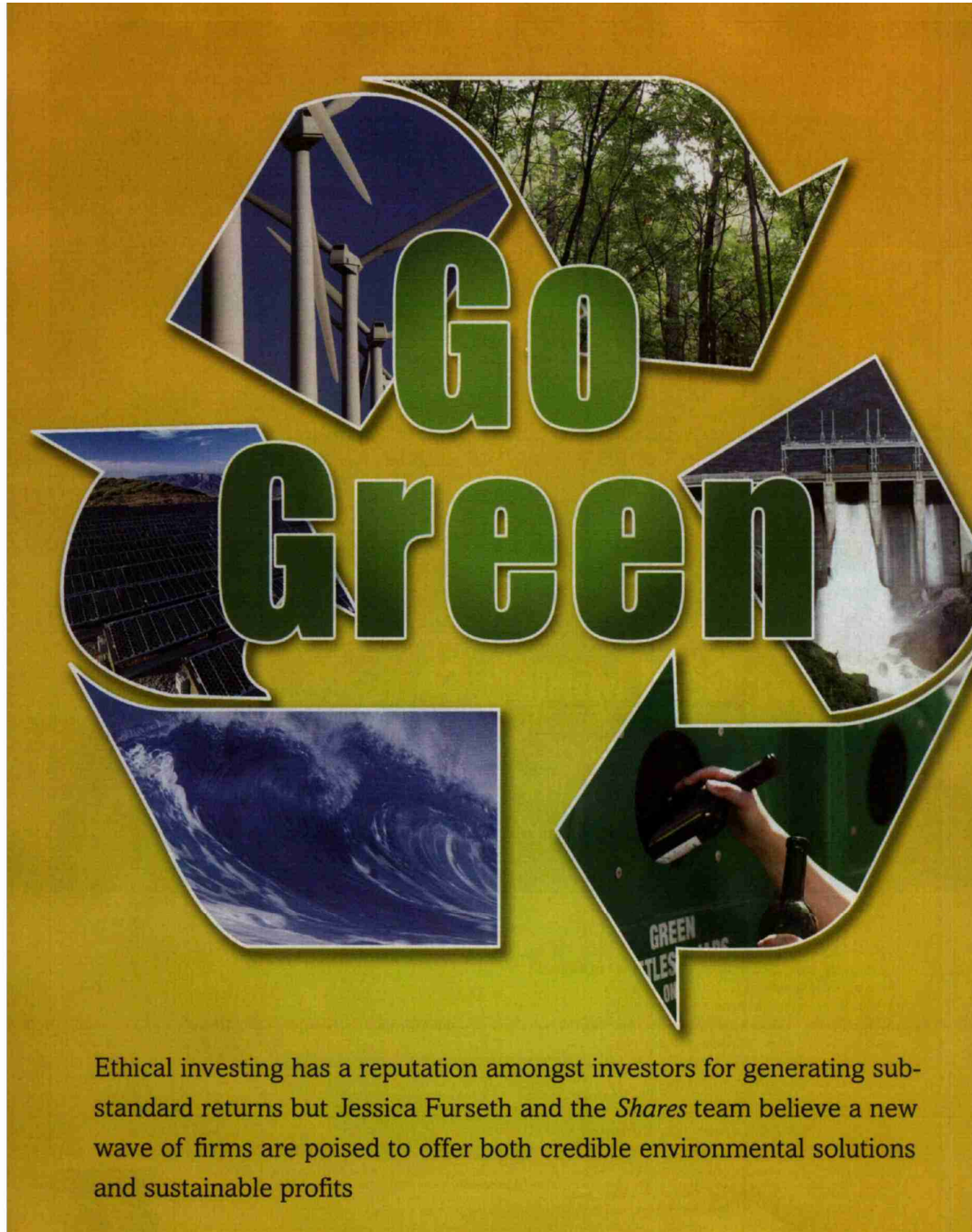


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KREAB & GAVIN ANDERSON
WORLDWIDE



Ethical investing has a reputation amongst investors for generating sub-standard returns but Jessica Furseth and the *Shares* team believe a new wave of firms are poised to offer both credible environmental solutions and sustainable profits



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ith the EU summit on climate change in Copenhagen less than a month away (6-18 Dec), alternative energy sources and the fight against carbon emissions are both back at the top of the political and economic agenda. For investors this means taking a fresh look at green and ethical investing, because the severity of the climate change threat is now starting to really translate into action. What was traditionally a well-meaning yet hopelessly underperforming arena could well become the next big thing as a new low-carbon industry is taking shape.

