WilderShares, LLC

Q4 2010 Quarterly Report: WilderHill Clean Energy Index®, December 31, 2010

4th Quarter 2010 opened with the Clean Energy Index® (ECO) at 99.83, & closed at 105.50 for a Q4 gain of +5.6%. For the full Year 2010, the ECO Index® was down by -5.2%. So little change this particular YTD period might be misleading; glance not at a last 12 *months,* but say at a past 21 *weeks,* or a longer 3 *years,* and there's been surely more volatility. Consider too its 'return as a function of risk' and this risk-laden sector & Index did 'worse' in 2010, than even safe government bonds. Indeed measure most periods other than a past YTD and there's volatility both downwards & up: just for instance the past 6 months the ECO tracker is up by +25%. In sum the Index is normally far from static.

That the clean energy sector reflected by ECO went mainly sideways near 100, mid-2009 to late 2010 is therefore a bit remarkable, given its history of frequently greater moves. But not all themes based around innovative, or alternative energy have been so static. Following Chart I below for ECO in 4th Quarter, and for last two years top of next page, Charts III & IV show all 4 WilderHill Indexes for 2010 & for the past 24 months. Seeing all 4 Indexes together in a larger data set, it's evident that a sideways line presents just for ECO (U.S. listed stocks) & for NEX (mainly outside U.S.) where core worldwide difficulties in solar & wind accounted for much temperance in those two key Indexes.

Unlike ECO/NEX, the *WilderHill Progressive Energy Index* (WHPRO) shown in Charts III & IV had remarkably greater changes (often quite upwards) in its tracker (PUW). WHPRO stands apart in non-negligible ways, up some +88% for 2009-2010, and +147% from its 2009 low. (There's no tracker at present for HAUL Index® of global energy efficient transport).

Focusing here on ECO for 2010, moderate declines over 1st half of 2010 were mostly erased in a climbing 2nd half; clean energy gains in 2H lifted many boats including pure-plays that can really 'plummet, or pop'. Last Quarter, we'd looked at key ECO vs. HAUL Index. In this Report we'll compare 'green' ECO, vs. a 'brown' WHPRO that's for reducing pollutants from, and improving efficiency of, fossil fuels & nuclear still dominating energy today. Finally we note benchmark ECO 'outperformed' two active funds in this space in 2010 (Chart V) and longer. But first, here's the latest for ECO Index in Q4:

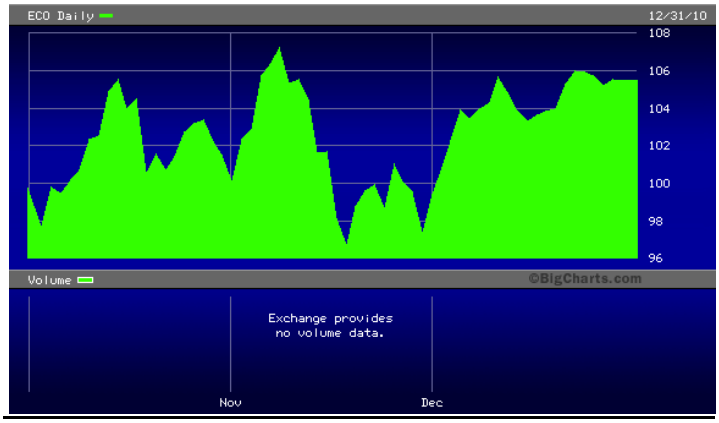


Chart II: here is ECO tracker (PBW, **blue**) in 2009+2010 for perspective of a past 2 years. This shows a clean energy bottoming in Spring 2009 and rebounding to that Summer, after dramatic sector declines in solar & wind throughout 2008. Arguably, core difficulties particularly in solar & wind sub-areas last 3 years prevented clean energy gains as a whole in that time. E.g. for the past two-years, below, a useful solar Index (in red, not ours) for instance is down, and a useful wind Index (gold, not ours) is down as well. So while ECO over the last 2 years is up some and did 'better' than say, safe government bonds (unlike in a last 1 year when it closed down), it's very volatile and so risky: as we highlight each Quarter the Index can and also does 'drop like a rock'. A last-18-months timeframe (latter 3/4th of this 2-year Chart) is rather less volatile than many periods for ECO:

Chart III, below showing all 4 of the WilderHill Indexes in 2010. We see ECO tracker (PBW) in **blue**, and NEX Index tracker (PBD) in **red** (Global clean energy mostly outside the U.S.) moving fairly closely first half of the year — at other times, they're less close (with either one ahead). Top over 2010 as noted is WilderHill Progressive Energy tracker (PUW) **green**, with an upward 2H trend. (4th tracker for HAUL Index in **gold**, is only to Dec 14th):

Chart IV, showing all 4 WilderHill Indexes over both 2009 and 2010.

Here ECO tracker (PBW) **blue** (for clean energy) has ended rather close, to NEX tracker (PBD) in **red** for global clean energy mainly outside the U.S. At top still is the WilderHill Progressive Energy (WHPRO) tracker (PUW) in **green** with its 'improving dominant/fossil fuels' theme so unlike clean renewables in ECO. (a HAUL tracker, **gold,** is to Dec 14th):

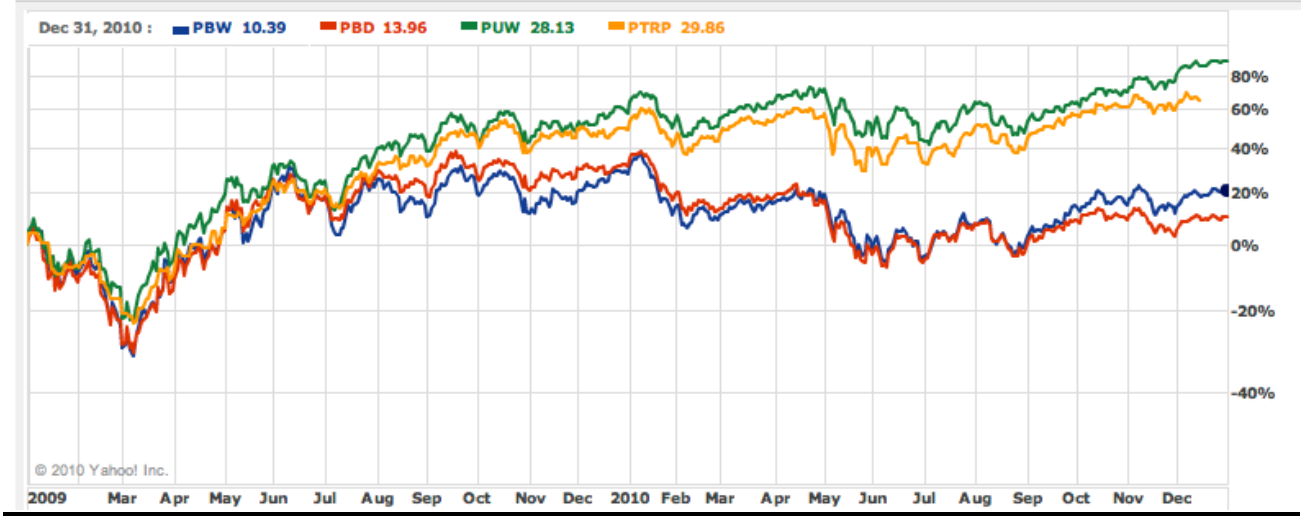


Chart V, Here is passive WilderHill Clean Energy Index (tracker PBW) in **blue,** and also passive WilderHill New Energy Global Innovation Index (tracker PBD) in **red** for 2010.
These 2 Indexes/trackers we observe here both 'outperformed' 2 active-managed mutual funds that also focus on clean/alternative energy. While passive, Indexes often will outperform actively managed funds, so the results are perhaps not greatly surprising. 'Up most' (the least down) in 2010 is ECO (tracker) and then NEX (tracker), less down here than 2 active funds. For a past two years too, these Indexes again led. Much more broadly, we note that over the past five years some 63% of large cap U.S. (active) mutual funds have lagged e.g. the S&P 500 Index (source: Standard & Poors).

As is apparent from Charts above, the WilderHill Progressive Energy's 'browner' theme did 'better' at least in the past two-year period, than did renewable solar & wind etc themes captured by 'green' ECO and the global NEX. Because WHPRO (with at present almost no solar or wind) is for *improving the major energy portrait today,* it illustrates interestingly how the technologies for its unique theme fared differently the past two years, vis-à-vis the better-known *clean energy theme* long benchmarked by ECO. At other periods however, it has been the ECO (and/or NEX) theme(s) that outperform WHPRO.

Helpfully the distinction setting apart from ECO from 'other family Index' WHPRO is a bright-line. No component in ECO any one Quarter can be simultaneously in WHPRO too, or visa-versa — there's no overlap + robust diversification as between ECO & WHPRO. Moreover WHPRO was first and remains the only Index capturing this unique theme. (ECO was the first-ever Clean Energy Index®: there are now many competitors. The NEX was the first live Global clean energy Index and it has many competitors now as well).

As we drill down farther on ECO vs. WHPRO we will see it's in *their contrasting themes* where the two stories most acutely differ. Younger WHPRO has been live since 2006 and it is to be concise, made of a very different basket of names than ECO Index. Plus WHPRO is the first Index for opportunities that may arise if a cost is put on carbon. Procedurally too, respective Rules for components differ for WHPRO vs. ECO. Generally for instance, a floor to initially include a name in Progressive Energy Index® (WHPRO) is >$150 million market cap around the rebalance time; names there <$400 million at the rebalance are down-weighted to a 'banded' 0.5% weight to start the Quarter. By contrast ECO generally has a lower initial floor of just $50 million for initial inclusion; there only those stocks <$200M at rebalance are 'banded' Quarterly with a lower 0.5% weighting.

Other aspects common to WHPRO+ECO and all WilderHill Indexes may be briefly stated — they can help differentiate WH Indexes from various other useful products, like say from alternative energy products weighted instead by the market cap of their components. Given the modified equal-weighted methodology in WilderHill Indexes, smaller pure-plays have a voice. Conversely no single exceptionally big-cap name, nor small handful of large cap names can start out at rebalance with relatively outsized Index weighting.

Before taking up the specifics for this last Q4 2010, let's take a look at what's noted for the WHPRO Index, at About WHPRO, at http://www.whprogressive.com/about.php
Text there observes in part that

WilderHill Progressive Energy Index® (WHPRO) is a modified equal-weight index made up of companies that serve as an energy bridge improving near-term use of fossil fuels by progressively improving efficiency, while reducing their conventional and other pollution. Sectors include alternative fuels, emissions reduction, energy efficiency, and innovation in energy materials, production and use. A focus is on transitional bridge technologies that can act to reduce harms from inherently dirty coal, oil and natural gas, enhance efficiency, or make better use of or advance all of the major energy sources dominant today.

Besides capturing solutions that reduce pollution, or make better use of the coal, oil, natural gas, plus the nuclear that dominate our energy portrait today, this is also the first Index for

opportunities to mitigate greenhouse gases because of potential climate risk.

Attentive to energy security & energy independence, as well as climate risk, we may include near-term options that can carry some downsides yet mitigate CO2: we are inclusive for mainly carbon-neutral options, like biofuels. Diverse companies with exposure to nuclear may be included, but past generation nuclear is not a priority; next-generation or advanced nuclear power may be considered if safer and better. Uranium and other nuclear fuels can be included. Zero-carbon pure-play companies such as those primarily in renewable solar & wind power that prevent pollution in the first place are mainly excluded from this Index [and may instead be in ECO Index].

Index Construction - Generally speaking, as a guideline, the Index should:

- The Progressive Energy Index® uses modified equal dollar weighting. No single stock may exceed 5% of the total Progressive Energy Index® weight at quarterly rebalancing.
- For a stock to be included in the selection universe, it should be a company providing for improvements in alternative fuels, emissions reduction, efficiency, or innovation in energy materials, production, use, etc. These should serve as an energy bridge improving use of fossil fuels over the next several decades by progressively reducing carbon and other pollution. Of potential relevance could be government or private sector concerns for greenhouse gases (GHGs), climate change, or new efforts to reduce GHGs such as from coal, oil, and natural gas. We favor near-term options and so recognize only modest improvements may be represented in many cases; mainly carbon-neutral transitional biofuels such as corn-based ethanol can be included in this Index. Companies having some or substantial exposure to nuclear power such as utilities may be included, but current-generation nuclear power is not a priority for the Index; next-generation nuclear may be considered if it is significantly safer. Zero-carbon clean energy and pollution prevention are generally excluded from this Index.
- To be eligible for Progressive Energy Index®, a stock must have: (i) three-month average market capitalization of at least $150 million; (ii) three-month average closing price above $1.00 if not currently in the Progressive Energy Index®; and (iii) be listed on the NYSE, AMEX or NASDAQ and, if a foreign company, have their ADRs listed on the NYSE, AMEX or NASDAQ.
- WHPRO may, at any time and from time to time, change the number of issues comprising the Progressive Energy Index® by adding or deleting one or more component stocks, or replacing one or more issues contained in the Progressive Energy Index® with one or more substitute stocks of its choice, if in WHPRO's discretion such addition, deletion or substitution is necessary or appropriate to maintain the quality and/or character of the emerging energy industry.
- 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 $400 million in total market capitalization are set to one-half of a percent (0.5%) weight. The remaining components in each Sector are equally weighted using Sector weightings minus the sum of the weights of stocks less than $400 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. At the rebalancing no component may exceed five percent (5%) of the Index.

A Comparison of the Progressive Energy Index® (WHPRO) – with the original WilderHill Clean Energy Index® (ECO): The Non-Overlapping of Stocks

Notably this WilderHill Progressive Energy Index® is significantly different from WilderHill Clean Energy Index® (ECO) that launched August 16, 2004 and more on it is at www.wildershares.com Unlike the original ECO Index designed for a clean energy sector and so specifically for non-fossil fuel sources like zero-carbon solar or wind power — this latest WH Progressive Energy Index® (WHPRO) is designed to instead track transitional bridge technologies reducing harms stemming from dominant energy of today: inherently dirty fossil fuels coal, oil natural gas, also nuclear.

Importantly there is no concurrent overlap between the stocks themselves that make up these two Indexes; generally none of the stocks in ECO in any one Quarter are also in WHPRO at the same time and visa-versa. At times we expect a company may migrate from one Index into the other, should their activity grow for instance in developing renewable zero-carbon energy to prevent pollution ('green' power, for ECO) — or they move to reduce a pollutant from fossil fuels (going to WHPRO) — however they will generally be moved from one Index to the other, and thus not appear in both the same Quarter. We post [see WHPRO website, http://whprogressive.com/about.php] some Correlation data showing significant non-correlation between WHPRO & ECO.

More broadly for a company to be considered for inclusion in WilderHill Progressive Energy Index® in a first place, their share price movement should be impacted in a meaningful way by work they may do in a relevant (energy) endeavor. While this WH Progressive Energy Index is expected to have significant composition of large cap stocks, a more pure-play Clean Energy Index® (ECO) focuses on volatile renewable energy companies that are often $1-10 billion in size or less. WHPRO is expected to perhaps have larger, wide-ranging conglomerates working in diverse fields for which progress in new energy activity, or better efficiency is just a part of their work. Blue chip famous names in WHPRO are often recognizable; those in ECO may frequently be less well known.

Index Rules also *may* lead to less volatility for WHPRO with its larger stocks, as compared to ECO.

For instance the minimum allowable floor for stocks initially included in the Progressive Energy Index (WHPRO) is $150 million market cap at the rebalance; any stocks $150 million-$400 million in size are down-weighted to 0.5% at each rebalance to account for their smaller size. By contrast ECO has a lower minimum floor of $50 million, and any (perhaps purer-play) stock within its lower band of $50 million-$200 million market cap is weighted 0.5% at each rebalance.

