

# Energy & Environmental Funds

## Continuing to Offer Superior Opportunities?

Energy related environmental or ‘green’ investment opportunities are in the initial stages of market development and present a host of new global investment opportunities in areas such as emissions, carbon finance, clean technology and renewable energy.

By Peter C. Fusaro & Dr. Gary M. Vasey

**AS WE PROGRESS** through year three of sustained higher and more volatile energy prices, there is no evidence to suggest that these high prices will not continue for several more years. Investors who have been hesitant to invest in the energy sector are now more interested than ever – even with the demise of a small number of high profile energy commodity hedge funds (such as Motherock), which has done nothing to diminish investor appetite.

There remain many significant investment opportunities across the energy and environmental value chain. In fact, energy-related environmental investment opportunities are in the initial stages of market development and present a host of new global investment opportunities in areas such as emissions, carbon finance, clean technology and renewable energy.

Our thesis has been quite simple for the past three years. Energy is an immature financial market. A sustained historical lack of investment in much needed industry infrastructure and skills has resulted in a demand/supply tightness in both global and regional energy commodities. The industry and its analysts were caught napping by strong and surging energy demand from the economies of Asia, and even the USA.

### There remain many significant investment opportunities across the energy and environmental value chain

Energy is a risky business and investors need to be cognisant of these risks. But they also have the opportunity to get better than average returns in energy compared with almost any other investment. In fact, with the cooling off of the real estate boom, it may be an opportune time to refocus investor interest on energy which has been a ‘mysterious sector’ for many.

We look at the entire energy value chain for investment opportunities (Figure 1). These opportunities are not only across the upstream, downstream, and midstream energy segments but across all geographies and energy commodities. Moreover, environmental hedge funds are starting to proliferate, morphing from not only carbon and renewable energy credit trading but also into clean-tech project finance. Investors are buying carbon projects to ensure that they get a lifetime of credit stream. Both private equity investors and venture capitalists are also joining the party. The numbers are staggering.

The US alone needs US\$1.6 trillion in infrastructure investment in energy, water and telecommunications. China will invest US\$184 billion in renew-

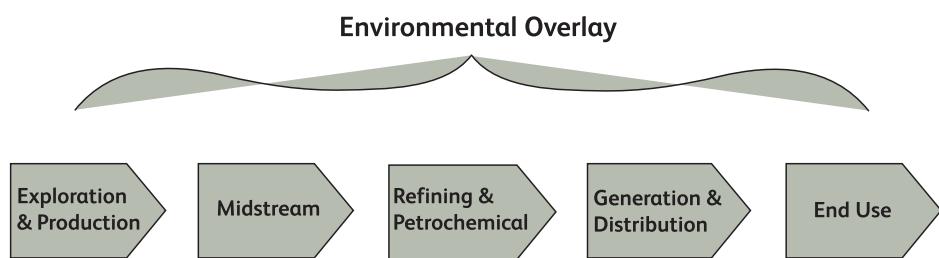
ables by 2015. To meet this market need, there are now infrastructure funds who do not want to be called hedge funds (although they are).

### Many Different Ways to Invest in This Sector ...

Because investment needs are great and institutional investors have been slow to invest, there exists a myriad of investment opportunities that investors seem confused on how to enter or exploit. Even the traditional equity long/short funds for energy are, in reality, under-invested. Then, there are over 140 commodity hedge funds in energy which all have different strategies. We have previously underestimated the number of ‘green funds’ and are finding more information and more strategies emerging that go beyond only commodity or equity trading in that they are involved in project finance as well. In fact, in a recent meeting in New York, we learned of a renewable hedge fund that will invest in the developmental phase of renewable energy or clean-tech projects and then cash-out.

In fact, there are any number of hedge fund strategies targeting energy and environmental markets. Equity long/short funds may sound run-of-the-mill but many funds target specific industry sectors such as utilities, exploration and production, midstream

Figure 1: The Energy Value Chain



Source: Energy & Environmental Capital Management LLC.

Master Limited Partnerships and oilfield services for example. While some have a focus on the arena of publicly-traded securities, others will invest more speculatively in pre-IPO companies and/or those traded on less liquid markets such as the AIM in London.

Additionally, many of these funds are now utilising the various exchange traded funds (ETFs) available in energy for hedging purposes, including energy commodity focused ETFs. Others have taken direct exposure to energy commodities via a percentage of assets under management invested in commodity options and futures. On the energy environmental side, green equity long/short funds have similar differentiated strategies targeting renewable energy, clean technology and alternative energy equities. Finally, while a minority of funds are long only, the fact is that most have a considerable long bias.

The same diversity of strategies exists in the energy commodity trading fund universe. Some funds focus on natural resources, investing in a basket of broader commodities, while others are more focused on a particular energy commodity or geographic market – for example electric power in the mature NordPool power market in Scandinavia where around 10 or so hedge funds exist. As investors and hedge fund managers seek uncovered opportunities, this diversification is likely to continue in the short-term with funds specialising in commodities such as water, uranium, sugar/ethanol, emissions, renewables and other energy-related commodities. Some of these funds also trade weather.

