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Hedge Funds

The New Investment Paradigm

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Introduction

The rising power of hedge funds has continued to reshape both Wall Street and the City of London during the past several years. While hedge fund returns generally disappointed investors in 2004 and 2005, their movement into the energy complex has not. It now seems likely that their advance into energy is primed to follow throughout the world as the globalization of financial markets accelerates. Rapid economic growth in China and India, coupled with rising energy demand, is leading a sustained thrust into the energy hedge fund universe. This financial model is now changing to include more equity investment, as well as commodity trading, and begins to blur the line with investment banking, venture capital, and hedge funds. The second thrust of this powerful financial change will be the emerging environmental financial markets as drivers of both change and investment opportunities. The environment now overlays the energy value chain, as the recent emergence of "green" hedge funds attest to this investment opportunity.

Hedge funds seek new areas of investment where returns may be stronger, and that opportunity is in the global energy business and emerging environmental financial markets. This book is envisioned as a road map to identify investment opportunities in these new and volatile markets. It is a primer for investors and other hedge fund managers to take a hard look at this complex sector, which is now rife with both investment opportunities and risk. The relative immaturity of both energy and environmental financial markets point to much opportunity in this sector than is currently realized, but it does not fit tidily into the macro models and more sophisticated trading of foreign exchange and corporate debt trading, which is the traditional realm of hedge funds.

Today, there are more than 8,700 hedge funds with over $1 trillion at work, which could be levered to at least $2 trillion. This is double the number of hedge funds that existed in 1999.[1] The flat or sideways trading of global equity markets for the past several years since the dot com crash has not shown the rates of return that investors have become accustomed to. Meanwhile, the energy complex is volatile, capital intensive, and just plain interesting. You can't put down the newspaper or watch television today without every angle of the energy complex being under intense scrutiny and investor interest.

Our research has revealed that there are over 450 energy hedge funds and perhaps that number could be as high as 600, with many new funds emerging on a daily basis. These funds run the gamut of strategies from energy equities, commodities, distressed assets, debt, and alternative energy (environmental) such as renewable energy and emissions trading, and increasingly, funds of hedge funds. Investors are looking for better returns every year as they abandon one financial sector for another, and they have now turned to the energy patch for those financial rewards – but energy is a risky and physical business that cannot readily be compared with other investment opportunities.

In this book we make the case for energy and later the environment, as it relates to energy, as the place to invest. It is an area where hedge funds in particular offer investors exposure to a wide variety of innovative and profitable opportunities. Our thesis is that a lack of investment in the entire energy complex over the last 20 years since the price collapse in 1986 has now teed up a sustained period of supply–demand tightness in all energy commodities. We argue that there will be no mean reversion in energy prices, and offer the view that energy markets are behaving differently this time around. Something has fundamentally changed in energy.

For the last couple of decades, energy commodity prices moved sideways within a narrow range, but then suddenly began an inexorable rise about two years ago. We feel that many in the industry were lulled into a false sense of security around market fundamentals, while many skills simply left the industry altogether during the past two decades. Many in the industry today, including Wall Street and other analysts, have no experience of anything but low and relatively stable energy prices. Indeed, after the collapse of Enron in late 2001 and the energy merchants in 2002, many predicted the demise of energy commodity trading and markets altogether. But, it was this event that accentuated opportunities in energy and even provided many of the trading skills that allowed the new energy speculators to enter these complex and risky markets. And so we have seen the new triangle of trading emerge these past two years, which includes investment banks, hedge funds, and multinational oil companies. We have not seen the predicted globalization of electric utilities, but instead foreign utilities retreated from American power markets. We have also witnessed the Wall Street power companies rise as they bought distressed assets and began to trade those assets through various asset optimization strategies. We have seen the resurfacing of the financial institution/utility joint ventures such as Calpine and Bear Stearns, as well as Merrill Lynch's purchase of Entergy/Koch, and more recently we have seen the entrance of financial hedge funds focusing on the energy industry for a variety of reasons, including acquiring and trading distressed generation assets.