There is a range of ways for investors to tap into the ethical investment agenda. One starting point is wind farm operators such as **SeaEnergy (SEA:AIM)** since the UK government is finally

putting strong drivers in place for offshore wind. Environmental consultant **AEA Technology (AAT)** is well positioned, offering its services to governments in the US, UK, Europe and China. The firm specialises in carbon management and also water quality, a field where **Modern Water (MWG:AIM)** is making a splash. **Helius Energy (HEGY:AIM)** develops biomass-fired renewable electricity plants, while technology will continue to play a significant role in tackling climate change, as evidenced by **Zenergy Power's (ZEN:AIM)** work on energy efficient superconductors.

Not every green idea will prove sustainable and some investors may want to diversify risk and take a broad, global stance through a fund. The **BlackRock New Energy Investment Trust (BRNE)** has returned 74.4% in the past five years, vastly outperforming the FTSE World Index's 15% gain through its long-term pro-environment strategy.

Big problem, big business

The outcome of Copenhagen, where world leaders will try and hash out a successor to the 1997 Kyoto protocol on climate change, is the subject of much debate, but the hope is it will result in new regulatory measures designed to drive the new low-carbon future. The UK government has already committed to generate 40% of UK energy from renewables by 2020. This is a massive ask, as the current output is only 1.8% of the total. But this is not just about climate change since energy security in an increasingly volatile world is also a strong motivator. We are already starting to see more support for measures to boost alternative energy generation, such as this summer's increase in the ROC (Renewable Obligation Certificates) scheme which means developers of offshore wind farms could be looking at potentially hundreds of millions of pounds worth of subsidies. **Centrica (CNA)** has just secured funding for two offshore wind farm projects, each expected to cost £1.5 billion, and could



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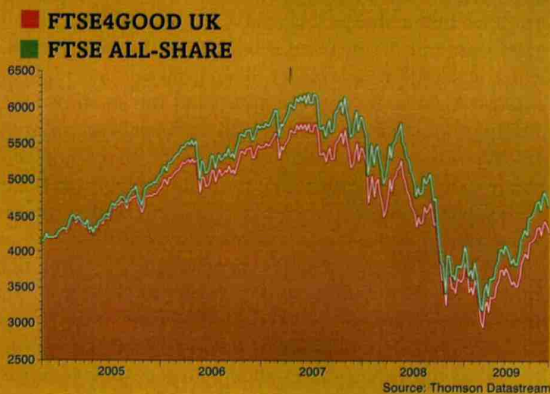


be looking at an extra 55% in subsidies for up to 25 years under the added subsidy scheme. This is also the first time wind power has attracted funding from private equity, a strong signal the industry is perceived as financially viable.

Environmental incentives were on the agenda when global governments dedicated funds through their fiscal stimulus programme at the beginning of the year, but this cash is only just starting to translate into gains for companies. As the US stimulus starts to trickle through, winners should include turbine manufacturer **Clipper Windpower (CWP:AIM)**. More than \$512 billion of the global stimulus has been dedicated to so-called green projects, according to HSBC analyst Nick Robins, but with the expected multiplier effects the total impact now tops \$1,000 billion.

Sustainable focus: FTSE4Good

The FTSE4Good indices aim to provide a standard for globally recognised corporate responsibility standards. Five benchmark indices are created from 23 markets, and the 660 members include **Aviva (AV)**, **Diageo (DGE)**, **Lonmin (LMI)**, **National Grid (NG)** and **William Hill (WMH)**. This quintet all comply with key criteria such as working towards environmental sustainability, ensuring good supply chain labour standards and countering bribery. The index excludes companies producing tobacco, whole weapons systems or nuclear power. Compared to the market as a whole, the FTSE4Good Global Index is underweight in oil and gas, industrials and consumer goods, and overweight telecoms, technology, healthcare and financials. The FTSE4Good UK Index has returned 29.6% over five years, compared to 38.4% from the FTSE All-Share Index. The FTSE4Good Global Index returned 20.5% over five years, comparing to a 24.1% return of the FTSE Developed Index.



