



Q4 2009 Quarterly Report: WilderHill Clean Energy Index[®], December 31, 2009

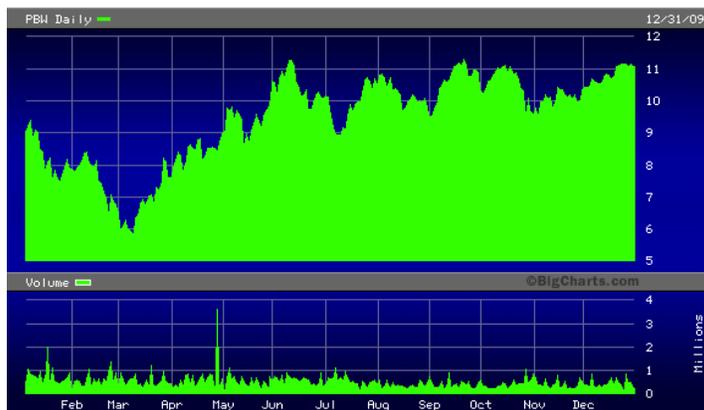
4th Quarter 2009 opened with the Clean Energy Index[®] (ECO) at 109.09 and closed at 111.35, for a barely positive Q4 return of +2.0%. For all 2009, the ECO Index[®] rose +28.9%. Following 2008's historic falls over a prior year, 2009 too, now has moved into the past, notable for its persistently strong declines the first 2 months, bottoming in Spring and then a volatile rebounding up to mid-year. The Index mostly went sideways latter half of 2009, and clean energy was essentially unchanged in Q4 as seen in Chart 1 below.

What happened overall of note this past year? Look across the clean energy sector broadly and it's made of many distinct, de facto, subsectors. Consider then a volatile *solar* subsector narrowly fell hard – yet strong gains instead were made in many other clean energy subsectors including efficiency, wind, LEDs, batteries, demand response, etc. That ECO is a basket holding six differing subsectors, let it capture useful gains outside solar.

So one story was a drag volatile solar had much of the year – in crystalline & thin film PV, concentrating solar, etc – somewhat affecting broader clean energy and ECO to boot. Just in solar that story was one of excess capacity, declining revenues, pressures on margins, concern over loss of incentives, & order cancellations; it confounded earlier high hopes once lifting solar from 2003 to 2007. A narrowly bearish view priced into solar yielded impressively low valuations in that subsector over 2008, and again in much of 2009.

Yet step back, there are now 4 distinct and independent yet relevant themes captured by WilderHill Indexes. Two of them exclude solar as discussed below: these 2 WilderHill Indexes 'outperformed' ECO (indeed beat most Indexes) in 2009. And our Global NEX Index did well too, in spite of its solar, given its sizeable wind power among other reasons.

To sum all WilderHill Indexes gained in 2009. WilderHill Progressive Energy (WHPRO) was up most, Wilder NASDAQ Global Energy Efficient Transport (HAUL Index[®]) second, then WilderHill New Energy Global (NEX) slightly ahead of ECO Index. Top of next page is a 2009 Chart for ECO with 3 other WilderHill Indexes. Very helpfully too there's now more products by others, including well-run active funds, & narrow Indexes for diverse options. But first, here's clean energy benchmark ECO for 2009 as seen by tracker fund (PBW):



With ECO capturing one key story, it may be interesting to see ECO along with 3 other relevant yet independent WilderHill Index stories. Here are trackers for **Progressive WHPRO (PUW)** orange at top, 2nd is **Global Transport HAUL (PTRP)**, 3rd is **Global NEX (PBD)**, and the 4th is ECO tracker, **blue**. We proudly note the 4 WilderHill Indexes all define & capture distinctive themes, and each was the first live Index for their respective fields:



So, varied ‘green stories’ did well in 2009 both relative to solar, and on absolute grounds. That grander story also sizably benefited the ECO Index. ECO being so diversified across clean energy, not in solar alone, it has had upside compared to 2 independent, interesting, well-built Indexes (not ours) for solar only. But as discussed too, solar Indexes could also move up very strongly, faster than ECO should solar recover quickly ahead.

We also touch, below, on academic theory that holds it’s tough for the active-managed mutual funds (we’ll shorten those to ‘actives’, or funds), to be well ahead of passive Indexes (‘passives’ or Indexes). Long term, or significantly so in short term, the bar set by passives can be pretty high. And after actives’ higher costs and their tax-bite, the active funds may hug or even trail passive benchmarks. We’ll look at a few recent well-run active mutual funds for global clean energy, and compare them to a relevant & leading global clean energy benchmark, WilderHill New Energy Global Innovation Index (NEX).

What are some Lessons from 2009?

Diversification remains as always a Good Idea! It may be tempting for investors to try to beat ‘boring’ averages by focusing on tight subsectors that have done noticeably well. To be sure after some subsector turns in great wins, like solar did from 2003-2007, one can be tempted to move in after the fact. One result may be extraordinary returns upside, so a win for an investor. Yet dangers too, may lurk in chasing past returns. Declines might soon dominate as one rides regression to mean downwards, narrowly harsh returns thus underscoring some risk in what’s the all-too-human nature of buying near a top.

Thus it might be useful to steel oneself and instead be contrarian; for instance a poorly performing subsector one year, may swiftly turn round, and sometimes be a winner – opposite of chasing gains! Rotation at least makes some case for breadth in Indexes.

We note then ECO as a basket, holds 6 major subsectors: ***Renewable Energy Harvesting** contains not just solar, but also wind power, geothermal power, ocean power, etc; ***Energy Storage** includes various batteries technologies, and ultracapacitors, flywheels; ***Energy Conversion** can have whole electromechanical systems like electric vehicles, thermoelectric conversion, FCs etc; ***Cleaner Fuels** may be cellulosic biofuels, H2, etc; ***Power Delivery & Conservation** is energy efficiency technologies including LEDs, power controllers, demand response, and means to reduce demand in a first place etc; and ***Greener Utilities** can include lower CO2 and renewable sources for producing power.

Having wide representation across clean energy can, as it seems happened in 2009, soften drops in a narrow area, or blunt gains. One hypothesis here is ECO's 'under-performance' this past year relative to say 2 other WilderHill Index themes (up nearly +50%, +60%) was due to solar's weakness. Importantly however, one can do little ahead of time, to avoid a subsector falling ahead; those declines are apparent in retrospect only. Solar is major to clean energy so naturally in ECO; we observe too solar's unforeseen drag in parts of 2009 slowed as well active funds that could have proactively moved their assets around.

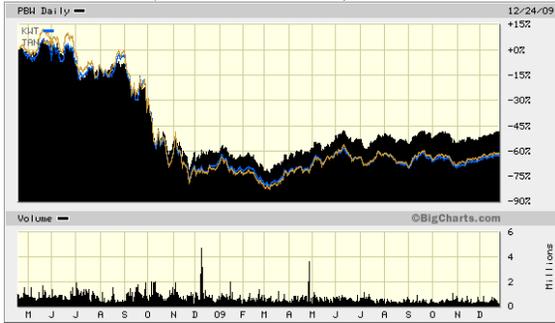
A converse is also notable: should volatile solar return to profit, then ECO can benefit – while two (not ours) solar Indexes could do especially well and really 'pop' more! So if, or when solar turns 'round, solar-only Indexes can see a good 'pops' upwards, or if down by over 80% from highs, they might even be seen as value propositions. On the other hand their deep focus arguably costs too by missing gains elsewhere in clean energy. Other areas lately pushing ECO to gains in efficiency, batteries, wind, geothermal, LEDs, etc etc likely helped propel ECO to relatively better returns, unlike just solar in most 2009.

Holding a single subsector may help mitigate risk – say single-security risk, given the declines last year. It may rise fast; in March-June & November-December 2009, solar moved up (although still trailing ECO) seen below in ECO's tracker (PBW) in blue, and 2 solar trackers in red and orange/gold the past year. One should note volatility in slicing to subsectors and consequences of narrow targeting, and yet always be aware too the clean energy sector and so ECO Index® can and will at times also 'drop like a rock'.

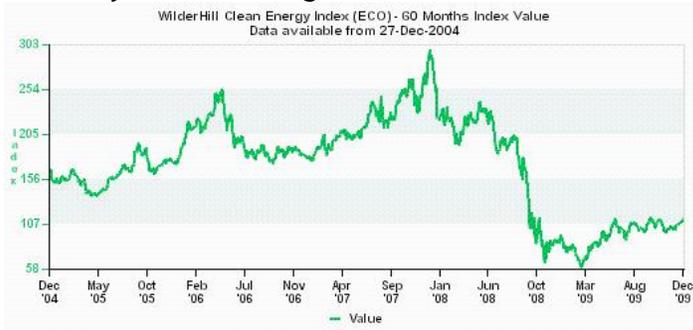


In sum despite solar moving up in some of 2009, much of the year it was down (above). Downwards force kept solar from outstripping clean energy since 2008/2009; a fuller shot (below) shows ECO's tracker, here in black, and solar Indexes since their inception.