We have conservatively estimated that around US\$60 billion is invested via commodity trading hedge funds in energy markets. But with other ways for investors to gain exposure to commodities via investible indexes and even ETFs, there is significant capital at work in these markets today.

Other funds target the actual industry infrastructure where investment is still sorely needed, either through debt and equity or through the actual purchase of industry assets (though in the latter case, these funds have a necessarily longer lock-up period for investors and begin, in reality, to resemble private equity funds). In this category might also be included the more activist hedge funds that in recent months have surfaced in the ener-

gy industry in companies like Aquila, for example. Activist funds seek companies where they can essentially force restructuring and in the process increase the value of the business.

Finally, for investors who perhaps seek a more conservative approach there are a number of natural resource and energy oriented fund of hedge funds. These managers invest in a range of underlying hedge funds seeking to reduce volatility and risk while maintaining attractive returns.

But what about returns? Two years ago the early funds dazzled with returns often better than 100%. Today, returns from energy and environmental funds are now often more restrained, but they nonetheless remain much higher than the average for traditional hedge funds and investment vehicles. Expectations of 20+ % returns are not unreasonable in 2006 but (investor beware) the industry's volatility can often result in sharp monthly turnarounds and much higher return volatility than is the norm for hedge funds. Certain strategies, i.e. commodity trading, are more susceptible to this volatility than others. But increasingly, commodity price volatility is being reflected in energy equity prices too, making even some equity long/short funds more risky and volatile.

### **Energy Is Risky**

One issue with investing in energy and environment that has become increasingly obvious to us is the increased and yet poorly understood risks in the sector. Many institutional and individual investors, even those with a track record of investing in hedge funds, are actually largely ignorant of the differences between energy investing and, say, foreign exchange. When an investment vehicle states that 'past performance is not indicative of future results' then nowhere does this better apply than energy, where traditional market dynamics have essentially broken down over the last 18 months.

An example of this is the number of funds and investment banks that shorted natural gas based on seasonal trends and full storage in North America – only to lose vast sums of capital as natural gas prices unexpectedly went up for one unforeseen reason after another. In fact, some commodity funds we are aware of no longer invest in natural gas at all, viewing it as simply too volatile and unpredictable.

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What this means is that typical metrics used in due diligence may not be applicable in energy. The trader's track record is often one factor used in due diligence, but what good is a track record if historical trends have broken down? Additionally, investors will often look for hungry young traders but in energy, grey hair counts for a lot. After all, its only those traders and risk managers that have been around 20 years or more that have ever experienced an energy market quite like this one.

Part of the problem is a lack of detailed knowledge of the energy industry. Not only do investors not actually know what questions to ask but probably wouldn't understand the answers anyway. Risks such as regulatory, volume and deliverability etc. are foreign concepts to the average investor in more typical financial instruments and markets. The other part of the problem is that due diligence has taken on a certain mechanistic approach using questionnaires provided by various financial organisations that simply fail to address the underlying fundamental risks inherent in the energy complex.

By way of example, would a prospective investor ever ask a question about the trading systems used by the commodity fund and whether those systems were properly integrated? Would they ask questions about

accounting practices and valuation (i.e. pricing information used to value liquid instruments?). The answer seems to be; rarely. So while energy and environmental markets are increasingly attracting investors of all types, these investors also need good advice from industry experts.

### **Why Now & How Long Will It Last?**

Under-investment in industry infrastructure, technology shifts, and rising environmental imperatives have created the *perfect storm* for investment in the energy and environmental hedge fund sector. We think that risk is pervasive and that the environment will continue to emerge as a disruptive and volatile factor in energy and agricultural markets. The capacity for capital is vast and, frankly, under-appreciated. Globalisation is not just an overused buzz word – it is real. Continued energy demands, coupled with rising environmental imperatives, are ushering in global investment opportunities on a scale no one had predicted.

For those that understand energy, it tends to behave in fairly long cycles,

largely related to the time it takes to start and complete projects to meet demand. This is year three of the energy and broader commodities bull market but in reality, this could last for four to five years more – and even longer than that if Chinese and Asian demand continues

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unabated. Hedge funds certainly offer one investment conduit into the energy and environmental space for certain types of investors and we expect a doubling of these types of funds by 2010 (to reach over 1,000 or 10 % of the current hedge fund universe) as well as a quadrupling of capital invested through them in that time period.

So, if you have been hanging back from investing in energy and the environment, there is still time to profit. While making profits may not be as easy as a directional bet on energy prices, the continued fundamentals and price volatility – as well as significant emerging opportunities in the environmental aspects of energy – means that there remain significant opportunities to profit. Our advice to potential investors; Get some good advice first •

**Peter C. Fusaro & Dr. Gary M. Vasey** have recently co-authored *Energy and Environmental Hedge Funds: The New Investment Paradigm* (Wiley, 2006), run the online Energy Hedge Fund Center, and have launched fund manager *Energy and Environmental Capital Management LLC.* [www.energyhedgefunds.com](http://www.energyhedgefunds.com)