



## **2006 Q3 Quarterly Report: WilderHill Index Clean Energy Index®. Sept. 30, 2006**

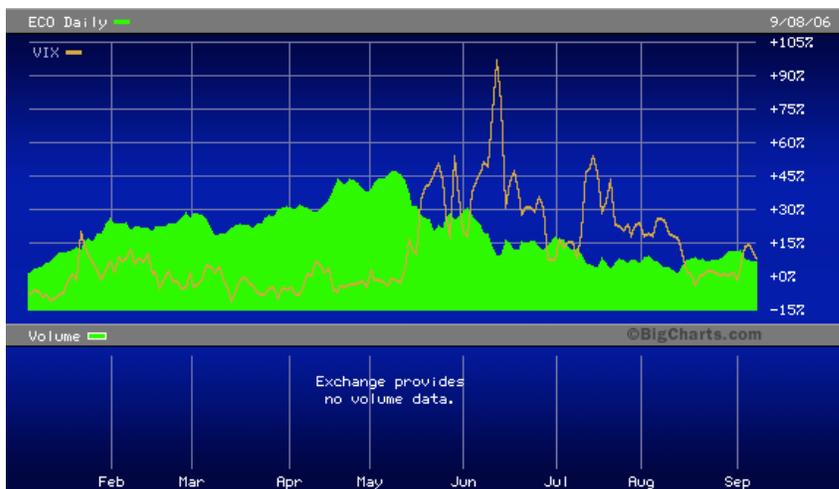
The Third Quarter of 2006 opened with the Index (ECO) at 201.25, and it ended at 176.32. Q3 thus had a negative return of -14.1%. As expected in tracking the notably volatile clean energy sector, this Clean Energy Index® too had a sizable intra-Quarter volatility.

### **Overview of 2006 Q3, and the Past Six Months of 2006**

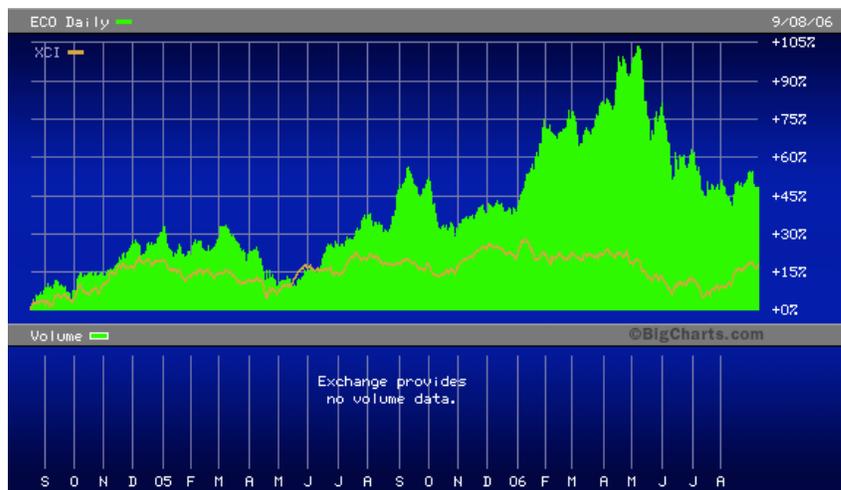
Given sizable upward movements in the Index (ECO) over much of the past 2 years, we've felt a concomitant need to repeat in many past Reports that this sector also will surely be volatile to the downside too: it should be expected the sector may well turn down despite past increases and it can also 'drop like a rock'. In light of an unsustainable 40% Year-to-Date increase that preceded YTD movement to May, the downturn now marking all of Q3 is in line with past moves down (or up) that's expected long-term. The impressively sharp drop for the past 5 months may also reflect some short-term frothiness was priced in for Q1. We'd note too unlike an active-managed fund that may try to soften downturns, as an Index we don't try to take defensive positions or to second-guess the sector.

Overall then, following a strong run up from January through early May of 2006, the broad clean energy sector afterwards turned sharply downward; it since lost roughly entirely earlier gains of the year. After starting the Second Quarter of 2006 by opening up at 227, it later closed Q2 at 201 for a negative return of -11%, while the Third Quarter 2006 has closed down again to extend this trend to 5 months so far. Usefully some factors might help explain a bit sharp movements of Q2/Q3 and may be traced back to early May.