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Wind power has been identified as the main push, but as the government estimates Britain's low-carbon market is already worth more than £100 billion a year, other focus areas earmarked for investment include wave power, low-carbon vehicles, renewable construction materials, carbon capture and renewable chemicals. 'The carbon agenda is beginning to drive business decisions,' says Andrew Shepherd-Barron, analyst at KBC Peel Hunt. Companies are looking to get ahead of the curve, either because regulation is forcing them to, they are anticipating increased regulation and want to be prepared or they think it is good business practice. 'All companies will need to employ a low-carbon strategy. This will become increasingly more embedded in the way they do business,' the analyst adds.

While the challenge to overcome climate change is massive, it also represents significant opportunity. 'This is real, hard-core capitalism. This is the biggest investment trend of all time,' Kevin Parker, head of global asset management at Deutsche Bank told the *Financial Times*. 'If you really believe we will move to a low-carbon economy, there is going to be tectonic shifts in the markets'.

'Share prices for companies in the renewable energy sector have fallen sharply over the past year, but if you trace it back over the last several years you can see there has clearly been growth,' says Piper Jaffray analyst Alastair Bishop. He points out the sector is still in its infancy: 'Most of the UK-listed stocks in this sector are small, mostly Aim-listed companies, many of them not yet profitable.' These elements make for high-risk plays at the best of times, but the recent volatility may have gone a long way to persuade UK investors to steer away from the entire sector, something Bishop believes is a mistake: 'This negative impression is not representative of the state of the global renewable industry,' he says, emphasising investors should take a global view, possibly by buying a fund. Those who prefer to buy individual shares should do very thorough research, he says, recommending UK wind power group Renewable Energy Generation, and Indian hydro and biomass company Greenko (GKO:AIM).



Ethics start to pay

'Environmental markets are set for superior growth in the next decade and beyond,' says Ian Simm, chief executive of **Impax Asset Management Group, (IPX:AIM)** which focuses on alternative energy, water and the waste management sectors. 'The world is facing increased pressure on scarce natural resources and strained infrastructure due to rising populations. Consequently there are business opportunities arising as companies can produce solutions to these problems,' he asserts. Simm emphasises Impax does not actually have a socially responsible investing (SRI) mandate: 'This for us is a business opportunity arising from growing environmental problems. We are invested in these companies because we believe they will outperform.'

The flagship fund, **Impax Environmental Markets (IEM)**, has returned 33.5% over the past year.

'We look for companies with robust markets, and we typically back companies with proven technology,' continues Simm. Companies he likes includes engineering consultancy **Ricardo (RCDO)**, power control systems specialist **Chloride (CHLD)**, composting play **TEG (TEG:AIM)**, water treatment firm **Hydro International (HYD:AIM)** and **Dialight (DIA)** in the energy-efficient lighting arena. He also highlights water and waste services firm **Pennon (PNN)** as interesting due to its strong role in recycling through subsidiary Viridor.

A study published in October by the Ethical Investment Research Service (EIRIS) suggested 90% of wealth managers believed responsible investment portfolios had performed the same or better than other investments. Ethical concerns were also higher than ever on customers' investment agenda, according to Guy McGlashan, head of private wealth management services at Kleinwort Benson: 'Responsible investing takes on a significantly greater role in mitigating risk and delivering investment goals.'

Regulation: Creating green winners



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As companies move from theories to proven technologies, alternative energy has come a long way in the past decade. But most of them are still far away from being able to compete with conventional energy, meaning they need support through regulation if they are to thrive. Regulator Ofgem (Office of the Gas and Electricity Markets) supervises the main support scheme for renewable electricity, the ROC (Renewables Obligation Certificate). The system obliges companies to generate an increasing amount of electricity from renewable sources, giving a financial boost to those who comply and penalising those who do not. The scheme makes renewable energy generation more profitable as the certificates have an additional value over the price of electricity. The ROC price is reset every year although critics have pointed out the industry would greatly benefit from a longer-term ROC price as predictability would greatly ease the process of obtaining sufficient funding.