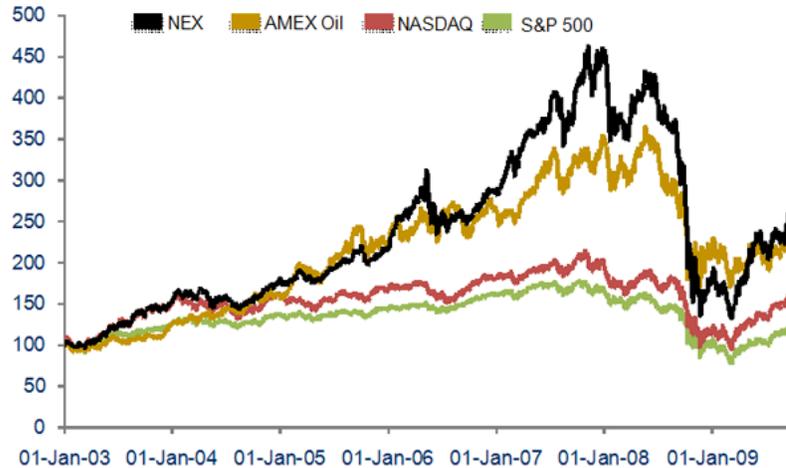
ECO tracker (black mountain) vs 2 solar tracker since their 2008 inception:



Yet go back more with 2 longer-Charts, for ECO & NEX below. Both have much solar and here they show earlier gains. First here's ECO over the past 5 years since start of 2005:



Below interestingly is Global NEX for the past 7 years, 2003 to Dec 2009. This shows NEX in black and 3 key Indexes for price of Oil (brown), Nasdaq (red) & S&P 500 (green):



AMEX Oil, Nasdaq and S&P 500 rebased
30 Dec 2002 = 100

Source: New Energy Finance, AMEX

A longer-view indicates solar basked in a five-year remarkable run-up, 2003 to 2007. Immediately afterwards was a thorny, compressed fall from 2008 - March 2009, or '15-months of pain' after earlier robust rise upwards suggested by ECO & NEX above.

Imagine for a moment a thought experiment: say we'd stripped out solar from ECO back in early 2008. That could mean better returns (we can glean from WHPRO below). However apart from a fact ECO wouldn't then be a true clean energy Index, it's vexing for even active funds to sell their 'about-to-drop' subsectors near tops, shifting to 'under-priced' just before they rise. Were it possible active managers aiming to better Indexes would clearly far outpace the Indexes – which so far isn't the case at all as discussed below.

Plus a subsector that's downtrodden can (*very*) quickly turn around: what's vexing is to know it's about to happen! To try to actively rotate from 'about to drop', into 'about to gain' subsectors is thorny, yet one could smartly hold favored subsector/s & Index/es. Here our original thesis expands. Start with 1) solar arguably held back clean energy sector in 2009 (although it rose up late in November & December); we add a second thought, 2) wind power subsector instead did much better in '09 helping clean energy.

So Indexes for wind did favorably in 2009 as seen next in a Chart for 2 new, very useful, interesting wind Indexes/trackers in '09. It shows wind's robust returns in red and orange at top. A wind tracker in red shows its particularly noticeable lead almost all year. Solar indexes in green & purple rose up in November/December; interestingly, solar's late move up arguably helps NEX's tracker in blue (PBD), to end the year right near the top:



The above Chart we'd argue makes the case for a larger basket holding say, solar + wind, plus arguably, energy efficiency, LEDs, geothermal, etc, etc. When NEX went live it was a first *global* clean energy Index and held much wind; its wind exposure remains today large – more so than ECO at present. Arguably that exposure to wind in NEX (many wind firms list only overseas, Appendix VII) probably 'helped' its performance in 2009 and prior.

In summary one might choose to drill down on subsectors as via useful indexes for wind, for solar etc – and/or capture all clean energy entirely as with ECO and/or global NEX. Subsectors can be very effective; they allow one to drill deeply and are helpfully more diverse than a solo stock helping mitigate single stock risk: yet one should also be aware of heightened volatility & trade-offs. A knock against Indexes is that a single stock can rise much more swiftly (though it can go to zero). It's safe to say the case for having many differing options in clean energy is very strong; broad & narrow Indexes plus well-run active funds are all good to consider, along with an attention to diversification.

Academic Case for Indexing

Because active funds often aim to beat Indexes, there can be justification for actives' rather higher costs, less tax efficiency, or sparser transparency compared to an Index. Certainly too a few active managers like a Warren Buffett deliver famous results that far, far outstrip (other actives, or) Indexes. But more commonly, a margin by which a good active regularly beats an Index is pretty thin, so the race can be an interesting one!

Statistics indicate active funds in general won't beat Indexes by much – or if they beat Indexes as happened in 2009, it's close – so costs + tax efficiency matters. Either way a vexing thing is to pick ahead of time the winning active that outperform the funds – and Indexes. Yet be fortunate, and the active (or a stock) may 'hit the ball out of the park.'

Remarkably we broadly note actives as a whole have just done better in 2009, than in the past: they're slightly beating the major Indexes when looking over thousands of funds. But it still may be vexing to distinguish chance from skill in active funds. We note a recent study by 2 well-known academics (Professors Fama & French who are supporters of Indexing) covered in Wall Street Journal, Dec. 3, 2009 (p. C13). The Journal reports on this ongoing debate between the actives vs passives, and on skill vs luck, stating:

....

Blast at 'Actives'

The latest Fama-French study is another piece of ammunition to support their view that most active managers can't consistently beat index funds, which track the market. Underpinning that is the efficient market hypothesis, developed by Mr. Fama in the 1960s, that states that assets are appropriately priced since the market has all available information.

Active managers, of course, disagree. There is clearly a difference between luck and skill," said ...

....

Mr. Fama and Mr. French, professor of finance at Dartmouth College's Tuck School of Business, ran 10,000 simulations of what investors could expect from actively-managed funds.

This was based on data for 3,156 stock funds from January 1984 to September 2006. They found that outside of the top 3% of funds, active management lags behind results that would be delivered due simply to chance.

....

"The simulations tell us that for the vast majority of actively managed funds, true (abnormal expected return) is probably negative; that is, the fund managers do not have enough skill to produce risk-adjusted expected returns that cover their costs," wrote the professors.

While many studies have shown that the vast majority of active funds can't beat the S&P 500 Index, lately active and index funds have been in a dead heat: This year, actives beat indexes 28.6% to 27.6%, and last year, actives were slightly behind, negative 39% versus negative 37.7%, says Morningstar.

....

There is lastly a practical problem here of 'dollar weighted returns'; investors too often buy near a top and sell at bottom, strangling any fund's or Index's 'good results.' In sum the case for Indexes is notable, yet we repeat that diversity of options is key. Because there's now several active & passive products here, it's worth a comparative look back.

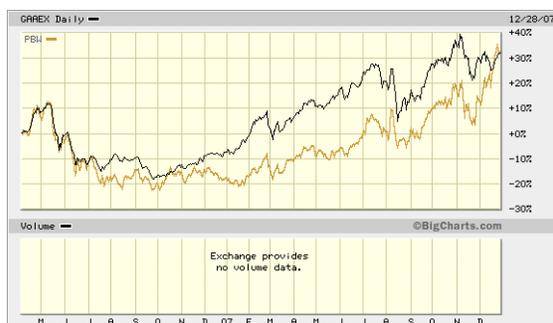
Looking Back Briefly Not Just To Theory, But To Results: How Have Passive NEX & ECO/Trackers Compared to Well-Run Active Funds?

How do trackers for global NEX & ECO, compare to well-run active global funds here? What happened in an Upwards 2007 – followed by big Down 2008 – and a Mixed 2009?