A first item starting in May as noted in the last Report was sharply increasing volatility in broader markets that roughly inversely coincided with ECO's drop. This is displayed below as Year to Date (ECO, in green), compared to the volatility Index (VIX, in brown):



But the YTD chart above spotlighting a sharp change in the VIX only captures a brief period of time for the Clean Energy Index®. Because ECO has been calculating since August 2004, the recent downturn in ECO since May should be seen in context since inception. Here we show all of ECO (in green), as compared to a Technology Index (in brown):



Since May more specific factors arguably help account for the Q3 decline, and one may be a notable rotation that was/is now being seen across the clean energy sector. We note that the very areas that were so buoyed by strong positive opinions about their prospects in Q1, have since conversely seemed to undergo a reversal in sentiments during latter Q2 and Q3. Suddenly what was in favor went out of favor. It speaks to undying significance of market psychology too, since some changes are seemingly based on ‘soft’ changes in sentiment, rather than ‘hard’ news or objective changes in profits/company prospects.

Hence Q1 first witnessed robust enthusiasm for the whole solar arena. That grew variously from attention to possibly strong sales growth for years ahead in poly & non-crystalline PV, interest in exotic PV technologies that may expand energy resiliency, hopes for incremental reductions ahead in cost per watt due to step-improvements in efficiency, an idea that disruptive next-generation thin film or thermal concentrating technologies could be commercial within a few years, the fact PV starts from a tiny installed base, and the U.S. States’ renewable portfolio standards, growing governmental subsidies, etc.

But by latter Q2 2006, this very same solar arena was being regarded in far more dismal light. It was then regarded as an idealistic but a not so-realistic bet, one beset by current costs of over 20 cents per kilowatt/hour, beleaguered by shortages in poly unlikely to end soon, being overly-dependent on government subsidies or distant RPS goals, sadly unable to grow at swifter rates despite demand due to bottlenecks, and perhaps just too futuristic in contrast to widely-accepted (however inelegant) combustion of fossil fuels today. In short a key change was arguably one of sentiment: solar stocks dropped quickly and fell out of favor despite lack of hard news. Meanwhile capital was fleeing globally away from risk, and towards safer havens in Q3: all the clean energy stocks suffered.

Energy efficiency stocks declined too. Achieving better efficiency is often a deferrable choice easily put off and business maintained as usual. Absent some sharp catalyst or spike in fossil fuel costs, upgrades in efficiency are often an infrequent choice. Here too, stocks declined absent much hard news and oil declined from its peak of \$75/barrel.

Much the same thing could be said for the wind arena where prior enthusiasm for wind power under 5 cents per kilowatt/hour and untapped wind regimes (like in America), gave way instead to angst over constraints of grid capacity, excessive turbine mechanical break-downs, local opposition to some wind farms, and ongoing lack of interest by some utilities that are more comfortable with traditionally firmer power such as coal or gas.

This was most clearly evidenced by shifting attitudes toward ethanol stocks. Starting from merely ‘a yawn’ for all ethanol stocks (like PEIX), the investing public soon was strongly bidding up ethanol early in 2006 especially after the January State of the Union message that had spotlighted ethanol. This arguably reached exuberant and unsustainable ‘bubble’ levels by Spring 2006, and so even very small companies like PEIX that was not yet producing even a gallon of ethanol, had seen their share prices increase many-fold.

But by Q3, pessimism (perhaps unsurprisingly) had replaced prior exuberance. The overdone notions that corn-based ethanol could displace fossil fuels cheaply and without impacting the prices for corn/food and the vexing transportation difficulties for ethanol etc that were all largely ignored in Q1, were soon washed away with a steep drop in stocks. Now thorny transport of corrosive ethanol, the difficulties in vastly ramping corn harvests and thus supplying enough to make a real dent substituting for fossil fuels, a vexing need to splash-blend ethanol near retail pumps, the lower MPG, ambiguous climate change benefits from corn-ethanol and severe lack of gasoline stations even selling ethanol was now much in fore. Yes, millions of U.S. cars had theoretically been built as flex-fuel ready for advantage under U.S. CAFE standards, but it was less clear now that obstacles to ramping corn-ethanol in the U.S. would allow a quick paradigm shift.

Yet through this all something a bit overlooked remains the potential for differing, second-generation cellulosic ethanol. This is based not on inputs of corn that competes for food – but rather on agricultural wastes (stover) or fast-growing switchgrass, poplar, etc that’s grown smartly and may be climate/CO<sub>2</sub>-neutral or better. Hence it may be not first-generation ethanol that holds keen promise but rather 2G cellulosic biofuels *if* much cheaper enzymes are found to unlock their potential, and ecological issues (deforestation etc) are all addressed. That said the uncertainty makes it difficult to price ethanol stocks.