Green cars: Electric dreams

Green transportation has so far failed to live up to the hype, but this may be about to change. Municipal and commercial fleets are the target markets for minnows such as **ITM Power (ITM:AIM)** and **Proton Power Systems (PPS:AIM)**. The latter has made some progress in mainland Europe. But as the need for a national network of refilling points has held back the personal hydrogen car, many of the large vehicle manufacturers have started to refocus development programmes towards electric cars. While problems such as battery life and size still need solving, investors should bet on electric vehicles becoming a success story over the next decade. Financial aid is being offered in the US to make more fuel-efficient cars; more effective batteries are being made to support longer-life for electric vehicles; and vehicle manufacturers are racing to get products out that will form the next generation of the automobile industry. Investors should look for opportunities in lithium miners which hold the key ingredient for batteries. **Landore (LND:AIM)** is a highly-speculative buy as perhaps the only UK-quoted miner with lithium assets. (DC)



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Onshore wind companies such as **Novera Energy (NVE:AIM)** and **Renewable Energy Generation (RWE:AIM)** are among the small companies benefiting from the ROC scheme, but it also encourages bigger players to invest in green energy. Around 20% of **Scottish & Southern Energy's (SSE)** 10,700 megawatt (MW) electricity generation capacity comes from renewable sources, much of this being wind farms. Coal giant **Drax (DRX)** hopes to derive 12.5% of its output from biofuels by the middle of next year, a not insignificant amount considering Drax supplies 7% of the UK's electricity.

The Department of Energy and Climate Change has committed to launching a feed-in tariff in April 2010. This could be a very significant boost for companies developing microgeneration technology, such as CHP (combined gas and power) units like the green 'boilers' developed by fuel cell groups **Ceres Power (CWR:AIM)** and **Ceramic Fuel Cells (CFU:AIM)**. A feed-in tariff would significantly speed up the pay-back time for such products, as owners would get paid for generating electricity in their homes and feeding this into the grid. Germany has created a large domestic market for solar panels through its feed-in tariff, reflected in unit sales for solar technology group **PV Crystalox Solar (PVCS)**.

Green hopes for technology

George Soros, the American billionaire investor, is planning to put \$1 billion in to clean energy technologies over the next decade, and the UK's Aim market offers plenty of plays on technologies which could

just become the next big thing in clean tech. Most of them are 'jam tomorrow' stocks – at various stages of proving their technologies as being viable, commercially relevant and competitive on price. Investors can find some security by investing in groups which have attracted the support of a mature company, such as Ceramic Fuel Cells, which has a product development agreement with E.ON, or Ceres Power. Centrica's British Gas has placed a forward order to purchase at least 37,500 green boilers from Ceres, boosting the not-yet-profitable fuel cell group with milestone payments as its technology progresses. Now on the cusp of volume production, Ceres will in the future have access to the British Gas distribution network.

Contrasting with the solid-oxide fuel cells from Ceres Power and Ceramic Fuel Cells,

AFC Energy (AFC:AIM)

makes alkaline fuel cells, a simpler technology which can be assembled from very cheap materials. 'We have a number of applications in mind,' says commercial director Terry Walsh, 'but we have started by targeting applications where hydrogen is already in place'. The fuel cell creates electricity from waste-product hydrogen generated by the chlor-alkali industry, and AFC is making notable progress testing its device on site with partner AkzoNobel. The company is several years from profitability, but the stock should benefit as the group signs further partner contracts.

The special needs of the US military means it has been happy to pay **Protonex (PTX:AIM)** to develop efficient, clean and quiet power generators. Protonex is now launching its fuel cell generators commercial markets having essentially had its research and development costs funded by the US government. **Ocean Power Technologies (OPT:AIM)** has a similar relationship with the US Navy developing its wave power technology. Commercial power buoys are now in the waters outside the UK, Spain, Japan, the US and Australia.

Further punts on clean tech can be found among companies working on the next generation of energy efficient lighting, such as Dialight and **Enfis (ENF:AIM)**. Zenergy Power's (ZEN:AIM) superconductors have nearly zero loss of electrical energy, hence improving the efficiency of energy generation and distribution. **Modern Water (MWG:AIM)** just won the 2009 Aim Sustainability Award for its energy-efficient method of converting seawater into drinking water, while using minimal amounts of polluting chemicals.



