

## **Osborne turns carrot into stick**

Chancellor George Osborne's Spending Review shows that his environmental intentions are honourable. The Department of Energy and Climate Change (DECC) has received the largest-ever boost to its capital spending plans – 41 percent growth over four years. By contrast, the Department for Environment, Food and Rural Affairs (DEFRA) has to shrink its capital budget by 34 percent.

Trumpeting the delay of the Carbon Reduction Commitment by a year (maybe because loads of bigemitting companies haven't got their heads round the necessary bureaucracy yet), he slid in the fact that all revenue from carbon purchases is now



going to the Treasury instead of back to the most-improved companies. This turns it into a rather handy billion pound carbon tax and all he has to do to get more is to increase the price per ton or impose the regulations on more companies.

Most of the measures are aimed at improving energy efficiency, increasing supplies and reducing carbon, all of which are worthy goals. However, not a lot is being done about waste, apart from cancelling seven waste-topower plants. And, despite the supposed rush to green, train fares are set to rise and bus subsidies to be cut.

*Turn to pages 18-19 to read a complete rundown of the Chancellor's green intentions.* 

## Royal Society comes clean

The Royal Society has published a new layman's guide to the science of climate change. And this one shows a welcome degree of humility (its predecessor didn't). It identifies where the science is well established, where consensus is broad but debate continues, and where substantial uncertainty remains.

B&GT isn't madly interested in the minutiae of scientific and political debate, though, because it really is like "fiddling while Rome burns". Why delay decisions to reduce your environmental impact or to help others reduce theirs? Climate change: A Summary of the Science http://royalsociety.org/climate-changesummary-of-science/

#### By sheer coincidence ...

The first issue of *Blue & Green Tomorrow* appears just two days before National Ethical Investment Week. To quote from its website, "NEIW brings together Advisers, Charities and Trusts, Financial Organisations, Faith Groups, NGOS and Community Groups to spread the word about green and ethical investing." Just thought you might be interested. *neiw.org* 

#### A responsible new voice in British media

Welcome to the first issue of *Blue & Green Tomorrow*. We want the world to be as blue and green tomorrow as it was yesterday. And we believe that everyone can play a part. Not by going back through misplaced nostalgia to some bygone age, but by striding out to a new future in

which we take advantage of new technologies to improve the food we eat, the air we breathe, the water we drink and the land we live on.

#### Cooking with your own gas

Twenty-three days after you flush your loo, some of the content pops out of your cooker in the form of biomethane gas. How about that for a neat bit of recycling? Didcot has the honour of being the first sewage works to feed this kind of gas into the national grid. The three companies involved in the Didcot project, British Gas, Thames Water and Scotia Gas Networks, expect to roll out their processes across the country. Competitors are already well advanced with their own schemes, but 200 lucky customers in the Didcot area beat them to the punch.



#### TRAVEL ENERGY NEWS MONEY SHOPPING Why not take your A clear-eyed look at From serious to silly, Get the lowdown on Christmas presents stories that make the next luxury winter responsible investgetting the best green that make everyone break in the UK? p.13 planet a better place. ment to suit you. p.24 energy deals. p.10 feel good. p.16

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#### Why Blue & Green Tomorrow?

We're indebted to Douglas Adams for writing *The Hitchhiker's Guide to the Galaxy*, in which he describes Earth as "an utterly insignificant little blue-green planet". Now you know where the title comes from ...

Our magazine is for thinking people who'd like our planet to be as blue and green tomorrow as it was yesterday.

Editor David Tebbutt (editor@blueandgreentomorrow.com) Subeditor Lori Heaford Design inkENGINE.co.uk – Dominic Kershaw Publisher Blue and Green Communications Limited, London – Simon Leadbetter, 6 Peal's Court, 9–10 Colville Terrace, London W11 2BE (publisher@blueandgreencommunications.com) Advertising advertising@blueandgreentomorrow.com Production BGP Limited, Bicester – Marcus Dobbs Distribution Jordans Limited, Oxford – Jan O'Shea

### EDITORIAL

Hello. Welcome to *Blue & Green Tomorrow*. We called it this because we want our planet to be as blue and green tomorrow as it was yesterday. And we believe that you, our readers, will have a huge impact on this by pursuing your own enlightened selfinterest.

