

The Cleantech Strategist: Having an Edge

What's your edge?

In our view, entrepreneurial or investment success generally is based on having a differentiated view, a non-consensus insight, or taking advantage of an inefficiency. Sometimes, being different can beat being better. Of course, founding a company based on a disruptive technology or having a valuable stock insight is easier said than done. We have been fascinated by those who find a different way to gain an advantage, such as using advanced statistics in sports.

Cleantech faces an uphill battle early on

In the short term, alternative energy doesn't have much of an edge. These technologies typically are more expensive, unlike truly disruptive approaches, and improve at a rate well short of Moore's Law. This lack of differentiation relative to fossil fuels means cleantech is at an early stage of development and significant stock outperformance is unlikely for now, in our view.

Alt energy should develop advantages though

We would argue that time is on the side of cleantech companies and the long-term investment prospects are good. Their edge should include (1) less risk than fossil fuels in environmental impact, supply security, and price certainty, (2) the likely creation of category leaders as money and brains pour into the space, and (3) the opportunity of playing in the largest sandbox of all, energy, especially as developing countries are able to afford it.

Picking stocks with differentiated views

We all are looking for stock calls that will add value based both on our edge as analysts and companies' advantages relative to competitors. Given that 9 of our 13 stocks have broken charts, viewing these names with great skepticism seems to have been the key. Some critical issues going forward may include (1) the ability of US solar names to offset European price pressure with US utility business, (2) whether LED makers can maintain price and margin as demand evolves, (3) which battery maker can thrive in grid storage, (4) whether demand response is a sustainable market, and (5) which alternative to oil will take the most share in transportation.

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In search of non-consensus insights

Byron Wien, formerly chief investment strategist at Morgan Stanley and now Vice Chairman of Blackstone Advisory Services, is reported to have said that the goal of an analyst is to find a correct, non-consensus insight. Incorrect views aren't of much value nor are consensus thoughts since they should be built into securities prices. Such non-consensus gems, of course, come infrequently. That makes life difficult for both buy- and sell-siders, who typically must have opinions on a wide range of stocks. Only a few of those opinions are likely to be truly value added. Indeed, part of Warren Buffett's success has been his luxury of not having to swing at every pitch.

We are fascinated by entrepreneurs, managers, and investors who challenge conventional wisdom and find new ways of doing things. In sports, for example, statistical analysis has changed the way teams and athletes are analyzed. The most notable example was Billy Beane's "Moneyball" approach to help the low-payroll Oakland Athletics compete more effectively. Scouts often judge players by how they looked along with counting statistics like RBIs. Beane focused on more sophisticated statistics such as on-base percentage, now widely quoted by game announcers.

The investing world is as competitive as it gets with the relevant question being "What's your edge?" Author Sebastian Mallaby points out in his history of the hedge fund industry *More Money Than God* that famous managers had an edge, even if they couldn't fully describe it or downplayed it. Richard Dennis and his turtles understood the power of trend following and risk management in commodities trading. Michael Steinhardt made outsized returns by being one of the first block traders. Jim Simons and the quant team at Renaissance Capital not only were among the early quants, but took a different approach in ignoring what economic theory or fundamentals might have to say about finding inefficiencies and instead searched pragmatically for profitable trading strategies without worrying about the "why."

Such investors tend to do things differently rather than better. They succeeded not because they were performing traditional securities analysis better than everyone else, but because they found a new way to approach the task. Most of us spend our energy working to be better rather than to "Think Different," to quote Apple.

Disruption in cleantech

Clean energy technologies face an uphill battle because (1) in trying to replace well-established approaches (EVs vs. internal combustion engine, renewable energy vs. coal and natural gas), they usually start out more expensive, and (2) they typically live in a world of atoms rather than bits and don't benefit from a semiconductor-like Moore's Law rate of improvement. The industry constantly is looking for disruptive technologies, a term coined by Professor Clay Christensen of Harvard. "Disruptive" often is used to describe new approaches that overturn the traditional methods and practices. Although that is true, Christensen had a narrower definition in mind:

"Generally, disruptive innovations were technologically straightforward, consisting of off-the-shelf components put together in a product architecture that was often simpler than prior approaches. They offered less of what customers in established markets wanted and so could rarely be initially employed there. They offered a different package of attributes valued only in emerging markets remote from, and unimportant to, the mainstream."

In other words, disruption occurs from below with less costly, less functional approaches that attract new users. PCs for the masses or measuring medical metrics like blood pressure at home would be examples. Over time through functional improvement, these new approaches encroach on established products, and perhaps more important, higher-margin business models.