It has been the rise in energy commodity prices and volatilities, the lack of investment in infrastructure, and the credit and debt issues of the collapsed merchants that have uniquely combined to create today's opportunities. Somewhat simplistically, the lack of investment in infrastructure across the complex this last 20 years, combined with the surge in global demand for energy, has resulted in a rapid rise in energy commodity prices and volatilities. In turn, this has created a situation where energy companies across the complex have seen profits rise. This is now resulting in increased spending on long overdue projects and activities. Meanwhile, the abundance of relatively cheap assets for sale, and the need for various energy companies to restructure debt, has created a variety of other opportunities. Finally, higher energy prices and the tightness in supply–demand dynamics across all energy markets is driving increased interest in alternative forms of energy and energy efficiency investment.

Although a small number of hedge funds have specialized in energy equities for several years, and many more general equity funds had a component of energy in their portfolios, it was the entrance of hedge funds into energy commodity trading that really spurred the interest on the part of investors in hedge funds. These early energy commodity funds, staffed with expert energy traders from the old merchant segment, produced extraordinary returns in 2003 and 2004. As a result, investor interest increased and many ex-traders and investment bankers created new hedge funds across the space. Existing funds, especially larger macro funds, also exposed more of their assets under management to the energy complex. Of course, it wasn't just hedge funds that got into energy – it was all of the investment banks as well.

While many hedge funds concentrate mostly on price risk, there are almost unlimited risks in the physically oriented energy business. There is operational risk, geopolitical risk, event risk, regulatory risk, weather risk, tax risk, and others that add multiple additional dimensions to the more linear and traditional thinking of hedge fund operations. These externalities are also about to be overwhelmed by "environmental risk," which is the wave beyond the current energy hedge fund euphoria. Therefore, trying to put the traditional hedge fund financial overlay into the energy complex is really putting the proverbial square peg into the round hole. Why? Because energy is the world's largest business with over $4 trillion in annual trade, but it is also a very immature financial market.

The notional value of the financial energy market is $2.2 trillion according to our estimates. Since commodities traditionally trade six to 20 times the physical market, we still have a long way to grow toward market maturation. Moreover, the Enron and energy merchant debacle set back natural gas and power trading a good three years. Today, the natural gas market is over $400 billion – where it was when Enron went down in December 2001. Oil trading still predominates energy trading and is the most liquid financial business. It also predominates in the energy commodity hedge fund business as it is still the only global energy market today.

Energy is a business that hedge funds really have just entered in large numbers during the past two years. Of course, it can be argued that commodity pool operators (CPOs) and commodity trading advisors (CTAs) have been around for decades, but the movement into energy trading by hedge funds has really accelerated in the more recent time period. In our Energy Hedge Fund Center (www.energyhedgefunds.com), we have counted more than 120 energy commodity trading hedge funds with over $50 billion or more in assets under management in our universe of over 450 energy hedge funds. Just 18 months ago there were less than 20 commodity trading hedge funds.

Energy trading activities such as electric power trading look attractive and bold, but they are fraught with unexpected risks – especially for those used to more mature financial markets. And that's the problem with energy for people and organizations more used to such markets. It's a very complex physical market. Superficially, it seems straightforward enough, but the more you probe into the business transactions required to make the industry work, the more complex and risky it becomes. Even crude oil markets are not as simple as just supply and demand. One has to consider transportation issues, crude quality issues, storage levels, refining capabilities, weather risks, and so on.

Certainly, there is a rapidly developing investor appetite for energy, but energy doesn't neatly fit the hedge fund business model and we observe some issues around that fact, particularly with respect to funds in energy and the institutional investor. However, we see an ongoing bull market for energy for some time to come and the results speak for themselves. Where there is a will, there is a way.

WHAT'S ON THE HORIZON?

Today, the energy hedge fund arena is ramping up, due to the need for higher returns for hedge fund investors. Our book attempts to frame this financial opportunity for them, but energy hedge funds are still only about 5% of the hedge fund universe – and growing. New York and London continue to be the twin capitals of both energy trading and energy hedge funds. Houston, Calgary, Chicago, Singapore, and Switzerland play second fiddle. More hedge funds and fund of hedge funds are in formation as the energy bull market continues with rocky price spikes and collapses.

