

Putting Knowledge Into Action



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What's Catching Fire in Alternative Energy and Why

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Alternative energy is still dependent on poorly defined public policy in the United States. The excitement on the overly subsidized energy bill is unfounded. It will not solve our growing energy dependency. It would make more sense to debunk the nonsense of a “hydrogen highway or economy,” send checks to farmers for biofuels instead of using food for fuels, and get down to the hard work of rebuilding America's moribund energy infrastructure. Not to mention its third world telecommunications and water infrastructure too. The plain fact is that infrastructure projects are not sexy to politicians or the media for that matter. But they are essential for a first world economy to function well. Ours isn't and is increasingly vulnerable to mishaps.

Alternative energy is one long-term solution to this problem. Unfortunately, the lack of education (another U.S. homegrown problem) of energy markets saw alternative energy equities run ahead of markets once again. The largest market cap in this space is Danish wind manufacturer Vestas.

There is no shortage of investment capital, but folks still look only at venture capital. Hedge funds are now great equity providers for startups too. Take a look at the recent public offering on the London Stock Exchange's AIM (London's pink sheets). In the United Kingdom, the hedge funds provide the risk capital for investment in the alternative energy space for companies such as fuel cell start up ITM Power. How ironic?

Once a year, I am privileged to be invited to a special event in New York held by investment boutique Ardour Capital Management, which tracks over 300 market caps in the alternative energy space, and law firm Baker and McKenzie. Their annual technology conference lets me look at the future. This year's event was closed to 100 people but many more wanted in (You can check out Ardour at www.ardourcapital.com). The one-day conference has 12 CEOs present their new, emerging technology. They show on-site generation from fuel cells, to power quality components, ultra capacitors, and other devices.

The market drivers today are obviously higher energy prices, energy security, environment, new technology and the need for power reliability. The downside risks are technology risk, costs and payback periods, efficiency, lack of infrastructure (could also be seen as an opportunity), institutional barriers, and scale. The government/military is still the most significant angel investor in the energy and environmental technology space.

It seems to me that distributed solutions may be the way forward for communities and countries without an existing infrastructure for both power and water. This business model follows the cell phone analogue over land-based phones by leapfrogging technology. Build it and the customers are already there. Today, two billion people do not have access to electric power and three billion to potable water. New technologies to watch are vacuum water distillation, non-silicon pv solar cells, ultra capacitors to replace batteries, fuel cells with longer reliability life cycles, and most importantly the ever present need to use natural resources more efficiently and environmentally benignly. These are strategies not addressed by the recently passed and supply side only oriented Energy Policy Act of 2005. Tax subsidies and capacity constrained as one critic labeled it.

The real market drivers besides consumers engaged in the over 600 green power purchasing programs are corporate America and the Pentagon. In past six months, we have seen GE, Wal-Mart and now Goldman Sachs go green. They are going green because it is good for business not for any altruistic reason. The Pentagon needs to cut its fuel and energy budget and has now replaced NASA as the government purchaser and investor in clean technology.

The greater picture lost to many is that there now is a need to address energy and environment as fused together. One impacts the other. Costs must be driven down but less of an environmental footprint must be in its place. Sustainability is an overused concept, but energy must be used more efficiently, can be renewable and needs to be less damaging to the environment. Costs must come down in alternative energy as well, and there are ways to wring out costs, but there are also ways to monetize revenue streams for renewable energy credits, SOX and NOX reductions, and eventually carbon dioxide emissions reduction in America too. Green finance is starting to take front and center along with clean technology and trading. They are all interrelated. The technology shift really can't take place without the capital markets' investment from private investors, institutions and now hedge funds (the new equity investors in clean tech)!

Peter C. Fusaro is Chairman of New York-based Global Change Associates (www.global-change.com) and co-founder of the Energy Hedge Fund Center (www.energyhedgefunds.com), a free online community. He is also author to three new books out next year concerning this space including *Energy and Emissions: Collision or Convergence* (Wiley) *Energy and Environmental Hedge Funds: The New Investment Paradigm* (Wiley), and *Emissions as a Financial Market Opportunities to Trade the Environment* (Bloomberg). He is working with Green Ground Zero, a non-profit, to create an online clearinghouse on information for clean technology, emissions trading and green finance since his mantra is “knowledge breeds liquidity.”



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