At home, at work and at play, you can always make choices. The sum total of the positive choices made by all of us determines the sort of world we'll live in tomorrow. Choices in favour of clean energy, low carbon goods and wise investments will help make the world a better place rather than one spoiled through pollution and waste.

Of course, nothing's perfect, and we all know we can always do better. But it's still better to do something than nothing; and it's better to start doing it now rather than wait for climate scientists and politicians to settle their interminable differences.

At heart, *Blue & Green Tomorrow* is an optimistic magazine. We believe that the world is full of opportunity, for invention, manufacture and services around sustainability. The word is boring, yet it's probably the right one. We have only one Earth. We can plunder and spoil it and make it uninhabitable for the billions of people who live on it. Or we can reduce our collective footprint while shifting our economic activity in the direction of doing good instead of harm.

Many companies are waking up to the desirability of a "triple bottom line", or "people, planet and profit" as it's sometimes called. This isn't because they've had a Damascene conversion from needing to make money. It's because their customers are increasingly asking them to behave themselves. Or else.

Some organisations resort to "greenwash" to pretend they're doing things right; but, in this world of instant communications and social networking, none can get away with it for long. And the backlash, when it comes, makes companies realise that deception is no longer a marketing option.

Blue & Green Tomorrow rejoices in good news, but won't shrink from bad. We believe that the sustainability space holds more of the former than the latter anyway. Often bad news turns out not to be news at all, just vested interests trying to capture some juicy headlines. We'll steer clear of that kind of nonsense, giving you instead a diet of relevant, interesting, informative and enjoyable news and features.

Of course, if you don't like what we're doing, or you'd like us to do something else, please drop us a line. We'd love to hear from you.



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## READERS' EMAILS

As this is the first issue of our magazine, we thought we'd share with you some feedback from our recent pre-launch surveys while we wait for your emails to flood in. In future, we'd love to publish your letters. If you get the urge, please email

editor@blueandgreentomorrow.com

#### Are you balanced?

"I think your magazine is an interesting concept. I've often found magazines in this space are either too preachy or too opportunistic, i.e. seeing it as a money-making opportunity rather than a serious issue. If it's genuinely about a real debate about environmental and ethical issues, rather than an argument, between light-sceptics like me and the true-believers, without all the abuse that normally accompanies this debate, then I'd be interested in reading your magazine. I wish you luck and hope you'll live up to your word on being balanced." Businessman (M), Bristol

#### **Not guilty**

"I try to live ethically. I run a small business, have a young son, gave up my car two years ago and think I do most of

the things I can do to make as little impact on the world as I can, including holidaying in the UK. But I'm busy and have to make compromises all the time, and sometimes the non-green choice is just easier or cheaper. Whenever I read 'green' titles I feel guilty I'm not doing enough and what little I do will make no difference as I'm just one person. I'm looking forward to getting your magazine if it lives up to its aspiration of not making me feel guilty and showing simple things I can do to live more sustainably." Entrepreneur (F), Notting Hill

#### **Pointless**

"There is no room for more than one ethical voice in British media. While I applaud your ambition I don't really see the point of such a title."

IFA (F), Edinburgh

#### Last throw of the dice?

"All my life I've tried to do the right thing by the world I live in and the family I nurture. Whenever I have a bright idea for making my savings safe they either get taxed or the returns suddenly shrink. If I look at my lifetime earnings and what I'm now left with, you'd probably call me a "comfortable failure" certainly in a financial sense. "Perhaps I've been so busy looking at ways to protect or grow my money while giving my family a good life that I lost sight of what's important. And if what's important is

making the planet more habitable and growth (I hesitate to use that word) more sustainable, I should have been putting more of my money to good work. This has never really occurred to me before; at best, I've avoided investing in obviously odious companies.

"Your magazine appears to offer me exactly the information and guidance I'll need when trying to come to terms with the new realities. And, who knows, once I get a good sense of the landscape, I might just see if one of your IFAs can help me rebalance my savings and investments. "I can't wait to see the first issue. And I wish you every success."