In sum the clean energy sector went from an exuberant January and an apex in May – to impressively strong declines going through at least the end of Q3. It’s entirely impossible to predict what will happen in Q4 2006. But it is possible to look in the rearview mirror and note even the latest decline is entirely normal, and has happened many times in the past (as well as sharp increases upward). For this Quarter, we’ll again note the Index is volatile and can ‘drop like a rock’ – but now we add as well that ECO may increase sharply too, especially after declines. We will as always closely observe and evaluate the Index ahead for correlations with other areas, or inverse correlation relationships.

### **Lessons from Over the Past Two Years**

Look back then at what perhaps previously impacted the sector (and so the WilderHill Clean Energy Index<sup>®</sup>), since lessons from the past may be relevant in future as well. First in terms first of the ‘*negative*’ pressures that may lead to any *downwards* movement in ECO, there’s clearly been short-term periods where ECO roughly correlates with the price

of oil – and so bearish oil declines interestingly coincide with ECO dropping too. More recently we've also seen times where ECO hasn't correlated well with oil at all. ECO has thus declined (like in early Q3) during oil's upturns. On the other hand, concern over risk that has sent investors to safer havens than in equities (especially smaller equities like in clean energy) might swamp any upwards pressure then being felt by rising oil.

Next look at past *upwards* movement in ECO, and historically there are 'external' triggers have surely helped add to the upwards-sector pressure and a rising Index. These have included *natural* events briefly but sharply hiking costs of oil (or natural gas) such as after Hurricane Katrina or following an unusually cold winter or hot summer, or *human error* that interrupts supply and again raises the price of oil; or an unforeseeable 'intentional disaster' such as a terrorist attack that targets or simply impacts fossil fuels.

The above triggers all are catalyzed by *more expensive oil*, since that makes alternative clean energy relatively affordable, or even desirable in its own right. Natural gas costs on the other hand may be most important in relationship to oil as we noted previously for the 'spark-spread', while coal is generally less volatile. But when oil costs climb, then the superior attributes of clean energy may be very favorable including the energy security that's derived from solar, wind power, etc, domestic abundance, distributed generation, fixed fuel costs (free), resiliency, and that zero-carbon prevents harm in the first place.

Besides external forcing, there are events 'internal' to clean energy that from time to time lend an upwards-pressure on ECO. These can include non-negligible disruptive breakthroughs in aspects of clean energy or efficiency like via novel nanotechnology, metallurgical silicon to supplant regular raw poly, smaller-scale/lower-temperature geothermal, ACSi, ultracapacitors, or fuel cell electrolytes etc that may bring down prices extensively. They're perhaps increasingly close to reality in clean energy technologies like better batteries – and may become plausible for highly speculative areas like fuel cells.

We also believe the price of oil cuts both ways: oil may drop substantially below \$50/barrel ahead (making clean energy relatively costly) or it could increase above \$100 – and at times we've seen past sharp movements in either direction having real impacts on ECO, and at times there's been little/no correlation. Notably too although we focus on clean energy, we're still rather skeptical of the very-near (or even past) peak-oil thesis which hypothesizes that worldwide we may be at or near a point where in retrospect more oil is soon being taken out, than is still economically available in the ground.

In part our skepticism is because with oil lately above the 'expensive' \$50 mark, we're anticipating sophisticated exploration ahead and huge oil discoveries in the near-future that will soon increase proven reserves. It's been wisely said 'there's no cure for cheap oil, like cheap oil' since oil that fetches low prices dries up forces of exploration and leads to decreased supply. Future oil and its close cousins like tar sands or shale etc may well cost a rather startling >\$25 barrel or more to produce, and dear oil comes from distant places not now under the control of National Oil Companies (NOCs) like deep offshore in the Gulf of Mexico, Arctic, from coal, tar, shale etc. So we're perhaps not running out of oil yet, but rather running low on *cheap oil*. If OPEC potentially defends a floor near or above \$50/barrel, that too unleashes great forces of exploration subdued a few years ago at \$25 oil. We're also a bit skeptical because we believe clean energy will increasingly make the greatest sense, in its own right, and so naturally replace oil as *the better idea*. On the other hand if peak oil is indeed near, then oil may rise greatly in cost regardless.