After this investment window begins to close, watch out for the surge of environmental hedge funds coming into play that is just now surfacing. While carbon trading is the current focus of attention, there are also markets for sulfur dioxide (SO_2), which causes acid rain, nitrous oxides (NOx), which cause urban ozone, and renewable energy credit trading (as it is called in the United States). There are also opportunities in alternative energy market caps, ethanol trading, and alternative energy project equity plays. The emissions market formation is global as we recently learned of emissions credit trading for sulfur dioxide in China, which burns a lot of coal. Thus, the energy wave is superceded by a "green wave" of environmental hedge fund trading. Its genesis is still the United States, but now it is spreading globally. Watch this space expand, contract, and mature.

The energy hedge funds have the trading talent, better credit, and risk-taking acumen to really roil markets. They already have in day trading in both West Texas Intermediate (WTI) and Henry Hub Natural gas on the NYMEX, and Brent on the International Petroleum Exchange (IPE), making more traditional energy traders squeamish about all that intra-day price volatility. More is coming. The energy hedge funds are a double-edge sword for energy trading, since while they bring more liquidity to markets they also bring more price volatility. They also bring in more speed in day trading that traditional energy traders are not used to. Our belief is that more traditional players will have to live with the new market dynamics of what we dub the "trading triangle" of multinational oils, investment banks, and the funds. What is really occurring is a rising financialization process in the energy complex. This transition is not without risks and market changes are seldom greeted with open arms.

In this book, we will also disclose our thinking on what is driving energy markets and the attendant investment opportunities, picking apart myth from reality as we see it. The media and politicians try to simplify energy to a sound bite, but it is far more complex than that. There are a multitude of views as to where energy is headed from the apocalyptic theory of "peak oil" to the idea that this is just another dot com bubble. To us, it is about the fundamentals. Fundamentals have driven energy commodity prices these last two years, and the evidence suggests nothing much has changed as we reached the end of 2005. We hope to demonstrate that in this book.

For many years, the floor traders on the NYMEX have complained about hedge funds entering energy markets. For the most part they were wrong. Today, the funds have really arrived. They are looking for greater returns on equity for their investors than the flat trading of stock market equities. The missing ingredient is the understanding of energy markets and its complexity. Funds like to "move money in and move money out," as one experienced energy trader commented to us recently. However, what they are missing is that there are now fewer opportunities for that type of trading. Second, there are greater risks in the market because they have arrived to trade. A seasoned energy trader we know commented that "there is a billion fund with three traders, the oldest is 29 years old." The funds often lack knowledge and experience in energy markets, but they are gaining it. Energy trading is the most volatile and complex of any commodity. Energy prices are driven by supply–demand fundamentals, technical trading, weather, events, geopolitical issues, and regulatory issues. Credit risk is still an important risk to manage in the energy industry, particularly since this industry has less creditworthiness. The funds have better credit but less knowledge. They also sometimes have a "know-it-all" attitude. These factors bode for more impending energy trading disasters, and some have already occurred during 2005. Expect more to come.

Energy and the environment provide both opportunity and risks for hedge funds, fund of hedge funds, and investors to show much better than average returns. This book is an attempt to decode this new market. This is the beginning of a ramping up of energy and environmental hedge funds. It is sustained due to market uncertainty, supply constraints, and just plain old risk factors. We think it's a good thing as hedge funds are starting to provide the risk capital for investment in new technology that the venture funds are used to. This book should provide some insights into how these markets operate, where the hedge funds are entering, and where this all might ultimately lead us.

Peter C. Fusaro and Dr. Gary M. Vasey
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NOTE

1 Vann Hedge Fund Advisors, LLC website.

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Peter C. Fusaro and Dr. Gary M. Vasey

Abbreviated Terms used in this Book

ANWR	Arctic national wildlife refuge
CAT	Cumulative average temperature
CBOT	Chicago Board of Trade
CCX	Chicago Climate Exchange
CDDs	Cooling degree days
CFTC	US Commodity Futures Trading Commission
CME	Chicago Mercantile Exchange
COT	Commitment of traders
CPO	Commodity pool operator
CTA	Commodity trading advisor
E&P	Exploration and Production
EHFC	Energy Hedge Fund Center (www.energyhedgefunds.com)
EIA	US Energy Information Administration
EPRI	Electric Power Research Institute
ETF	Exchange traded fund
EU ETS	European Union Emissions Trading Scheme
FERC	Federal Energy Regulatory Commission
FoF	Fund of hedge funds
GDDs	Growing degree days
GHG	Greenhouse gas
HDDs	Heating degree days
HNW	High net worth
IEA	International Energy Agency
IGCC	Integrated gas combined cycle
IPE	International Petroleum Exchange
IPO	Initial public offering
IPP	Independent power producer
LCH	London Clearinghouse
LME	London Metals Exchange
LNG	Liquefied natural gas