Retired Company Director (M), Kent

#### **Bravo**

"It's a very good idea." IFA (M), Southampton

#### Sick of greens?

"I'm sick to death of people like Al Gore telling me off for my carbon footprint when he spends his time jetting round the world telling everyone off about their carbon footprint. This entire debate is dominated by hypocrites and green fundamentalists. If you're going to be a sane voice that looks at the evidence and focuses on how we maintain economic growth rather than the dogmatic stone-age beliefs of do-gooders I'll read your magazine. I'll judge you by what you do, rather than what

#### you claim to believe in." Venture Capitalist (M), London

#### Let's not wait

"There is no greater issue facing mankind than the one you will be addressing. The current economic woes, concerns about terrorism are all going to seem like side shows to our children and grandchildren. When wars in which we will be involved are being fought over water supplies, the collapse of biodiversity (bees, anyone?), the collapse of harvests globally (bees, anyone?), and more locally, increased flooding and destruction in low-lying counties on the east coast, then people might finally sit up and listen. We have one planet and we've been messing over too short a period to know the long term effects. No-one 'knows' the effect of our behaviour. Let's leave 'knowing' to the world's religions and work on the balance of probability. On the balance of probabilities does anyone in their right mind think that if we continue to dump toxins into the land, sea and air and take resources from the earth at a faster rate than they can be replenished are we going to end up in a good place? Are our children going to thank us for blaming it on the science? Your new biggest fan."

Retired Geologist (F), Norwich

#### Tell us what you think

@

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#### NEWS

## Hello growth, goodbye world?

Country leaders want growth and they want to tackle climate change, but the two goals are incompatible. At least, so says Jerry Mander (yes, it's his real name) writing in The Guardian. As he puts it, "Whether it's the political left or right, Obama, or Cameron, or Sarkozy, or Putin, or Wen, or Harper or Miliband or Gingrich or Palin, or any political candidate for any office, they're all talking about the necessity to stimulate growth." This mostly means consumption of raw materials and energy with an accompanying emission of waste and pollutants.

Professor Tim Jackson from the University of Surrey brought the same point home in his recent TED lecture: "We spend money we don't have, on things we don't need, to create impressions that won't last, on people we don't care about."

Maybe we could all ask ourselves a simple question before sticking our hands in our pockets. "Does what I want to buy really make life better?" While this is undoubtedly sensible, it'll send shivers down the spines of politicians and captains of industry.

*Tim Jackson's economic reality check – YouTube* 

#### **Google gets windy**

Google, Good Energies and the Marubeni Corporation are backing Trans-Elect in its aim to deliver wind energy to the mid-Atlantic states of the USA. Energy from offshore turbines is fed into the grid, the key element of which is the transmission backbone that runs along the coast. This can come ashore at convenient points to connect to the national grid without putting undue pressure on any individual part.

Plans have to jump through

an enormous number of regulatory hoops before work can start, but the benefits are fairly undeniable in terms of clean energy, boosting the security and reliability of the energy supply, and minimising the environmental impact of landfall sites.

http://atlanticwindconnection.com

#### How green is the Prince?

Prince Charles has written an



eco-book called Harmony, in which he tells us all what we should be doing differently. Not him, though, because he's already different enough. The book is, apparently, goldtooled and richly illustrated with glossy pictures on almost every page, unless you buy the Kindle version, the CD or the audio version. But they wouldn't look so impressive on the coffee table. How can you be serious about the environment and shove out such an ostentatious tome? I wonder whether co-author Tony Juniper, ex boss of Friends of the Earth, had a chance to whisper in his ear? And what on earth made them go to Blue Door, a publisher that publishes only fiction?

Talk about mixed messages. The tragedy of all this is that he talks a lot of sense.

#### **Energy from the sky?**

Stanford University's Airborne Wind Energy Conference, all about capturing the energy of atmospheric winds, sounds like a lot of fun. From automatic kites that pull on their tethers to drone-like aircraft with a built-in turbine, the whole idea is to get things up in the air where winds blow stronger and then get the power down to Earth where it can be used.

The industry isn't yet even in its infancy, with most of the designs existing inside computers or as small prototypes. Winds are certainly stronger up there, but the thought of tethers snapping and craft breaking free worries some. A steel kite or a drone equivalent could do some real damage if it landed in a built-up area.

One design that tries to sidestep this is a helium-filled doughnut with a turbine in the middle. It still needs an Earth tether and, were the helium to leak, its return to Earth could be unpleasant.

But, having said this, the engineers working on these things aren't daft. They will no doubt have considered the downsides. Won't they? Airborne Wind Energy

Conference awec2010.com

#### Trash to cash

The True Green Energy Group (TGEG) has started to build its first Biosphere Green Energy System in San Fernando Pampagna in the Philippines. Built next to a landfill site, it will become operational next year. And many other installations are expected to follow in the Philippines, in Brazil and in other countries.