In sum we purposefully don't use words like 'clean' or 'solutions' with respect to WHPRO; as noted those more accurately refer to the story of the Clean Energy Index® (ECO). We also as individuals do not seek to be 'pied-pipers' for compromise technologies of WHPRO, since these are transition technologies, only incrementally improving still-dirty fuels. And yet they are importantly near-term approaches that may valuably help reduce harm, advance energy efficiencies, or make better use of dominant energy sources of today and therefore can be of real utility. We'd emphasize themes here are often vexing compromises; as such they often only reduce certain pollutants (not eliminating harm). Yet these nearer-term advances could well be tied to progressive improvements in, and a de-carbonizing of, the main energy sources of the very early 21st century.

Performance of WHPRO; theoretical backtest history 2001 to WHPRO Launch in October 2006 (**black**), compared with S&P500 (green) and Nasdaq (red):

(Note: it is important that theoretical, after-the-fact backtesting always be treated with considerable caution because no matter how much care is taken during Index creation, some unintentional bias may slip in favoring past 'winners'. However backtesting roughly speaking may give at least some broad indication of direction or velocity of change in downward or upward market conditions. Most useful of all however is to examine actual performance *after* an Index goes live and is calculating real time, so that skewing is not a factor. An Index once live and on the 'tape' for all to see, Is then very useful).

We'll look next at live, brown, WHPRO in recent Q4 2010 and compare it to ECO Index.

Some Specifics for WHPRO Index in the latest Q4 2010

There's 6 Sectors in WilderHill Progressive Energy (WHPRO) and during Q4 2010 as usual, those browner stocks presented a pleasingly striking contrast with green, clean ECO Index. We could see a first Sector of WHPRO (by alphabet) as **Alternative Fuel:** a granular view below shows it had 8 stocks in Q4 and a Sector weight then of 19%. Names in each Sector begin co-equally weighted to start at the rebalance, they then move independently rest of the Quarter. Thus with 8 stocks (none *banded as <$400M) and a 19% Sector weight, these started out for Q4 @2.37% each (19% Sector/8= 2.37% each). They were:

Alternative Fuel – 19% Sector Weight (8 stocks @2.37% 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 can be derived from fossil fuels or organics.
Questar, STR. Natural gas, explores for & 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.
The Andersons, ANDE. Ethanol producer, corn-based; rail group in fuel transport.
USEC, USU. Uranium fuel, converts Soviet warheads into U.S. nuclear feedstock.

Perhaps a 1st thought on seeing the 8 above is in clear contrast to ECO, the brown WHPRO approaches aren't relevant to truly clean, renewable energy. So they're unlike a 'Renewable Energy, Harvesting' Sector of ECO with its renewable solar, wind, etc.

To begin unlike green ECO, components in WHPRO can work in *fuel* for nuclear power. One name in WHPRO works in dismantling & recycling warheads from ex-Soviet missiles, converting them into low enriched uranium fuel useful as in U.S. power plants: it's turning unwanted Soviet-weaponry into more peaceful uses via 'megatons to megawatts'. While that is significant, and the gaseous diffusion by another component is innovative too — nuclear fuel that might belong in WHPRO is inarguably not robustly green, nor clean, nor is it truly renewable. Nuclear put plainly, is ***not*** allowed within ECO.

If climate risk & CO2 does move to the fore, then, yes, nuclear may be a baseload option. *But nuclear is without doubt, not a magic bullet;* it carries terrible proliferation risk, waste risk etc. Innovation *may* address dangerous, risky, and costly nuclear power ahead (perhaps with newer methodologies here, or in PBMR, modularization, 3rd gen, etc).

Before going to a next WHPRO Sector, consider Alternative Fuel names in *natural gas*. Arguably another very imperfect fuel, it's a non-renewable bridge yet with much room for improvement in its use within dominant energy today. Natural gas for instance, can be a bridge to less-dirty baseload power generation, by shifting away from filthiest coal-fired plants. It's increasingly useful as alternative transportation fuel too, in the developing nations, such as in compressed natural gas (CNG) tanks onboard vehicles.

Hardly visible as fuel in U.S., as only 110,000 natural gas vehicles are on roads here, CNG fuel is far more popular with good reason in other places. As noted in the Wall Street Journal (Nov. 29, 2010, R3) regions with sparse gasoline refining capacity yet abundant natural gas reserves may well embrace CNG in transport. These presently include Pakistan with 2 million+ CNG vehicles, and Argentina with 1,800,000, similarly Brazil & India have nearly 1 million CNG vehicles in use apiece and they are growing that use.

From a strictly 'lower-CO2, de-carbonization standpoint', natural gas clearly beats coal in power generation; that said, like all else fossil fuels, there's huge downsides too such as terrible pollution in hydraulic fracturing – so natural gas is also no magic bullet, with room to improve. To sum up Q4, there were 4 natural gas names in WHPRO's Alternative Fuels, also 1 name in ethanol (non-cellulosic feedstock), and 1 in methanol as a potential H2-rich energy dense liquid fuel for possible use in fuel cells. Briefly we contrast WHPRO 'fuels' above, with an 'analogous' and yet very different ECO sector in **green** below:

ECO Index: Renewable Energy Harvesting Sector in Q4 –
24% sector (9 stocks @2.38% each; +5 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.
Canadian Solar, CSIQ. Solar, China based vertical-integrated solar manufacturer.
China Wind Systems, CWS. Wind power, large forged components in turbines.
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'.

Just glance at this "Renewable Energy Harvesting" Sector in ECO above, and its own 'alternative fuels' are very unlike the brown natural gas & nuclear. On the other hand renewables are still much more costly to 'harvest' — than dirty energy. Both Indexes have great room for their candidates to improve ahead, and they've also shown they move in their own ways for good non-correlation; indeed among these 2, the solar, wind, ocean power etc just above are hardly found in WHPRO. Instead WHPRO emphasizes finding better uses of traditional resources to improve a near-term paradigm: importantly though both Indexes can be expected to contain much in new energy efficiency.

Indeed returning to Progressive WHPRO, next by alphabet is the **Better Efficiency Sector**. Seeing this Sector below, some names here *might* even be in ECO (unlike those in Alternative Fuels) although none can be put into both Indexes in any one Quarter.

Names below bear far closer resemblance to an ECO theme, not surprisingly as advantages of efficiency are strong for both Indexes. In Q4, this WHPRO Sector was weighted 24% with 10 stocks (plus 1 *banded as <$400M, @0.5%), and so these 10 started at 2.35% each.

Put simply, *better energy efficiency* is one of the sanest things that one can do today. Whether part & parcel of better use of the renewables so seminal in ECO (in solar, wind, geothermal etc) — or better use of dirty fossil fuels & nuclear dominant today for WHPRO, there's a compelling case for efficiency — it's the most overlapping aspect as between these two (for all of the ECO stocks see http://wildershares.com/about.html).

Here are these WHPRO names in Q4 2010:

Better Efficiency – 24% Sector Weight (10 stocks @2.35% each+1 banded stock)
***A.O. Smith*, AOS.** Better energy efficiency in water heating, & treatment, motors.
***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
***Harbin Electric*, HRBN.** Linear motors for energy efficiency, propulsion, reliability.
***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.

Each name above presents a strong case for efficiency today, so inclusion in WHPRO.
A first name makes innovative and efficient water heaters, also motors, two areas where consumption is vast and improvements markedly improve residential, commercial and industrial power use. (Their efficient motors unit was in fact bought in Q4 2010). Likewise a 2nd name also makes efficient motors and variable speed drives (that whole company was bought in Q4 2010!). Another name is in demand response they're typical of these names and the one *banded <$400M that populate this Better Efficiency theme.

To find a Sector of ECO akin to WHPRO's for Better Efficiency, note a dozen Q4 2010 names in ECO's 'Power Delivery & Conservation' Sector shown here in **green**:

ECO Index, Q4 2010:
Power Delivery & Conservation - 29% sector weight (12 stocks @2.37%; +1 banded)
Aixtron Aktiengesellschaft, AIXG. Deposition tools for efficient (O)LED, displays.
Applied Materials, AMAT. PV & semi fabrication, LCD displays, crystalline solar.
**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.
STR Holdings, STRI. Encapsulants, broad technology covers range of PV panels.
Universal Display, PANL. Organic light emitting diodes, OLED panel displays.

Some names above are tied to efficiency upstream for greater power production, and others are in better energy-use downstream, which perhaps raises a very different point. Think of 2010 election results; arguably either political Party could favor efficiency paths on the demand side (like better lighting). But on the supply side as a practical matter, election of a more conservative House *may* lead to new emphasis for producing a greater percentage of domestic energy from the 'traditional' sources like nuclear power; efficient new domestic natural gas production may also find new favor after 2010.

Next is the **Conversion & Storage Sector** of WHPRO; many names here are once again a brown area, so stand well apart from the green ECO. For example one name is developing commendable distributed generation (DG) and micro-grid power in China such as for stand-alone steel, chemical, cement, and food industries. For such very hungry power draws however, DG entails the use of dirty fossil-fuel-reliant gen sets like diesel.

Yes, they're moving strongly now into wind, lately solar too (deals and/or problems in wind do impact its share price) but DG has been its core business: on the other hand decentralized power can oft be better even within a fossil fuel dominant paradigm. In sum they're not yet so significantly in renewables as to warrant possible shift into ECO. In the meantime they're advancing a more reliable system than China's grid, notably using many better (and costlier, oft cleaner) resources — yet still belong in brown WHPRO.

A 2nd name is innovative and yet currently 'brown' too — so not for ECO Index. This is in waste-to-energy; to make power from biomass waste traditionally qualifies for WHPRO. (If they'd use only 'clean' feedstock they might in theory be eligible for ECO, but by relying on unsorted municipal wastes with resulting pollutants, they belong in WHPRO). Another is in nuclear wastes recycling/storage. Two others here are developing systems to store & fuel natural gas vehicles, thus growing fleet use of natural gas vehicles. Another in energy storage doubled (!) in value over Q4: had they started Q4 just above $400M (instead of just below, so *banded @0.5%), they may well have made WHPRO's Top 10 list. Below are its diverse names in Q4 2010, and each (unbanded) name started at 2.28%:

Conversion & Storage – 17% Sector weight (7 stocks @2.28% each+2 banded stocks)
***A-Power**, APWR. Distributed power generation, micro-grid systems; China focus.
***Chicago Bridge & Iron**, CBI. Advanced containment vessels, next-generation nuclear.
***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.
***Exide Technologies**, XIDE. Better lead-acid batteries for motive, traction uses.
***Westport Innovations**, WPRT. Enables vehicle use of natural gas, gaseous fuels.

Names above starkly contrast with two roughly analogous Sectors of ECO; those are there an Energy Conversion Sector, and an Energy Storage Sector shown next:

Energy Conversion - 17% sector weight (7 stocks @2.14% each; +4 banded stocks)
American Superconductor, AMSC. Wind power converters; and superconductor HTS.
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 MCFCs.
Fuel Systems Solutions, FSYS. Gaseous fuels, for ICEs in cleaner-fuel vehicles.
International Rectifier, IRF. Energy-saving in power conversion and conditioning.
Molycorp, MCP. Rare Earths, strategic elements for new batteries, wind, EVs etc.
**Quantum*, QTWW. Alternative fuels for vehicle propulsion; also solar nexus.
Satcon, SATC. Inverters, DC/AC conversion for larger utility-scale renewables.
Tesla Motors, TSLA. Electric vehicles, maker of EVs, advanced power systems.
**UQM Technologies*, UQM. Motors and controller systems, EVs & hybrid vehicles.

And here is the ECO Energy Storage Sector:
Energy Storage - 18% sector weight (8 stocks @2.12% each; +2 banded stocks)
**Active Power*,, ACPW. Flywheels, uninterruptible power, conditioning; non-chemical.
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.
**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.
Energy Conversion, ENER. Thin film, amorphous flexible PV panels; also batteries.
Maxwell, MXWL. Ultracapacitors, alternative supplement to batteries, hybrids, UPS.
OM Group, OMG. Cobalt and other precursors, producer for Li-Ion batteries, FCs.
Polypore Intl., PPO. Batteries, separator membranes in Li-ion, Pb-acid cells.
Sociedad de Chile, SQM. Lithium, major Li supplier for batteries; also STEG storage.

Moving on, a 4th Sector in WHPRO is **Emission Reduction,** seen below. In Q4 it was just 9% of the Index, since many stocks there were *banded for being <$400M at rebalance. Given only 3 names over $400M, the other 4 were at start of the Quarter small and thus started out as *banded @0.5% each. Subtracting then 2.0% (due to 4 banded stocks @0.5% each) from initial Sector weighting of 9%, leaves 7.0% for its 3 unbanded names. Hence the 3 started Q4 @2.33% each at rebalance. Clearly these purer play components in Emission Reduction may be of smaller size, relative to some of the other WHPRO Sectors.

One of its small (<$400M) and banded names is in post-combustion pollution control that reduces pollutants from fossil fuels, e,g. the NO_X reduction had by catalytic reagents. Such end-of-pipe pollution controls must operate in a vital sense, after-the-fact, post-combustion: they assume of course dirty fossil fuels as the inputs, and then aim to lessen impacts. That contrasts with ECO where attention is oft on better *pollution prevention (P2)*. Over in ECO more emphasis is on renewables, clean energy and P2, therefore naturally preventing those emissions in the first place (there are no emissions from solar PV for instance) and so leading to very different themes in the two baskets.

A big and non-banded name in Emission Reduction manufactures emission controls for the world's automotive OEM and aftermarket. These controls can substantially reduce tailpipe emissions and increasingly are lightweight. That said, they pointedly are based on the kind of end-of-tailpipe approaches found more in WHPRO, than in ECO. They by design function in context of utter dependence on existing dirty fuels like gasoline & diesel. They are an innovator in reducing emissions in a dominant energy portrait today: their theme is not at all renewable energy — but rather is tied to reducing emissions from fossil fuel. Here are its 7 stocks, only 3 of which are fully-weighted, the others being banded:

Emission Reduction - 9% Sector Weight (3 stocks @2.33% 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.
****Peerless*,** PMFG. Pollution reduction, effluent separation & filtration systems.
****Rentech***, RTK. Gas to liquids, converts synthetic gas from varied 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.

Next we can turn to a fifth Sector of WHPRO, **New Energy Activity.**
This New Energy Activity Sector is very diverse and may include for instance demand-side innovators in lighting, in vehicles, in advanced materials, reducing building needs etc; on a supply side they may be in engineering, infrastructure, energy technologies, etc. There's no similar Sector in ECO in part because this (often-'ancient') energy portrait of today has been around so long, it has pervasive room for means to improve. In part too, it's because inherently dirty, old systems can benefit so sizably from improvements. Here are the 10 stocks and its 23% Sector weight (so 2.30% each) to start the past Q4:

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.

Last of 6 Sectors in WHPRO is a Utility Sector. It's unlike a Greener Utilities Sector in ECO (that one there in ECO doesn't have nuclear of course), yet Utility names here in WHPRO also emphasize means to produce power with lesser pollutants and fewer CO2 emissions. These can be innovators that make power in less-polluting ways than the norm; they might benefit too from a potential price on carbon ahead. During Q4 there were 4 names here, with none banded, so 8% Sector weight meant each one started out Q4 at 2.00% apiece. Three of the names in Q4 happened to be based outside the U.S.