M&A	Merger and acquisition
MLP	Master limited partnership
NAV	Net asset value
NWS	National Weather Service
NYMEX	New York Mercantile Exchange
OTC	Over the counter
PAI	Palo Alto Investors
REC	Renewable energy credit
ROI	Return on investment
RPS	Renewable portfolio standard
SEC	Securities and Exchange Commission
SUV	Sports utility vehicle
WTI	West Texas intermediate
WRMA	Weather Risk Management Association

Contents

CHAPTER 1

The New Investors in Energy

For the average investor the energy industry has always offered opportunities to profit through the publicly traded securities available on the world's stock markets. Indeed, many multinational oil companies have long been considered "blue chip" stocks with both reasonable dividend and appreciation characteristics. Mutual funds have also provided investors opportunities to indirectly invest in the energy equities, although until recently usually as part of a more diversified approach. More sophisticated investors have had other options, including the use of options on securities and access to commodity trading through CTAs, hedge funds, and other alternative investment vehicles.

However, over the last two years, the energy industry has literally been transformed into the "hot" investment sector. Today, with high and volatile energy commodity prices impacting everyone, energy is in the news headlines 24/7. On a daily basis, new investment opportunities in the energy industry are offered in the form of energy or natural resource-specific mutual funds, exchange traded funds (ETFs), income and royalty trusts, master limited partnerships (MLPs), and other vehicles. The average investor now has a broader set of opportunities to participate in the booming energy sector. Yet these new vehicles only scratch the surface of the opportunities provided through the alternative investment universe via energy and environmental hedge funds.

NEW ENERGY INVESTORS

The new investors in energy are what we refer to as "the triangle of trading." These comprise investment banks, hedge funds, and multinational oil companies. Today, utilities are being increasingly marginalized in energy markets as they drop back into trading around their assets and pursue a strategy of optimizing those assets for shareholders if they trade at all. With the energy merchants long gone after the fall of Enron and the others, a vacuum was left that these new investors have stepped in to fill.

The investment banks have been in and out of energy over the years to varying degrees, but over the last 18 months, the banks have increased their interest in and exposure to energy across the board. Almost every sizable investment bank now has a position in energy, while only Goldman Sachs and Morgan Stanley have had some form of presence for over 20 years. Other banks, including UBS, Barclays Capital, Lehman Brothers, Citigroup, Deutsche Bank, and ABN AMRO, among others, have all increased the size of their energy trading desks; and others, such as Merrill Lynch and Bear Sterns, have created joint ventures with, or even acquired, existing energy trading firms.

Investment banks continue to play a role on the distressed asset side of the energy business, too, while some have actually acquired significant energy assets and now operate those assets. For example, Goldman Sachs added to its energy portfolio with the purchase of East Coast Power and the acquisition of Cogentrix Energy in the United States. Both Goldman Sachs and Morgan Stanley can handle physical trading and take actual physical delivery of product. Goldman also holds a large renewable energy generation portfolio, too. Some investment banks have even bought oil and gas reserves in the ground.

The multinational oils have also moved in to fill the space left by the energy merchants in recent years. British Petroleum (BP) is now the largest trader of natural gas in North America, and it and other multinational oil companies have reported huge profits from their energy trading activities over the last 12 months.

However, the key area of interest and the topic of this book is the ever-growing and "secretive" hedge fund community. Despite increased interest from regulators such as the US Securities and Exchange Commission (SEC) and others, hedge funds are being funded at a record pace. Once the exclusive domain of private wealthy individuals, institutional money is now flooding into hedge funds seeking promised better returns (Figures 1.1 and 1.2). The $38.2 billion that flowed into the funds in Q1 2004 was a record and that pace has continued as public and corporate pension funds now allocate an average of 5–7% of their assets for investment in hedge funds. Van Hedge Fund Advisors[1] recently issued a report in which it expects assets under management at hedge funds to double to $2 billion by 2009.