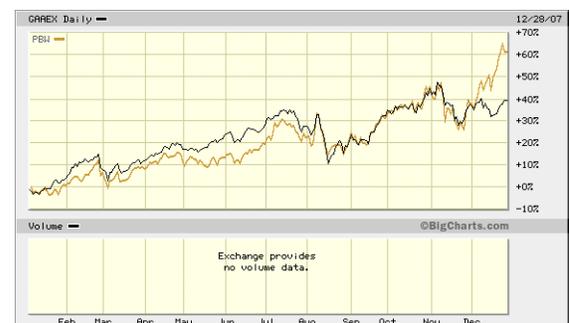
These 3 years are varied enough as a backdrop to begin to consider relative performance. It's important too to compare apples to apples, so it should be Global NEX Index with most stocks worldwide – that's measured against these active funds that are also global.

In late 2007 we'd at first compared using ECO (for U.S.-listed stocks, so not so good a benchmark) because an active launched in 2006 (after NEX Index, but before its tracker went live). To briefly note partial year 2006 that well-run active initially outperformed ECO's tracker in partial 2006. But by end of 2007, the ECO tracker was (just) outperforming. To end of 2007, ECO tracker finished just ahead below left.

At left is that active fund in **black** from inception to end of 2007 with initial 'good' performance early in 2007, but by end of 2007 the ECO Index in **brown**, moved up quickly. (They finish about same). Chart at right for 2007 alone shows that the passive ECO tracker did 'better' very late in the year and made up for all first partial year:



Active fund from '06 Inception to end of 2007, and the ECO tracker (in brown), 'end in tie'.



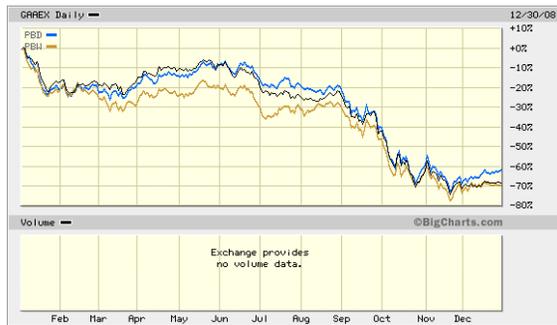
Active fund (black) and ECO tracker (brown), for 2007 alone: here ECO 'wins late in year'.

But more appropriate is to compare a global active to benchmark WilderHill New Energy Global Innovation Index (NEX). NEX's tracker (PBD) would launch mid 2007 - so while NEX Index had gone live back at the start of 2006, its independent tracker came later. (We parenthetically note the NEX Index and ECO both 'outperformed' the fund in 2007).

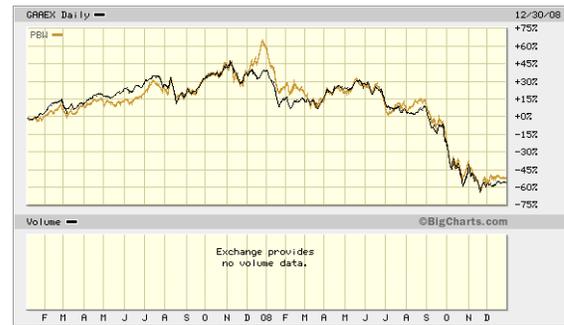
Thus Indexes did relatively well in 2007 - but that was just 1 very-up year. We postulated that while well-run active funds might face some tough sledding beating lower-cost Indexes in upwards periods, we'd imagined some advantage *might* instead go to the active funds in big declines. Cash cushions in active funds may hold them back in rising markets – but perhaps their cushion could help mitigate falls vs Indexes in declining years(??). In years of exceptional volatility, both downward, and up, could active stock picking perhaps provide active funds a meaningful extra boost that puts them well ahead?

Active funds in theory may 'strive to beat Indexes' by foretelling advances or declines and acting ahead of time. Yes, in practice it's very difficult to do. But it's at least a goal of funds. An interesting question was ... how might a well-run fund do in big declines?

2008 was an interesting year to compare theory vs. results. Given big declines that year, what did we find? A well-run active fund usefully completed 2 full calendar years and we saw in 2008 the active in **black** at Chart left had a negative return of roughly -68%. By comparison the tracker for passive ECO in **brown**, left Chart had a slightly lower 'worse' return near -70%. But for 2007 & 2008, **ECO** did just a bit 'better', down roughly by -50% (right Chart), with the **active** returning roughly -55% by comparison.



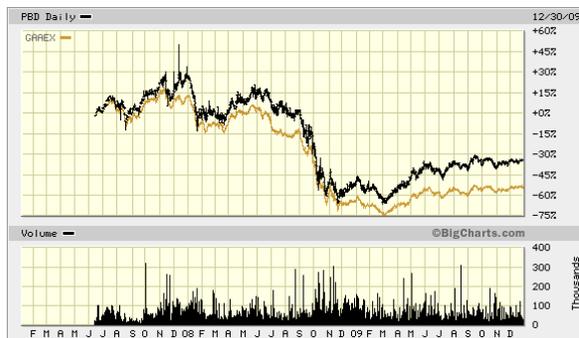
2008 only: active fund (in **black**) vs. **ECO** (**brown**); the NEX tracker (in **blue**) here does best.



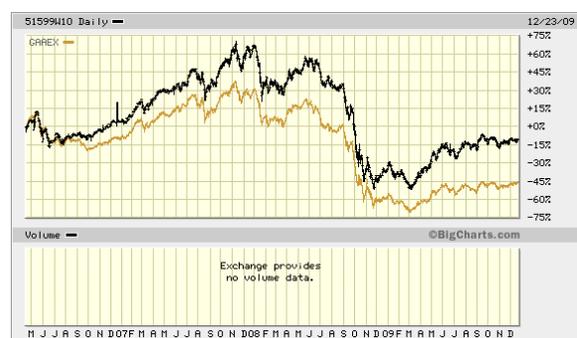
Years 2007 + 2008: fund (**black**) and **ECO** (**brown**); a tracker is n/a for NEX in all 2007 (only Index).

2008 finally gave a first calendar year of data for an NEX tracker, in Chart above left with the NEX tracker shown in **blue**. We saw it had a 'better' return than an active fund, the NEX down 'just' some -59% in 2008 (compared to -68% for a fund; -70% for ECO).

Comparing global NEX over longer periods too, the NEX seems to do rather well. A Chart below left is since 2007 inception of NEX tracker, now put in **black** (PBD) to late '09. At right alternatively is NEX Index itself (not a tracker; as 51599W10) from the 2006 inception of an active fund to late 2009: we see both NEX and/or its tracker in **black** lead with a gap kept in 2009. We're delighted to see the active funds here, being a very useful alternative option to Indexing, and doubtless there will be years where active(s) well lead.



NEX's tracker (PBD, **black**) and active fund (**brown**). Here since the 2007 inception of tracker for NEX.



NEX Index itself (**black**) and an active fund (**brown**). Here since 2006 inception of active fund.

Recently how fared the global NEX (tracker) vs several newer, also well-run funds in 2009? Given what we've seen in prior years above, the picture is perhaps what you'd expect.

Stay with global NEX vs active global funds a moment; we can look now 3(!) well-run active funds, because more have arrived. How closely do three well-run funds in global clean energy track NEX and each other, in a very volatile year of declines & gains?

This was of course a just completed 2009, and it is a usefully volatile backdrop year.

The 3 good active funds arguably fairly closely correlated to each other, and to NEX – despite active styles, differing managers, and chances to move away from an Index, in either downwards, or upwards scenarios of 2009. A fourth product (not posted here) we observe seemed to underperform three actives – or vs the NEX, at least just for 2009.

In a Chart below NEX is in blue, while 3 active funds seem to hug a bit closely near it and one another. The one active fund we've looked at just outperformed the Index in 2009 at late December and we congratulate; overall, performances for all 4 were pretty tight. Such similarity can & probably will change ahead, but for 2009, it suggests some past 'gravity' among the 3 active funds. Performing pretty 'well', NEX tracker in blue (PBD) seems to be near a lead much of this year – with all 4 bunching throughout 2009.



It's almost certain that one or more among what are now several well-run active funds in this space will instead beat Indexes in years to come. There's little to no chance that an Index will top the tables every year, and we also are delighted these good options bring further 'expert eyeballs' into the global clean energy space. We wish them all well!

Now step back more; it appears while there's some useful non-correlation (generally speaking a non-correlation among assets is a good thing) – as between ECO and NEX, there's perhaps even greater non-correlation as between ECO/or NEX vs two other WilderHill Indexes tracking progressive energy or global efficient transport (below).

At the outset we saw the latter two WilderHill Indexes (WHPRO and HAUL) as it happened, 'outperformed' clean energy in 2009 – but there's no way to know which story will do better in 2010! What is useful to know is there is space between the stories, and hence they're not likely to track exactly the same. Finally, tighter and independent from us subsector themes such as for wind, and for solar etc showed disparity too vs clean energy broadly captured by ECO and NEX. All these and other trackers and active funds in the space are greatly worthwhile alternatives providing much-needed diversity of options.