## Two-Year Performance of ECO Since its Inception on August 16, 2004

We were pleased to see ECO nicely mark the first two years of live calculations during Q3. We'd note parenthetically that after ECO had first gone live August 16, 2004, at a value of 125, two years later on August 16, 2006 the Index then closed at 186: this means a two-year total increase across clean energy as captured & tracked by ECO of 49%.

This followed upon the previous one-year August 16, 2005 closing at 163, when ECO then had its first-year return of +31%. Some thoughts are suggested by this strong first-year, plus the strong second-year record. One is risk and return go hand-in-hand: it may be the substantial risks across the sector that's so dominated by many small-cap stocks that can engender such dynamism. However, that risk also requires strong declines. As we so often highlight, the Index doesn't attempt to mitigate for volatility – for instance, the Index doesn't seek defensive positions, nor the large-caps with lesser exposure to clean energy simply because those could 'smooth out' performance. Significant movements in ECO are thus expected, over time, and this will at times be sharply downwards (or even upwards).

The Index by coincidence arguably began live calculations at a relative low-point, as suggested by back-test historical data. This importantly contributed too to the Year 1 plus Year 2 total performance. As the Index goes on calculating for the years yet to come, we'll look forward to an increasingly data-rich environment and to ECO being the key benchmark that's recognized as the most robust reflection of this emerging sector. Being steeped in both clean energy, and Indexing, we look forward to staying the leading Clean Energy Index<sup>®</sup> in a field we believe might potentially grow with some vigor ahead.

## The 3% Rebalancing Cap: A Design of Index (ECO) Rules

We published the following Rule Change in August 2006, to band any stocks \$50-\$200 million in size at 0.5% weight, and revise the ceiling slightly from 3% to 4% at rebalance:

### **Calculation Methodology**

The Index is calculated using a modified equal dollar weighting methodology. Component securities and weights are determined by their respective sector and size. Each Sector is assigned an aggregate weight within the index. Components less than \$200 million in total market capitalization are set to one-half of a percent (0.5%). The remaining components in each Sector are equally weighted by using the Sector weightings minus the sum of the weights of less than \$200 million in market capitalization. Sector weightings were initially determined by the Index Provider and are reviewed each quarter in conjunction with the scheduled quarterly review of the Index. Within each sector the components weighting cannot exceed four percent (4%) of the index.

As noted several of our ECO Rules have been designed by us to restrict our own discretion and two ways we seek to 'handcuff ourselves' are by \*modified equal-weighting method, and \*4% ceiling on individual stocks at rebalance. Our rationale was laid out before but it may merit some brief repeating, since the Index has been operating for over two years and is arguably a benchmark. From the start, our experience in clean energy usefully taught us early lessons for designing this Index (ECO); given a choice whether this new Index should weight by market-capitalization (producing very wide range of weights) – or have modified equal-weight, we clearly felt the latter would work better here.

To be sure a market-cap style is used well when Indexing mature big-cap sectors and it gives large stocks an important role there. Yet it can also make some stocks far more significant than others, based on market cap. One or two stocks may re-balance at 15% or more, with others together under 1%. For subscribers to efficient-market theory who hold ample data are priced into shares, market-cap alone may be a good arbiter of value. But with small pure-plays thus having little impact, we saw market-cap as vexing for ECO.

Our own experience Indexing clean energy had persuasively shown us that to robustly track genuine, Clean Energy stocks in this sector, we needed to include the pure-plays and so volatile relatively very small-cap stocks. These small-caps can be key here. Since often-young tech companies doing R&D may lack much revenue or commercial products, they may have market caps under \$500 million. To avoid those seminal small stocks ‘fighting against’ or being swamped by large-caps, we needed a (modified) equal-weight.

Within that design we’d also need the large companies with significant clean energy exposure and relevance, since those have some value for any Index here: indeed, several are in ECO now. Yet we recognized that while large companies are often more diversified and their stocks may relatively track a major Index (Beta), a robust Clean Energy Index should truly reflect the sharp movements – down or up – that characterize this emerging sector. Unlike Indexing for the mature fossil fuels where cap-weighting may mean two very large-caps make up 25%+ of an Index – and relatively small stocks together are 1% – the design of ECO helps ensure volatile clean energy pure-plays are retained and not overshadowed. And with this 0.5% banding approach too we’ll see large stocks having relatively greater impact, all together allowing a bit more leeway for the Index.