Winds of change

The chart (right) shows over one-third of all new electricity generating capacity built in Europe last year was wind,



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according to the European Wind Energy Association (EWEA), more than any other source. Private equity has latched on to this trend as Guy Hands is attempting to buy wind operator Novera Energy, resulting in a strong rejection of the 62.5p-a-share offer. 'It substantially undervalues the business,' said chairman Roy Franklin, who added he was encouraged by the support from shareholders as the offer not only undervalues Novera's existing assets gives no value to its pipeline. Novera has a strong record for gaining approval for its wind farms, and recently announced a 15-year funding mandate for up to £36 million for the 22 MW Glenkerie wind farm. The group has two further consented sites and a further four in planning. Commenting on the role of regulation in running Novera's business finance director and acting chief executive Richard Round says: 'A good, strong fiscal regulatory regime which everyone understands is something banks place a lot of comfort in. The ROC regime ensures there is a natural floor to prices, so banks see wind as a low-risk industry.'

Novera is our pick in onshore wind, while SeaEnergy is the key play on offshore. With essential expertise in deep-water installation, the £29.3 million cap partners up with large power groups to take advantage of the Government's push into large-scale offshore wind. 'The offshore wind opportunity is truly enormous, with over £150 billion of investment envisaged over the next 11 years,' says chairman Stephen Remp. To date, 456 MW of capacity has been awarded to the consortium in which SeaEnergy has a 25% stake. This this could double, pending a favourable outcome of the next round of site allowances from the Government, to be announced by the end of the year. ■



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Wonderful Copenhagen: Emissions trading

The Copenhagen summit has the potential to make or break the EU's emission trading system (ETS), the troubled cap-and-trade scheme established under the Kyoto protocol in order to co-ordinate the climate fight. Under the ETS scheme, member countries hand out pollution permits to companies which can sell unused permits if they reduce emissions, creating a financial incentive to do so. But over-allocation of permits led to a collapse in the carbon price, meaning it no longer acts as a strong motivator to cut pollution.

'The scheme needs to be tightened up,' says KBC Peel Hunt analyst Andrew Shepherd-Barron. But politicians have been very reluctant to do this, he acknowledges: 'There has been constant undermining of the scheme.' The European Commission is currently trying to pass proposals to expand the scheme and make it more efficient. **Climate Exchange (CLE:AIM)** is the owner of emissions trading platform 'European Climate Exchange' while **Trading Emissions (TRE:AIM)** invests in tradeable environmental instruments. 'These companies are a good play on any political tightening,' says Shepherd-Barron. Investors bullish on the carbon price should buy these stocks as their valuations price in nothing at all beyond 2012, when the current trading system expires, according to Shepherd-Barron. If the system survives the stocks are ridiculously cheap.

This year's deal to buy EcoSecurities suggests JPMorgan Chase are carbon price bulls, having paid £122.9 million for the Ireland-based company. EcoSecurities develops clean energy projects under the Kyoto protocol's Clean Development Mechanism, which allows companies to export their efforts to cut emissions to countries where it is cheaper to do so, such as in China and India.



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Coal mining: A cleaner dirty

As coal will remain a key source of power for decades to come, considerable amounts of money have been invested in technologies that clean up the coal consumption process. Coal-to-liquids converts coal into more environmentally clean energy sources including gas and synthetic fuels. It produces less sulphur and nitrogen oxides and up to 20% less carbon dioxide per unit of power than a standard coal-burning power plant. Carbon emissions can now also be captured and stored underground, making the consumption cycle even more environmentally-friendly. Investors should buy **Altona Energy, (ANR:AIM)** which is working with a Chinese group to develop a huge coal deposit in Australia. It hopes to produce 10 million barrels of coal to liquids and generate 560 megawatts (MW) of power per year. Also worth a punt is chemicals tiddler **Oxford Catalysts (OCG:AIM)**, which recently signed an agreement with Portuguese energy giant SGC to fund the commercialisation of its coal-to-liquid technology. (DC)

AEA Technology (AAT) 30p

+ BUY

Both the public and private sectors are making a serious stab at addressing environmental problems, providing significant business opportunities for consultants such as AEA Technology. The group should benefit when the green parts of the \$787 billion US fiscal stimulus programme feed through to the market, as a stronger push in the US should compensate for expected cutbacks in the UK public sector. (DC)