Differing Indexes can Capture Differing Stories: Global Energy Efficient Transport, and Alternative Energy Solutions for Improving the Energy Portrait of today, may be Increasingly Relevant! More can be captured than the (global)clean energy in ECO & NEX. Alternatively, energy solutions to improve the dominant energy portrait today - as different from greener energy and excluding solar – has told a different story in 2009.

Think here of WilderHill Progressive Energy (WHPRO), another story we're tracking. In an imperfect analogy, by its excluding solar, WHPRO is perhaps a bit akin to some 'Ex' Index (e.g. 'Alternative Energy Bridge Ex-Renewables') that has removed solar from its theme. Without solar's drag the WHPRO emphasis on reducing pollution, lower-CO2, and better energy efficiency did 'well' in 2009. Compare its tracker (PUW) in blue below, to S&P 500 (orange) and Dow Jones Index (in red) in '09 – WHPRO led all year. WHPRO doesn't have same stocks in it at the same time as ECO, and generally avoids pure play renewables:



We'll next briefly note 3 anniversaries in 2H 2009, for WHPRO & HAUL. First Oct 13, 2009 WilderHill Progressive Energy Index (WHPRO) marked 3 years since it went live in 2006. After starting at a value near 230 in 2006, WHPRO at first rose well its first 2 years (seen below) only to hit a 'great global recession' in 2008, dropping dramatically along with all global markets to early 2009. Although it has since rose rather steeply and by the 3rd anniversary was back to 212 - it is only getting close now back to starting point.

Secondly its tracker (PUW) marked its 3rd anniversary too in October 2009. A Chart for the WHPRO tracker below shows its first 3+ years of October 25, 2006-to end of 2009 in black. Because there's not yet another fund for this story, nor a similar-themed Index for bridge solutions in our current energy portrait, it is both benchmark and solo Index (with tracker). Here it is since inception (in black) with Dow (blue line) and S&P 500 (brown):



Another, 3rd anniversary in 2H 2009 was to mark a first year for Wilder NASDAQ Global Energy Efficient Transport Index® (HAUL Index, below) since it went live August 25, 2008. Here too there's not yet a competing fund in this story, nor similar-themed Index for global energy efficiency in transport, so it is benchmark and solo Index (with tracker).

Briefly we note HAUL's tracker (PTRP) launched Sept 23, 2008 just near beginning of a 'global crash'. Starting near 25 (24.88), PTRP at first rose. Then with the 2008 crash worldwide HAUL tracker dropped under 14 (13.77) by March 2009. After that Spring floor as inflection point, it has moved back with some force up: having dropped precipitously by roughly half after launching to Q1 2009 – by Q4 2009 it reached a value roughly twice that nadir for a pretty remarkably volatile 5 Quarters. In sum after a great fall late in 2008 along with all global markets, by Sept. 23rd of 2009 it had returned up to 26 - essentially regaining all after a largest global decline since the Great Depression.

Is there useful non-correlation as between global HAUL Index (tracker PTRP) and a more 'standard', good, and better-known Dow Jones U.S. Transportation Index (IYT)? The Chart below suggests their performance was helpfully pretty different over 2009. While very good IYT bounced up too from its Q1 2009 lows with considerable vigor, global HAUL (PTRP) for *better energy efficiencies in transport worldwide* and most components on exchanges outside the U.S., returned by comparison a higher move in 2009.

We'll take a closer look at Wilder Nasdaq Global Energy Efficient Transport (HAUL) and WilderHill Progressive Energy (WHPRO) in coming Reports in 2010. Until then here's HAUL tracker (PTRP, black mountain) and a 'regular' good transport Index (**brown**) in 2009:



To close this Report all four WilderHill Indexes bounced back from March 2009 lows, to December 31st. Trackers rose by these volatile percents from March bottoms to end 2009: ECO (PBW) +90%; NEX (PBD) +95%; WHPRO (PUW) +109%; & HAUL (PTRP) +96%.

Last is a problem with volatility: Wall Street Journal (12/31/2009 p. C1) reports the best performing mutual fund the past decade returned a remarkably high 18% annually in the last 10 years. Yet a major investment research firm reports an average investor *lost* some 11% annually in that fund over the past 10 years. How can that be?! Because they figure true investor returns ('dollar weighted returns') by reflecting inflows coming into the fund near its volatile top, and selling happening near the fund's bottom. An average investor 'chasing past performance' is hurt by very volatility that made its exceptional returns possible. A moral of the story: contrarian thinking *may* give better results!

Finally there were two additions to ECO Index: AIXG and AONE. There were no deletions.

Telling a Story in a Single Basket: Indexing as ‘Sum Over Probabilities’

It’s been an arduous year and decade(!) so how about 1 extra page with a couple ‘metaphors for fun’? Let’s briefly consider an Indexes’ one summary changing figure as a story with many facets. In a first ‘real-stretch’ analogy to entertain this final page, an Index might be akin to a ‘multi-faceted diamond’, the gem’s differing facets sparkling from varied angles. Just for instance take a region-specific Leading Economic Indicators for San Diego County Index (we’ll call it LEISDCI) usefully from University of San Diego.

That LEISDCI notably rose 0.2% for October 2009, from the prior month. This ‘win’ was due to more shining facets (or Index sectors) overall gaining: that Index reflected increases in consumer confidence within the region (+3.36%), in gains in the local building permits (+0.42%), and an improving national economy (+0.57% gain in U.S. LEI).

At a same time the County Index had sectors (facets) that fell (‘didn’t sparkle’). These were in local help-wanted ads (-0.41%), unhelpful unemployment claims (-1.28%) and declining stock prices for local companies (-1.31%). But it’s more complicated.

To look just at residential housing starts, 2009 was ‘by far’ the worst on record. Yet this LEISDCI didn’t fall as far as one sector would have pushed it down, due to gains elsewhere. Moreover while help wanted ads had fallen 38 months, they’d just stabilized for several months and that helped to keep the Index from falling more (shined). Overall, shining facets outweighed duller facets and the Index posted an increase for the month. LEISDCI tells a complex story in its single dynamic (sparkling) number of +0.2%.

A more awkward, maybe fun analogy lastly is Professor Richard Feynman famously speaking of ‘sum over probabilities’ (about physics). To advance Quantum Mechanics he could express mathematical ideas in compellingly accessible pictograms. In quantum electrodynamics his ‘sum over possibilities’ (or ‘sum over histories’, we’ll call ‘sum over probabilities’) was seminal. We now associate ‘probability waves’ with a particle taking all possible paths between points A and B. All things are possible but probability helps to explain ‘actual’ outcomes if we try to establish (‘fix’) paths by observing.

In an admittedly tenuous metaphor of physics & indexing (a last bemusing of 2009), subsectors in an index can contain possibilities, none certain, though dynamic probabilities evolve over time in each; an index’s final sum (collapsing wave function) is able to account for many differing outcomes, in different subsectors, whose probabilities add up to a single live reading changing in time. (The idea, say of hydrogen as a practical energy carrier (subsector) may suddenly burst on the scene and just as quickly fade...).

Stay with this metaphor a last moment; in early maths fixed Pythagorean & Keplerian views saw immutable order, harmony expressible in numbers. But with Niels Bohr and increasingly Wolfgang Pauli & Werner Heisenberg, earlier determinism was given up for unknowable, indeterminate possibilities (as Einstein laments, ‘playing with dice’).

An Index isn’t static, even if harmonious on a certain date (a possibility one decade ago, say, of hydrogen) there should still be capacity to embrace undeterminable improbables (new Li-ion batteries in EVs which could not be foreseen); an Index must allow for even unlikely technological outcomes in future. In sum, Happy New Year, & New Decade!

Summary

4th Quarter 2009 opened with the Clean Energy Index[®] (ECO) at 109.09 and closed at 111.35, for a barely positive Q4 return of +2.0%. For all 2009, the ECO Index[®] rose +28.9%. Following 2008's historic falls over a prior year, 2009 too now has moved into the past, notable for its persistently strong declines the first 2 months, bottoming in Spring and then a volatile rebounding up to mid-year. The Index mostly went sideways latter half of 2009, and clean energy was essentially unchanged in Q4 as seen in Chart 1 at page 1.

There were two Additions to the ECO Index for start of Q1 2010, AIXG and AONE. Aixtron Aktiengesellschaft (AIXG) makes deposition equipment for more efficient LEDs, and displays; A123 Systems (AONE) makes Li-ion batteries as for EVs, grid, & portable power; there were no Deletions. As always, we welcome your thoughts & suggestions.