Utility – 8% Sector weight (4 stocks @2.00% each)
Companhia Energetica de Minas Cemig, **CIG**. Brazilian Utility, large hydroelectric.
Centrais Electricas Brasileiras, EBR. Brazilian Utility, large hydro, also nuclear.
Enersis, S.A., ENI. Chile, Argentina, Peru. Utility, lower-CO2 large hydroelectric.
NextEra Energy, NEE. Florida Utility, lower-CO2 natural gas, nuclear; has wind.

That wraps up discussion of WHPRO Sectors. Next we took a quick snapshot of respective Top 10 names in WHPRO, and in ECO near the end of Q4. With a brief look at Top 10 first in WHPRO Index, 2/3rds of the way into Q4 — we can offer a few thoughts on these Top 3 names then versus those in a seminal ECO Index. First, we see that on December 1st 2010, the Top 10 names in the WHPRO Index (tracker PUW) then were:

Baldor Electric	**3.29%**
Cameco Corp.	**2.91%**
Tenneco Inc	**2.75%**
McDermott Intl.	**2.73%**
General Cable	**2.73%**
GrafTech Intl.	**2.73%**
Methanex	**2.64%**
Veeco Instrument	**2.61%**
Johnson Controls	**2.61%**
Range Resources	**2.58%**

And the Top 10 also December 1st - for ECO Index (tracker PBW) were then:

Tesla Motors	**3.49%**
Cree	**2.98%**
Intl. Rectifier	**2.91%**
OM Group	**2.68%**
Echelon Corp.	**2.65%**
Universal Display	**2.65%**
Applied Materials	**2.56%**
Rubicon Tech.	**2.50%**
Aixtron AG (ADS)	**2.50%**
Maxwell Tech.	**2.41%**

In both Indexes the top name was a bit >3% and so as noted, no 1 name overwhelms an Index. A quick review of the WHPRO Top 3 shows that its 1st then was a manufacturer of more efficient motors. Just 2 days prior, it announced it was being bought and so from gently ascending valuations over the Quarter, it jumped Nov. 29. (This sort of energy efficiency company might be in ECO, were it was focused on highly efficient motors).

A 2nd name in WHPRO is a decidedly browner story: innovation in producing uranium fuel for nuclear plants; its valuations moved well up over all 2nd half of 2010 from 21 five months prior, to around 40 by late 2010, but nuclear of course isn't in ECO. A 3rd name in WHPRO was noted in a prior ECO Report too due at the time to a remarkable (upwards) volatility, in going up some 10+fold in a very brief time. It's noted above, its in end-of-pipe pollution controls for gasoline & diesel fueled vehicles and thus isn't a likely ECO candidate. However it's own 'lovely stock chart' does paints a pretty 2010.

Looking next at an ECO Top 10, a 1st name then on December 1 is a now-well-known (and yet new) maker of 100% Battery Electric Vehicles (BEVs). As the largest & purest-play in BEVs, one dedicated to growing global supply/demand of EVs and mass production ahead (and sharing its battery technology in JVs with other OEMs), it is a natural fit in ECO. Were it instead building say, more efficient hybrids or micro-cars with internal combustion engines, then that name could be in WHPRO — but as is, it's very appropriate here.

A 2nd name that date in ECO is a LED manufacturer, and it did very well over the past two years in the energy efficient lighting space. Consider that its stock was around $18 to start 2009 — by December 2010 it had climbed to just above $70 (small wonder it's in Top 10!). LEDs are far more efficient than incandescents, which would argue for its much-warranted inclusion. We note too while solar & wind themes have swooned with large falls the past 3 years, other ECO themes like efficient lights/(O)LEDs counter-acted that—and helped ECO turn in a relatively 'much better' performance in 2008-2010 than solar or wind alone.

Somewhat interestingly this company has had many dips and increases since the 1990s; yes, to pick it's 'low' is easy in retrospect — but is vexing in the real world; this makes a case for passive Indexing. Unlike actively moving into, and out of stocks, passive Indexes can present an attractive long-term approach (especially given difficulties active manage funds in fact actually have, in trying to beat the Indexes). Lastly a 3rd ECO name here is once again in energy efficiency, manufacturing power management semiconductors and it too did very well the past two years by more than doubling.

Passive Indexes vs. Active Funds as a General Matter

In other matters we observe ECO & WHPRO Indexes happened to 'beat' two useful, active mutual funds in the clean/alternative energy space over 2009 and 2010. This isn't very surprising; as is often observed in academic literature & in popular stories, Indexes are very tough to 'beat' long term. Yes, they 'merely' capture & track a particular theme so by definition they can't 'beat the market' — yet in practice, the passive low-cost methodology has real benefits. Add in too their better tax efficiencies, and transparency, and it's clear why Indexes have become increasingly popular over the years.

Indeed after a past 'terrible' decade as many market segments dropped *way, way* down from highs of early 2000, and most equities have little to show for 10 years, Indexes still are tough for active equity funds to beat (even with all returns less than cash/bonds). In theory an active manager could have sold short, or gone to cash a decade ago at highs, but in practice people aren't so prescient. It is very easy to look back after the fact and know what's best … its far more vexing in reality to beat passive Indexes over time.

Because returns were remarkably poor last decade in equities, mostly Indexes delivered dismal results this period. But that shouldn't imply active funds did better in the period. Yes, a minority of active funds did do better (and a very small percentage as always will do *far better*) yet most funds didn't/don't beat Indexes. Relative to active funds then there is a strong case for the lower costs & efficiency of Indexing; some active funds shall far outperform the Indexes, but a problem is selecting them in advance.

Sometimes, keeping one's money in just cash turns out to be a best route: this last decade proved that axiom beyond doubt! That said as noted in Wall Street Journal, the Indexes in general often tend to outperform active funds, despite the fact active funds do have managers aiming to beat the market (Nov. 27, 2010, *italics added*):

> …
> Over the past decade, Vanguard Total Stock Market Index Fund has gained an annual average of just 1.79%, or less than half the return you could have gotten keeping your money in cash. *Then again, according to Morningstar, this autopilot fund outperformed two-thirds of all other stock funds, including those run by managers trying to beat the market.*
> ….

After little recent change mid-2009 to 2010, it may be interesting to see what movements lay ahead for the sector/ECO in 2011+ — and to glance ahead at Indexes versus stock picking to be done by active managed funds. One sure thing of some interest too, may be to look to the past: after very tough three years from 2000-2002 and an inflection in 2003, there was the strongly upwards 5 years for 2003-2007 in clean energy captured by ECO. The Index/sector fell dramatically over 2008-2009 and that too was captured by ECO.

We saw in Chart V above the passive ECO & NEX did comparatively 'better' than 2 active mutual funds in 2010. We'll next post ECO (PBW) & NEX (PBD) – versus these 2 active funds over the past 2 years. Since the inception first of original ECO, and then Global NEX (both were first for their respective fields) a large number of entrants have lately appeared -- over a dozen other funds/Indexes! We'll again use those for a comparison as 2 of the older, and better-known active funds within this similar clean energy theme.

Seen here at top are 2 Indexes (trackers for PBW, PBD) vs. 2 active funds in 2009+2010. The NEX tracker (PBD) in **red,** & the ECO tracker (PBW) in **blue** are both up, somewhat; next are the 2 active funds in green and yellow to end this period roughly unchanged.

So here's a past two years then, over a bottoming and gentle rising markets:

Lastly one might consider a longer past too, say the last 5+ years where there was a rise in the 5 years thru 2007, then a very dramatic fall, and a gentle rise since. No active fund exists however, pre-dating ECO for our clean energy space. (That said, we have noted in the past 2 very good mutual funds in a green arena much more broadly, that are older. However, we focus here on the energy space).

Staying with the 2 clean energy active funds, only 1 goes back to 2006; it's perhaps the oldest comparable active fund. Looking at its chart for a roughly 4 ½ year period since its inception, it 'underperformed' passive ECO. The other active fund is roughly at a same point today, as passive ECO Index over a timeframe of roughly the past 3 ½ years.

To sum up, 4 WilderHill Indexes exist now for a variety of themes including seminal clean energy ECO (tracked by PBW); global clean energy mainly outside the U.S. (NEX, tracked by PBD); progressive energy for innovations to reduce pollution and make better use of fossil fuels + nuclear dominating our energy portrait today (WHPRO, tracked by PUW); & global energy efficient transport (HAUL, that doesn't presently have a tracker) — these four are benchmarks for innovative themes worldwide. Three have trackers, not the 4th.

Text from Q3 Report about Wilder Nasdaq Global Energy Efficient Transport Index

Noting a tracker for the 4th HAUL Index goes only until Dec. 14, 2010, and after that the unique Wilder NASDAQ OMX Global Energy Efficient Transport Index may be followed by other products, we'll re-post below a recent discussion for that HAUL Index. *Following is text from Q3 2010 ECO Report [except an updated Chart now goes to mid-Dec. end]:*

To review ECO vs. HAUL in this [here Q4] Report let's first consider some fundamental ways they can differ. ECO for example is made of U.S. listed stocks; it may include companies domiciled in or working in countries around the world, but all must meet strict U.S. listing requirements to trade on major U.S. exchanges, NYSE/AMEX & Nasdaq.

In fundamental contrast with ECO, then, HAUL's stocks mostly list & trade on exchanges *outside* the U.S. (HAUL itself has robust component listing requirements for average daily volume, market cap, etc). So HAUL may, in theory, capture dynamics of stocks & nations beyond the U.S. This can give HAUL potentially, good non-correlation from U.S. transport-focused Indexes like, say, a Dow Transport Index®. Thus a 'HAUL transports' tracker [here up by +66%] has good non-negligible diversification from 'Dow Transports' [here up by +50%] below for the past 2 years [to mid-Dec. 2010]. HAUL Index gives exposure to non-U.S., foreign bourses and offers a new green transportation theme, a first. Here's a Chart for the **HAUL** Index (tracker, in blue) vs. Dow Transports (tracker IYT, in red):

Other aspects of HAUL more common to all 4 WilderHill Indexes can be briefly stated — these help differentiate WH Indexes from other, very useful products like a domestic-only Dow Transports. For instance since we use a (modified) equal-weighted methodology in HAUL (like all WilderHill Indexes), smaller pure plays have a voice. Plus generally speaking no one name, nor few have outsized weight. HAUL Index has 4 Sectors, and components start out equally weighted within a Sector at rebalance, as discussed below.

Drilling down ahead on ECO vs. HAUL, we'll see that it's ultimately in their *themes* where the two most acutely differ. Importantly for example, the HAUL Index (like WHPRO) doesn't have exposure to solar & wind 'pure plays' so key in ECO & global NEX. Because HAUL succinctly is for greater energy efficiency in transportation worldwide — it is to be concise, made up of a very different basket of equities, than ECO. Let's review now the 4 independent Sectors making up HAUL, with names/nations/exchanges there in recent Q3 2010. For Q3 these 4 Sectors happened to be equally weighted 25% each:

Alternative Vehicles
Rail & Subway Systems
Sea, Land, Air & Intermodal
Transport Innovation

First up then by alphabet, is **Alternative Vehicles:** 10 stocks and 25% Sector weighting to start Q3 meant each component was initially worth 2.50% of HAUL, to start a Quarter. (Sector weights reset at rebalance; each stock then moves independently over a course of the Quarter). Look first geographically at a recent Q3, and of those 10 components there, 2 were listed on U.S. exchanges. Both work internationally in 'green' vehicles yet it's fair to say they're both truly 'U.S.-based': that is, they're not companies based overseas but that choose to list on the U.S. exchanges as by an ADR (American Depository Receipt).

Stay geographic a moment and these 1st Sector components were also listed in Q3 on exchanges in China (2), Taiwan (2), S. Korea (1), and Japan (1) — totaling 6 in Asia in this 1st Alternative Vehicles Sector. Overall then of 10 names, roughly 60% in Q3 were listed on exchanges in Asia, 20% in U.S., and another 20% were listed in Europe (France, Italy).

Next we could ask, what *technologies* are reflected in these same 10 names in Q3? Parsed this way, there were many emerging, varied *battery* chemistries & technologies for new electric vehicles (EVs) and hybrid cars. Diverse battery chemistries were thus seen in these 5 names, 50% of that Sector (60% if one also includes ultracapacitors): these 5 @2.50% each if put together had made up 12.5% of HAUL Index overall to start Q3.

Why differing battery types? It's unclear today what competing battery(s) may come to be dominant: it might be a commodity AA-type 18650 standard used in laptops and small devices that benefits from state of art advances — or instead maybe specialized larger prismatic cells designed just for plug-in vehicles, etc. Air-cooled, liquid-cooled? With so many competing approaches, Indexing helps to mitigate the vexed 'picking of winners'.

Alternative vehicles more broadly is globally competitive with little clarity as to eventual winners (will bikes do relatively well?, maybe scooters?, hybrid cars/trucks?, pure EVs?). We might at least gain some 'advantage' in assembling a basket since that addresses the thorniness of predicting comparative 'winners'. Bicycles for example, including hybrid electrics held 2 places in Q3; we note they're seeing fresh penetration in Asia & Europe. We're very familiar with limits & joys of the hybrid bikes, using 2 generations for years here, e.g. http://www.wildershares.com/pdf/hybridbikespecs.pdf Also small scooters were included during Q3 at 1 place, as 10% of this Sector or as 2.5% of HAUL.

As a side note we've daily driven a world-leading electric car here the past couple years. This 2008 (fast!) plug-in car gives considerable real world experience with coming issues like battery limits, J1772 chargers, & true range. Practical knowledge & vivid familiarity gained using solar PV power to 'fuel' our EVs has been a non-negligible benefit, see http://wildershares.com/solar.php A 2nd EV arriving soon is to be mass-produced; it will be very affordable, mass-marketed and thus a first of its kind electric car.

Shifting gears now step back: consider as between many Indexes, or in context of a larger portfolio, one may seek useful ***non*-correlation**. Put another way how many names in HAUL *unhelpfully* overlapped by being in ECO too in Q3? Generally speaking the less similarity/or the greater the differences, the better. Helpfully then ECO Index can have only U.S. listed stocks and so 80% of the 1st HAUL Sector (8 of 10 in Q3) couldn't overlap at all. Just 2 may overlap as being on U.S. exchanges; both of those work in efficient transport, as well as in clean energy — so both were in HAUL+ECO for some but arguably not much Q3 overlap. Below is the Alternative Vehicles Sector in Q3:

#1. Alternative Vehicles. 10 stocks. 25% Sector weighting @2.50% each.
HEV:US - ***Ener1 (U.S.)***. Lithium ion battery maker for electric cars, plug in hybrids.
MXWL:US - ***Maxwell (U.S.)***. Ultracapacitors, can very rapidly store/discharge power.
PIA:IM - ***Piaggio & C. SpA*** *(Italy)*. Scooters include Vespa, developing hybrids.
SAFT:FP - ***Saft Groupe SA (France)***. Advanced batteries in electric cars, subways.
489:HK - ***Dongfeng Motor (China)***. Chinese partner for electric vehicles (EVs).
1211:HK - ***BYD (China)***. Early production EV batteries, also builds entire EVs.
6674:JP - ***GS Yuasa (Japan)***. Li-ion batteries, in EV production 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 (S. Korea)***. Larger-format Li-ion cells in production EVs.

Another perspective is next presented by a 2nd HAUL Sector capturing remarkable energy efficiency in transport that can be more naturally afforded by **Rail & Subway Systems**. To haul goods or move passengers may be done relatively efficiently, by steel wheels on track; in fact many concepts here are naturally part of the global energy efficiency story. As will be shown, much too in Rail & Subways helpfully *non-correlates* with Alternative Vehicles where instead there's been much exposure to Asia & Li-ion battery makers.

One noticeable trait seen right away in this Sector is relative to Alternative Vehicles, the Rail sector had recognizable names in Q3 long known on U.S exchanges. Unlike ideas born in the U.S. but capitalized on elsewhere (e.g. advanced batteries), to move goods around in the U.S. for instance, is done internally boosting an intimately domestic industry.