Lastly the slightly revised 4% cap still helps to ‘hand-cuff’ us by preventing distortions in weightings or any favoritism at rebalance: it also reinforces an aim of passive Indexing which is to avoid active management (frequent stock turnover or ‘stock picking’). As the number of stocks in ECO grows or changes, this Rule helps enforce that no stock is weighted very much more than any other stock at rebalance. Having these constraints on our own discretion helps in our opinion to instill discipline; it also promotes a straight-forward thinking and transparency that’s core in the WilderHill Clean Energy Index® (ECO).

In sum the modified equal-weighted design has been the most appropriate for this Index (ECO). A strictly equal-weighted methodology arguably might be used except that we’re seeking to be highly intellectually robust by weighting this first-ever, Clean Energy Index® (ECO) according to Sector. Also we felt that as the first-ever Index for clean energy, we should be able to emphasize the cleanest or more relevant Sectors, over the less so.

With this banding, stocks between \$50-\$200 million are given an \*asterisk below and each have a 0.5% weight; the floor for eligibility in ECO remains as always \$50 million.

The following are stocks and weights at the rebalancing for Q4 2006 (as of last day of Q3):

#### **INDEX (ECO) SECTOR & STOCK WEIGHTINGS AS OF FIRST DAY 2006 Q4. 42 STOCKS.**

Each stock freely floats according to its share price after rebalance.

**Renewable Energy Harvesting** - 33% sector weight (10 stocks @3.25% each; +1 banded)

*Applied Materials*, AMAT. Semiconductor fabrication, growing solar PV aspects.

\**Distributed Energy*, DESC. Part solar, wind; mainly in DG, some H2: an integrator.

*Emcore*, EMKR. Solar, 28% ultra-efficient PV cells for satellites and terrestrial use.  
*Evergreen* ESLR. Unique string-ribbon solar PV with efficient silicon-use.  
*Kyocera*, KYO. Solar PV, integrated manufacturer is doubling production.  
*MEMC*, WFR. Producer of the polysilicon needed in many crystalline solar PV cells.  
*Ormat*, ORA. Geothermal, works as well in recovered energy, biofuels.  
*SunPower*, SPWR. Solar, Efficient PV panels with all-rear-contact cells.  
*Cypress*, CY. (Parent firm of SPWR above, and owns the major block of their stock).  
*SunTech Power*, STP. Solar, fast-growing and major producer of PV is based in China.  
*Zoltek*, ZOLT. Wind, makes carbon fiber for wind blades and product 'lightening'.

**Power Delivery & Conservation** - 20% sector weight (7 stocks @2.78% each; +1 banded)

*American Superconductor*, AMSC. Superconductors, 'no'-resistance 2G HTS wire.  
*American Power Conversion*, APCC. UPS, makes firm-power systems.  
*Color Kinetics*, CLRK. Light Emitting Diode (LED) lighting systems.  
*Cree*, CREE. LEDs, makes efficient lights, power-saving electronics.  
*Echelon*, ELON. Networking, for management of whole energy systems.  
*International Rectifier*, IRF. Efficiency-enabling electronics producer.  
*Itron*, ITRI. Monitoring, designs energy measurement and management systems.  
*\*UQM Technologies*, UQM. Hybrid vehicle electrics; motor & power systems.

**Cleaner Fuels** - 14% sector weight (7 stocks @2.00% each)

*Air Products & Chemicals*, APD. Hydrogen, a supplier of many industrial gases.  
*Andersons*, ANDE. Biofuels and ethanol; highly diversified across agribusinesses.  
*Diversa*, DVSA. Enzymes to convert biomass, cellulosic feedstocks into biofuels.  
*MGP*, MGPI. Biofuels, ethanol and fuel alcohol.  
*Pacific Ethanol*, PEIX. Aims to be a leading biofuels producer for Western U.S.  
*Praxair*, PX. Hydrogen, a supplier of many industrial gases.  
*VeraSun Energy*, VSE. Biofuels, is the 2nd largest corn ethanol producer in U.S.

**Energy Conversion** - 14% sector weight (4 stocks @3.25% each; +2 banded)

*Ballard Power*, BLDP. Mid-size fuel cells, makes mainly PEM FCs.  
*\*Capstone Turbines*, CPST. Micro-turbines 30-60 kW, may be flexible-fueled.  
*FuelCell Energy*, FCEL. Large fuel cells as stationary high-temp. flex-fuel MCFCs.  
*\*Hydrogenics*, HYGS. Fuel cells and testing gear, H2 electrolysis, regenerative FCs.  
*Medis*, MDTL. Micro fuel cells, designed for liquid-fuels and a unique electrolyte.  
*Plug Power*, PLUG. Mid-sized fuel cells for distributed generation, home power.

