



**GUINNESS
ATKINSON**
F U N D S

Alternative Energy *brief*



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April 2009

**Commentary and Review by co-portfolio managers
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In March we saw further government policy response to the current economic issues that support the alternative energy industry. China and Japan have both proposed attractive solar subsidies and California has introduced a 33% renewable portfolio standard for 2020. At the same time, companies have experienced a slow Q1 and it remains to be seen whether investor expectations are as low as the quarterly results will be. Notwithstanding the short term issues, we believe the long term outlook for alternative energy continues to improve.



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Latest News

The sector witnessed a flurry of excitement in March as in addition to the broad markets recovering from their lows, information on a number of new economic stimuli for the alternative energy sector became available.

Chinese solar subsidy

In China, an announcement posted on the Chinese Ministry of Finance website stated that the Chinese government has introduced a highly attractive subsidy for new solar installations.

The subsidy is 20 Chinese Renminbi (RMB 20) per Watt (W) for installations larger than 50 kilowatts (kW). This equates to approximately \$3/W which is roughly the price of solar photovoltaic modules. This leaves the remaining

equipment and labor cost of installation unsubsidized and we estimate that this is less than \$2/W in China.

This is potentially a valuable step forward for the global solar industry.

This subsidy is important for a number of reasons:

China has developed a strong solar module manufacturing industry over the last 5 years but this industry has been hit hard by the credit crunch. As the availability of credit has dried up solar project developers have struggled to obtain the necessary financing. This has led to reduced demand for solar modules and a significant fall in module pricing. The government is clearly looking to support this industry by introducing a generous subsidy. Unlike many European

countries which have had subsidies in place for solar projects for a number of years, China has not looked to support developers of solar installations but has instead given attractive tax breaks to the solar module manufacturing industry. With the recent US Stimulus plan offering attractive terms for solar developers, China has now followed up with a plan to develop solar as a source of electricity generation and support the growing Chinese solar module manufacturing industry.

The potential scale of the industry in China is large. According to the International Energy Agency (IEA) the electricity generating capacity of China in 2005 was 517 gigawatts (GW) and is expected to more than double to 1110 GW by 2015. If solar were to grow to say 3% of China's electricity generation capacity by 2015 that would require a total installation of 33GW over the next 6 years. This is an average of 5.5GW per year which is the same order of magnitude as the global solar generating capacity installed in 2008. Currently we estimate China has an installed base of 100MW. Given this low base even if China only had solar reaching 0.5% of total capacity this would still require the volume of solar installed to double every year until 2015.

This is also a signal that China is taking action on climate change. This is potentially positive for other alternative energy technologies such as wind.

At 03/31/08 the Guinness Atkinson Alternative Energy Fund held positions in the following Chinese solar stocks which are listed in the US as American Depositary Receipts (ADRs): Suntech Power, JA Solar, Trina Solar, LDK Solar, Renesola. At the same date the fund had 39.64% of its net assets invested in solar stocks.

Details of the Subsidy

- The program applies to systems completed after March 23 2009.
- Systems will have to be larger than 50kW to be eligible for the subsidy.
- The program will only use high quality modules.
- Building integrated projects will have a higher priority.
- Applications will be reviewed at the state level twice per year in April and August.
- A final decision will be made at a state federal level as to how much subsidy to allocate.

What we don't know

- Although the announcement does not state that there will be a cap on the volume of installations this is still a possibility.
- We do not know how long this subsidy program will be in place.
- We do not know what electricity price developers will receive.

Japanese solar subsidy

In Japan, the government has formally issued their new solar residential subsidy, which is 70,000 Yen per kW with a budget of 20.05 billion Yen. This implies installations of 286 megawatts (MW), which compares to total installations of 230MW in 2008.

In addition, the ruling party has included in their latest Stimulus Package proposal 2 trillion Yen for solar cells in public facilities over 3 years. Current estimates are that this is around 3,000MW in total (i.e. 1,000MW per year), which would be a significant uplift compared to the demand expected.

Californian Renewables Portfolio Standard (RPS)

While the US stimulus plan and the subsidies announced above will have a significant impact on near term support for alternative energy, in the long term Renewables Portfolio Standards are expected to drive continued uptake of alternative energy in the US and internationally. While we expect a federal RPS later in 2009 or early 2010, 28 states have already implemented renewable portfolio standards of varying levels. On a federal basis, RPS levels of 20% by 2020 and 25% by 2025 are being considered.

However, the California senate has approved an even more progressive 33% RPS by 2020 that should drive growth of alternative energy in the state. This is particularly favorable for the Solar, Wind and Geothermal industries given the natural resources available in California.