The system cleanly converts waste into energy, biofuel and other by-products. Each of the three steam turbines outputs 2.5 megawatts per hour. To do this, the recycling facility gets through 750 tons of waste per day.

The operators either get their raw material for free or they're paid tipping fees to remove it. Not a bad business model at all. The people who could be said to miss out are the children who used to "work the dumps". Ronald Flynn, founder of TGEG, says: "The most important issue is to help the children who are working in these dangerous landfills. We must give the scavengers' mothers and fathers jobs so they can then support their children."

If you're interested you can see an animation of the process at tgeg.asia/ howthebiosphereworks.php - No need to log in; just hit the play button.

#### When shrill backfires

Some members of the green lobby come across as rather "holier than thou". They can't understand that this probably drives away more people than it attracts. And no one demonstrates this better than Richard Curtis with his (deliberately?) ill-conceived mini-movie about reducing carbon emissions.

You've probably read about it: anyone who doesn't wholeheartedly volunteer to reduce their emissions gets blown up. Their school friends or work colleagues are splattered with their remains.

It is truly vile, and has tarred carbon evangelists with a particularly nasty brush.

The question is, was it deliberate? No sooner had it been released than it was being mentioned all over the place. To add to the drama, the company withdrew it from YouTube when it saw the public reaction; but then issued an apology mentioning it wasn't stopping other people from uploading the film.

We've deliberately not named the movie or the company, although you can find them easily enough if you want to. Just follow the trail of gore (no pun intended).

#### **CANADA - Ontario**

Ontario has decided to subsidise firms that are installing solar and wind energy systems. This has outraged some of the country's biggest trading partners, not least the USA, the EU and Japan, which have complained to the World Trade Organization that it violates international trade agreements.

The spat centres on Feed-in Tariffs in Ontario, which are granted only to users of primarily locally-made equipment. Samsung has immunised itself from the fuss by agreeing to set up four manufacturing plants in Ontario.

#### USA - California

Imagine a fuel cell the size of a parking space – it could power a building or a fleet of cars. Bloom Energy Servers, usually called "Bloom Boxes", do exactly this. Based on solid oxide fuel cell technology, the cells are cheaper than hydrogen fuel cells. As well as generating electricity, they can act as storage batteries.

Adobe Systems has installed 12 of these servers, generating 1.2 megawatts of electricity and protecting the campus from cuts and brownouts in the grid. Fuelled by biogas (they can use liquid or gas, fossil or bio), they are also expected to cut the company's carbon footprint by 121.5 million pounds over 10 years.

#### **USA - Connecticut**

If SunHydro and Proton Energy Systems have their way, drivers will be able to travel almost the length of the east coast of America "on sun and water". The first experimental hydrogen filling station has just opened in Wallingford, Connecticut, marking the start of what they're calling the "East Coast Hydrogen Highway".

Why "sun"? Because the filling station is solar powered. Why "water"? Because the hydrogen fuel is derived from on-site water at the filling station using Proton's advanced exchange membrane.

#### MEXICO

After resisting genetically modified (GM) corn for decades, Mexico has relented and passed laws to allow small-scale pilots, following tests by Monsanto and Pioneer Hi-Bred (part of DuPont) in a remote area in the north of the country.

While self-sufficient in terms of white corn, Mexico currently imports around 10 million tons of GM yellow corn for animal feed. It would prefer to grow its own, but many fear this might lead to cross-contamination and the destruction of native seeds that have been passed down through generations.

#### UK - Severn Estuary

The UK Government has decided against funding the proposed 10-mile long tidal barrage across the estuary of the River Severn, which was expected to deliver 5 percent of the UK's energy needs. It was expected to cost £30 bn, an excessive sum in these straitened times for the UK. The decision wasn't just about money, though: environmental campaigners opposed the scheme because of its impact on wildlife; while, as regards learning, a smaller barrage would serve equally well to develop expertise.

The area around the Orkney Islands, in the North Sea just off Scotland, might be a much better location from an energy point of view. However, it would put the rest of the UK in thrall to Scotland for a goodly chunk of its energy needs.