**Energy Storage** - 13% sector weight (3 stocks @3.67% each; +4 banded)

*\*Active Power*, ACPW. Flywheel power storage, a firm power alternative to batteries.  
*Energy Conversion Devices*, ENER. Very diversified: in batteries, solar PV, also H2 FCs.  
*\*Fuel Systems Solutions*, FSYS. Gaseous fuels integrator for cleaner-fueled vehicles.  
*Maxwell*, MXWL. Ultracapacitors, a battery alternative such as for hybrid vehicles.  
*OM Group*, OMG. Producer of nickel and precursors in rechargeable batteries, FCs.  
*\*Quantum Fuel*, QTWW. Hydrogen gas storage systems for cleaner-fuel vehicles.  
*\*Ultralife Batteries*, ULBI. Batteries, advanced lithium ion, polymer rechargeable.

**Greener Utilities** - 6% sector weight (3 stocks @2.00% each)

*Idacorp*, IDA. Hydroelectric, Utility, significant hydro-electric; some small hydro.  
*Puget Energy*, PSD. Wind, Utility. PSD is growing its wind power.  
*PPM Energy / Scottish Power*, SPI. Wind, Utility, PPM is growing wind power.

### Index (ECO) Rebalancing: Addition of OMG, DVSA; Deletion of MKTY

Sector weights remained the same and are as follows: Renewable Energy Harvesting, 33%; Power Delivery & Conservation, 20%; Cleaner Fuels, 14%; Energy Conversion, 14%; Energy Storage, 13%; Greener Utilities, 6%. Two stocks were added for Q4 rebalancing (at end of Q3): **OM Group (OMG)** is a producer of essential nickel and precursor materials like cobalt needed for rechargeable batteries or various battery technologies like Li-Ion that may be core to emerging hybrid vehicles etc; and **Diversa (DVSA)** that's doing research on cheaper enzymes that could be used in converting biomass feedstock to cellulosic ethanol, or biofuels. OMG and DVSA are growing work that's highly relevant to clean energy and they are well impacted by it now. In other matters, MKTY (one of several fuel cell stocks) was deleted from the Index after trading for a period very near the \$50 million floor.

### Other Noteworthy Events in Q3

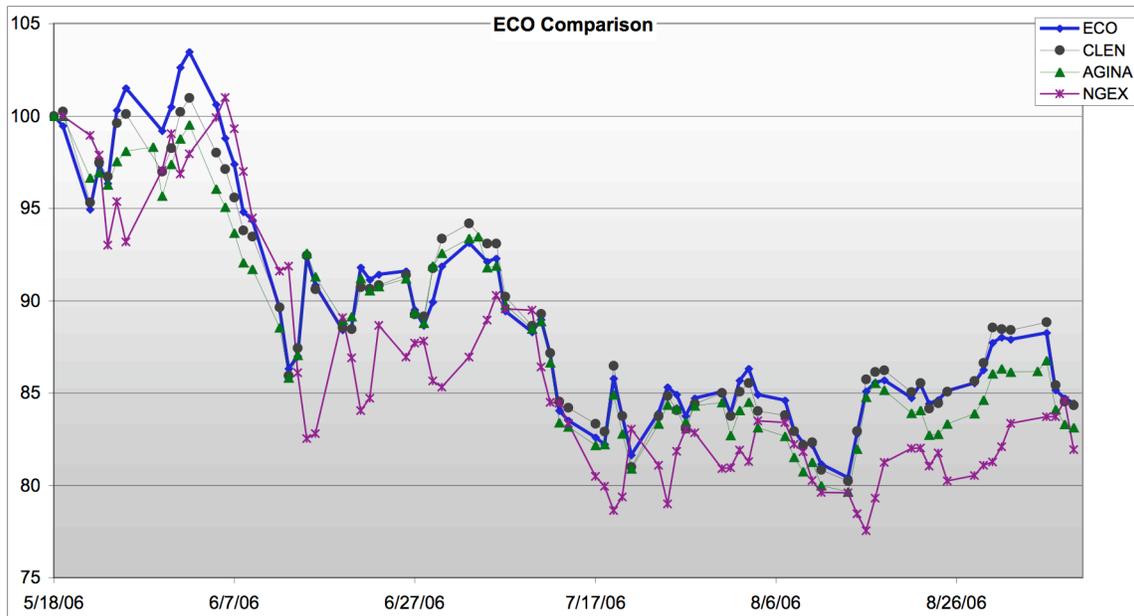
Three small but noteworthy matters arose in Q3. One was then-Index component Power Integrations (POWI) had a stock symbol change due to its failing to meet certain market requirements and was 'downgraded' to POWI.PK. Under our Index Rules, with that delisting from NASDAQ they were also automatically removed from the Index (ECO). We allowed them on the webpage list of 'Stocks Within ECO As Of The First Day of Q3' to the end of Q3 since that's correct information, but let old "POWI" show as a non-live symbol on the webpage list since that's a useful alert. They were a rare instance of an intra-Quarter deletion; POWI was deleted but can potentially be re-considered in future.