Happy New Year to all!

Sincerely,



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Appendix I: ECO Index, Past Q4 2009 Components and their Weights on 12/10/2009:

Following were Q4 weightings at about 3 weeks before rebalance to start Q1 2010; after rebalance each stock then floats according to its share price over the coming Quarter.

Company Name	Symbol	% Weighting
Trina Solar Ltd	TSL	4.06%
Cree Inc	CREE	3.94%
American Superconductor	AMSC	3.41%
Rubicon Technology Inc	RBCN	3.41%
Yingli Green Energy	YGE	3.21%
JA Solar Holdings Co Ltd	JASO	3.00%
Ormat Technologies Inc	ORA	2.89%
International Rectifier Corp	IRF	2.86%
Suntech Power Holdings	STP	2.82%
Itron Inc	ITRI	2.72%
Applied Materials	AMAT	2.70%
Universal Display Corp	PANL	2.63%
GT Solar International Inc	SOLR	2.61%
Broadwind Energy	BWEN	2.61%
Energy Conversion Devices	ENER	2.52%
Air Products & Chem	APD	2.45%
Echelon Corp	ELON	2.37%
Converge Inc	COMV	2.34%
First Solar Inc	FSLR	2.33%
Fuel Systems Solutions	FSYS	2.25%
Quanta Services	PWR	2.24%
Cosan Ltd	CZZ	2.23%
Evergreen Solar Inc	ESLR	2.23%
Om Group	OMG	2.14%
Sociedad Quimica y Minera	SQM	2.11%
Zoltek Cos Inc	ZOLT	2.10%
CPFL Energia S.A.	CPL	2.10%
Maxwell Technologies Inc	MXWL	2.02%
SOLA International Inc.	SOL	2.00%
Sunpower Corp	SPWRA	1.99%
MEMC Electronic Materials	WFR	1.95%
Idacorp Inc	IDA	1.91%
Advanced Battery Tech Inc	ABAT	1.89%
Portland General Electric	POR	1.85%
Calpine Corp	CPN	1.83%
Ener1 Inc	HEV	1.74%
Ballard Power Systems	BLDP	1.32%
China BAK Battery Inc	CBAK	1.31%
Valence Technology Inc	VLNC	1.22%
FuelCell Energy Inc	FCEL	1.20%
Ocean Power Technologies	OPTT	0.98%
Amerigon Inc	ARGN	0.57%
US Geothermal Inc	HTM	0.52%
Plug Power Inc	PLUG	0.45%
Spire Corp	SPIR	0.45%
Uqm Technologies	UQM	0.44%
Quantum Fuel Sys Tech	QTWW	0.38%
Emcore Corp	EMKR	0.35%
Gushan Environmental	GU	0.35%
Beacon Power Corp	BCON	0.35%
Raser Technologies Inc.	RZ	0.34%
Ascent Solar Technologies	ASTI	0.30%

Appendix II: Index (ECO) Components & Weights at latest Rebalance: **INDEX (ECO) SECTOR & STOCK WEIGHTS FOR THE START OF Q1 2010. 54 STOCKS.**

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

*Stocks below \$200 million in size at rebalance are banded with a 0.5% weight.

Renewable Energy Harvesting - 30% sector weight (11 stocks @2.54% each; +4 banded stocks)

**Ascent Solar*, ASTI. Solar, early-development stages for thin film CIGS flexible PV.

Broadwind Energy, BWEN. Wind, holds firms across supply chain for wind energy.

**Emcore*, EMKR. Solar, Concentrating PV, CPV for terrestrial uses, also for satellites.

Energy Conversion, ENER. Thin film, amorphous flexible PV panels; also batteries.

Evergreen ESLR. Solar, builds string-ribbon PV with reduced silicon-demand.

First Solar, FSLR. Thin film, CdTe solar panels reduce silicon need, and costs.

JA Solar, JASO. Solar, China-based sells PV modules in Asia, Europe, U.S. etc.

**Ocean Power Technologies*, OPTT. Wave power, in speculative very early-stage.

Ormat, ORA. Geothermal power, works too in areas of recovered heat energy.

SunPower, SPWR. Solar, Efficient PV panels with all-rear-contact cells.

SunTech Power, STP. Solar, major producer of PV and is based in China.

Trina Solar, TSL. Solar, produces ingots, wafers, solar PV modules; China-based.

**U.S. Geothermal*, HTM. Geothermal, site acquisition, PPAs, development-stage.

Yingli Green Energy, YGE. Vertically-integrated solar PV manufacturer, China.

Zoltek, ZOLT. Wind, makes carbon fiber for wind blades, product 'lightening'.

Power Delivery & Conservation - 31% sector weight (13 stocks @2.34%; +1 banded stock)

Aixtron Aktiengesellschaft, AIXG. Deposition tools for efficient (O)LED, displays.

Applied Materials, AMAT. PV fabrication, manufacture thin film & crystalline.

American Superconductor, AMSC. Wind power; also superconductor 2G HTS.

Comverge, COMV. Demand-side energy management, building smarter grids.

Cree, CREE. LEDs for efficient lighting, manufacturer for power-saving lights.

Echelon, ELON. Networking, better management of whole energy systems.

GT Solar, SOLR. Solar, PV manufacturing lines with automated fabrication.

Itron, ITRI. Energy monitoring, new measurement and management systems.

MEMC, WFR. Producer of polysilicon used in many crystalline solar PV cells.

Quanta Services, PWR. Infrastructure, modernized grid, smart power transmission.

ReneSola, SOL. Wafers, for silicon PV, mono and multicrystalline, China-based.

Rubicon, RBCN. Maker of substrates used in production of LEDs and lighting.

**Spire*, SPIR. Upstream PV fabrication equipment, also nanotech, semiconductors.

Universal Display, PANL. Organic light emitting diodes, OLED panel displays.

Energy Storage - 15% sector weight (6 stocks @2.25% each; +3 banded stocks)

Advanced Battery, ABAT. Batteries, China based maker of Li-ion for diverse uses.

A123 Systems, AONE. Batteries, nano phosphate for new EVs, grid, portable power.

**Beacon*, BCON. Flywheels, non-chemical firm power alternative; also inverters.

**China BAK*, CBAK. Batteries, large China based OEM manufacturer of Li-ion cells.

Ener1, HEV. Batteries, diverse in Li-ion power storage, nanotechnology; fuel cells.

Maxwell, MXWL. Ultracapacitors, alternative supplement to batteries, hybrids, UPS.

OM Group, OMG. Cobalt and other precursors, producer for Li-Ion batteries, FCs.

Sociedad de Chile, SQM. Lithium, major Li supplier for batteries; also STEG storage.

**Valence*, VLNC. Batteries, phosphate-based lithium cells address thermal events.

Energy Conversion - 12% sector weight (4 stocks @2.37% each; +5 banded stocks)

**Amerigon*, ARGN. Thermoelectrics, in waste heat to power energy conversion.
**Ballard Power*, BLDP. Mid-size fuel cell R&D, PEM FCs potential for transportation.
FuelCell Energy, FCEL. Large fuel cells as stationary high-temp flex-fuel MFCs.
Fuel Systems Solutions, FSYS. Gaseous fuels, for ICEs in cleaner-fuel vehicles.
International Rectifier, IRF. Energy-saving in power conversion and conditioning.
**Plug Power*, PLUG. Mid-size fuel cells for potentially distributed generation.
**Quantum*, QTWW. Alternative fuels for vehicle propulsion; also solar nexus.
**Raser*, RZ. Speculative stage licensing firm, small geothermal & electric motors.
UQM Technologies, UQM. Motors and controller systems, EVs & hybrid vehicles.

Cleaner Fuels - 5% sector weight (2 stocks @2.25% each +1 banded stock)

Air Products & Chemicals, APD. Hydrogen, is a supplier of industrial gases.
Cosan, CZZ. Biofuels, Brazil based uses sugarcane feedstock, an ethanol exporter.
**Gushan*, GU. Biodiesel, vegetable oil, used-cooking oil etc feedstock; China based.

Greener Utilities - 7% sector weight (4 stocks @1.75% each)

Calpine, CPN. Geothermal: a major North American producer; low-carbon assets.
CPFL Energia S.A, CPL. Brazil Utility with both large and small hydroelectric.
Idacorp, IDA. Hydroelectric, Utility with sizeable hydroelectric, some small hydro.
Portland General Electric, POR. Utility with hydro & thermal, growing renewables.

