



Illustration: Fintian Taité

Eddie Hobbs shares his stock tips for the new energy era

EDDIE'S ENERGY SECRETS

Regular readers know that, since the launch of *You & Your Money* over a year ago, the magazine has been very biased towards energy and energy efficiency investments. The change over the past year has been rapid as oil prices soared and food inflation accelerated. Still, most investment houses, the mainstream media and politicians don't quite get it, relegating energy to just another theme in a long list. The tipping point is getting ever-closer, though: soon, oil prices will rise to a level to finally convince the majority that energy (and its flip side, CO₂ emissions) is the single greatest theme of our times. There's money to be made by getting waisted high in investments that surf the energy megatrend. Many of our regular readers have come to us, though, wondering how exactly a novice investor can get started in this area.

You can buy into funds that take the guesswork out of what to buy, and many have already been covered by *You & Your Money*. Alternatively, you can concentrate on specific companies by buying their shares on stock exchanges. You don't need to be loaded to start investing in shares, or a guru either. Some of the tips on these pages should help get you started.

This month, I'm identifying companies – very big players and higher-risk emerging small firms – that appear well positioned in their sectors to benefit from the forces now unleashed in world energy and efficiency markets. You should view this as raw material, a starting point to examine value, taking care not to buy at inflated peaks in share prices. Armed with the company name or stock exchange symbol (ticker) you can get brief snapshots of analysis, performance and prices by visiting sites like Reuters.com, or you can ask a full service stockbroker to dig out what it has on the companies you've listed. At worst you'll get research from platforms used by professionals, like Bloombergs. At best you'll get the latest in-house papers written up by energy analysts. So what are the interesting sectors and why, and who are players?

Oil and Gas

It stands to reason, you might think, that buying into oil majors who are making vast profits on rising oil prices is the way to go but the international oil majors like Royal Dutch Shell and Exxon Mobile play second fiddle to national oil companies, who

account for 13 of the largest players in the game. Most oil comes from the Middle East and two thirds of it is in the hands of Muslim countries stridently opposed to US hegemony. Oil majors who collectively only control a quarter of oil supply will be squeezed in the depletion game. The only exception is multi-award-winning Brazilian company Petrobras (NYSE:PBR). Not only is Petrobras sitting on a giant new oil field estimated to greatly increase its oil flow, but it's the world's biggest biofuel producer in a country that's spent over 30 years and plenty of cash becoming energy

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independent. Petrobras biofuel, added to petrol, is pumped into nearly half of the Brazilian car fleet and stands to grow strongly in value as oil prices rise.

For diversification, I think it's better to focus further down the food chain to refiners of heavy sour crude oil and on drillers, who will earn ever-larger revenues to drill more difficult offshore locations as desperation sets in to replace declining reserves. Transocean (NYSE:RIG) is a \$45 billion deep water drilling specialist that has a large fleet of offshore drilling platforms. Others worth exploring are Nabors (NYSE:NBR), a leader in land drilling valued at \$12bn, and Noble (NYSE:NE) valued at \$17bn for offshore.

For companies that supply oil well services, the giant in the game is Schlumberger (NYSE:SLB), a company valued at over \$120bn that provides management, discovery and seismic services. Valero (NYSE:VLO), valued at \$24bn, is the largest refiner and retailer in the US and Tesoro (NYSE:TSO) is the next largest with a valuation of \$3.4bn. Both have seen recent price falls. Technology specialist Sulphco (AMEX:SUF) is a small, highly-speculative play on a breakthrough in ultrasound that lightens heavy crude underground, improving its value and

recoverability. Valued at \$300m, its shares have fallen from a high of close to \$10 last autumn.

Encana (NYSE:ECA) valued at \$69bn is the largest natural gas producer in North America, while Air Products and Chemicals (NYSE:APD) is a top supplier in industrial, medical and speciality gases. It has a beefy equipment business to boot, serving oil, power, food and healthcare industries. South African company Sasol (NYSE:SSL), while producing both oil and gas, is also a world leader in synthetic fuels.

Solar and Wind

Renewable energy growth is fast paced as demand rises for wind turbines and solar technologies, especially driven by CO₂ emission targets and other government directives, with Europeans continuing to set the standards globally. The scope for growth is vast even though, after a period of blistering growth, prices are high. Renewable energy still only accounts for less than one per cent of the world energy mix so don't expect a tail-off to maturity for many years to come. Wind energy, which is growing at a rate of nearly 30 per cent each year, has been led by Europe – especially by Germany – but is now gaining momentum in the US.

Danish company Vestas Wind Systems (CPH;VWS), is valued at €12.1bn, and is the largest supplier of wind turbines in the world. It also runs over 35,000 wind turbines across a vast array of countries. Spanish company Gamesa SA (GAM.MC) is the second largest wind turbine manufacturer, valued at €8bn, and has solar power assets too. Zoltek, valued at \$1bn and quoted on the NASDAQ (ZOLT), is a US company set to benefit from rising prices in the wind turbine sector: it supplies special carbon fibres to manufacturers like Vestas and Gamesa. Another one to check out in the developing world is Indian wind power player Suzlon Energy, which is quoted on the National Stock Exchange of India (SUZL.NS) and is valued at about €6bn.