Although arguably simpler, most clean technologies are less functional but more expensive, which is why subsidization is required. Solar is much simpler than mining coal, for example, but is also less energy dense and expensive on a delivered cost basis. LEDs are attacking traditional lighting from above in terms of higher performance and cost rather than from below.

From an investor's perspective, alternative energy has been disappointing following the 2006-07 solar and wind financing bubble. Our cleantech index has underperformed the last few years; currently 9 of our 13 stocks under coverage have broken charts. Although cleantech has outperformed year to date, led by solar and wind, we continue to be concerned that (1) it is very early, so technologies are not yet economic, and (2) it may not be today's public companies that are the ultimate winners.

The cleantech advantage

That's the bad news, let's consider the good. Alternative energy does have advantages that are likely to become more important over time:

Fewer greenhouse gas emissions: Climate change is a potential threat of large magnitude; many argue that even with moderate confidence in the theory's validity, prudent risk management demands that we reduce emissions. Climate change concern is far from top-of-mind right now, but that could change over time, both due to climatic events and generational change as today's more environmentally-conscious teenagers become tomorrow's consumers.

Fewer people hurt or killed: To be blunt, clean energy techniques are less harmful not only in their byproducts but in their manufacture and use. Whether it is through the risk of coal miners being trapped, oil rigs exploding, nuclear plants leaking radiation, or nat gas fracking threatening drinking supplies, current energy sources can be dangerous. Clean energy has a few potential issues such as solar encroaching on endangered species, geothermal possibly creating earthquakes, and wind turbines flying off/making noise/killing birds, but on the whole they are safer.

Less risk in supply and price: New Energy Finance CEO Michael Liebreich argues that while investors emphasize the policy risk of renewables, they overlook the risk-reduction benefits. In addition to less environmental risk, clean energy offers better supply security (dependence on Mideast oil), more price certainty (nat gas and coal prices historically volatile), and fewer cost overruns (solar and wind pretty predictable relative to nuclear cost in particular). Moreover, these fossil fuel risks seem to be getting worse with time.

Category creation potential: While perhaps not classically disruptive, alt energy threatens the energy establishment nonetheless with new product categories. Venture capitalist Vinod Kholsa sees more “disruption” possible than in tech. As in tech, he argues that new categories will be led by new companies. He points out it is not GE inventing new LEDs but Cree. It is not BP taking the reins in solar but First Solar. It is not Exxon leading in biofuels but Amyris and Gevo. And, arguably, it might not be GM winning in EVs but Tesla. No doubt much of the coming innovation will be a result of the money being poured into cleantech in just the last few years and the brains migrating from other industries.

Distributed energy generation: Energy generation today largely is centralized. Much as mainframes gave way to PCs and wireless devices in computing, we expect alternative energy to provide ways to generate energy more distributed locations. Solar and wind are available everywhere to varying degrees and may prove more economic competing with retail rather than wholesale costs. A critical missing piece is storage--fossil fuels can be stored while, for now, electricity cannot.

It's a big energy market: Although overtaking today's incumbents likely is more difficult in energy than it has been in technology, the energy market is larger at \$1.5 trillion in the US alone. A little success could go a long way. Transportation would seem especially ripe for change since it is the only industry solely dependent on one fuel—oil. Whether it is electric vehicles, nat gas-powered transportation, or biofuels, there is a great opportunity for challengers. In addition, developing markets are the ones that really need more energy and will take off as their ability to pay for clean energy intersects with its cost.

Picking stocks with an edge

These high-level thoughts are fine, but most of us face the task of picking stocks we think will outperform or underperform. We need to figure out both what our edge is over other investors (industry understanding, supply chain information, superior modeling, etc.) and the edge the companies we invest in have. At best, the two combine for a correct, non-consensus insight.

Finding such insights is our daily job and we won't belabor the point here. We would make some comments on select names we cover though:

First Solar: Given our view that solar is investable long term as grid parity is reached and that First Solar is likely to remain the cost leader, we like the stock. We have argued that investors underestimate the profitability of the North American utility business. We remain confident in that opinion, though our similar view on better-than-expected European ASPs is shakier given faltering policy support.

SunPower : The company has been easy to write-off due to its high manufacturing cost and some execution missteps. That may be providing an opportunity for contrarians that believe in solar generally and SunPower's ability to reduce cost while leveraging its high conversion efficiency specifically. We have warmed in upgrading to Neutral but aren't convinced yet given the potentially negative macro oversupply backdrop.

EnerNOC: We overestimated the company's 2011-12 earnings prospects given the PJM headwind. The question whether demand response is a viable long-term category remains unanswered. If it is, and EnerNOC remains the leader, the stock would have substantial upside.