Appendix III: Rebalance for Independent yet relevant, HAUL Index[®], start of Q1 2010

Wilder NASDAQ OMX Global Energy Efficient Transport Index (HAUL)

For start of Q1 2010. 39 stocks total.

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

*Stocks below \$200 million in size at rebalance are *banded with a 0.5% weight.

Alternative Vehicles. 9 stocks. 25% Sector weight; stocks @2.77% each.

HEV:US – *Ener1 (U.S.)*. Lithium ion batteries, also in electric cars, plug-in hybrids.
MXWL:US – *Maxwell (U.S.)*. Ultracapacitors, very rapidly store/discharge energy.
PIA:IM - *Piaggio & C. SpA (Italy)*. Scooters includes Vespa, developing hybrids.
489:HK – *Dongfeng Motor (China)*. Chinese partner for electric vehicles (EVs).
1211:HK - *BYD (China)*. Early production for EV batteries, builds entire EVs.
6674:JP – *GS Yuasa (Japan)*. Li-ion batteries, in production EV partnerships.
9914:TT – *Merida (Taiwan)*. Bike manufacturer sells in Asia, Europe, Americas.
9921:TT – *Giant (Taiwan)*. Bike manufacturer, also makes hybrid electric bikes.
051910:KS - *LG Chem (Korea)*. Larger-format Li-ion cells for production EVs.

Rail & Subway Systems. 10 stocks. 25% Sector weight; stocks @2.50% each.

ALO:FP – *Alstom SA (France)*. More efficient rail infrastructure, high speed TGV.
BBD/B:CN - *Bombardier (Canada)*. Builds efficient locomotives, also in light rail.
CNI:US – *Canadian National Railway (Canada)*. Rail as 3x more efficient than trucks.

CSX:US - *CSX Corp (U.S.)*. Invests \$1 billion in Tier II locomotives; EPA SmartWay.
 LEY:FP - *Faiveley SA (France)*. Manufactures equipment systems for trains, trams.
 NSC:US - *Norfolk Southern (U.S.)*. Software optimizes rail movement; SmartWay partner.
 STS:IM - *Ansaldo STS SpA (Italy)*. New information technology for subways, rail.
 UNP:US - *Union Pacific (U.S.)*. 3,000 fuel-efficient locomotives add to fleet; SmartWay.
 VOS:GR - *Vossloh AG (Germany)*. Makes Europe diesel-electric, electric locomotives.
 7122:JP - *Kinki Sharyo (Japan)*. Shinkansen Bullet Train; light mass transit vehicles.

Sea, Land, Air & Intermodal. 10 stocks. 25% Sector weight; stocks @2.50% each.

CLNE:US - *Clean Energy Fuels (U.S.)*. Enables natural gas CNG in fleet buses, trucks.
 FGP:LN - *FirstGroup plc (U.K.)*. Public transportation, in buses, rail and logistics.
 LOGN3:BZ - *Log-In Logistlca Intermodal SA (Brazil)*. Intermodal cargo logistics.
 MAERSKB:DC - *Maersk A/S (Denmark)*. Shipping, globally efficient goods transport.
 OSG:US - *Overseas Shipholding (U.S.)*. Bulk shipping, VLCCs, diversified LNG, CNG.
 SAFT:FP - *Saft Groupe SA (France)*. Advanced batteries in trains, subways, trams.
 SGC:LN - *Stagecoach Group plc (Scotland)*. Trains, buses, trams, in U.S. and U.K.
 TLVT:US - *Telvent GiT S.A. (Spain)*. Information technology, transport, traffic, energy.
 316:HK - *Orient Overseas Intl. (Hong Kong)*. Container shipping and logistics.
 2612:TT - *Chinese Maritime Transport (Taiwan)*. Shipping, marine transport services.

Transport Innovation. 8 stocks. 25% Sector weight; @3.00% each (+2 *banded stocks).

BG/:LN - *BG Group (U.K.)*. Natural gas, CNG, LNG used as transportation fuels.
 FSYS:US - *Fuel System Solutions (U.S.)*. Gaseous fuels, use of natural gas in engines.
 NFI-U:CN - *New Flyer (Canada)*. Hybrid alternative fuel buses, electric trolley buses.
 *QTTW:US - *Quantum (U.S.)*. Developing alternative fuel, plug-in hybrid systems.
 RS:US - *Reliance Steel & Aluminum (U.S.)*. Aluminum, in lightening modern vehicles.
 SGL:GR - *SGL Carbon AG (Germany)*. Advanced carbon composites, lightening.
 SQM:US - *Sociedad de Chile (Chile)*. Lithium, is used in electric & hybrid batteries.
 *UQM:US - *UQM (U.S.)*. Advanced motors, controllers in electric, plug-in vehicles.
 WBC:US - *Wabco (Belgium)*. Control systems, new electronic automation in vehicles.
 WPRT:US - *Westport Innovations (Canada)*. New technology advancing gaseous fuels.

Appendix IV: WilderHill Progressive Energy Index (WHPRO): Past data Q4 2009, Components & Weights on 12/10/2009 for independent yet relevant WHPRO Index: Following were Q4 weightings about 3 weeks before the rebalance to start Q1 2010

Progressive Energy Index (WHPRO) Components as of: 12/10/09

Company Name	Symbol	% Weighting
Corning Inc	GLW	3.79%
Tenneco Automotive	TEN	3.78%
Sasol Ltd.	SSL	3.16%
Methanex Corp.	MEOH	3.11%
Cameco Corp	CCJ	3.08%

Questar Corp	STR	3.01%
GrafTech International	GTI	2.92%
Praxair Inc	PX	2.89%
Southwestern Energy Co	SWN	2.88%
Eaton Corp	ETN	2.85%
OWENS CORNING	OC	2.83%
United Technologies	UTX	2.75%
Johnson Controls	JCI	2.67%
Koninklijke Philips Elec	PHG	2.57%
Companhia Energetica	CIG	2.57%
Range Resources	RRC	2.50%
Hexcel Corp	HXL	2.48%
EnerSys	ENS	2.45%
Siemens Ag Ads	SI	2.41%
Chesapeake Energy	CHK	2.36%
Covanta Holding Corp.	CVA	2.36%
National Grid PLC	NGG	2.31%
Mcdermott Intl	MDR	2.28%
Emerson Electric	EMR	2.27%
Foster Wheeler Ltd.	FWLT	2.26%
EnergySolutions Inc	ES	2.25%
Energizer Holdings Inc	ENR	2.24%
Exide Technologies	XIDE	2.22%
USEC Inc.	USU	2.21%
Woodward Governor Co	WGOV	2.17%
Enersis S.A.	ENI	2.12%
Baldor Electric Co	BEZ	2.07%
Badger Meter Inc	BMI	2.06%
Clean Energy Fuels Corp	CLNE	2.01%
FPL Group Inc	FPL	1.98%
ESCO Technologies Inc	ESE	1.88%
EnerNOC Inc	ENOC	1.84%
General Cable Corp.	BGC	1.58%
A-Power	APWR	0.76%
Peerless	PMFG	0.64%
SmartHeat	HEAT	0.62%
Headwaters Inc.	HW	0.59%
Rentech Inc	RTK	0.48%
Capstone Turbine Corp	CPST	0.47%
Westport Innovations	WPRT	0.44%
LSB Industries Inc	LXU	0.41%
Fuel Tech Inc	FTEK	0.39%

Appendix V: Q1 2010 Rebalance for independent WilderHill Progressive Energy Index (for solutions improving efficiency & reducing CO2 in the dominant energy portrait of today).

Sectors & Stock Weightings: WilderHill Progressive Energy Index (WHPRO) for start of Q1 2010. 47 stocks.

Each stock freely moves according to its share price after the rebalance;
*Banded stocks are those under \$400 million in size and weighted at 0.5%.

Alternative Fuel - 20% Sector Weight (8 stocks @2.50% each)

Cameco, CCJ. Uranium fuel, one of the largest producers; also fuel processing.
Chesapeake Energy, CHK. Natural gas, one of largest U.S. independent producers.
Methanex, MEOH. Methanol, liquid fuel may flexibly derive from organic & fossil fuels.
Praxair, PX. Hydrogen, energy carrier for FCs & ICEs; supplier of industrial gases.
Questar, STR. Natural gas, explores for and produces gas and natural gas liquids.
Range Resources, RRC. Natural gas, produces in Appalachian & Gulf Coast regions.
Southwestern Energy, SWN. Natural gas, produces in U.S. Arkoma Basin, East Texas.
USEC, USU. Uranium fuel, converts Soviet warheads into U.S. nuclear feedstock.