With nearly half this Sector U.S.-listed stocks, one might think there's unhelpfully large overlap with ECO, given the U.S. equities here in HAUL. *And yet any correlation with ECO was very helpfully zero here in Q3*. Since Rail is so very different from the ECO theme, 'energy efficient transport' so unlike clean energy, there's usefully sparse possibility of much overlap even in a long run. With non-correlation dimming globally among bonds, equities, commodities etc etc in the past 2 years, every bit of diversification helps(!).

Next by coincidence there was 10 stocks in this Rail & Subways Sector weighted 25% in Q3, so 1/10th or 2.50% of HAUL overall was again given each component. With 4 U.S.-based components meaning 40% of the Sector had U.S. exchange listings in Q3, it started with twice the U.S. exposure of a 1st Sector. Moreover a fifth (North America) Canadian component had listings available on both Canada and U.S. exchanges — its more liquid U.S.-version was placed into HAUL in Q3, below. Finally many remaining names also work in U.S. rail & subways, so there's frankly much U.S. exposure here.

On the other hand, half the Sector is still outside the U.S. This Sector's 1st component (by alphabet) is a French firm listing on a French exchange; it's in passenger rail & a sharp-eyed rider in Europe may well see its nameplate. Next a 2nd component is a Canada-listed conglomerate with businesses around the globe including modern transport besides rail such as aircraft manufacture. A 3rd Sector component is Canadian and as noted above it was one with both native Canadian shares and a share listing in U.S.; that HAUL utilized a more liquid U.S. ticker may introduce just a bit of ambiguity classifying the 1 country this component 'most belongs to' geographically, but that company is inarguably Canadian. As noted we still find very desirable diversification from ECO.

A 5th name is again French-based & France listed. The 7th based & listed in Italy: spend time commuting in either of those 2 nations by passenger rail including high speed train and they can show much of the world how moving people should be done; similarly a 10th name is linked to Japan's bullet train for another facet of passenger rail. On the other hand, U.S. companies have had some leadership in efficiently moving goods by rail: this Sector therefore also includes as noted 4 American leaders in hauling *freight and goods* by rail; here the 4th, 6th & 8th names help capture along with a 9th in control systems.

In sum, 1st vs. 2nd Sectors are very different. Rail of course isn't new: it's old, established, yet in modern iteration very unlike yesteryear (ironically early cars were electric, but that's another story). On a side note we've purposefully ridden key examples of passenger rail & subways to experience leading ways for moving *people*; this state-of-the-art rail is typically in Europe & Asia (now China). Yet some of the most efficient means for moving *not passengers — but rather freight & goods* by rail instead can be inside the U.S. (where passenger rail has less access to tracks). Posted here are Sector components in Q3 and as noted below, there was less relative volatility here than the other Sectors in Q3.

#2. Rail & Subway Systems. 10 stocks. 25% Sector weighting @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 better Tier II locomotives; SmartWay.
LEY:FP - ***Faiveley SA (France)***. Manufactures equipment systems for trains, trams.
NSC:US - ***Norfolk Southern (U.S.)***. Software optimizes rail movement; SmartWay.
STS:IM - ***Ansaldo STS SpA (Italy)***. New information technology for subways, rail.
UNP:US - ***Union Pacific (U.S.)***. 3,000 fuel-efficient locomotives added to fleet.
WAB:US - ***Wabtec (U.S.)***. Makes, services control systems in locomotives, subways.
7122:JP - ***Kinki Sharyo (Japan)***. Shinkansen Bullet Train; light mass transit vehicles.

Moving on a 3rd Sector of HAUL is capturing the better energy efficiency in transport today by **Sea, Land, Air, & Intermodal** means. These options may include e.g. modern shipping, better land transport via bus (for people) trucks (goods), and intermodal containers, even airborne transit emphasizing energy efficiency when timeliness is of the essence.

Sea transport raises a few thoughts of interest. Ships may burn incredibly dirty bunker fuel in transit (upon fractional crude distilling only carbon black, & bituminous residue are denser than bunker fuel), or run inefficient engines powering themselves in port. On the other hand moving bulk some distance may naturally be done energy efficiently utilizing waterways in modern fashion. Rather like rail, the ages-old shipping (in its modern dress) has important benefits today for hauling, say, heavy cargo from one continent to another.

Happily there's mighty room for improvement. Filthy bunker fuel & shipboard engines for example have been given rather sparse attention to date. A host of ideas may one day be viable ranging from the far-off and strangely futuristic ideas like bow sails to help pull tankers with added boost 'free' or electric-power in transit (for the Innovation Sector) — to what's possible today (for this Sector) like more efficient power for ships in port, upgrading of port & channel infrastructure, and greater efficiency in bulk shipping.

Of course this Sector includes energy efficiency seen on land too. In Q3 components included activity in modern buses, trams & in control systems for hybrid vehicles, also better transit more efficiently moving goods & people. Another option here in Q3 was alternative fuel in fleets as some larger vehicles especially outside the U.S. already use compressed natural gas when returning nightly to a central CNG fueling facility.

As expected for this 3rd Sector there's not much overlap between HAUL — and ECO in Q3. Global HAUL listings mostly are outside U.S. exchanges; here just 2 of the 10 names in Q3 were 'American-based', and just one of those was in ECO+HAUL. That said, a company based in Spain (but with stock listing on a U.S. exchange) was a 2nd name here to overlap with ECO: there was thus a total overlap of two stocks in this Sector in Q3.

Of perhaps some tangential interest, one (U.S. listed) name here in HAUL was also in the independent WilderHill Progressive Energy Index (WHPRO) in Q3. No component in this Sector was also in WilderHill New Energy Global Innovation Index (NEX) in the Quarter: there is generally exceptionally little overlap in total as between HAUL Index — and either WHPRO or NEX Indexes — less so even than small amount with ECO.

This 3rd Sector coincidentally was 25% too, 2.50% co-equal and 10 components at rebalance to start the third Quarter on July 1. To sum up this Sector of HAUL, just 1 U.S.-based name plus 1 U.S.-listed (on U.S. exchange but based in Spain) name overlapped with ECO in Q3. This Sector had 2 U.S.-listed stocks in its 10; 1 happened to be in WHPRO. This spatially diverse Sector had names in Netherlands (1), U.S. (2), U.K. (1), Denmark (1), Scotland (1), Spain (1), Hong Kong (1), Taiwan (1), and Japan (1) -- so no 1 country represented more than 2 components, 20% of Sector, or 5.0% of HAUL to start 3rd Quarter. Sector activity included modern activity in shipping & ports, in intermodal containers, IT, and efficiency on land, in buses, trams, trucks, and their control systems.

#3. Sea, Land, Air & Intermodal. 10 stocks. 25% Sector weighting @2.50% each.
BOKA:NA - ***Boskalis NV (Netherlands)***. Improving ports, for more efficient shipping.
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.
MAERSKB:DC - ***Maersk A/S (Denmark)***. Shipping, for efficient transport of goods.
OSG:US - ***Overseas Shipholding (U.S.)***. Bulk shipping, VLCCs, diversified LNG, CNG.
SGC:LN - ***Stagecoach Group plc (Scotland)***. Trains, buses, trams, in U.S. and U.K.
TLVT:US - ***Telvent GiT S.A. (Spain)***. Info. technology in transport, traffic, energy.
316:HK - ***Orient Overseas Intl. (Hong Kong)***. Container shipping and logistics.
2612:TT - ***Chinese Maritime Transport (Taiwan)***. Shipping, marine services.
7251:JP - ***Keihin Corp (Japan)***. Control systems used in hybrids, light vehicles.

We now reach a 4th and last HAUL Sector: this future-looking **Innovation** Sector mainly looks out further ahead towards coming advances in more energy efficient transportation. This is a bit more a grab bag than other Sectors, chiefly because ideas of tomorrow can come from diverse places; yet such broadness is needed to capture emerging ideas wherever found in a theme less focused than say just Rail & Subways. Here we find some options still on a horizon: lighter-weight advanced composite materials, still-speculative microturbines that could one day be range extenders in electric cars, and lithium for various possible batteries chemistries yet that all share the element lithium.

There's also profound ideas being furthered here like global integrated freight forwarding, or international logistics by innovative tools; latter two Swiss-based names were listed in Q3 on exchanges in Switzerland. Carbon fiber composites for light future vehicles were seen by a firm based in/and listed in Germany. Just 3 of 10 Sector companies here were traded on U.S. exchanges; 2 of those 10 were in ECO in Q3.

One name in HAUL+ECO during Q3 was a firm based in Chile that lists there and on U.S. markets: the latter ticker was in ECO, due to more liquid U.S. symbol. It produces lithium (comes from several nations, but Chile is a leader) needed ahead in a range of innovative rechargeable Li-ion battery chemistry electric vehicles. With atomic number 3, no metal is lighter than lithium on the periodic table and it is special. Differing chemistries and strategies may be possibly used ahead in cells at the Cathode ($LiCoO_2$, $LiMn_2O_4$, $LiFePO_4$ even synthesized pyrophosphate compound $Li_2FeP_2O_7$), and at the Anode (such as LiC_6, $Li_4Ti_5O_{12}$), and in lithium air batteries, etc, but that basic need for lithium remains no matter which cutting-edge wrinkle wins a technology race here.

For future energy efficient transport, another option as noted is natural gas to power medium to large-vehicles; rather than depending on 1 fossil fuel (petroleum), innovation is likely here especially outside of the U.S. For some nations natural gas may add some resiliency & energy security, particularly in gas-rich locales; it's rather 'cleaner' (or less-filthy) as a fossil fuel to boot. Of course problems still abound: new shale 'fracking' for gas can be highly polluting, and even this gaseous fuel still emits much CO2, etc.

Only relative to placing all one's eggs in a single, inefficient (petroleum) basket — or using dirtiest-of-all coal (syngas) fuel — *imperfect* natural gas might be one transitional fuel. More desirable though, are new batteries for storing (renewably-made) power onboard in everything from humblest bikes & scooters, to regularly sized passenger cars, to larger trucks, buses and even one day, ships & airplanes. Looking forward the Innovation Sector in Q3 included emerging automation & control systems for coming vehicles, globally integrated efficient freight forwarding, lithium, and stronger composite materials like carbon fiber or aluminum in lightweighting vehicles to grow more energy efficient.

The 4th Sector for Innovation was coincidentally 25% weighted with 10 components in Q3. In the Quarter it had 4 stocks listed on U.S. exchanges, 2 listed in Switzerland, 1 in U.K., 1 in Germany, (1 based in Chile, was its 4th U.S. stock listed), 1 in Belgium, and 1 in Canada. 2 stocks overlapped with ECO in Q3, only 1 was U.S.-based:

#4. Transport Innovation. 10 stocks. 25% Sector weighting @2.50% each.
BG/:LN - ***BG Group (U.K.)***. Natural gas, CNG used as new transportation fuels.
CPST:US - ***Capstone (U.S.)***. Microturbines that can power hybrid cars, HEVs, buses.
FSYS:US - ***Fuel System Solutions (U.S.)***. Gaseous fuels, enables natural gas engines.
KNIN:VX - ***Kuehne + Nagel AG (Switzerland)***. Globally integrated logistics solutions.
PWTN:SW - ***Panalpina Welttransport AG (Switzerland)***. Freight forwarding, logistics.
RS:US - ***Reliance Steel & Aluminum (U.S.)***. Aluminum, used to lighten vehicles.
SGL:GR - ***SGL Carbon AG (Germany)***. Advanced carbon composites, lightening.
SQM:US - ***Sociedad Quimica (Chile)***. Lithium is used in EVs & in hybrid batteries.
WBC:US - ***Wabco (Belgium)***. Control systems, new electronic automation in vehicles.
WPRT:US - ***Westport Innovations (Canada)***. Technology for gaseous fuels.

Interestingly only because 4 Sectors of HAUL happened to be equal weight 25% in Q3 at 10 stocks per sector and so components in each sector were 2.50% to start Q3 — we could readily see which components 'outperformed' & which 'underperformed all last Quarter. Here at the 8 weeks' point for instance, are Top 10 & Bottom 10 seen on August 31, 2010 for HAUL Index (in tracking fund):

On August 31, 2010: the Top 10, & Bottom 10 in HAUL Index (tracker)

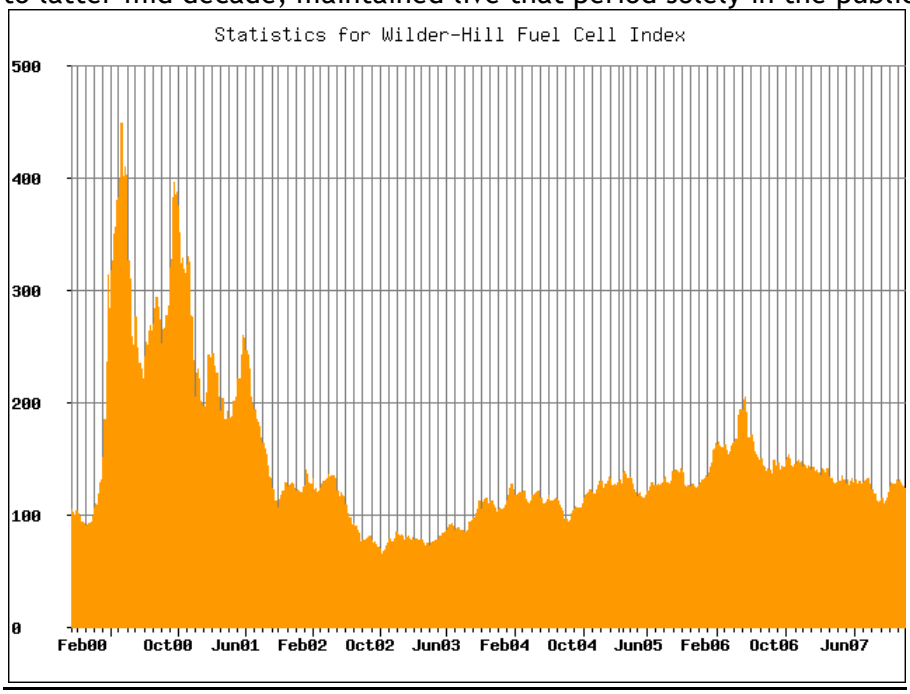
TOP 10:	**(domicile)**			
Name	**Country**	**Weight**	**HAUL Index Sector**	**Symbol**
Dongfeng Motor Group	China	3.56%	Alternative Vehicles	B0PH5N
Sociedad Quimica y Minera	Chile	3.13%	Transport Innovation	SQM (in U.S.)
Panalpina Welltransport AG	Switzerland	3.08%	Transport Innovation	PWTN SW
Giant Manufacturing	Taiwan	3.03%	Alternative Vehicles	637216
Orient Overseas Intl.	Hong Kong	3.01%	Sea, Land & Air	665911
Wabco	Belgium	2.98%	Sea, Land & Air	WBC (in U.S.)
LG Chem	S. Korea	2.95%	Alternative Vehicles	634691
Merida Industry Ltd.	Taiwan	2.87%	Alternative Vehicles	658444
Fuel Systems Solutions	U.S.	2.87%	Transport Innovation	FSYS
Faiveley Transport SA	France	2.86%	Rail & Subway	B11HYH
BOTTOM 10:				
Capstone Turbine	U.S.	1.45%	Transport Innovation	CPST
BYD	China	1.71%	Alternative Vehicles	653665
Reliance Steel & Aluminum	U.S.	2.09%	Transport Innovation	RS
Overseas Shipholding Grp	U.S.	2.11%	Sea, Land & Air	OSG
Clean Energy Fuels	U.S.	2.17%	Sea, Land & Air	CLNE
GS Yuasa	Japan	2.21%	Alternative Vehicles	6674
Ansaldo STS SpA	Italy	2.24%	Rail & Subway	B118XB
Koninklijke Boskalis NV	Netherlands	2.25%	Sea, Land & Air	B1XF88
Telvent GiT SA	Spain	2.27%	Sea, Land & Air	TLVT (in U.S.)
FirstGroup PLC	U.K.	2.29%	Sea, Land & Air	034521

A few last thoughts are suggested by these Q3 data above. One is that roughly 3 names from each of 3 Sectors are seen above in Top 10, with the 4th Sector (Rail) nearly-absent. Another is a few stocks which in prior Quarters had relatively out-performed to upside, like 1 name from China and 1 from Japan, here appear instead in a Bottom 10; it's said 'trees don't grow to the sky' and no stock goes incessantly upside. Another observation here is Rail's absence from Top 10 & Bottom 10: in Quarter's past names there showed more movement from middle — but in Q3 its names were *relatively* unchanged. A last point to jump out is that *U.S. (based)* names were pretty abundant in Q3's HAUL Bottom 10 list — and (sadly perhaps) were nearly absent from its Top 10 in Q3.