Technology developments in photovoltaic cells are moving quickly to create ever-greater efficiency in capturing a tiny share of the free energy hitting the planet from our biggest source of energy: the sun. Worldwide growth in solar energy is eclipsing wind growth at 50 per cent a year. China looks set to become a major user, leading some analysts to estimate that



solar power will make up 20 per cent of global power supply over the next three decades. Energy Conversion Devices (ENER) is a full service player in the US, providing everything from design to installation. It's quoted on the Nasdaq and valued at \$2.5bn. Meanwhile, First Solar (FSLR), which launched on the Nasdaq at the end on 2006 and is valued at \$20bn, is a specialist in thin-film material for the solar sector. Open Energy Corporation (OEGYMU) is a tiny company (valued at €33m) with big ambitions for its patented solar roof tile technology and is quoted on the Munich Stock Exchange.

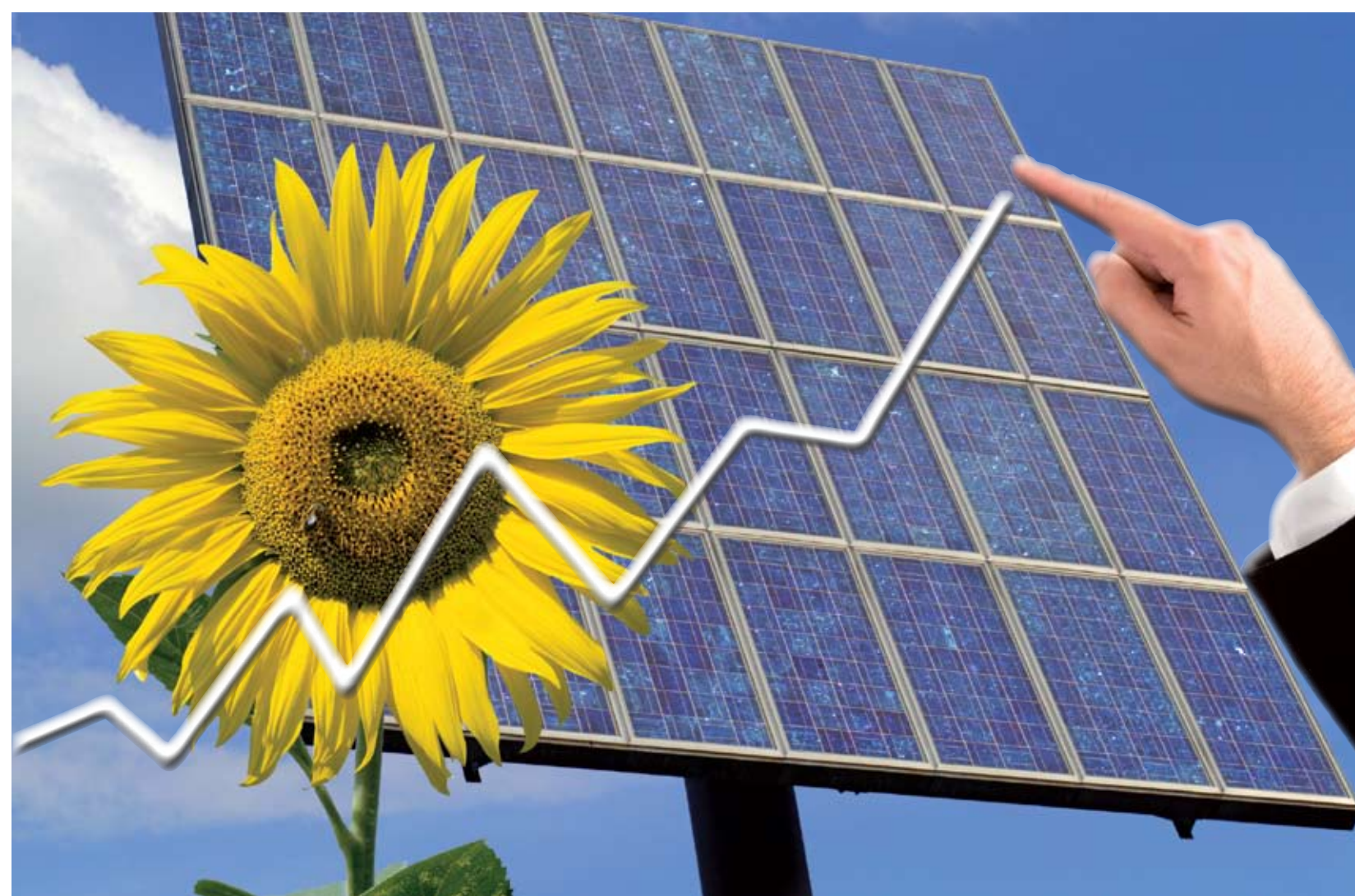
Biofuels

Biofuels have hit controversy by contributing to food inflation as farmers switch from feeding people to feeding the cars they

