



Alternative Energy Investments – “The next internet-style bubble?”

Despite the recent correction of fossil fuels prices, namely oil and natural gas, over the first half of 2009, the record high prices witnessed in 2008 as well as over the past few years resulted in increasing attention towards alternative sources of energy. According to Exxon Mobil, global energy demand is projected to be 40% higher by 2030 than in 2005 and whilst alternative energy sources are still only a small fraction of global energy consumption, these present investors with great long term opportunities.

The main uses of energy include electricity, heat and transportation with coal dominating electricity generation in the United States while natural gas is mainly used for heat and oil for transportation purposes. Indeed, according to an analysis done by Wells Fargo, the only renewable source which has been able to make inroads into this segment of the energy market is hydroelectric power with other sources such as wind power and solar energy registering a mere 0.70% of the market in 2004. With the price of oil and natural gas expected to gradually increase in the coming years as a result of increasing global demand and weather-related factors, it is in this author's opinion that the greatest potential opportunities lie in investments in the alternative energy sources segment of the energy sector.

The alternative energy segment of the industry covers a broad range of sources including; the well established nuclear and hydroelectric power industries to the less tried hydrogen powered technology which can all be used specifically for electricity generation and transportation. According to an analysis done by Wells Fargo, *“the three most commercially viable sources of alternative energy are nuclear, hydroelectric and wind energy”* on the basis of their cost relative to that of natural gas and coal for electricity generation. In addition, the renewable resources that could possibly *“replace gasoline in the automobile industry include hydrogen and ethanol produced from biomass such as corn or sugar cane”*.

Nuclear power energy is enjoying a revival as new technologies are being developed to make this type of energy safer whilst disposing of radioactive waste. This energy source earns environmental support as it does not give off carbon emissions and are largely produced by Canada and Australia, both of which have stable government administrations and are viewed as reliable sources of supply. The issue of costs remains a double edged sword as while on one side it is very cost effective to keep these plants running at high capacity, the upfront capital costs of constructing new plants are extremely high. One of the obvious drawbacks of using nuclear energy is safety as it relates to both nuclear waste and potential terrorist attacks. With grave safety concerns delaying the use of this energy source in the US, there are greater opportunities in other markets including China which plans to build 30 new plants by 2050 and in certain European countries where nuclear power is more accepted.

Thus far, the greatest contributor of all the renewable energy resources is hydro power. A key benefit of hydroelectric power is its ability to withstand both peak and seasonal periods. On the flip side, the high capital costs associated with dam construction coupled with the potential negative impact on wildlife and agriculture are the major drawbacks of this energy source. Worth mentioning is the other hydro sources that are beginning to gain attention including tidal and wave power. Growth in hydroelectric power is expected to accelerate in the coming years in light of key projects on the way including the Three Gorges Dam project as well as other large hydroelectric projects being developed in China as well as other Asian countries.

With significantly improving technology, the wind power industry has become one of the more developed renewable energy sources. This resource benefits from being a clean source with no fuel component which can provide a hedge against fuel price volatility and is cost competitive when compared to other sources of energy. The main drawback to this source is that the wind used to drive the turbines may be intermittent. With this type of energy source catching on in Europe, Asia and the US, the outlook for this is promising. Indeed, twenty states in the US have signed on to the renewables portfolio standard which requires that a minimum amount of energy be supplied from such sources.

Despite the popularity of solar energy, it is still a long way from being a major alternative energy resource accounting for less than 1% of the world's energy. Nevertheless, it benefits from making use of a natural resource that is readily available whilst the process used to harness this is emission free. Like the other energy sources, the key drawback is the high costs involved. We believe that the benefits outweigh the drawbacks and as a more flexible source in terms of scale and application, we believe it has great potential in the future as an investment.

As the outlook on the current sources of energy paint an expensive picture in the face of looming shortages, nations throughout the world are jumping head first into renewable resources. Indeed, China, the world's largest energy consumer and biggest producer of greenhouse gases, is already signaling a shortage of energy sources. In January 2007, China pledged to spend some \$200 billion over the next 15 years on renewable energy. Further, according to a JP Morgan energy report, it was indicated that the International Energy Agency estimates generating capacity by renewable resources will increase by 3.1% between 2004 and 2015 with the majority of the growth in Europe. According to the report, wind and solar energy growth are forecast to be strong at 12% and 16% respectively.

With all this information, the next question is obvious, how does one invest in alternative energy? Risk adverse investors may want to consider large established companies operating in well established growth markets including hydroelectric and wind energy. For the moderate risk investor, relatively large and medium sized public companies in developing technologies such as solar may be appropriate. Alternative energy is the way of the future and as Jeffrey Segal, the founder of GreenChipStocks.com says, *"the basic fundamentals of supply and demand dictate the success of renewables. All of our non-renewables will peak within the next 40-50 years. There is nothing that can fill the void besides renewables. The companies that can utilize these resources to generate electricity simply have a stronger long-term value"*.

FINANCIAL & ECONOMIC INDICATORS

As at 30 July, 2009

<u>Exchange Rate/US\$</u>	<u>Closing Value</u>	<u>Previous Week</u>
Yen	95.56	94.92
Euro	1.41	1.41
Jamaica	89.09	88.79
Guyana	205.50	204.70

<u>Commodity Prices</u>	<u>Closing Value</u>	<u>Previous Week</u>
Crude oil (US\$/bbl)	66.94	67.16
Natural Gas (US\$/mmbtu)	3.34	3.66
Gold (US\$/Troy Ounce)	934.40	949.15

Eurobond Indices (As at 30-July-09)

Lehman Brothers Global Aggregate Index (Return % YTD)	2.86
JP Morgan EMBI+ (Basis points)	391
JP Morgan Central America and Caribbean Index (CACI) (YTD return %)	22.80

<u>Policy Interest Rates (%)</u>	<u>Closing Value</u>	<u>Previous Week</u>
United States	0.15	0.15
Euro Zone	1.00	1.00
Japan	0.10	0.10
Brazil	8.75	8.75
Trinidad	7.25	7.50
Jamaica	16.00	17.00
Barbados	3.00	3.00

<u>Market Interest Rates (%)</u>	<u>Closing Value</u>	<u>Previous Week</u>
US 90-day T-Bill	0.18	0.18
US 10-Yr Treasury	3.61	3.66
3-month UK Libor	0.89	0.93
Japan 90-day T-Bill	0.33	0.33
Brazil 90-day T-Bill	8.58	8.60
TT 90-day T-Bill	2.50	2.51
Jamaica 90-day T-Bill	18.46	19.58
Barbados 90-day T-Bill	3.78	3.83

Sources: Bloomberg, CMMB, Central Bank of Trinidad and Tobago, Bank of Jamaica, Central Bank of Barbados, www.lehman.com

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