Looking back over a Decade of Green Themes: A few Thoughts on the 2000s

Return now to end of 2010: because we've actively Indexed in this green space for a long period, we can look at clean, alternative & new energy themes over this past decade. What sorts of observations may be made about pertinent themes of the past 10 years?

We actually can go back to a theme/Chart begun in late 1999-for the very start of 2000 (and this is due to the far-sighted work of the "Hill" in WilderHill). At that time there was already an Index specifically for Advanced Batteries, another for Alternative Energy, and one WH Index (below) for Hydrogen (H2) & Fuel Cells (FCs); the latter one for H2 FCs was about to jump – and dramatically would crash right after. Perhaps of interest, here's performance of a Wilder-Hill Hydrogen Fuel Cell Index that had started in 2000 and went to latter-mid decade, maintained live that period solely in the public interest:



As seen above at outset of the 2000s, particularly in its very first year(!), there was a prominent 'double peak' among the already abundant, not-profitable, H2 FC pure plays. A caveat however, is that very few pure plays yet existed in actual clean and renewable energy, such as solar or wind, not yet enough to robustly index beyond niches like H2 FCs. A rarity of pure solar names, almost none in wind, and just conglomerates in energy efficiency etc made it nearly impossible to capture the themes to Index U.S.-listed stocks. That said the above chart rather helpfully shows a (4X) jump & great crash in a narrow, hugely hyped, H2 FC sub-story. That was a classic bubble in a technology that didn't then approach economic viability; it inflated & then burst blindingly over 1999-2003.

Themes not yet ready to Index in 2000 but which would soon enough become key, were simply too costly back then. Solar PV for example was way more costly per kilowatt/hour than even dear rates in California & Hawaii — (unlike today as PV grows cost-competitive). Wind too 'back then' was dramatically costlier than its competition, e.g. natural gas — (again unlike now). Batteries used then far heavier chemistries like NiMH (unlike light, energy/power dense lithium today). It's 'funny' to recall how very unready then were key technologies — and thus sparse were candidate stocks, only a decade ago.

Around 3 years later, or 2003, things were happening to change all dramatically. One change was that long-overlooked solar/wind were at last seriously promoted & subsidized, and it brought innovation in Asia & Europe. Some nations historically lack access to oil, or have little refining capacity; many had sparse natural gas or coal reserves etc. Often too, their consumers have paid far more for fuel than anything Americans had ever seen; there governments wielded high taxes in order to raise fuel costs at the pump. Culturally whether for better or worse, the public was often more accepting of very high-energy-costs and so an active subsidized energy policy, quite unlike anything in the U.S.

An irony of course was many clean energy technologies had been invented in America! But by shaping their public policy to promote green jobs, or to advance clean or alternative energy industries, green ideas born here were seized as in Germany and Japan (and lately now in China). The U.S., instead, was pursuing very low (brown) energy costs.

A net result was around 2003 many clean energy techniques began to see costs pushed down dramatically. The sharp-eyed back then, even began to seriously argue that price parity with dirty fuels might be achieved one day (!), once immature clean techniques had early high costs wrung out. Challenging conventional wisdom, and unlike H2 fuel cells dismissed year after year as 'just a decade away—and always would be' — fresh concepts in wind, solar, batteries, EVs, efficiency, etc were advancing towards economic viability.

For an Indexer, this implied the public listed companies needed for clean energy Indexing should in fact soon materialize. At the time, nothing was yet tracking this on Wall Street. *With progress this whole new clean energy sector could soon blossom into a viable theme, and have good non-correlation to broad markets — yet without an Index making the story easily accessible, what seemed about to happen might stay invisible far too long.*

Following much toil, which was born of our own strong drive & passion to create this very first Index, the WilderHill Clean Energy Index (ECO) was launched on Amex (now New York Stock Exchange) August 2004. It was the first Index on Wall Street to capture this theme, and the initial 3 ½ years after launch were rather remarkable, seen here:

In its first few years above, 2004-2007, there was indeed some sharp volatility upside. This rise captured a fast broadening of clean energy too — the story quickly was already becoming much more than a narrow (H2 FC) or other niche sub-theme.

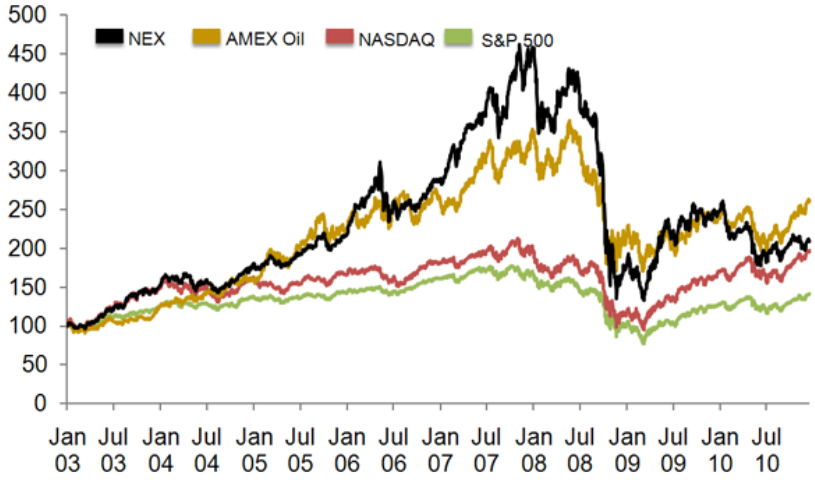
Another notable point here is this inception year. Clean energy names available in 2004 had already dropped and very greatly over a prior few years (like broader markets). Hence they were perhaps only a bit past some inflection in 2003, after a 3 years' fall. Like the broader markets they too had already declined, and oftentimes much more so.

Such volatility was another sizable point about the Index: in 2004, the 'novel' ideas of efficiency, better lighting, solar, wind, geothermal power, batteries, EVs, motors, etc were little watched/researched. That often meant that names might be priced somewhat inefficiently in markets and subject to fairly sizable swings in valuations. A result was this Index could possibly offer attractive non-correlation with other asset classes.

So by early/mid decade, technical advances had made clean energy more economical and brought a likelihood of new IPOs adding pure play candidate names to its pipeline. Critical mass was reached, for a stand-alone clean energy Index covering the whole sector.

In the following 5 or so years, perceptions began to catch up with reality: markets were bullish overall too and valuations marched up smartly in a clean energy sector, 2003-2007. This was in clean energy in the U.S. & worldwide. After a remarkable march, the sector plummeted at start of 2008 (like before in 2000, in the far narrower names then). A tremendous crash took this Sector way down over 2008+2009 under 60 -- below even ½ of a 125 value at which ECO Index began calculating live in 2004. This story was playing out worldwide too: the global NEX for clean energy internationally acted similarly.

We can thus take a look at **NEX** too (in black, below) for its theme of Global clean energy mainly beyond the U.S.; its story was much the same. Backtested here it illustrates a 2003 start (NEX went live Jan. 2006) and we can see the similar great rise, then plummet:



AMEX Oil, Nasdaq and S&P 500 rebased 30 Dec 2002 = 100
(chart source: Bloomberg New Energy Finance).

It's clear from above that clean energy is often far more volatile than broader markets. While this Chart here is for Global NEX, it shows a story like that of ECO (prior page). As compared to well-known S&P500 (**green**) or Nasdaq (**red**) — the ECO and NEX Index (**black)** for global clean energy can rise much faster — and drop far more quickly.

We devoted much discussion in past Reports to a 'great plummet' in clean energy that next came in 2008-2009, so that's been well covered. It is perhaps worth briefly recapping that after the large rise from late-1990s (among fewer sub-themes) to 2000, there was the dramatic 3-year downturn in early clean energy 2000-2002. A more mature Sector then saw 5 years of strong upwards volatility 2003-2007, until the 3 very tough years of 2008-2010. It remains to be seen if anything like a 2003-2007 bull might recur ahead.

It is impossible in sum to know what will happen to ECO, this Sector & markets ahead. We've often emphasized looking forward, that this Sector can & does 'drop like a rock'. Yet the markets broadly, & clean energy in particular already underwent a wrenching downturn: valuations today are far from their 2007 highs that engendered concerns. For a broad example the S&P 500 may trade now say near 15 times earnings; recently around 1250, it could reach 1400 to get back to say, an average 15 multiple. Or Europe's Stoxx 600 at a multiple of 11.3 and near 280, can reach 320 if it gets back to a multiple of 12. Quite a vague yet bullish case for markets, it however is just one possibility.

Another possibility to be sure, is China's growth & demand faltering – remarkably it's been new China that's done much recently to keep the globe from double-dip recession. Or global massive debt burdens could lead to a Great De-leveraging and wide falls ahead.

Or… oil costs could continue a long uphill climb. In past declines destruction in America alone quickly brought down oil prices globally — but that's no more. Dear oil is a 'bullish' note for clean energy and thus the Sector and Index. Today the demographics and GNP in growing China, India, Brazil etc are far more significant to oil demand, than ever before; the developing world may join in the driver's seat with its growth/demand curves ahead unlike a currently-'aged' developed world's. Betting against the developing world's vast new energy demand ahead, arguably, isn't a bet that one ought to take.

Finally coal, natural gas, nuclear, etc make electricity but its the high price of oil that first hits us viscerally: oil breaching >$100-$150 sends interest in clean energy high. Peak oil is very bullish too, for clean energy, as is climate risk that may bring a tax on carbon. Either of these is uncertain but will be an immensely powerful factor, if it comes to be. Finally this decade started with a few narrow themes defining clean energy; after 3 tough years a broadened Sector ran upwards strongly for 5 years with renewables, and crashed; next came another tough three years; this decade is ending now with interesting new sub-stories that may be just beginning, in energy efficiency, (O)LEDs, electric vehicles, etc.

……..

ECO for start of Q1: Addition to ECO Index of 5 stocks, Deletion of 2 stocks

For the start of Q1 2011 there were 5 stocks added: AMRC, AMRS, MY, PWER, REE.
(Ameresco, AMRC. Energy saving performance contracts; to Power Delivery & Conservation Sector. *Amyris,* AMRS. Biotech, speculative R&D for 'drop in' renewable diesel & jet fuels; added to Cleaner Fuels. *China Ming Yang Wind,* MY. Wind turbine manufacturer; to Renewable Energy Harvesting. *Power-One,* PWER. Power conditioning, inverters; to Energy Conversion; and *Rare Element Resources,* REE. Rare Earths, to Energy Conversion).

There were 2 deletions of GPRE and QTWW.

Summary

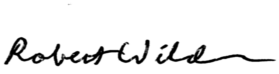
4th Quarter 2010 opened with the Clean Energy Index® (ECO) at 99.83, & closed at 105.50 for a Q4 gain of +5.6%. For the full Year 2010, the ECO Index® was down by -5.2%. So little change this particular YTD period might be misleading; glance not at a last 12 *months,* but say at a past 21 *weeks,* or a longer 3 *years,* and there's been surely more volatility. Consider too its 'return as a function of risk' and this risk-laden sector & Index did 'worse' in 2010, than even safe government bonds. Indeed measure most periods other than a past YTD and there's volatility both downwards & up: just for instance the past 6 months the ECO tracker is up by +25%. In sum the Index is normally far from static.

There were the 5 Additions to the Index of AMRC, AMRS, MY, PWER, REE. There were 2 Deletions of GPRE, QTWW from the ECO Index for start of Q1 2011.

For the past 1 & 2 years the passive ECO & NEX Indexes have 'beaten' active funds in a similar clean energy space; this is perhaps a non-negligible case for Indexing. Looking over at Progressive Energy Index (WHPRO) it was up some +88% in 2009-2010, and some +147% since its 2009 lows March 9th. There is no tracker at present for the HAUL Index.

To sum up last decade, after 3 years of tough decline to 2002, there was a strong upwards move for roughly 5 years thru 2007 and then another very tough 3 years since then. The last 3 years saw a debt crisis that dried-up project funds and that nixed government subsidies; also, new China manufacturers brought lower-cost competition, helpful longer term, but tougher in a short-term. Starting out a new decade there's fresh growth in energy efficiency, (O)LEDs, EVs etc. Where our Sector is now, couldn't have been imagined 10 years ago. Unfathomable too, is where it will be in 2020 and we look forward to capturing decades ahead. As always, we welcome your thoughts & suggestions.

Sincerely,



Dr. Rob Wilder
rwilder@wildershares.com

Appendix I: ECO Index; past Q4 2010 Components & Weights on 12/15/2010:

Following were weightings near the end of Q4 about 2 weeks before rebalance to start Q1 2011:

Company Name	Symbol	% Weight
Tesla Motors	TSLA	2.89%
Polypore International	PPO	2.89%
Cree	CREE	2.89%
International Rectifier	IRF	2.84%
Echelon	ELON	2.72%
Universal Display	PANL	2.67%
Aixtron Aktiengesellschaft	AIXG	2.67%
Om Group	OMG	2.58%
Maxwell Technologies	MXWL	2.57%
Molycorp	MCP	2.55%
Applied Materials	AMAT	2.54%
Satcon Technology	SATC	2.45%
Ener1 Inc	HEV	2.34%
GT Solar International	SOLR	2.32%
Quanta Services	PWR	2.31%
Zoltek Cos	ZOLT	2.26%
Rubicon Technology	RBCN	2.24%
Sunpower	SPWRA	2.20%
Advanced Battery Tech	ABAT	2.20%
STR Holdings	STRI	2.19%
Ormat Technologies	ORA	2.17%
Sociedad Quimica y Minera SA	SQM	2.16%
Canadian Solar	CSIQ	2.15%
Energy Conversion Devices	ENER	2.13%
MEMC Electronic Materials	WFR	2.10%
Itron	ITRI	2.09%
Amerigon	ARGN	2.06%
First Solar	FSLR	2.04%
Suntech Power Holdings Ltd	STP	2.04%
Cosan Ltd	CZZ	2.02%
Idacorp	IDA	1.98%
CPFL Energia S.A.	CPL	1.97%
American Superconductor	AMSC	1.97%
Air Products & Chem	APD	1.96%
Calpine	CPN	1.94%
A123 Systems	AONE	1.91%
Trina Solar Ltd	TSL	1.91%
Yingli Green Energy Holding Ltd	YGE	1.89%
Green Plains Renewable Energy	GPRE	1.89%
JA Solar Holdings Ltd	JASO	1.86%
SOLA International .	SOL	1.58%
Fuel Systems Solutions	FSYS	1.57%
Active Power	ACPW	0.93%
US Geothermal	HTM	0.71%
FuelCell Energy	FCEL	0.64%
Broadwind Energy	BWEN	0.60%
Ascent Solar Technologies	ASTI	0.53%
Ocean Power Technologies	OPTT	0.48%
Comverge	COMV	0.46%
Quantum Fuel Sys Tech	QTWW	0.45%
China BAK Battery	CBAK	0.43%
UQM Technologies	UQM	0.39%
Ballard Power Systems	BLDP	0.38%
China Wind Systems	CWS	0.31%

Appendix II: Index (ECO) Components & Weights at Rebalance:

INDEX (ECO) SECTOR & STOCK WEIGHTS FOR THE START OF Q1 2011. 57 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 - 24% sector weight (11 stocks @2.00% 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.
Canadian Solar, CSIQ. Solar, vertically integrated solar PV manufacturer, China.
China Ming Yang Wind, MY. Wind, large turbine manufacturer is a pure play.
**China Wind Systems,* CWS. Wind, makes large forged components in turbines.
First Solar, FSLR. Thin film, CdTe solar panels reducing 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, speculative very early-stages.
Ormat, ORA. Geothermal, is working too in areas of recovered heat energy.
SunPower, SPWR. Solar, makes efficient PV panels with all-rear-contact cells.
SunTech Power, STP. Solar, major producer of global PV 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. Solar, is a vertically integrated PV manufacturer.
Zoltek, ZOLT. Wind, makes carbon fiber for wind blades, product 'lightening'.

