

Excerpt from Alt Energy Stocks, July 29, 2011

[http://www.altenergystocks.com/archives/2011/07/are\\_the\\_declines\\_in\\_solar\\_and\\_wind\\_stocks\\_structural\\_or\\_cyclical\\_1.html](http://www.altenergystocks.com/archives/2011/07/are_the_declines_in_solar_and_wind_stocks_structural_or_cyclical_1.html)

## **Are the Declines in Solar and Wind Stocks Structural, or Cyclical?**

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He says,

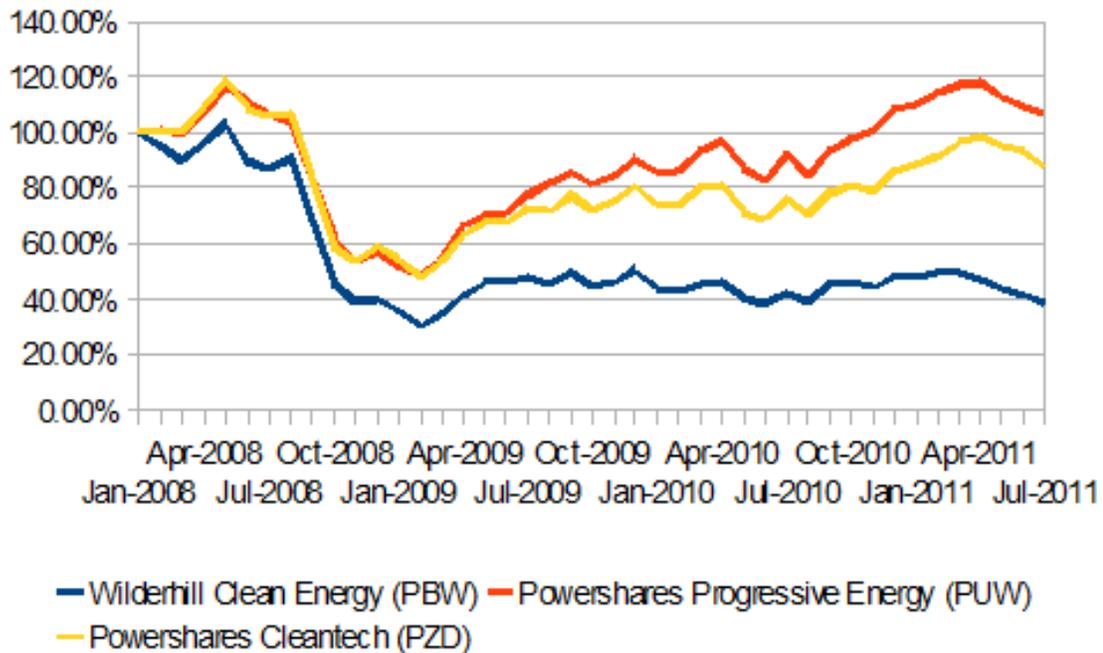
"[S]olar and wind have underperformed the more broadly defined cleantech sectors because China is subsidizing the manufacturing ramp of those industries and creating overcapacity. Commensurate with pricing pressure due to the supply and demand imbalances are raising commodity costs like steel, silver, copper etc which pressures margins for solar and wind manufacturers throughout the value chain."

### **Other Structural Problems**

Commoditization is not the only potential structural problem in clean energy. I also corresponded last week with [Robert Wilder](#), the manager of the Wilderhill Clean Energy Index ([ECO](#)) and the Wilderhill Progressive Energy Index ([WHPRO](#)). The largest clean energy ETF, [PBW](#) is based on ECO, while the Powershares Wilderhill Progressive Energy Portfolio ([PUW](#)) is based on WHPRO. Wilder and I were discussing why broad-based ETFs such as PUW and ... outperformed narrower clean energy indexes like PBW recently. Wilder says,

"Indexes capturing broader themes simply had been able to avoid the narrow, sharp drop. A wider Index for say, cleaner technology with lesser green energy weightings would in a sense do 'better' the past couple years, while Progressive energy emphasizing efficiency and the smart use of dominant energy would do even 'better' than that."