New Energy Activity - 23% Sector weight (10 stocks @2.30% each)

Eaton, ETN. Hybrids, better electric and fluid power in truck & auto applications.
Foster Wheeler, FWLT. Infrastructure, engineering services, LNG, WtE, CCS.
GrafTech, GTI. Graphite, advanced electrodes, fuel cells, power generation.
Hexcel, HXL. Lighter composites, advanced structural reinforcement materials.
Johnson Controls, JCI. Building control, also in advanced hybrid vehicle systems.
McDermott, MDR. Infrastructure, reducing coal emissions, constructs WtE facilities.
Owens Corning, OC. Materials lightening, building insulation composite materials.
Rockwood Holdings, ROC. Lithium battery recycling, lithium & cobalt supply.
Siemens AG, SI. Conglomerate, highly diversified across energy innovation globally.
Veeco Instruments, VECO. Designs, manufactures equipment for LED production.

Better Efficiency - 20% Sector Weight (8 stocks @2.43% each +1 banded stock)

Baldor Electric, BEZ. Better energy-efficiency in advanced technology motors.
Emerson Electric, EMR. Broad work in energy efficiency, storage, lately biofuels.
EnerNOC, ENOC. Demand response energy management, smarter grid efficiency.
Esco Technologies, ESE. Power grid, advanced two-way metering & communications.
General Cable, BGC. Power grid, high voltage transmission cable and wire products
Koninklijke Philips Electronics NV, PHG. Efficient LEDs, advanced industrial lighting.
**LSB Industries*, LXU. Greater energy efficiency in building end-use, heating, cooling.
Telvent GIT S.A., TLVT. Information technology for smarter grid, transport, energy.
Woodward Governor, WGOV. Energy controllers, industrial turbines for generation.

Conversion & Storage - 19% Sector weight (7 stocks @2.57% each +2 banded stocks)

A-Power, APWR. Distributed power generation, micro-grid systems; China focus.
**Capstone Turbine*, CPST. Microturbines, distributed power, flexible-fuel sources.
Clean Energy Fuels, CLNE. Natural gas fleet vehicles, integration and distribution.
Covanta Holding, CVA. Incineration, converts waste to energy (WtE); conglomerate.
Energizer, ENR. Lithium, NiMH, various other battery and charger technologies.
Energy Solutions, ES. Spent nuclear fuel storage, fuel recycling and management.
EnerSys, ENS. Battery maker, for telecommunications, utilities, motive power.
**Westport Innovations*, WPRT. Enables vehicles use of natural gas, other fuels.
Exide Technologies, XIDE. Better lead-acid batteries for motive, traction uses.

Emission Reduction - 12% Sector Weight (4 stocks @2.50% each +4 banded stocks)

Corning, GLW. Diverse activity includes emissions reduction, filters, and catalysts.

**Fuel Tech NV*, FTEK. Post-combustion, control systems reducing NOx, pollutants.

**Headwaters*, HW. Emission reduction from coal, also synfuels, reagents, fly ash.

**Peerless*, PMFG. Pollution reduction, effluent separation & filtration systems.

**Rentech*, RTK. Gas to Liquids, converts synthetic gas from various sources to fuels.

Sasol Ltd, SSL. Syngas to synthetic fuel; potential CO2 capture/sequestration (CCS).

SmartHeat, HEAT. Plate heat exchangers, making use of waste heat; China based.

Tenneco, TEN. Automotive end-of-pipe emissions controls, catalytic converters.

Utility - 6% Sector weight (3 stocks @2.00% each)

Companhia Energetica de Minas Cemig, CIG. Brazilian Utility, large hydroelectric.

Enerjis, S.A., ENI. Chile, Argentina, Peru etc. Utility, lower-CO2 large hydroelectric.

FPL Group, FPL. Florida Utility, growth in lower-CO2 nat gas, and nuclear, also wind.

Appendix VI: WilderHill New Energy Global Innovation Index (NEX), Data below are in past Q4 2009; weights below late Q4 (12/10/2009) about 3 weeks before Rebalance to start Q1 2010. :
http://www.nex-index.com/Constituents_And_Weightings.php

**NEX component weights for the open of trading on: Fri Dec 10, 2009; 87 stocks
Sort Order: Weight (Descending)**

Name	Country	Currency	Weight
American Superconductor Corp.	US	USD	3.05 %
China High Speed Transmission	HK	HKD	2.75 %
Centrotherm photovoltaics AG	DE	EUR	2.32 %
SMA Solar Technology AG	DE	EUR	2.30 %
EDF Energies Nouvelles S.A.	FR	EUR	2.29 %
Infigen Energy	AU	AUD	2.26 %
Iberdrola Renovables S.A.	ES	EUR	2.24 %
Cree Inc.	US	USD	2.22 %
Acciona S.A.	ES	EUR	2.10 %
Vestas Wind Systems A/S	DK	DKK	2.07 %
Hansen Transmissions Inter. N.V.	GB	GBP	2.01 %
Yingli Green Energy Holding Ltd.	US	USD	1.98 %
Nordex AG	DE	EUR	1.94 %
EDP Renovaveis S/A	PT	EUR	1.94 %
Cosan S/A Industria e Comercio	BR	BRL	1.83 %
Gamesa Corporacion Tecn S.A.	ES	EUR	1.81 %
Novozymes A/S Series B	DK	DKK	1.76 %
Sharp Corp.	JP	JPY	1.69 %
Suntech Power Hold Ltd. ADS	US	USD	1.67 %
EPISTAR Corp.	TW	TWD	1.64 %
Sechilienne-Sidec	FR	EUR	1.63 %
International Rectifier Corp.	US	USD	1.62 %
LDK Solar Co. Ltd. ADS	US	USD	1.60 %
Fortum Oyj	FI	EUR	1.59 %
Johnson Controls Inc.	US	USD	1.59 %
GT Solar International Inc.	US	USD	1.58 %

Energy Development Corp.	PH	PHP	1.58 %
Abengoa S.A.	ES	EUR	1.58 %
Covanta Holding Corp.	US	USD	1.56 %
Kingspan Group PLC	IE	EUR	1.53 %
GCL-Poly Energy Holdings Ltd.	HK	HKD	1.53 %
Itron Inc.	US	USD	1.52 %
SolarWorld AG	DE	EUR	1.51 %
Ormat Technologies Inc.	US	USD	1.44 %
Baldor Electric Co.	US	USD	1.42 %
First Solar Inc.	US	USD	1.42 %
Umicore S.A.	BE	EUR	1.40 %
Contact Energy Ltd.	NZ	NZD	1.39 %
Q-Cells AG	DE	EUR	1.33 %
Renewable Energy Corp. ASA	NO	NOK	1.25 %
SunPower Corp. CI A	US	USD	1.23 %
BKW FMB Energie AG	CH	CHF	1.21 %
Meidensha Corp.	JP	JPY	1.20 %
BYD Co. Ltd.	HK	HKD	1.19 %
MEMC Electronic Materials	US	USD	1.15 %
Verbund AG	AT	EUR	1.14 %
Saft Groupe S.A.	FR	EUR	1.13 %
Fuel Systems Solutions Inc.	US	USD	0.99 %
GS Yuasa Corp.	JP	JPY	0.92 %
Sanyo Electric Co. Ltd.	JP	JPY	0.90 %
China WindPower Group Ltd.	HK	HKD	0.79 %
Capstone Turbine Corp.	US	USD	0.70 %
Xinjiang Goldwind Science	CN	CNY	0.69 %
Broadwind Energy Inc.	US	USD	0.66 %
Solar Millennium AG	DE	EUR	0.59 %
Gurit Holding AG	CH	CHF	0.59 %
Zhejiang Yankon Group	CN	CNY	0.56 %
FuelCell Energy Inc.	US	USD	0.54 %
Theolia S.A.	FR	EUR	0.51 %
Green Energy Technology	TW	TWD	0.51 %
Zoltek Cos.	US	USD	0.51 %
Rockwool International A/S	DK	DKK	0.51 %
JA Solar Holdings Ltd. ADS	US	USD	0.50 %
Roth & Rau AG	DE	EUR	0.50 %
Phoenix Solar AG	DE	EUR	0.47 %
Power Integrations Inc.	US	USD	0.47 %
Praj Industries Ltd.	IN	INR	0.45 %
Sao Martinho S/A Ord	BR	BRL	0.45 %
Eaga PLC	GB	GBP	0.43 %
5N Plus Inc.	CA	CAD	0.43 %
Takuma Co. Ltd.	JP	JPY	0.43 %
Energy Conversion Devices	US	USD	0.43 %
NPC Inc.	JP	JPY	0.43 %
Japan Wind Develop. Ltd.	JP	JPY	0.42 %
Climate Exchange PLC	GB	GBP	0.41 %
Universal Display Corp.	US	USD	0.40 %
Evergreen Solar Inc.	US	USD	0.38 %
Echelon Corp.	US	USD	0.37 %
Solaria Energia y Medio S.A.	ES	EUR	0.37 %
EnerNOC Inc.	US	USD	0.37 %