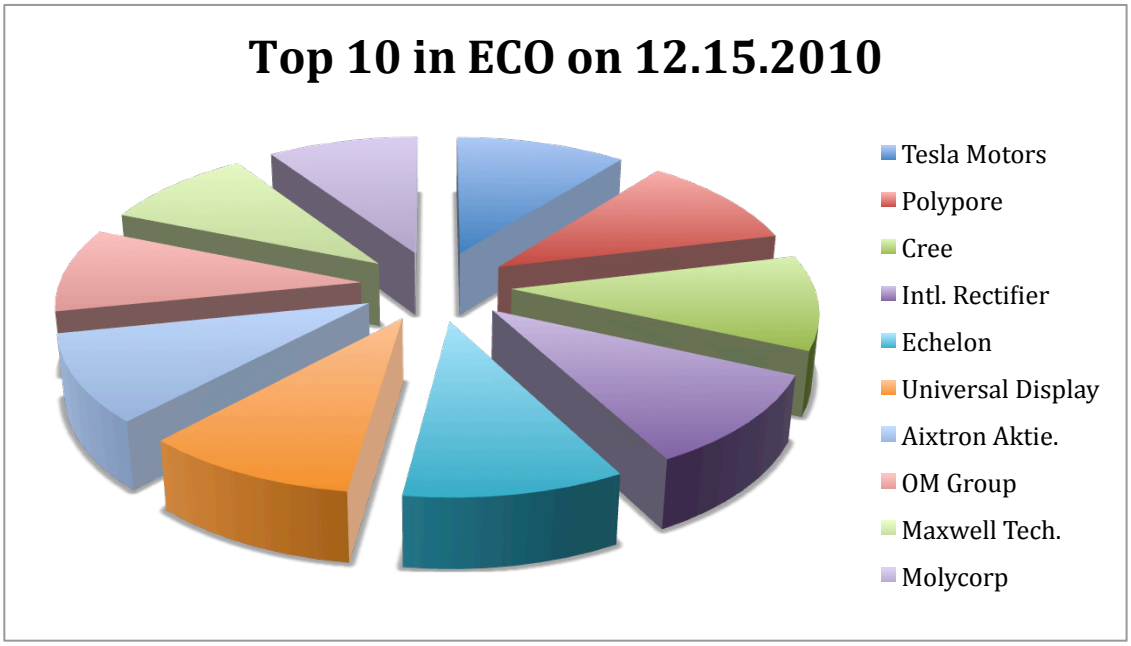
Power Delivery & Conservation - 28% sector weight (13 stocks @2.11% each; +1 banded)
Aixtron Aktiengesellschaft, AIXG. Deposition tools, for efficient (O)LEDs, displays.
Ameresco, AMRC. Energy Savings Performance Contracts, also renewable energy.
Applied Materials, AMAT. PV & semi fabrication, LCD displays, crystalline solar.
**Comverge*, COMV. Demand-side energy management, building smarter grids.
Cree, CREE. LEDs, manufacturer in power-saving lumens and efficient lighting.
Echelon, ELON. Networking, better management of whole energy systems.
GT Solar, SOLR. Solar, PV manufacturing lines with automated fabrication.
Itron, ITRI. Monitoring, advanced energy metering, measurement, management.
MEMC, WFR. Producer of polysilicon used in many crystalline solar PV cells.
Quanta Services, PWR. Infrastructure, modernizing grid and power transmission.
ReneSola, SOL. Wafers, for silicon PV, mono and multicrystalline, China-based.
Rubicon, RBCN. Maker of substrates used in production of LEDs for lighting.
STR Holdings, STRI. Encapsulants, broad technology for range of PV panels.
Universal Display, PANL. Organic light emitting diodes, OLED panel displays.

Energy Storage - 18% sector weight (8 stocks @2.12% each; +2 banded stocks)
**Active Power,* ACPW. Flywheels, uninterruptible power, conditioning; non-chemical.
Advanced Battery, ABAT. Batteries, China based maker of Li-ion for diverse uses.
A123 Systems, AONE. Batteries, nanophosphate for new EVs, grid, portable power.
**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.
Energy Conversion, ENER. Thin film, amorphous flexible PV panels; also batteries.
Maxwell, MXWL. Ultracapacitors, alternative supplement to batteries, hybrids, UPS.
OM Group, OMG. Cobalt and other precursors, producer for Li-Ion batteries, FCs.
Polypore Intl., PPO. Separators, membranes used in Li-ion, Pb-acid battery cells.
Sociedad de Chile, SQM. Lithium, a major Li supplier for batteries; also STEG storage.

Energy Conversion - 20% sector weight (10 stocks @1.90% each; +2 banded stocks)
American Superconductor, AMSC. Wind power converters; also superconductor HTS.
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, stationary high-temp flex-fueled MCFCs.
Fuel Systems Solutions, FSYS. Gaseous fuels, for ICEs as cleaner-fueled vehicles.
International Rectifier, IRF. Energy-saving, in power conversion and conditioning.
Molycorp, MCP. Rare Earths, strategic elements in NdFeB magnets, wind power etc.
Power-One, PWER. Power conditioning, inverters & converters for renewables.
Rare Element Resources, REE. Rare Earths, U.S. holding of strategic lanthanides.
Satcon, SATC. Inverters, DC/AC conversion for larger utility-scale renewables.
Tesla Motors, TSLA. Electric vehicles, maker of EVs, advanced power systems.
**UQM Technologies,* UQM. Motors, controller systems for EVs & hybrid vehicles.

Cleaner Fuels - 5% sector weight (3 stocks @1.66% each)
Air Products & Chemicals, APD. Hydrogen, is a supplier of industrial gases.
Amyris, AMRS. Biotech, speculative R&D, drop-in renewable diesel and jet fuels.
Cosan, CZZ. Biofuels, Brazil based uses sugarcane feedstock, an ethanol exporter.

Greener Utilities – 5% sector weight (3 stocks @1.66% each)
Calpine, CPN. Geothermal: a major North American producer; low-carbon assets.
CPFL Energia S.A, CPL. Hydroelectric, Brazil Utility has large and smaller hydro.
Idacorp, IDA. Hydroelectric, Utility with sizeable hydroelectric, some small hydro.



Appendix III: WHPRO in Past Q4 2010; Index Components & Weights on 12/15/2010:

Following were Q4 weightings in WHPRO Index about 2 weeks before rebalance to start Q1 2011.

Company Name	Symbol	% Weighting
Baldor Electric	BEZ	3.21%
Cameco	CCJ	2.90%
Tenneco Automotive	TEN	2.86%
Foster Wheeler Ltd.	FWLT	2.79%
Mcdermott Intl	MDR	2.74%
General Cable	BGC	2.74%
EnerSys	ENS	2.62%
Methanex	MEOH	2.61%
GrafTech International Ltd	GTI	2.60%
Chicago Bridge & Iron NV	CBI	2.59%
Woodward Governor	WGOV	2.56%
Johnson Controls	JCI	2.56%
Rockwood Holdings	ROC	2.49%
Range Resources	RRC	2.47%
Eaton	ETN	2.44%
Telvent GIT SA	TLVT	2.44%
Veeco Instruments	VECO	2.43%
Siemens Ag Ads	SI	2.36%
USEC	USU	2.33%
OWENS CORNING	OC	2.32%
ESCO Technologies	ESE	2.31%
Chesapeake Energy	CHK	2.26%
Emerson Electric	EMR	2.25%
Southwestern Energy	SWN	2.25%
Sasol Ltd.	SSL	2.23%
Smith (a.o.)	AOS	2.20%
Covanta Holding .	CVA	2.20%
EnergySolutions Inc	ES	2.16%
Corning Inc	GLW	2.15%
Questar Corp	STR	2.06%
Harbin Electric Inc	HRBN	1.99%
Koninklijke Philips Electron	PHG	1.99%
Westport Innovations	WPRT	1.98%
Energizer Holdings	ENR	1.96%
Hexcel	HXL	1.93%
Clean Energy Fuels	CLNE	1.88%
Companhia Energetica de	CIG	1.87%
Andersons	ANDE	1.84%
Centrais Electricas Brasil	EBR	1.80%
Enersis S.A.	ENI	1.77%
NextEra Energy	NEE	1.63%
EnerNOC	ENOC	1.58%
Exide Technologies	XIDE	0.84%
Rentech	RTK	0.61%
Fuel Tech	FTEK	0.57%
LSB Industries	LXU	0.55%
PMFG	PMFG	0.40%
SmartHeat	HEAT	0.39%
A-Power Energy	APWR	0.30%

Appendix IV: Rebalance for WilderHill Progressive Energy Index (WHPRO)

Sectors & Stock Weightings: WilderHill Progressive Energy Index (WHPRO) for the start of Q1 2011. 53 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 – 19% Sector Weight (9 stocks @2.11% each)
Cameco, CCJ. Uranium fuel, one of the largest producers; also fuel processing.
Chesapeake Energy, CHK. Natural gas, one of larger U.S. independent producers.
Denison Mines, DNN. Uranium fuel, produces in & outside U.S; fuel wastes recycling.
Methanex, MEOH. Methanol, liquid fuel can be derived from fossil fuels or organics.
Questar, STR. Natural gas, explores for & 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.
The Andersons, ANDE. Ethanol producer, corn-based; rail group in fuel transport.
USEC, USU. Uranium fuel, converts ex-Soviet warheads to U.S. nuclear feedstock.

New Energy Activity – 23% Sector weight (11 stocks @2.09% each)
Cooper Industries plc, CBE. Energy efficiency, diverse in new LEDs, grid innovation.
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 controls, also 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 – 24% Sector Weight (12 stocks @2.00% each)
A.O. Smith, AOS. Energy efficiency innovations for water heating and monitoring.
Elster Group se, ELT. Metering innovations, power and grid 2-way communications.
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, advances 2-way metering & communications.
General Cable, BGC. Power grid, high voltage transmission cable and wire products
Harbin Electric, **HRBN**. Linear motors for energy efficiency, propulsion, reliability.
Koninklijke Philips Electronics NV, PHG. Efficient LEDs, advanced industrial lighting.
LSB Industries, LXU. Greater energy efficiency in building end-use, heating, cooling.
Regal Beloit, RBC. Energy efficient motors, in commercial, industrial, homes etc.
Telvent GIT S.A, TLVT. Information technology for smarter grid, transport, energy.
Woodward Governor, WGOV. Energy controllers, industrial turbines for generation.

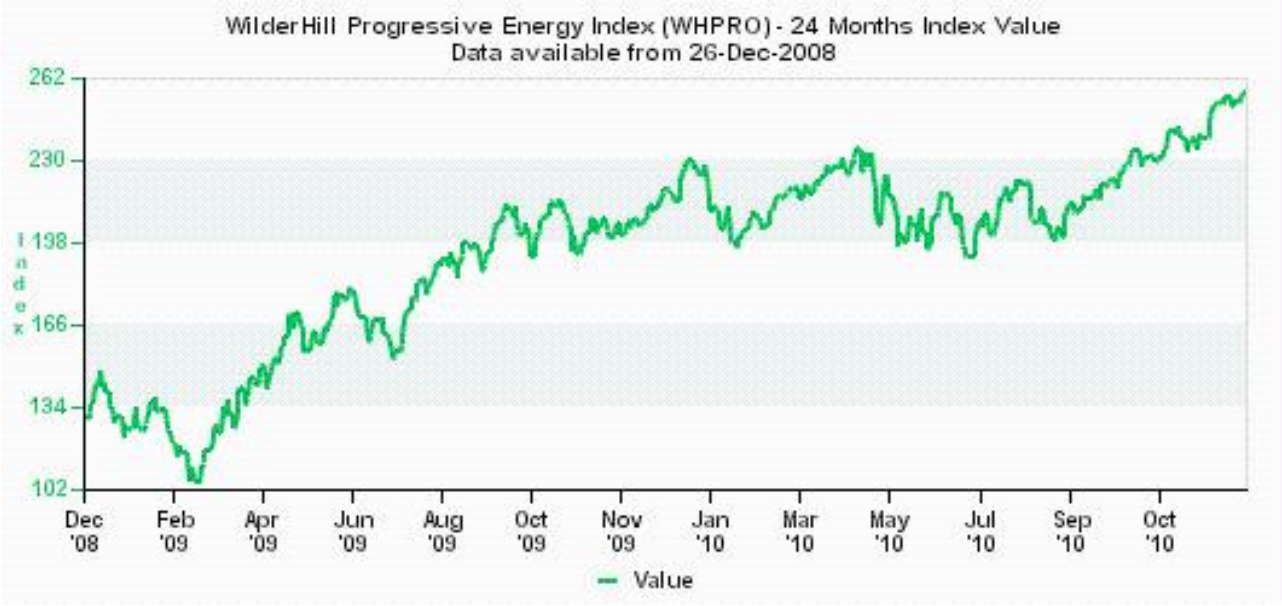
Conversion & Storage – 19% Sector weight (9 stocks @2.00% each+2 banded stocks)
A-Power, APWR. Distributed power generation, micro-grid systems; China-based.
Chicago Bridge & Iron, CBI. Advanced containment, for next-generation nuclear.
Clean Energy Fuels, CLNE. Natural gas fleet vehicles, integration 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.
Exide Technologies, XIDE. Better lead-acid batteries for motive, traction uses.
****Kandi Technologies***, KNDI. Developing new micro-cars, China-based manufacturer.
Tata Motors, TTM. Makes small & 'nano' vehicles, India-based, sales worldwide.
Westport Innovations, WPRT. Enables vehicle use of natural gas, gaseous fuels.

Emission Reduction – 9% Sector Weight (3 stocks @2.33% 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.
****Peerless***, PMFG. Pollution reduction, effluent separation & filtration systems.
****Rentech***, RTK. Gas to liquids, converts synthetic gas from varied 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.
Centrais Electricas Brasileiras, EBR. Brazilian Utility, large hydro, also nuclear.
Enersis, S.A., ENI. Chile, Argentina, Peru. Utility, lower-CO2 large hydroelectric.

WH Progressive Energy Index (WHPRO), past 24 months:



Appendix V: Rebalance for the HAUL Index® -- for start of Q1 2011

Wilder NASDAQ OMX Global Energy Efficient Transport Index (HAUL)

For start of Q1 2011. 45 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. 11 stocks. 25% Sector weight; stocks @2.27% each.