Sector and geographic breakdown

Sector	% of Assets	Domicile	% of Assets
Solar	39.64%	Europe	46.34%
Wind	26.00%	North America	27.28%
Efficiency	9.15%	Asia	16.95%
Hydro	8.78%	Latin America	3.27%
Geothermal	8.42%	Australasia	0.71%
Biomass Energy	2.28%		
Biofuel	0.28%		

The portfolio is reasonably concentrated in the wind and solar sectors, with 39.64% in solar and 26.00% in Wind. We believe these sectors have the best long term growth potential of the alternative energy space. Stock prices have been hit hard, but that provides an opportunity in the event of a recovery in the markets. While the lack of capital is creating difficult trading conditions now, valuations reflect much of this concern, and we believe that the higher quality companies should do well later in 2009.

For the solar sector, lower prices should ultimately enable the industry to grow faster sooner, and much of these prices are matched by ongoing cost reductions and lower

silicon prices (in addition to the improved subsidy regimes globally). We have exposure to thin film solar panel manufacturing via our holding in First Solar and are otherwise invested across the photovoltaic value chain.

The wind sector has seen concerns over the quality of contract backlogs and potential declining order books and prices for turbine manufacturers. However, costs (particularly steel) are falling too, which should assist the turbine manufacturers in maintaining margins. This should feed through into higher returns for developers with access to capital, who should also benefit from lower financing costs. We have exposure to turbine manufacturing and to wind farm developers in the fund.

Our hydro holdings are in utilities and small independent power producers. These businesses have solid cash flows and low cost bases. As such, we believe they are well placed in the current economic environment.

Efficiency is an area where the Obama stimulus plan will likely provide a wealth of opportunity. However, the biggest beneficiary is the eventual energy user. We have interesting investments in ground source heat pumps, building efficiency and heat recycling, with some exposure to transmission grid service providers.

We are invested in three geothermal companies, of which one is the principle builder of systems, Ormat, the second is a Philippine utility and the third small position is invested in a hot rock project in Australia. We expect geothermal to become a more important part of alternative energy plans as a result of its low costs and established technology.

Our biomass investment is in a company where the biomass part of the business is being used to finance the development of a wind portfolio. We think there are some interesting niche biomass projects and we are interested in those companies that do not have constraints on future biomass supply.

We have only a small research holding in biofuels. We monitor the sector closely, but have concerns about overcapacity and negative margins in the US ethanol refining sector.

We have no investments in fuelcells, tidal or wave power companies, but remain interested in these areas.

The fund has 46.34% of its holdings in companies domiciled in Europe, reflecting the more mature European industry. North America accounts for 27.28% of the fund of which 5.15% is in Canada. The fund's 20.92% of emerging markets holdings is principally in Asia, with our investment in Chinese companies making up 12.09% of the fund.

Top Ten Holdings as of 03/31/09	% of Assets
Energy Development Corporation	4.86%
EDP Renovaveis SA	4.28%
Echelon Corporation	4.03%
Suntech Power Holdings-ADR	3.89%
SMA Solar Technology AG	3.86%
Solarworld AG	3.78%
Waterfurnace Renewable Energy	3.75%
Iberdrola Renovables SA	3.71%
First Solar Inc	3.59%
EDF Energies Nouvelles SA	3.40%

Liquidity analysis as at 03/31/09

Mkt Cap \$m	Positions	% of Assets
>1,000	18	58.91%
500-1,000	3	7.34%
250-500	4	9.35%
100-250	7	10.14%
50-100	4	5.52%
<50	9	3.29%

Position Size	Positions	% of Assets
Units	25	78.66%
Half units	9	11.89%
Research units	11	4.00%

The liquidity of the fund remains excellent, with 58.91% of the fund in companies with a market capitalization over US\$1,000 million and 5.45% in cash. The fund now has 25 full units and 9 half units.

Valuation as at 03/31/09

Valuation metrics	08	09	10
P/E	12.83	15.53	11.04
P/Sales	1.17	1.06	0.89
EV/Sales	1.54	1.40	1.18
EPS growth	-34.62%	85.51%	75.83%
Sales growth	19.55%	10.38%	18.56%
% NAV +ve eps	86.23%	86.62%	88.40%

Source: GA estimates, Bloomberg. P/E based on total portfolio value but include negative earnings at zero.

We include valuation metrics for the portfolio to demonstrate why we perceive there to be an investment opportunity in the sector. The fund is trading on a 15.53x P/E multiple in 2009 which falls to an 11.04 P/E multiple in 2010. This is a function of the strong growth of the industry, notwithstanding downgrades as analysts pare their forecasts. By comparison the S&P500 at the end of March at 797.87 was on a higher P/E of 13.03x based on the current (Zacks 3rd April) estimate of S&P500 EPS of 61.22 for 2009. The percentage of holdings with positive EPS increases

from 86.62% in 2008 to 88.40% in 2009. On an EV/Sales basis, the fund is trading on 1.54x 2008 sales, falling to 1.40x 2009 sales. These are not multiples that reflect the long term growth potential of the sector, notwithstanding that there may be delays in some projects in the sector while the financing market recovers.

We think that the table above emphasizes how the alternative energy companies in which we are invested are companies that are achieving real sales and earnings today and can be analysed using conventional financial metrics - they do not require a "new paradigm" to justify valuations. Future sales and earnings growth over the long run provide a straightforward path to high returns.