But as hedge funds gain access to increasing amounts of capital, so too has the average hedge fund return declined to something less than spectacular. Hedge funds returned less than 9.64% in 2004, compared to 15.44% in 2003, and under-performed more conventional asset classes according to the CSFB Tremont hedge fund index.[2] Hedge fund managers attributed their lower performance in 2004 to low volatility and low interest rates. As a result, hedge funds have been looking for other asset classes to invest in. Seeking new opportunities where the sparkle can be put back on their reputation for producing a significant return on investment, they have identified the energy industry as having that potential. Early indications have only served to raise energy's profile since some of the better performing funds last year were focused on energy.

As a result, those ex-energy traders from the merchant era are now back in demand. Energy traders are being snapped up by hedge funds, multinational oil companies, and investment banks, and, in some instances, they have formed their own hedge funds based on their energy trading expertise. Indeed, the number of specialist energy commodity trading funds with between $1 million and $25 million in assets under management is growing rapidly. Not all the energy funds are so small. Several of the better known energy-focused funds are quite large, between $400 million and over $1 billion in assets under management. But we are also seeing a trend for much larger (greater than $1 billion under management) macro funds to switch more of their assets into energy, too. Today, our research has identified over 450 hedge funds that are active in the energy industry and that number continues to grow. Their assets under management range from $1 million to $2 billion.

WHY NOW?

Perhaps those of us in the energy industry have been too comfortable and too close to the business to notice the lack of sustained investment in our industry over the last 15 or so years. Whether it is oil and gas exploration, development of new reserves, or investment in the power industry, we are now seeing supply–demand tightness in all energy commodity markets and a historical under-valuation of energy companies and their assets. At the same time, demand has continued to grow robustly, and we are now at a stage where unforeseen events such as acts of terrorism, industrial disputes or accidents, weather-related events, and transmission constriction can be enough to create considerable concern about supply. This has resulted in increased price volatility, particularly in oil markets, and the funds love that price volatility.

There is now a growing awareness and even acceptance that in global oil markets supply tightness is such that OPEC no longer holds the swing vote on oil price formation. Today, oil prices are set by the trader's views on the NYMEX as much as anything else. News events such as those that occur in Iraq, Nigeria, Russia, and Venezuela over the potential for or actual supply disruptions, combined with reserve estimate reductions by major oil companies and the lack of transparency into the true nature of OPEC's own reserves, are now sufficient to cause $2+ daily swings in the oil price. Over the last two decades, oil companies have been more interested in buying back their stock to increase share price and please shareholders than in investing in new exploration or production activities. Wall Street just hasn't rewarded explorers and risk-takers, and the majors have not significantly increased their exploration and production budgets partly because other commodity markets, like steel, have also risen accordingly, adding to the expense side.

For each energy commodity the picture is similar. While oil is a global market and impacted by global events, regional natural gas, coal, and electric power markets are now often subject to similar supply tightness. The rush to natural gas-fired generation has helped to increase the perception of supply tightness in gas markets and the 2003 black outs did likewise for electric power.

Hedge funds like volatility. They like to identify trends and bet on those trends. Today they see that the trend in commodity prices has been largely up, and as they place their bets they are accentuating those trends. They are also followers and will follow each other, chasing the money and the returns. Some of the energy commodity trading funds had returns of over 40% during the past year and that has not gone unnoticed.

Similarly, as oil companies made money on increased commodity prices, their equities looked undervalued. Energy stocks, including oilfield services, looked the same. Also, the collapse of the merchant sector in the industry has created a significant distressed asset and debt play for the funds. As ex-merchants seek to raise cash by selling perfectly good assets, so the hedge funds have seen their opportunity, and today hedge funds are among the leading holders of ex-merchant debt backed by valuable collateral. Even as the industry seeks answers to its own problems, the hedge funds see opportunities in renewables and green trading, for example.

WHAT IS A HEDGE FUND?

A hedge fund is a type of "alternative" investment. The term "hedge fund" is a general, non-legal term that was originally used to describe a type of private and unregistered investment pool that uses sophisticated hedging and arbitrage techniques to trade in the corporate equity markets. While hedge funds have traditionally been limited to sophisticated, wealthy investors, over time, their activities have broadened into other financial instruments and activities. Today, the term "hedge fund" no longer really