## Clean Energy vs Cleantech vs Progressive Energy

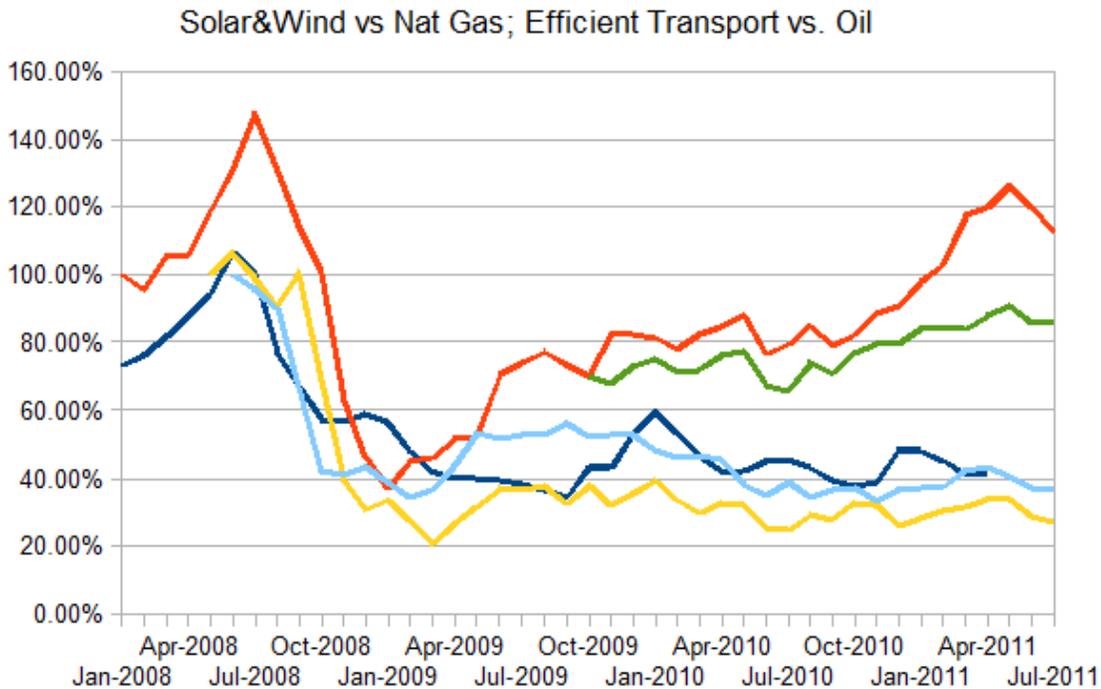


In addition to the quick commoditization arising from the rise of Chinese manufacturers, Wilder and ... also see structural problems for solar PV and wind in the reduction of subsidies. Wilder says that the paring back of subsidies has quickened recently as "several governments are suddenly fiscally flat on their back. ... One-off events like Japan's nuclear crisis, or sharp doubling in oil prices, spotlight moves to new energy in places like Germany, but that alone is not enough to offset these partly structural near term ... forces." ... adds that "this is a major structural issue as many of the companies that compete in these sectors are highly levered and the barriers to entry are fairly low."

### The Cyclical Case

While Wilder and ... see the recent decline as mostly structural, Wilder also sees some cyclical causes. He sees an analogy to semiconductor makers, which go through boom and bust as wafer makers over-expand, and then are forced to contract, but he sees the forces driving down solar, wind, LEDs, and geothermal in recent times as much more powerful than those in the semiconductor industry.

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Data Sources: Yahoo! Finance, EIA & NASDAQ

— Nat Gas for Electricity — World Oil — Eff. Transport index (HAUL)  
— Guggenheim Solar(TAN) — First Trust Global Wind (FAN)

## Conclusion

I think it's fairly safe to conclude that both structural and cyclical factors have been at work in the recent declines of solar, wind, LED, and geothermal stocks. For the investor, the question should be, "Have the structural factors and most of the cyclical factors been fully priced in?" If so, these stocks will benefit as cyclical factors begin to reverse themselves. If, however, the full effects of the structural problems in these industries have yet to be felt, then even a political and cultural shift back towards pricing in the full costs of fossil fuels may not be enough to make the current batch of solar and wind stocks profitable again.

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... As Rob Wilder points out, "an Index capturing global energy efficiency in transportation is well up" over the same period solar and wind have been down. I think that's probably due to the fact that transportation efficiency competes with oil, and the price of oil is up

50% over the last two years.

Solar, wind, geothermal, and electrical efficiency technologies such as demand response and LEDs compete with the marginal supplier of electricity, which in most of the developed world is natural gas, and the natural gas price has been very low since early 2009 compared to 2004-2008. This is why many renewable developers are now focusing more on developing countries where it is possible to displace oil in electricity generation.

Fossil fuel prices are far from the only factor influencing clean energy stocks, but they seem significant. If we want to know if the current price trends for renewable electricity and electricity efficiency technologies are structural or cyclical, we also need to know if the price trends for natural gas are structural or cyclical, which in turn depends on our assessment of the long term course of the shale gas boom. If we want to know if the recent positive trends in transportation efficiency will continue, we need to decide if recent oil price trends are structural or cyclical.

Unfortunately, as with the trends in renewable energy, I think the recent trends in oil and natural gas have both structural and cyclical factors. Which of those factors will dominate over the next two years is beyond this analyst's expertise to predict. Over the long term, though, the trend for fossil fuel prices is likely to be up.