AONE UQ	*A123 Systems (U.S)*. Lithium ion battery maker, uses nanophosphate.
HEV US	*Ener1 (U.S.)*. Lithium ion battery maker for electric cars, plug in hybrids.
MXWL US	*Maxwell (U.S.)*. Ultracapacitors, can very rapidly store/release power.
PIA IM	*Piaggio & C. SpA (Italy)*. Scooters include Vespa, developing hybrids.
SAFT FP	*Saft Groupe SA (France)*. Advanced batteries in electric cars, subways.
489 HK	*Dongfeng Motor (China)*. Chinese partner for electric vehicles (EVs).
1211 HK	*BYD (China)*. Early production EV batteries, also builds entire EVs.
6674 JP	*GS Yuasa (Japan)*. Li-ion batteries, in EV production partnerships.
9921 TT	*Giant (Taiwan)*. Bike manufacturer also makes hybrid electric bikes.
051910 KS	*LG Chem (S. Korea)*. Larger-format Li-ion cells in production EVs.
006400 KS	*Samsung SDI (S. Korea)*. Li-ion cell maker in Korean JV for autos.

Rail & Subway Systems. 12 stocks. 25% Sector weight; stocks @2.08% each.

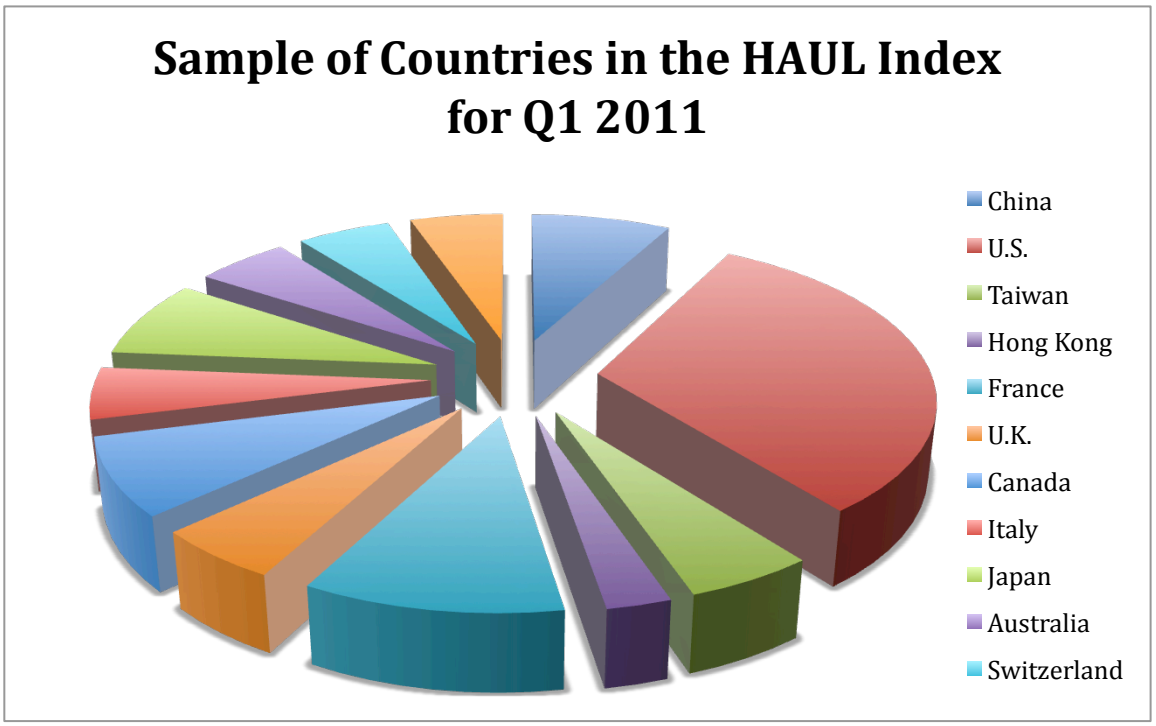
ALO FP	*Alstom SA (France)*. More efficient rail infrastructure, high speed TGV.
BBD/B CN	*Bombardier (Canada)*. Builds efficient locomotives, also in light rail.
CNI US	*Canadian National Railway (Canada)*. Rail as 3x more efficient than trucks.
CSX US	*CSX Corp (U.S.)*. Invests $1 billion in better Tier II locomotives; SmartWay.
LEY FP	*Faiveley SA (France)*. Manufactures equipment systems for trains, trams.
NSC US	*Norfolk Southern (U.S.)*. Software optimizes rail movement; SmartWay partner.
QRN AU	*QR National, Ltd (Australia)*. Rail for coal, bulk, general freight, Queensland.
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.
WAB US	*Wabtec (U.S.)*. Makes, services control systems in locomotives, subway cars.
1186 HK	*China Railway Construction (China)*. High speed rail, has global presence.
7122 JP	*Kinki Sharyo (Japan)*. Shinkansen Bullet Train; light mass transit vehicles.

Sea, Land, Air & Intermodal. 11 stocks. 25% Sector weight; stocks @2.27% each.

BOKA NA	*Koninklijke Boskalis NV (Netherlands)*. Improving ports for global shipping.
BOL FP	*Bollore (France)*. In transport & freight forwarding, stevedoring, ports, etc.
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.
MAERSKB DC	*Maersk A/S (Denmark)*. Shipping, globally efficient transport of goods.
OSG US	*Overseas Shipholding (U.S.)*. Bulk shipping, VLCCs, diversified LNG, CNG.
SGC LN	*Stagecoach Group plc (Scotland)*. Trains, buses, trams, in U.S. and U.K.
TLVT US	*Telvent GiT S.A. (Spain)*. Information technology, in transport, traffic, energy.
316 HK	*Orient Overseas Intl. (Hong Kong)*. Container shipping and logistics.
2612 TT	*Chinese Maritime Transport (Taiwan)*. Shipping, marine transport services.
7251 JP	*Keihin Corp (Japan)*. Control systems for Honda's hybrids, light scooters.

Transport Innovation. 11 stocks. 25% Sector weight; stocks @2.27% each.

BG/ LN	*BG Group (U.K.)*. Natural gas, CNG used as transportation fuels.
FSYS US	*Fuel System Solutions (U.S.)*. Gaseous fuels, enables natural gas in engines.
LYC AU	*Lynas Corp Ltd (Australia)*. Rare earths required like neodymium, cerium.
KNIN VX	*Kuehne + Nagel AG (Switzerland)*. Globally integrated logistics solutions.
PWTN SW	*Panalpina Welttransport AG (Switzerland)*. Freight forwarding & logistics.
RS US	*Reliance Steel & Aluminum (U.S.)*. Aluminum, used to lighten modern vehicles.
SGL GR	*SGL Carbon AG (Germany)*. Advanced carbon composites, lightening.
SQM US	*Sociedad de Chile (Chile)*. Lithium, is needed in electric & hybrid batteries.
TSLA UQ	*Tesla Motors (U.S.)*. Mass producing EVs ahead, a pure-play global leader.
WBC US	*Wabco (Belgium)*. Control systems, better electronic automation in vehicles.
WPRT US	*Westport Innovations (Canada)*. New technology advancing gaseous fuels.



Appendix VI: WilderHill New Energy Global Innovation Index (NEX) in Q4, Data below are from Q4 2010 on 12/15/2010, about 2 weeks before Rebalance of NEX to start Q1 2011:

See also for more NEX data: http://www.nex-index.com/Constituents_And_Weightings.php

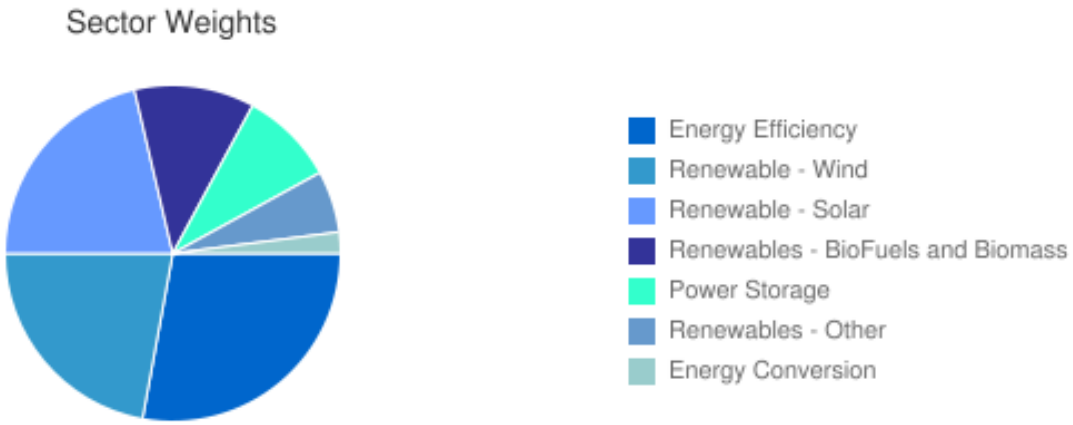
Name	Country	Currency	Weight	NEX Sector
Baldor Electric	US	USD	2.34 %	EEF
Tesla Motors	US	USD	2.19 %	EEF
International Rectifier	US	USD	2.09 %	EEF
Gamesa Corporacion Tecnologica S.A.	ES	EUR	2.09 %	RWD
EDF Energies Nouvelles S.A.	FR	EUR	2.05 %	RWD
Polypore International	US	USD	2.01 %	PWS
EDP Renovaveis S/A	PT	EUR	1.98 %	RWD
Iberdrola Renovables S.A.	ES	EUR	1.94 %	RWD
Cree	US	USD	1.90 %	EEF
Johnson Controls	US	USD	1.89 %	EEF
Fortum Oyj	FI	EUR	1.87 %	RBB
Covanta Holding	US	USD	1.86 %	RBB
Meidensha	JP	JPY	1.86 %	EEF
Novozymes A/S Series B	DK	DKK	1.84 %	RBB
American Superconductor	US	USD	1.82 %	RWD
Power Integrations	US	USD	1.81 %	EEF
Power-One	US	USD	1.80 %	EEF
Cosan S/A Industria e Comercio	BR	BRL	1.79 %	RBB
China Longyuan Power Group Corp. Ltd.	HK	HKD	1.67 %	RWD
China WindPower Group Ltd.	HK	HKD	1.66 %	RWD
Kingspan Group PLC	IE	EUR	1.66 %	EEF
Rockwool International A/S Series B	DK	DKK	1.65 %	EEF
Contact Energy Ltd.	NZ	NZD	1.62 %	ROH
Vestas Wind Systems A/S	DK	DKK	1.61 %	RWD
Acciona S.A.	ES	EUR	1.60 %	RWD
EPISTAR	TW	TWD	1.59 %	EEF
GCL-Poly Energy Holdings Ltd.	HK	HKD	1.59 %	RSR
A.O. Smith	US	USD	1.58 %	EEF
Abengoa S.A.	ES	EUR	1.55 %	RBB
GT Solar International	US	USD	1.49 %	RSR
Verbund AG	AT	EUR	1.47 %	ROH
Energy Development	PH	PHP	1.45 %	ROH
China High Speed Transmission Equipment	HK	HKD	1.44 %	RWD
Ormat Technologies	US	USD	1.41 %	ROH
GS Yuasa	JP	JPY	1.38 %	PWS
Itron	US	USD	1.38 %	EEF
Meyer Burger Technology AG	CH	CHF	1.35 %	RSR
A123 Systems	US	USD	1.35 %	PWS
SunPower Corp. Cl A	US	USD	1.33 %	RSR
MEMC Electronic Materials	US	USD	1.32 %	RSR
SMA Solar Technology AG	DE	EUR	1.28 %	RSR
First Solar	US	USD	1.28 %	RSR
Saft Groupe S.A.	FR	EUR	1.27 %	PWS
Suntech Power Holdings Co. Ltd. ADS	US	USD	1.21 %	RSR
Centrotherm photovoltaics AG	DE	EUR	1.21 %	RSR
Renewable Energy Corp. ASA	NO	NOK	1.21 %	RSR
SolarWorld AG	DE	EUR	1.17 %	RSR
Yingli Green Energy Holding Co. Ltd. ADS	US	USD	1.16 %	RSR

Trina Solar Ltd. ADS	**US**	**USD**	**1.16 %**	**RSR**
JA Solar Holdings Co. Ltd. ADS	**US**	**USD**	**1.15 %**	**RSR**
EnerNOC	**US**	**USD**	**1.13 %**	**EEF**
BYD Co. Ltd.	**HK**	**HKD**	**1.10 %**	**PWS**
FuelCell Energy	**US**	**USD**	**0.81 %**	**ECV**
Capstone Turbine	**US**	**USD**	**0.77 %**	**ECV**
Q-Cells AG	**DE**	**EUR**	**0.77 %**	**RSR**
Xinjiang Goldwind Science & Technology	**CN**	**CNY**	**0.65 %**	**RWD**
Zhejiang Yankon Group Co. Ltd. A	**CN**	**CNY**	**0.65 %**	**EEF**
Broadwind Energy	**US**	**USD**	**0.65 %**	**RWD**
Sao Martinho S/A Ord	**BR**	**BRL**	**0.64 %**	**RBB**
Takuma Co. Ltd.	**JP**	**JPY**	**0.64 %**	**RBB**
Hansen Transmissions International N.V.	**GB**	**GBp**	**0.59 %**	**RWD**
Zoltek	**US**	**USD**	**0.54 %**	**RWD**
Gurit Holding AG	**CH**	**CHF**	**0.54 %**	**RWD**
Tanaka Chemical	**JP**	**JPY**	**0.54 %**	**PWS**
Maxwell Technologies	**US**	**USD**	**0.51 %**	**PWS**
Echelon	**US**	**USD**	**0.51 %**	**EEF**
Brasil Ecodiesel Industria e Comercio de	**BR**	**BRL**	**0.51 %**	**RBB**
Ener1	**US**	**USD**	**0.50 %**	**PWS**
Universal Display	**US**	**USD**	**0.49 %**	**EEF**
Advanced Battery Technologies	**US**	**USD**	**0.46 %**	**PWS**
Fuel Systems Solutions	**US**	**USD**	**0.46 %**	**ECV**
Praj Industries Ltd.	**IN**	**INR**	**0.44 %**	**RBB**
Sechilienne-Sidec	**FR**	**EUR**	**0.44 %**	**RBB**
Taewoong Co. Ltd.	**KR**	**KRW**	**0.43 %**	**RWD**
Energy Conversion Devices	**US**	**USD**	**0.43 %**	**RSR**
Solar Millennium AG	**DE**	**EUR**	**0.43 %**	**RSR**
NPC	**JP**	**JPY**	**0.42 %**	**RSR**
Nordex AG	**DE**	**EUR**	**0.42 %**	**RWD**
Infigen Energy	**AU**	**AUD**	**0.42 %**	**RWD**
Rubicon Technology	**US**	**USD**	**0.42 %**	**EEF**
Neo Solar Power	**TW**	**TWD**	**0.39 %**	**RSR**
PV Crystalox Solar PLC	**GB**	**GBp**	**0.39 %**	**RSR**
Wasion Group Holdings Ltd.	**HK**	**HKD**	**0.38 %**	**EEF**
Neo-Neon Holdings Ltd.	**HK**	**HKD**	**0.31 %**	**EEF**
Phoenix Solar AG	**DE**	**EUR**	**0.30 %**	**RSR**
Roth & Rau AG	**DE**	**EUR**	**0.28 %**	**RSR**
Eaga PLC	**GB**	**GBp**	**0.24 %**	**EEF**

Below are further Sector data for NEX Index on this Q4 date, 12/15/2010:

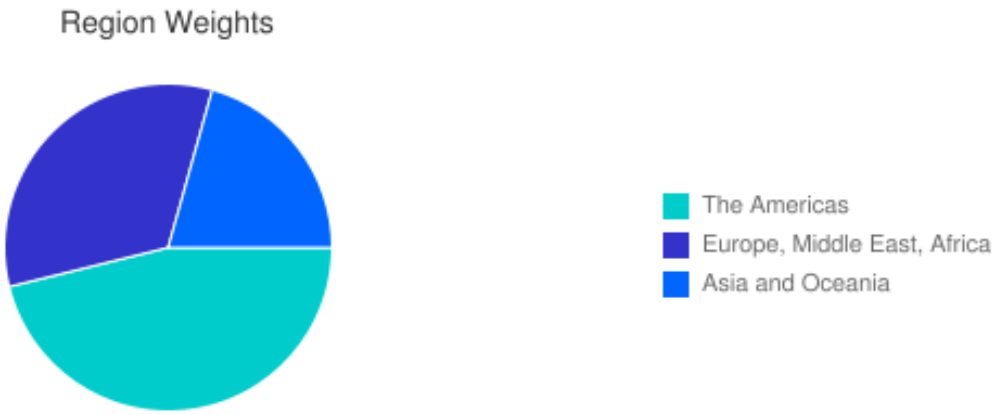
Sector Information for Tuesday Dec. 15, 2010		
Key	**NEX Sector**	**Weight**
EEF	Energy Efficiency	27.89 %
RWD	Renewable - Wind	22.11 %
RSR	Renewable - Solar	21.32 %
RBB	Renewables - BioFuels and Biomass	11.59 %
PWS	Power Storage	9.12 %
ROH	Renewables - Other	5.94 %
ECV	Energy Conversion	2.03 %

NEX Sector Weights, chart, Dec. 15, 2010:



Region-of-Listing Information for Tuesday Dec. 15, 2010	
Region	**Weight**
The Americas	**46.16 %**
Europe, Middle East, Africa	**33.18 %**
Asia & Oceania	**20.66 %**

NEX Region Weights, chart, Dec 15, 2010:



Top 10 Components, Countries represented on 9.14:

Appendix VII: WilderHill New Energy Global Innovation Index (NEX), for start of Q1 2011.