#### **NORWAY - Mongstad**

Statoil has warned carbon storage pioneer Norway of the health and environmental risks of one of the chemical processes used to capture carbon from flue gases in its gasfired power plant in Mongstad. The warning is connected with the use of amines, which are derivatives of ammonia that can become dangerous when mixed with other substances. In this case, suspicion falls on nitrosamines. The Norwegian Government is considering possible solutions, although any such decision might delay the planned 2012 start date.

Independent experts from Bellona, SINTEF and Aker Clean Carbon have studied Statoil's submission to the Petroleum and Energy Ministry (MPE) and can find no evidence for Statoil's claims. Bellona is concerned that Statoil may be sitting on key information.



#### HUNGARY- Ajka

A by-product of aluminium production is a highly toxic alkaline mud. No one knows what to do with it, so it is stored in tanks. The one in Hungary was an above-ground reservoir, which gave way in one corner. This sent tons of red sludge coursing through villages, across fields and into streams heading towards the River Danube, a major waterway for many Central European countries.

The Hungarians worked feverishly to stem the flow and neutralise the alkali with clay, vinegar and gypsum. By the time the flow reached the Danube it had been rendered more or less harmless.

Quietly, in the shadow of the Chilean miner rescues, the aluminium plant in Hungary has reopened.

#### SINGAPORE

The International Panel on Climate Change (IPCC) has agreed to change its working practices and particularly to tighten its fact-checking as a result of errors in its 2007 report. For example, the report warned that global warming could melt all Himalayan glaciers by 2035, which, apparently, is centuries ahead of the predicted worst-case thaw.

The IPCC will also look harder at issues such as geoengineering – perhaps using chemical mirrors to reflect sunlight or fertilising seas to encourage carbon-absorbing algae growth. In short, it's going to take a broader view of such matters, including the important role that clouds play in reflecting sunlight and cooling the Earth.





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### NEWS

#### From squirt to solar

Lonnie Johnson is an inventor. He made millions from a powerful water pistol called the Super Soaker. But he's also invented a new kind of solar power electricity generator. It's silent, it creates no waste - not even water, which can corrode equipment - and it's not dangerous. According to Johnson, it's two to three times more effective at solar conversion than conventional photovoltaics and concentrated thermal power systems. If true, this could make solar energy competitive with coal, oil and nuclear power.

In simple terms, the device works by heating hydrogen to split its protons and electrons apart. The protons are squeezed through a special membrane into a chamber where they await the arrival of their electrons. The electrons, meanwhile, travel through a circuit as electric current until they're reunited with their protons in the other chamber. The resulting hydrogen is compressed and pumped back into the first chamber to complete the cycle. Read the full story in The Atlantic theatlantic.com

## Huhne breaks energy log-jam

"I'm fed up with the standoff between advocates of renewables and of nuclear which means we have neither", says Secretary of State for Energy and Climate Change Chris Huhne. Well, good for him. He might fly in the face of his political party's pledges, but then it's easy to stand up for things when you've no chance of getting power. Now he has to face the grim reality of an energy gap opening up with no credible way of closing it. Nuclear power has had to come back into play until we figure out clean and unlimited sources of energy. The only other option is to

go backwards and reduce our demand.

Britain has given the go-ahead for eight new nuclear power stations to be built close to existing nuclear power plants. All of them will be built, run and decommissioned without government money. The sites are Bradwell, Hartlepool, Heysham, Hinkley Point, Oldbury, Sellafield, Sizewell and Wylfa.

## Seven steps to green purity

Triple Pundit is always worth a visit. Nick Aster, its founder, is a new media advocate who has used his skills to build an online community around the triple bottom line: people, planet and profit.

Here's a great checklist from one of its recent postings on what organisations should aim for:

a) Zero emissions – This includes all activities that contribute to net zero emissions such as zero emission technologies, vehicles, etc.

b) Zero toxic input, output, wastes – This includes all input, output and waste materials that are toxic or are termed as hazardous.

c) Zero output/packaging waste – This means all waste is recycled where no waste ends in landfill.

d) Zero non biodegradables as input, output, waste and disposal – This means all non biodegradables are recycled as qualitative raw materials finally aiming at zero non biodegradables as input, output or waste.

e) Zero resources waste such as Zero energy buildings, etc.

f) Zero Inappropriate Systems such as environmentally unfriendly Information Technology/ systems, etc.

g) Zero product/output disposal – This means all products are recovered, disassembled, taken back or recycled. *triplepundit.com* 

#### Air kills more than cars

You've got to hand it to Arnold Schwarzenegger when it comes to grabbing headlines.