Cree: Investors are in two camps: (1) the current earnings problems are cyclical and growth and margins will return as inventory is worked off and new lighting applications are enabled, or (2) competition will drive pricing, margins, and the P/E multiple further down. We stand in the first camp though with less conviction than we would like.

A123 and Ener1: The battery names have had a tough go of it given the need to build plants and hope customers will come. The insight now may be that grid storage is a greater opportunity than passenger vehicles, so the winner will be the one that can best sell to utilities.

Clean Energy Fuels: A low natural gas price and fossil fuel concerns should be bullish for this retailer of gas to trucks and buses. Near-term stock performance likely turns on whether the Nat Gas Act, which should be re-introduced in the next week or so, gets passed and incentivises truckers to switch from diesel to nat gas.

Price objective basis & risk

A123 Systems (AONE)

Our price objective of \$12 is supported by two valuation metrics: (1) Comp group average EV-to-sales multiple of 2.1x based on our 2012 estimated sales of \$495 million and (2) a discounted cash flow analysis with a WACC of 16.2% and a terminal EV/EBITDA multiple of 7.5x.

Upside risks to our price objective are: (1) the market for lithium-ion batteries could be larger and evolve sooner than we expect, which could result from higher oil prices, (2) significant share if A123 turns development into production contracts, and (3) the market for grid storage accelerates sooner than expected.

Downside risks to our price objective are: (1) the company's key auto relationships with various OEMs may fail to evolve, (2) the company's patent litigation may result in a higher-than-expected royalty fee, (3) the electric vehicle industry could develop later than expected or not at all, and (4) Asian companies with more battery experience and greater resources could dominate the battery market.

Clean Energy Fuels Corp. (CLNE)

Our price objective is \$15. Our valuation is based on a discounted cash flow analysis with a WACC of 12% and a terminal EV/EBITDA multiple of 8x, which is consistent with the median high growth cleantech multiple and reflects the potential growth in demand we expect for Nat Gas Vehicles (NGVs). The passage of the provisions originally outlined in the Nat Gas Act (H.R. 1835) that are now being debated as part of a larger energy bill would likely spur increased demand as tax incentives make natural gas vehicles more economical, resulting in increased profitability, free cash flow, and return on capital, in our view. A key will be NGV adoption by regional truckers and corporate fleets.

Risks to our PO are (1) the Nat Gas Act (H.R. 1835)/American Power Act fails to pass, (2) a weakening economy could reduce fuel demand, (3) a lower oil price could slow adoption of natural gas fuel, and (4) ports and other large fleets may choose to meet the clean air standard by going to clean diesel trucks rather than natural gas.

Cree, Inc. (CREE)

Our price objective of \$48 per share is based on a target P/E multiple of 21x our FY2012 adjusted EPS estimates of \$2.26 which is in line with the one-year mean P/E and also with our expected five-year earnings growth rate. Our DCF suggests a value north of \$50, reflecting Cree's solid free cash flow and the potential growth of the LED market. Our DCF incorporates a weighted average cost of capital of 11.3% and a terminal EBITDA multiple of 9.0x, which is in line with similar high-growth category leaders.

Risks are (1) increasing competition and associated pricing pressure, (2) the gross margin peaking, (3) customer hesitancy due to the high upfront bulb cost, and (4) manufacturing glitches as capacity ramps up.

Ener1 Inc. (HEV)

Our price objective of \$5.00 per share is based on estimated revenue of about \$555 million in 2013 and a price-to-sales ratio of 2.0x, discounted back at a 25% rate. We see HEV trading at a premium to comparable names over time given

the company's increased exposure to higher profit segments. A discounted cash flow analysis assuming reasonable success suggests significant potential upside. Risks are: (1) disappointing interest in hybrid and electric vehicles, (2) inability to procure funding for expansion, (3) larger competitors shutting EnerDel out of large contracts, (4) inadequate supply of lithium carbonate to support growth, and (5) superior technology from competitors leapfrogging the company.

EnerNOC Inc. (ENOC)

Incorporating heightened regulatory risk, our \$23 price objective is 6.0x our 2012 EBITDA estimate of \$68 million, which corresponds to the low end of stock's one-year range and a 15-20% discount versus smart grid peers. Our discounted cash flow analysis points to a similar value applying a WACC of 16% and a terminal EBITDA multiple of 6.0x.