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

NEX Index Components to start Q1 2011. 100 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

Company Name	Country	Exchange	Ticker	Weight	Sector
Energy Development Corp/Philip	Philippines	Philippines	EDC	1.6985%	ROH
Verbund AG	Austria	Vienna	VER	1.6985%	ROH
Contact Energy Ltd	New Zealand	NZX	CEN	1.6985%	ROH
Enel Green Power SpA	Italy	BrsaItaliana	EGPW	1.6985%	ROH
Ormat Technologies Inc	United States	New York	ORA	1.6985%	ROH
Seoul Semiconductor Co Ltd	Korea (Republic)	KOSDAQ	046890	1.5990%	EEF
Rockwool International AS	Denmark	Copenhagen	ROCKB	1.5990%	EEF
AO Smith Corp	United States	New York	AOS	1.5990%	EEF
Cree Inc	United States	NASDAQ GS	CREE	1.5990%	EEF
Epistar Corp	Taiwan	Taiwan	2448	1.5990%	EEF
International Rectifier Corp	United States	New York	IRF	1.5990%	EEF
Itron Inc	United States	NASDAQ GS	ITRI	1.5990%	EEF
Johnson Controls Inc	United States	New York	JCI	1.5990%	EEF
Kingspan Group PLC	Ireland	Dublin	KSP	1.5990%	EEF
Meidensha Corp	Japan	Tokyo	6508	1.5990%	EEF
Power Integrations Inc	United States	NASDAQ GS	POWI	1.5990%	EEF
Power-One Inc	United States	NASDAQ GM	PWER	1.5990%	EEF
Tesla Motors Inc	United States	NASDAQ GS	TSLA	1.5990%	EEF
Universal Display Corp	United States	NASDAQ GM	PANL	1.5990%	EEF
Abengoa SA	Spain	Madrid Stock	ABG	1.4132%	RBB
Amyris Inc	United States	NASDAQ GM	AMRS	1.4132%	RBB
Cosan SA Industria e Comercio	Brazil	Sao Paulo Ex.	CSAN3	1.4132%	RBB
Covanta Holding Corp	United States	New York	CVA	1.4132%	RBB
Fortum OYJ	Finland	Helsinki	FUM	1.4132%	RBB
Novozymes A/S	Denmark	Copenhagen	NZYMB	1.4132%	RBB
Yingli Green Energy Holding Co	China	New York	YGE	1.3243%	RSR
Trony Solar Holdings Co Ltd	China	Hong Kong	2468	1.3243%	RSR
JA Solar Holdings Co Ltd	China	NASDAQ GS	JASO	1.3243%	RSR
Suntech Power Holdings Co Ltd	China	New York	STP	1.3243%	RSR
Trina Solar Ltd	China	New York	TSL	1.3243%	RSR
Centrotherm Photovoltaics AG	Germany	Xetra	CTN	1.3243%	RSR
First Solar Inc	United States	NASDAQ GS	FSLR	1.3243%	RSR
GCL Poly Energy Holdings Ltd	Hong Kong	Hong Kong	3800	1.3243%	RSR
GT Solar International Inc	United States	NASDAQ GS	SOLR	1.3243%	RSR
MEMC Electronic Materials Inc	United States	New York	WFR	1.3243%	RSR
Meyer Burger Technology AG	Switzerland	SIX Swiss Ex	MBTN	1.3243%	RSR
Renewable Energy Corp ASA	Norway	Oslo	REC	1.3243%	RSR
SMA Solar Technology AG	Germany	Xetra	S92	1.3243%	RSR
Solarworld AG	Germany	Xetra	SWV	1.3243%	RSR
STR Holdings Inc	United States	New York	STRI	1.3243%	RSR
SunPower Corp	United States	NASDAQ GS	SPWRA	1.3243%	RSR
China Longyuan Power	China	Hong Kong	916	1.3082%	RWD
China Suntien Green Energy	China	Hong Kong	956	1.3082%	RWD
Xinjiang Goldwind	China	Hong Kong	2208	1.3082%	RWD
China Ming Yang Wind	China	New York	MY	1.3082%	RWD
EDP Renovaveis SA	Spain	EN Lisbon	EDPR	1.3082%	RWD
China High Speed Transmission	Hong Kong	Hong Kong	658	1.3082%	RWD
Acciona SA	Spain	Madrid Stock	ANA	1.3082%	RWD
American Superconductor Corp	United States	NASDAQ GS	AMSC	1.3082%	RWD
China WindPower Group Ltd	Hong Kong	Hong Kong	182	1.3082%	RWD

EDF Energies Nouvelles SA	France	EN Paris	EEN	1.3082%	RWD
Gamesa Corp Tecnologica SA	Spain	Madrid Stock	GAM	1.3082%	RWD
Iberdrola Renovables SA	Spain	Madrid Stock	IBR	1.3082%	RWD
Vestas Wind Systems A/S	Denmark	Copenhagen	VWS	1.3082%	RWD
Byd Co Ltd	China	Hong Kong	1211	0.9791%	PWS
A123 Systems Inc	United States	NASDAQ GM	AONE	0.9791%	PWS
GS Yuasa Corp	Japan	Tokyo	6674	0.9791%	PWS
Molycorp Inc	United States	New York	MCP	0.9791%	PWS
Polypore International Inc	United States	New York	PPO	0.9791%	PWS
Saft Groupe SA	France	EN Paris	SAFT	0.9791%	PWS
Fuel Systems Solutions Inc	United States	NASDAQ GS	FSYS	0.7500%	ECV
FuelCell Energy Inc	United States	NASDAQ GM	FCEL	0.7500%	ECV
Ayen Enerji	Turkey	Istanbul	AYEN	0.4853%	ROH
LSB Industries Inc	United States	New York	LXU	0.4853%	ROH
Elster Group SE	Germany	New York	ELT	0.4568%	EEF
eaga PLC	United Kingdom	London	EAGA	0.4568%	EEF
Aerovironment Inc	United States	NASDAQ GS	AVAV	0.4568%	EEF
Ameresco Inc	United States	New York	AMRC	0.4568%	EEF
Echelon Corp	United States	NASDAQ GM	ELON	0.4568%	EEF
EnerNOC Inc	United States	NASDAQ GM	ENOC	0.4568%	EEF
Neo-Neon Holdings Ltd	Hong Kong	Hong Kong	1868	0.4568%	EEF
Rubicon Technology Inc	United States	NASDAQ GM	RBCN	0.4568%	EEF
Wasion Group Holdings Ltd	Hong Kong	Hong Kong	3393	0.4568%	EEF
Zhejiang Yankon Group Co Ltd	China	Shanghai	600261	0.4568%	EEF
Brasil Ecodiesel Industria	Brazil	Sao Paulo	ECOD3	0.4038%	RBB
Sao Martinho SA	Brazil	Sao Paulo	SMTO3	0.4038%	RBB
Praj Industries Ltd	India	Natl India	PRJ	0.4038%	RBB
Sechilienne-Sidec	France	EN Paris	SECH	0.4038%	RBB
Takuma Co Ltd	Japan	Tokyo	6013	0.4038%	RBB
Apollo Solar Energy Technology	Hong Kong	Hong Kong	566	0.3784%	RSR
Energy Conversion Devices Inc	United States	NASDAQ GS	ENER	0.3784%	RSR
Neo Solar Power Corp	Taiwan	Taiwan	3576	0.3784%	RSR
NPC Inc/Japan	Japan	Tokyo	6255	0.3784%	RSR
Phoenix Solar AG	Germany	Xetra	PS4	0.3784%	RSR
PV Crystalox Solar PLC	United Kingdom	London	PVCS	0.3784%	RSR
Q-Cells SE	Germany	Xetra	QCE	0.3784%	RSR
Roth & Rau AG	Germany	Xetra	R8R	0.3784%	RSR
Solar Millennium AG	Germany	Xetra	S2M	0.3784%	RSR
China Datang Corp	China	Hong Kong	1798	0.3738%	RWD
Hansen Transmissions International	Belgium	London	HSN	0.3738%	RWD
Taewoong Co Ltd	Korea (Republic)	KOSDAQ	044490	0.3738%	RWD
Nordex AG	Germany	Xetra	NDX1	0.3738%	RWD
Broadwind Energy Inc	United States	NASDAQ GS	BWEN	0.3738%	RWD
Gurit Holding AG	Switzerland	SIX Swiss Ex	GUR	0.3738%	RWD
Infigen Energy	Australia	ASE	IFN	0.3738%	RWD
Zoltek Cos Inc	United States	NASDAQ GS	ZOLT	0.3738%	RWD
Advanced Battery Technologies	United States	NASDAQ CM	ABAT	0.2797%	PWS
Ener1 Inc	United States	NASDAQ GM	HEV	0.2797%	PWS
Maxwell Technologies Inc	United States	NASDAQ GM	MXWL	0.2797%	PWS
Tanaka Chemical Corp	Japan	JASDAQ	4080	0.2797%	PWS

16 Additions

Name	Country	Ticker	NEX Sector
Seoul Semiconductor Co Ltd	Korea (Republic)	KOSDAQ	EEF
China Datang Corp	China	1798	RWD
Xinjiang Goldwind Science	China	2208	RWD
Trony Solar Holdings Ltd	China	2468	RSR
Apollo Solar Energy Tech	China	566	RSR
China Suntien Green Energy	China	956	RWD
Ameresco Inc	United States	AMRC	EEF
Amyris Inc	United States	AMRS	RBB
Aerovironment Inc	United States	AVAV	EEF
Ayen Enerji	Turkey	AYEN	ROH
Enel Green Power SpA	Italy	EGPW	ROH
Elster Group SE	Germany	ELT	EEF

LSB Industries Inc	United States	LXU	ROH
Molycorp Inc	United States	MCP	PWS
China Ming Yang Wind Power Group Ltd		China	RWD
STR Holdings Inc	United States	STRI	RSR

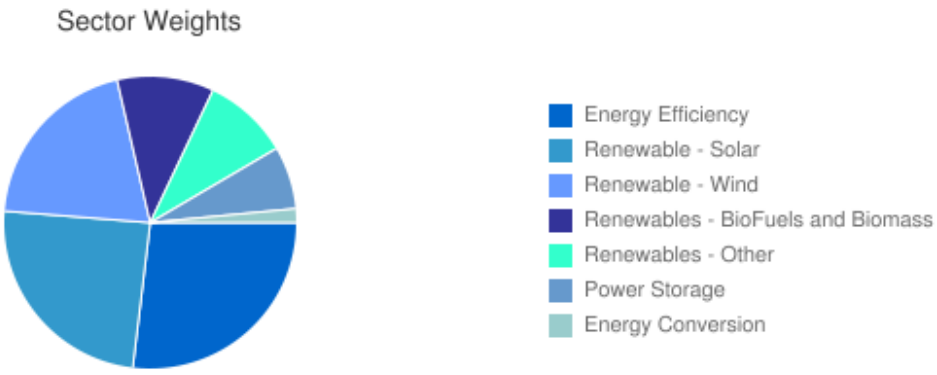
3 Removals

Name	Country	Ticker	NEX Sector
Xinjiang Goldwind Science	China	002202	RWD
Baldor Electric Co.	United States	BEZ	EEF
Capstone Turbine Corp.	United States	CPST	ECV

Sample Data from December 30, 2010 for NEX:

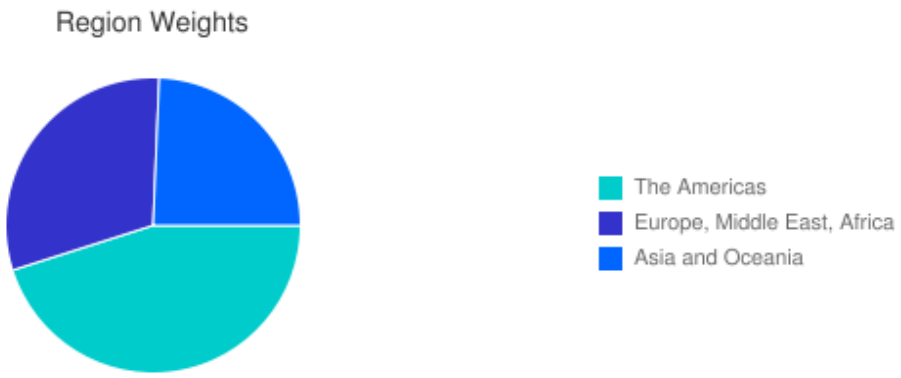
Sector Information for Thu Dec 30, 2010		
Key	**Sector of NEX**	**Weight**
EEF	Energy Efficiency	26.90 %
RSR	Renewable - Solar	24.36 %
RWD	Renewable - Wind	20.10 %
RBB	Renewables - BioFuels and Biomass	10.69 %
ROH	Renewables - Other	9.49 %
PWS	Power Storage	6.92 %
ECV	Energy Conversion	1.53 %

More Sample Data, these are from December 30, 2010 for NEX:



More Sample Data, these are from December 30, 2010 for NEX:

Index Region-of-Listing Information for Thu Dec 30, 2010	
Region	**Weight**
The Americas	45.10 %
Europe, Middle East, Africa	30.56 %
Asia & Oceania	24.34 %



(The NEX Index only, is a unique partnership between Bloomberg New Energy Finance based in London, and Josh Landess of First Energy Research LLC based in U.S., and Dr. Rob Wilder of WilderHill Indexes in the U.S.; the NEX is also addressed in prior reports).