PV Crystalox Solar PLC	GB	GBP	0.36 %
Solon AG fuer Solartechnik	DE	EUR	0.32 %
Maxwell Technologies Inc.	US	USD	0.31 %
Gushan Enviro Ltd. ADS	US	USD	0.31 %
Polypore International Inc.	US	USD	0.30 %
Ener1 Inc.	US	USD	0.27 %
Tanaka Chemical Corp.	JP	JPY	0.25 %

NEX INDEX SECTORS

Sector Information for December 10, 2009

Key	Sector	Weight
RWD	Renewable - Wind	28.62 %
RSR	Renewable - Solar	27.86 %
EEF	Energy Efficiency	16.26 %
RBB	Renewables - BioFuels and Biomass	11.59 %
ROH	Renewables - Other	6.76 %
PWS	Power Storage	6.68 %
ECV	Energy Conversion	2.23 %

Sector Weights



PAST NEX REGIONS INFO

Region-of-Listing Information for Sept 16, 2009	
Region	Weight
Europe, Middle East, Africa	43.15 %
The Americas	35.27 %
Asia & Oceania	21.58 %

Region Weights



Appendix VII: WilderHill New Energy Global Innovation Index (NEX), Rebalance to start Q1 2010.

NEX Index Components to start Q1 2010. 86 stocks.

The WilderHill New Energy Global Innovation Index (NEX) rebalances quarterly on the last trading day of March, June, September and December.

Calculation Method Modified Equal Weighted

Component Change - Rebalance

<u>Company Name</u>	<u>Country</u>	<u>Weight</u>	<u>Sector</u>
China Longyuan Electric Power Group	Hong Kong	1.97%	RWD
Iberdrola Renovables S.A.	Spain	1.97%	RWD
Vestas Wind Systems A/S	Denmark	1.97%	RWD
EDP Renovaveis S/A	Portugal	1.97%	RWD
Acciona S.A.	Spain	1.97%	RWD
Gamesa Corporacion Tecnologica S.A.	Spain	1.97%	RWD
EDF Energies Nouvelles S.A.	France	1.97%	RWD
China High Speed Transmission Equip.	Hong Kong	1.97%	RWD
American Superconductor Corp.	United States	1.97%	RWD
Hansen Transmissions International N.V.	United Kingdom	1.97%	RWD
Nordex AG	Germany	1.97%	RWD
Infigen Energy	Australia	1.97%	RWD
China WindPower Group Ltd.	Hong Kong	1.97%	RWD
Covanta Holding Corp.	United States	1.72%	RBB
Cosan S/A Industria e Comercio	Brazil	1.72%	RBB

Abengoa S.A.	Spain	1.72%	RBB
Sechilienne-Siddec	France	1.72%	RBB
Fortum Oyj	Finland	1.72%	RBB
Novozymes A/S Series B	Denmark	1.72%	RBB
Verbund AG	Austria	1.68%	ROH
Contact Energy Ltd.	New Zealand	1.68%	ROH
Energy Development Corp.	Philippines	1.68%	ROH
Ormat Technologies Inc.	United States	1.68%	ROH
First Solar Inc.	United States	1.52%	RSR
Renewable Energy Corp. ASA	Norway	1.52%	RSR
SMA Solar Technology AG	Germany	1.52%	RSR
GCL-Poly Energy Holdings Ltd.	Hong Kong	1.52%	RSR
MEMC Electronic Materials Inc.	United States	1.52%	RSR
Suntech Power Holdings Co. Ltd. ADS	United States	1.52%	RSR
SolarWorld AG	Germany	1.52%	RSR
Yingli Green Energy Holding Co. Ltd. ADS	United States	1.52%	RSR
SunPower Corp. Cl A	United States	1.52%	RSR
Centrotherm Photovoltaics AG	Germany	1.52%	RSR
Q-Cells S.E.	Germany	1.52%	RSR
LDK Solar Co. Ltd. ADS	United States	1.52%	RSR
GT Solar International Inc.	United States	1.52%	RSR
Baldor Electric Co.	United States	1.41%	EEF
Meidensha Corp.	Japan	1.41%	EEF
Itron Inc.	United States	1.41%	EEF
EPISTAR Corp.	Taiwan	1.41%	EEF
Rockwool International A/S Series B	Denmark	1.41%	EEF
Kingspan Group PLC	Ireland	1.41%	EEF
International Rectifier Corp.	United States	1.41%	EEF
Power Integrations Inc.	United States	1.41%	EEF
Johnson Controls Inc.	United States	1.41%	EEF
Cree Inc.	United States	1.41%	EEF
A123 SYSTEMS INC	United States	1.41%	PWS
BYD Co. Ltd.	Hong Kong	1.41%	PWS
Sanyo Electric Co. Ltd.	Japan	1.41%	PWS
GS Yuasa Corp.	Japan	1.41%	PWS
Saft Groupe S.A.	France	1.41%	PWS
Fuel Systems Solutions Inc.	United States	0.68%	ECV
Capstone Turbine Corp.	United States	0.68%	ECV
FuelCell Energy Inc.	United States	0.68%	ECV
Xinjiang Goldwind Science & Tech.	China	0.56%	RWD
Broadwind Energy Inc.	United States	0.56%	RWD
Japan Wind Development Co. Ltd.	Japan	0.56%	RWD
Zoltek Cos.	United States	0.56%	RWD
Gurit Holding AG	Switzerland	0.56%	RWD
Takuma Co. Ltd.	Japan	0.49%	RBB
Sao Martinho S/A Ord	Brazil	0.49%	RBB
Praj Industries Ltd.	India	0.49%	RBB
Gushan Environmental Energy Ltd. ADS	United States	0.49%	RBB
Meyer Burger Technology AG	Switzerland	0.44%	RSR
JA Solar Holdings Co. Ltd. ADS	United States	0.44%	RSR
Solar Millennium AG	Germany	0.44%	RSR
Roth & Rau AG	Germany	0.44%	RSR
Energy Conversion Devices Inc.	United States	0.44%	RSR
NPC Inc.	Japan	0.44%	RSR
Green Energy Technology Inc.	Taiwan	0.44%	RSR
Phoenix Solar AG	Germany	0.44%	RSR
PV Crystalox Solar	United Kingdom	0.44%	RSR
Solaria Energia y Medio Ambiente S.A.	Spain	0.44%	RSR
5N Plus Inc.	Canada	0.44%	RSR
Solon SE	Germany	0.44%	RSR
Neo-Neon Holdings Ltd	Hong Kong	0.40%	EEF
EnerNOC Inc.	United States	0.40%	EEF
Climate Exchange PLC	United Kingdom	0.40%	EEF
Zhejiang Yankon Group Co. Ltd. A	China	0.40%	EEF
Eaga PLC	United Kingdom	0.40%	EEF
Echelon Corp.	United States	0.40%	EEF

Universal Display Corp.	United States	0.40%	EEF
Ener1 Inc.	United States	0.40%	PWS
Polypore International Inc.	United States	0.40%	PWS
Maxwell Technologies Inc.	United States	0.40%	PWS
Tanaka Chemical Corp.	Japan	0.40%	PWS

4 Additions

China Longyuan Electric Power Group	Hong Kong		RWD
Neo-Neon Holdings Ltd	Hong Kong		EEF
A123 SYSTEMS INC	United States		PWS
Meyer Burger Technology AG	Switzerland		RSR

6 Removals

Umicore S.A.	Belgium		PWS
Theolia S.A.	France		RWD
Evergreen Solar Inc.	United States		RSR
Sharp Corp.	Japan		RSR
BKW FMB Energie AG	Switzerland		ROH
Canadian Hydro Devel. (intra-Quarter)	Canada		ROH

(NEX Index is a partnership between New Energy Finance based in London, Josh Landess at First Energy Research LLC, and Dr. Rob Wilder of WilderHill. Its history is addressed in prior reports).

For more on dynamic NEX Index components and weights, see also,
http://www.nex-index.com/Constituents_And_Weightings.php
http://www.nex-index.com/about_nex.php

Happy New Decade!