BlackRock New Energy Investment Trust (BRNE) 42.7p

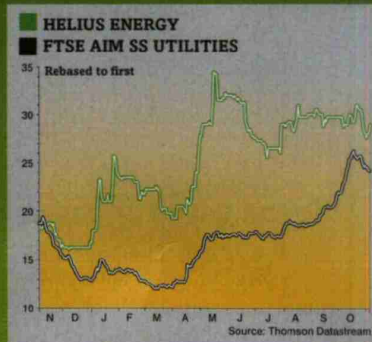
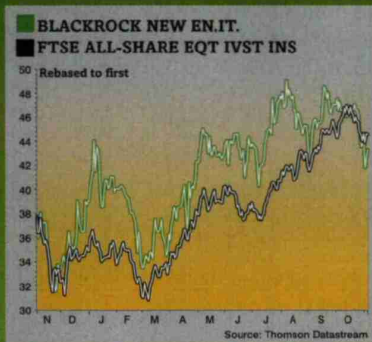
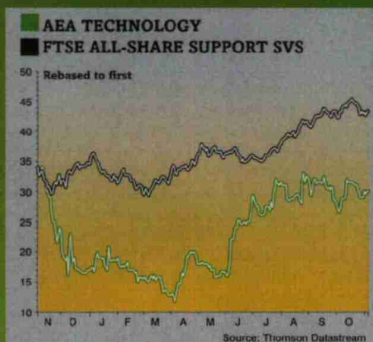
+ BUY

Taking a long-term, global view on alternative energy and green technology, the BlackRock New Energy investment trust has returned 74.4% over five years. Managers Poppy Allonby and Robin Batchelor supervise £119 million in assets, with key stakes in American Superconductor, Spanish utility Iberdrola, Denmark's Vestas Wind Systems and Spanish wind power play Gamesa. (JF)

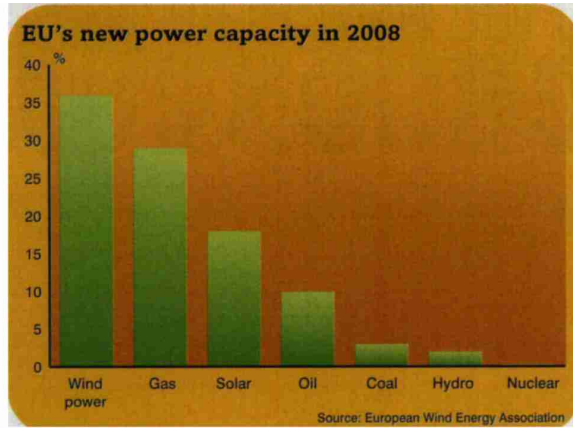
Helius Energy (HEGY:AIM) 28p

+ BUY

Helius develops biomass-fired renewable electricity plants, and this year sold its first 65 MW project to RWE Innogy, for £28.1 million cash plus 13% of the plant's profits over 24 years. The resulting £24 million in cash provides three years of funding for Helius, as the group moves towards its aims to run its own biomass portfolio. (JF)



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Modern Water (MWG:AIM) 62p **+ BUY**

The process of desalinating water uses 30% less energy with Modern Water's methods and also significantly reduces pollution by eliminating the use of chemicals. The Gibraltar plant is up and running and a site in Oman is in final commissioning stages. Desalination is a growing industry as drinking water grows more scarce and Modern Water's solution can also be retrofitted onto existing plants. (JF)

SeaEnergy (SEA:AIM) 42.7p **+ BUY**

SeaEnergy holds 25% in two of the largest scale offshore wind projects in Scotland, with 456 MW of capacity secured to date and further bids pending. The group should have the technical expertise and key partnerships in place to keep attracting funding, placing the £30 million cap in a sweet spot as the offshore wind industry gathers critical mass. (JF)

Zenergy Power (ZEN:AIM) 139p **+ BUY**

A developer of highly energy efficient superconductors for industrial uses, Germany's Zenergy has announced the installation of the world's first superconducting hydropower generator: the 1.7 MW project will go ahead in an E.ON power station in 2010 and be responsible for powering over 3,000 homes. Advanced talks with potential customers in a range of industries offer further encouragement. (JF)