Fund Performance (March 2009)

The Guinness Atkinson Alternative Energy Fund was up 14.07% in March 2009.

Total Returns as of 03/31/09

	Mar. 2009	QTD 09	YTD 09	1 Year	From Inception
Guinness Atkinson Alternative Energy Fund (inception 03/31/06)	14.07%	-10.12%	-10.12%	-63.46%	-26.33%
Wilderness New Energy Global Innovation Index	11.35%	-8.78%	-8.78%	-56.27%	-15.71%
Wilderness Clean Energy Index	17.37%	-10.07%	-10.07%	-61.69%	-29.70%

Gross Expense Ratio 1.58%

Net Expense Ratio* 1.64%

* The expense ratio shown is from the most recent prospectus (April 30, 2008). The Fund has an expense cap in place and the advisor is contractually obligated to cap the total expenses at least through June 30, 2009. The Advisor has guaranteed total fund operating expenses (as a percentage of net assets) will not exceed 1.98% through June 30, 2009 or until such a later date as the Advisor determines.

All return figures represent average annualized returns except for periods of one year or less which are actual returns.

Performance data quoted represents past performance; past performance does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance of the fund may be lower or higher than the performance quoted. Performance data current to the most recent month end may be obtained by visiting www.gafunds.com or calling 800-915-6566.

The funds impose a redemption fee of 2% on shares held less than 30 days. Performance data does not reflect the redemption fee. If reflected, total returns would be reduced.

Stock Performance

Top 5	Size	Mar	Bottom Five	Size	Mar
Suntech Power	Full	91.95%	Greentech Energy Systems	Half	-43.37%
JA Solar	Full	66.01%	Boralex	Half	-29.30%
Renesola	Half	65.29%	Sunpower	Full	-20.03%
Theolia	Full	64.06%	Clipper Windpower	Full	-18.46%
Energy Development Corp	Full	60.68%	Solar Integrated Technologies	Research	-10.51%

As mentioned above, the Chinese unexpected solar subsidy was a major positive for the Asian solar stocks we hold, including Suntech Power, JA Solar and Renesola. Theolia appears to be making headway in shoring up its balance sheet - we hope to see further progress on this over the coming months. Energy Development Corp is the fund's geothermal stock in the Philippines and came back well in March.

Greentech and Boralex are two smaller project developers, who should benefit when financing becomes available, but struggled in March. Sunpower has underperformed notwithstanding the US stimulus package and the Califor-

nia announcement, but as the provider of leading efficiency cells we feel it is well placed to benefit. Clipper Windpower is a holding where we are not rebalancing to maintain our exposure and have not been – technical issues have placed pressure on the company and they now need to deliver on promised turbines, while managing cash flow.

We position the fund to potentially benefit from the long term growth of the alternative energy sector and believe that long term both energy markets and banking markets will function to the benefit of sector companies and investors. Thank you for your continuing support.

Edward Guinness

Matthew Page
April 2009

Commentary for our views on global energy and Asia markets is available on our website. Please click here to view.

Total returns reflect a fee waiver in effect and in the absence of this waiver, the total returns would be lower.

This information is authorized for use when preceded or accompanied by a prospectus for the Guinness Atkinson Global Energy Fund. The prospectus contains more complete information, including investment objectives, risks, charges and expenses related to an ongoing investment in the Fund. Please read the prospectus carefully before investing.

The Fund invests in foreign securities which will involve greater volatility and political, economic and currency risks and difference in accounting methods. The Fund is non-diversified meaning its assets may be concentrated in fewer individual holdings than diversified funds. Therefore, the Fund is more exposed to individual stock volatility than diversified funds. The Fund also invests in smaller companies, which will involve additional risks such as limited liquidity and greater volatility.

Current and future portfolio holdings are subject to risk.

Fund holdings and/or sector allocations are subject to change at any time and are not recommendations to buy or sell any security.

The WilderHill New Energy Global Innovation Index (NEX) is a modified dollar weighted index of publicly traded companies which are active in renewable and low-carbon energy, and which stand to benefit from responses to climate change and energy security concerns.

The WilderHill Clean Energy Index (ECO) is a modified equal dollar weighted index comprised of publicly traded companies whose business's stand to benefit substantially from societal transition toward the use of cleaner energy

and conservation.

The S&P 500 Index is a broad based unmanaged index of 500 stocks, which is widely recognized as representative of the equity market in general.

Price to earnings ratio (P/E) is equal to a stock's market capitalization divided by its aftertax earnings over the previous 12 months. Earnings per share (EPS) measures total earnings divided by the number of shares outstanding. The price to sales ratio (P/S) is equal to the total capitalization of the company divided by total sales (revenue). The enterprise value to sales ratio (EV/S) measures a company's enterprise value in relation to its total sales (revenue). Cash flow measures the cash generating capability of a company by adding non-cash charges (e.g. depreciation) and interest expense to pretax income.

One cannot invest directly in an index.

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