drive. Biodiesel is made from vegetable and animal fats and ethanol is made principally from corn. The low energy return on energy invested for biofuels, coupled to the problem of the land needed to create this fuel, will place a restriction on the biofuel market but growth opportunities still exist. Although the field is still embryonic, producing biodiesel from algae looks promising, since it can be accomplished in ponds under sunlight. Investment opportunities in this area are limited to tiny companies on the over-the-counter market like Valcent Products (VCTPF), which specialises in producing the algae reactors and sells at 60 U.S. cents a share. In Europe, the GreenShift Corporation (GERS) is quoted in Berlin and has a patent to produce algae from exhaust gases. Valued at just €8.5m, the company is trading at about six cent a share. Andersons Inc, valued at \$728m, is quoted on the Nasdaq (ANDE) and is the largest producer of corn ethanol in the US.

Geothermal

Another growth sector in renewable involves drilling to depths of 3,000 metres to turbines powered by super-heated steam from cracks in the earth's crust. Much of Iceland's electricity is produced from its surface level geothermal springs. Plans are in place to export excess energy



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from there to Europe via Ireland, using interconnector technology which is itself improving in efficiency. But the largest producer of geothermal power is the US with over 200 plants. Growth in US geothermal power can be accessed by looking into companies like Ormat Technologies (NYSE;ORA) which, valued at \$2.2bn, has 10 plants and is set to build the world's largest geothermal plant in Indonesia. US Geothermal (HTM) is a well financed company building up a large portfolio of geothermal leases in the US. It's quoted on the AMEX and valued at \$165m. Raser Technologies (NYSE;RZ) is a \$600m business that specialises in

electromagnetic systems for hybrid cars, but is also building up a wide portfolio of leases on sites with high geothermal potential.

Nuclear

Growth in nuclear power investment is a given as more countries follow France, where three quarters of electricity generated comes from its nuclear industry. The sector suffers from anti-nuclear lobbies, a long lead-in time to construct plants and, ultimately, tightness in the supply of uranium 235. Nevertheless, demand for more nuclear plants and the replacement of obsolete plants is creating growth in the industry. Valued at \$14bn, the largest uranium mining company in the world is Canadian: the Cameco Corporation (NYSE;CCJ), controlling about a fifth of the market. At the other end, micro-miner Uranerz Energy Corp (AMEX;URZ) specialises in exploring for new discoveries of high grade uranium and is valued at \$177m.

THE BEST DEALS FOR INVESTING IN SHARES

Hunting online is the cheapest and easiest way to invest in shares. Useful sites include www.charlesschab.com, www.tdameritrade.com and www.etrade.com, all of whom allow deals from as little as \$6.99 (€4.72) and will provide a wealth of information about companies at your fingertips. If you want to deal in Irish shares, the cheapest options are again online. www.sharewatch.com charge fees ranging from €19.95 a deal – or 0.4 per cent if you want to trade by phone. Most traditional Irish brokers also offer online trading deals.

Railways

With a gallon of gas hitting the four bucks mark, US drivers are taking to smaller cars and shorter journeys and the railway industry is seeing growth. You can tap into US rail by examining opportunities to buy into rail giants like Union Pacific (NYSE;UNP). Valued at \$40bn, Union Pacific

INVESTING IN SHARES: THE TAX

STAMP DUTY

Stamp duty of one per cent takes an immediate chunk out of your future gains when buying Irish shares. Overseas Governments such as the UK and US take a much lower percentage.

CAPITAL GAINS TAX

If you make money on shares, you'll have to pay tax on the profits. The rate is 20 per cent but there are allowances and exemptions outlined by the Revenue Commissioners. Check www.revenue.ie for details.

DIVIDEND WITHOLDING TAX

Tax is automatically deducted from dividends at the standard tax rate before you receive it. It's a pain, but at least it's not too much hassle!

is a company where Warren Buffet's very-shrewd Berkshire group has a big stake. Norfolk Southern (NYSE;NSC), valued at \$24bn, may also be worth a look.

Electric Cars

Technology breakthroughs have improved battery efficiency to store electric power, and allowed lighter plug-in hybrid electric vehicles (PHEVs) to be built using carbon fibre instead of metal.

If things continue in this direction, electricity is set to replace oil as the dominant motoring fuel – not hydrogen, which delivers a poor energy return on energy invested. Until the breakthroughs come, the short-term winner is the hybrid engine where the giant Toyota Motor Corporation (NYSE;TM) leads the field.

Oil isn't going anywhere quickly as the dominant source of global energy. Even allowing for breakthroughs and vast investment, alternatives probably won't account for more than a third of energy supply at best by 2050. Meanwhile you can rely on the paradox that improvement in efficiency and new supplies will simply lead to more consumption. Whatever way you slice it, savvy investment across the energy story should yield strong returns over the long-term. It's not going to be smooth and economic turbulence as oil prices oscillate is likely. But instead of moaning about lifestyle changes, the high cost of home heating and travel, you can at least make some money from the energy