A second small event was ECO component 'IMPCO Technologies' (IMCO) changed its name to 'Fuel Systems Solutions' and its symbol changed to FSYS. Originally known as the 'Imperial Machine Products Company' (hence their name IMPCO), that company had come feel that the IMPCO acronym was no longer especially useful and the new name/symbol better described their work in vehicle gaseous alternative fuel systems. The name and symbol change to FSYS were all handled automatically for the Index (ECO) by the AMEX and this relevant component thus remains in ECO albeit under the new name.

A third event was when ECO component Emcore (EMKR) with a longstanding 49% stake in the 'GelCore' partnership with GE sold their stake to GE for \$100 million. Because that partnership for high-brightness Light Emitting Diodes was of some significance to their inclusion in ECO, we focused then upon where EMKR was heading with their remarkably efficient PV panel business since that's a core reason for their inclusion in ECO after all.

Because EMKR is now expanding their special GaAs PV panels into possible terrestrial applications instead of the more niche satellite uses and they may achieve remarkably >30% efficiencies while bringing down costs per watt, we were satisfied by their perhaps even increasing relevance for ECO, should they seek new multi-megawatt PV concentrating applications such as utilities seeking to meet renewable portfolio standards.

Finally, three other Indexes had appeared since the Clean Energy Index<sup>®</sup> (ECO) and they were each noted in the last Quarterly Report: all of them are tracking so far in a pattern that's quite similar to ECO. This perhaps adds weight to our choices of methodologies, stocks and sector decisions that define how we're capturing and tracking clean energy. The following chart ([ECO in blue](#)) gives a comparison since those 3 indexes began:



### Ongoing Website Development

Our website at <http://www.wildershires.com> is in continuous refinement and we monitor for glitches that occur as the site grows. We thrive on (clean energy) technology, and our experience with data-rich public-interest websites has taught us that glitches happen, given software issues that inevitably arise. It's worth repeating that the actual WilderHill Clean Energy Index (ECO) is calculated independently and totally apart from our own website by the American Stock Exchange. And of course an exchange traded fund (ETF), <http://www.powershares.com/products.aspx?ticker=PBW>, tracking the Index is calculated robustly and totally independently from our website too. Data on the Index (ECO) and tracking Fund (PBW) are on the website for the American Stock Exchange, <http://www.amex.com>. Lastly, we continue to upgrade our website with the aim of offering robust uptime and ample information: we welcome your suggestions

### Conclusion

The Third Quarter of 2006 opened with the Index (ECO) at 201.25, and it ended at 176.32. Q3 thus had a negative return of -14.1%. Looking back at six past years of data, there's clearly history of similarly strong movements down (as well as up) and from the longer-term perspective such drops like in Q3 are normal; it's perhaps not surprising to see this whole sector and thus ECO moving sharply down ~33% since mid May – given the WilderHill Clean Energy Index had first increased some 40% from January 1 to early May.

We're repeatedly reminded that it sometimes feels like it's only after a basket of stocks goes up dramatically and one then becomes convinced and feels like it 'can't go down' that there's some unexpected inflection and it drops precipitously. That's human nature, and it leads to well-known chasing after hot sectors. Conversely sometimes a basket doesn't (perhaps) turn back upwards until only after pessimism pushes it deeply

downwards for a painfully long time, and eventually the story 'feels so unpromising' that it seems it can never go up (it sometimes does): in a volatile arena, both instances occur.

