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Putting Knowledge Into Action



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Cleantech's Second Wave

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In recent months, I have been speaking and meeting with many folks who are chasing the dream of green. That is green in money and environmental sustainability. Clearly, there is a knowledge gap which needs to be breached. Wall Street banks still don't adequately cover the sector, although they do cover the ethanol roll ups and solar IPO deals. Research is spotty, at best.

Beyond Ethanol and Solar

As I continue to watch in amazement the plethora of investment ideas for ethanol and solar when I believe the play is about over for this sector, the real play is, can the green sector be financially sustainable? The answer seems deeply rooted to the sustainability of higher energy prices for the present time. Basically, high or rising oil prices correlates very well to alternative energy and clean tech market caps. The recent forecast of single digit oil prices by one well-known analyst is totally off the wall. The oil complex is under continuous stress and risk. Higher oil prices are sustainable and will periodically have price sell offs. Higher highs are still not out of the question, just not now.

I am now swamped with finding many more alternative energy hedge funds on both sides of the Atlantic, as well as more cleantech venture capital funds. There have been several hedge funds that have invested and made money on the ethanol and solar price move of the last year within existing funds, and are now launching alternative energy specific funds. They follow the equities. There are others that are 75 percent alternative energy equities and 25 percent private pre-IPO money. There some 75 equity/25 commodity funds. There are some carbon only funds in Europe that are oversubscribed. There are alternative energy/cleantech funds in Europe with multi-hundred million dollar backing. There are clean tech funds on both sides of the ocean. And there seems to be a realization that this market move will continue for some time period, but what is really lacking is basic knowledge of this emerging sector.

One very big hedge fund allocator told me recently in New York that it would take them 24 months to get up to the speed in the clean tech/alternative energy sector. They had allocated into several commodities (REC and GHG funds), but felt that the capacity was limited in those existing investment structures.

Here's how I view the sector as an all-encompassing technology and commodity play including energy efficiency which is the most unsexy investment opportunity to many (you can't really brag that you saved energy at a cocktail party).

The Investment Opportunities are Vast

- **Alternative Energy**
 - Solar
 - Wind
 - Hydro, tidal & wave
 - Geothermal

- **BioEnergy & Ethanol**
 - Distributed Energy
 - Microturbines
 - Fuel cells
 - Hydrogen generation

- **Energy Efficiency**
 - Lighting
 - Buildings
 - Energy recycling

- **Battery Technology & Energy Storage**
 - Flywheels

- **Medical & Biological Crossovers**

- **Environmental Technologies**
 - Water & Wastewater Treatment
 - Clean gasification
 - Emissions mitigation

- **Information Technology**
 - Net metering
 - Demand response

Source: Energy Hedge

Sector Just Gaining Momentum

The bottom line is that this investment sector is just getting started. There is pent up demand for renewable and clean technology. There is global demand. There is an impending climate change regime in the United States and throughout the world under Kyoto in 2008. There will continue to be supply side fossil fuel surprises, that can't be predicted, keeping everything tight. There is more weather and climate risk than people imagine. The green investment sector is about to blossom. Wall Street and City of London analysts need to get up to speed and start following those microcap companies that can scale. The new asset class has emerged and it is called "green."

It's time to "Renew America." The underinvestment in U.S. energy, telecommunications and water is estimated at \$1.6 trillion, and that doesn't count the overseas opportunities in the OECD and the developing world. There is a new industry that is emerging and it will create jobs. It needs intellectual capital and good science, as well as financial capital. In fact, don't underestimate the passion of that human capital. I am seeing young professionals, but also many professionals in their 40s and 50s, who were there for the first wave of the environmental movement starting to come back into this sector with their knowledge and business acumen. That can create a lot of jobs in this new sector which aligns environment, energy, technology and money. It's good to be green, just ask Kermit!

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