Risks to our price objective are: (1) electricity demand could be weak, reducing DR needs, (2) EnerNOC could experience pricing pressure in open market auctions, where the majority of the company's megawatts under management are obtained, (3) rising competition, including possible disintermediation by utilities, (4) high overhead and lack of profitability, and (5) increased regulatory scrutiny and/or negative rulings affecting treatment of curtailment capacity and pricing.

First Solar, Inc. (FSLR)

First Solar is one of the few solar companies to earn its cost of capital and should be a long-term winner, in our view. At our price objective of \$175, the P/E would be 18x our 2011 estimate, a meaningful premium to the average solar multiple given First Solar's higher earnings quality and superior ROIC. The PEG ratio would be about 1.0x, which we would view conservative for a relatively fast-growing and profitable leader.

Risks to our price objective are: (1) falling polysilicon prices that allow silicon solar suppliers to cut into the company's margins, (2) a change in the German feed-in tariff that hurts First Solar given 60% of revenue is in Germany, (3) disruptive competitive threats, such as CIGS or organic solar, (4) delays in building utility-scale projects, and (4) currency movements.

SunPower Corp. (SPWR)

Our price objective of \$21 reflects valuation in line with the mean 2011 solar universe P/E and EV/S ratio. The stock looks inexpensive on non-GAAP but less attractive on GAAP basis above 20x our 2011 estimate. We see limited upside potential until GAAP earnings break \$1.00 per share and earnings quality improves.

Upside risks to our PO are (1) high module efficiency allowing the company to sell modules at a significant price premium, (2) a pickup in solar demand as tight financing conditions ease, and (3) strong growth in distributed solar where its panels have a competitive edge.

Downside risks to our PO are (1) financing of demand this year, especially in the commercial and residential segments, (2) the ability to reduce costs to reach grid parity, (3) attacks from potential disruptive technologies, (4) currency movements, and (5) negative policy actions on existing solar incentive/subsidy programs.

Link to Definitions

Industrials

Click [here](#) for definitions of commonly used terms.

Technology

Click [here](#) for definitions of commonly used terms.

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US - Alternative Energy Coverage Cluster

Investment rating	Company	BofA Merrill Lynch ticker	Bloomberg symbol	Analyst
BUY				
	Ameresco Inc.	AMRC	AMRC US	Steven Milunovich, CFA
	Ener1 Inc.	HEV	HEV US	Steven Milunovich, CFA
	First Solar, Inc.	FSLR	FSLR US	Steven Milunovich, CFA
	Itron Inc.	ITRI	ITRI US	Steven Milunovich, CFA
NEUTRAL				
	A123 Systems	AONE	AONE US	Steven Milunovich, CFA
	Clean Energy Fuels Corp.	CLNE	CLNE US	Steven Milunovich, CFA
	Cree, Inc.	CREE	CREE US	Steven Milunovich, CFA
	EnerNOC Inc.	ENOC	ENOC US	Steven Milunovich, CFA
	Ormat Technologies, Inc.	ORA	ORA US	Steven Milunovich, CFA
	SemiLEDs Corp.	LEDS	LEDS US	Steven Milunovich, CFA
	SunPower Corp.	SPWRA	SPWRA US	Steven Milunovich, CFA
UNDERPERFORM				
	Covanta Holding Corporation	CVA	CVA US	Steven Milunovich, CFA
	Fuel Systems Solutions	FSYS	FSYS US	Steven Milunovich, CFA

Important Disclosures

Investment Rating Distribution: Alternative Energy Group (as of 01 Jan 2011)

Coverage Universe	Count	Percent	Inv. Banking Relationships*	Count	Percent
Buy	5	41.67%	Buy	2	40.00%
Neutral	4	33.33%	Neutral	3	75.00%
Sell	3	25.00%	Sell	2	66.67%

Investment Rating Distribution: Business Services Group (as of 01 Jan 2011)

Coverage Universe	Count	Percent	Inv. Banking Relationships*	Count	Percent
Buy	12	57.14%	Buy	6	54.55%
Neutral	7	33.33%	Neutral	6	85.71%
Sell	2	9.52%	Sell	1	50.00%

Investment Rating Distribution: Global Group (as of 01 Jan 2011)

Coverage Universe	Count	Percent	Inv. Banking Relationships*	Count	Percent
Buy	2011	53.86%	Buy	874	48.31%
Neutral	925	24.77%	Neutral	444	52.30%
Sell	798	21.37%	Sell	276	36.75%

* Companies in respect of which BofA Merrill Lynch or one of its affiliates has received compensation for investment banking services within the past 12 months. For purposes of this distribution, a stock rated Underperform is included as a Sell.

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Neutral	≥ 0%	≤ 30%
Underperform	N/A	≥ 20%

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