In conclusion the new Index (ECO) Rule introduced in August 2006 establishes a 0.5% weight band for stocks \$50 million-\$200 million in size at rebalance, and the ceiling is revised upwards slightly to 4%. With the recent rebalancing for start of Q4, sector weights remain the same as Renewable Energy Harvesting, 33%; Power Delivery and Conservation, 20%; Cleaner Fuels, 14%; Energy Conversion, 14%; Energy Storage, 13%; Greener Utilities, 6%. Two stocks were added at end of Q3: **OM Group** (OMG) is a producer of essential nickel and precursor materials like cobalt for rechargeable battery technologies and Li-Ion that may be used in hybrid vehicles. **Diversa** (DVSA) is doing research on enzymes that could be used in converting biomass feedstock to cellulosic ethanol or biofuels. Notably OMG and DVSA both have an increasing relevance to clean energy. In other matters, MKTY (one of several fuel cell stocks) was deleted from ECO after trading for a period near the \$50 million floor. As always, we welcome receiving your thoughts and suggestions.

Finally a matter not directly relating to ECO but pertinent is that we're also excited about the [WilderHill New Energy Global Innovation Index \(NEX\)](#) that was launched in Q1 2006: the NEX focuses on worldwide, international opportunities in clean energy and is mainly stocks listed outside the U.S.; it's a joint effort of [New Energy Finance](#), Mr. Josh Landess, and Dr. Rob Wilder. For more information on NEX, see <http://www.nexindex.com> Lastly, the newest [WilderHill Progressive Energy Index](#) is slated to go live very early in Q4 2006.

Sincerely,



Robert Wilder  
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Disclaimer: The following is a reminder from the friendly folks at the WH Index (ECO) who worry about liability. Performance figures quoted represent past performance only, and are no guarantee of future results. The views expressed here are those of just one of the managers of the WH Index. Views are not meant as investment advice and should not be considered as predictive in nature. Any descriptions of a holding, applies only as of September 30, 2006. Positions within the Index can and do change thereafter. Discussions of historical performance do not guarantee and are not indicative of future performance. The Index covers an exceptionally volatile sector and thus is remarkably volatile too, and always subject to well above-average changes in valuation.

## Appendix I

Following are Index weightings ~2 trading weeks before Rebalancing at very end of Q3. After a rebalance every stock will float according to its share price over the next Quarter:

### Index (ECO) Components as of: 09/16/2006

<b>Company Name</b>	<b>Symbol</b>	<b>% Weighting</b>
Cypress Semiconductor	CY	3.75%
Kyocera Corp Adr	KYO	3.66%
MEMC Electronic Materials	WFR	3.57%
Applied Materials	AMAT	3.44%
Sunpower Corp	SPWR	3.42%
Suntech Power Holdings Co	STP	3.16%
Ormat Technologies	ORA	3.05%
Zoltek	ZOLT	3.02%
Praxair	PX	2.78%
American Superconductor	AMSC	2.72%
MGP Ingredients	MGPI	2.71%
Distributed Energy Systems	DESC	2.70%
Air Products & Chem	APD	2.67%
Amer. Power Conversion	APCC	2.60%
Color Kinetics	CLRK	2.60%
Andersons	ANDE	2.46%
Itron	ITRI	2.45%
Echelon	ELON	2.44%
Emcore	EMKR	2.44%
Energy Conversion Devices	ENER	2.43%
Idacorp	IDA	2.43%
Scottish Power	SPI_W	2.40%
Evergreen Solar	ESLR	2.38%
Ultralife Batteries	ULBI	2.28%
Puget Energy	PSD	2.27%
Uqm Technologies	UQM	2.26%
International Rectifier	IRF	2.25%
Maxwell Technologies	MXWL	2.24%
Medis Technologies	MDTL	2.19%
Active Power	ACPW	2.06%
FuelCell Energy	FCEL	2.05%
Ballard Power Systems	BLDP	2.02%
Cree	CREE	2.01%
Quantum Fuel Sys Tech	QTWW	1.98%
Plug Power	PLUG	1.91%
Pacific Ethanol	PEIX	1.91%
VeraSun Energy	VSE	1.79%
Mechanical Technology	MKTY	1.57%
Hydrogenics	HYGS	1.34%
Capstone Turbine	CPST	1.34%
Fuel Systems Solutions/IMPCO*	FSYS/IMCO	1.23%

\*Was IMPCO: its name and symbol changed during Quarter to Fuel Systems Solutions (FSYS)