His latest claim is that "In southern California, air pollution kills more people than car crashes!" California is probably the cleanest, greenest US state. And Arnie is a strong supporter of California law AB32, which supports the reduction of greenhouse gas emissions and reduces dependence on fossil fuels. But his concerns are pragmatic. He says: "Today one in six Central Valley children go to school with an inhaler. And, nationwide, 100,000 people die every year because of pollution related illnesses. This is inexcusable."

You've only to go into the hills above Silicon Valley or Los Angeles to see the brown chemical haze that people live in at certain times of the year. Arnie's worked out that 3,081 traffic deaths in California in 2009 is fewer than the number of air pollution fatalities, although he didn't quite explain his calculations.

Another reason to keep an eye on clean energy is the number of jobs being created in related industries. California, apparently, has "more than 12,000 clean energy companies". And thousands more will materialise on the back of solar power.

Finally, Arnie points out that "America sends one billion dollars a day overseas for imported oil to countries and dictators that actually hate us!"

These are all good reasons for seeking clean energy self-sufficiency. He might be an odd cove, but he seems to have the right ideas.

## Just add wee for free travel

SiGNa Chemistry has found a cooler way to power fuel-cell bikes. Instead of storing hydrogen on the bike frame, usually somewhere you'd prefer it not to be, it uses a metal powder called sodium silicide. This has the interesting property of creating hydrogen when it gets wet.

The by-products are environmentally safe sodium silicate, which is stored in the cartridge, and water vapour. When the powder is exhausted, the cartridge can be swapped for a full one. This system probably gives electric bicycles a range of up to 60 miles - a three-fold improvement over most electric cycles today. Cartridges weigh only 1.5 lb, so if you're a cycling fanatic you get a 120-mile range by carrying a spare.

The most useful aspect, apart from range and safety, is that the cartridge isn't too fussy about where it gets its water from. To be honest, you could wee in it and it would work.

Expect shipments to start next summer.

#### 16-year-old embarrasses Government

As part of Young Rewired State 2010, 16-year-old Isabell Long measured the energy consumption of Government departments. Despite having data for just 24 days of October to compare with the whole month of September, the results are rather interesting.

The Department for Work and Pensions (DWP) managed to reduce its usage by an impressive 18 percent; while the Department of Energy and Climate Change (DECC) achieved a more modest saving of 5 percent.

But, despite repeated Government promises about lowering its own CO<sup>2</sup> emissions level a staggering 10 departments have actually managed to increase their output. The worst offenders are the Department for Culture, Media and Sport (DCMS) and the Department of Health (DH), with increases of 11 percent and 12 percent respectively. Well

## ENERGY Changing the UK Energy Landscape

Juliet Davenport, founder and CEO of Good Energy, tells how Britain can cure its addiction to fossil-fuelled power stations.



The UK has a target to meet by 2050 – to reduce carbon emissions by 80 percent of the 1990 baseline figure. Business as usual is not going to get us there; so fixing our old-fashioned energy supply systems is crucial.

We need to turn our energy systems upside down. For many generations the UK has been dependent on coal, oil and gas, with most of our energy coming from large, centralised fossilfuelled power stations. But concerns are growing, not only about the impact of fossil fuels on climate change, but also about the UK's growing reliance on imported energy – our energy security. The UK's energy of tomorrow needs to be drastically different from its energy of today.

Happily, there is an answer: renewable energy. And with our abundant natural resources the UK has the potential to lead a renewable energy revolution. As the windiest country in Europe, and with over 11,000 miles of coastline, we have instant access to an Aladdin's cave of renewable resources. Even better, these renewable resources are not only abundant, but free, too. By making the most of our wind and tides, as well as encouraging more use of solar photovoltaic and thermal technologies, we could put the UK at the forefront of renewable energy generation.

#### **UK behind in Europe**

The UK is committed to a target of 15 percent of energy coming from renewable technologies by 2020. This is equivalent to a seven-fold increase in UK renewable energy consumption from 2008 levels; as currently we generate only 2.2 percent of our power from renewables. Compare this with 44.4 percent in Sweden, 11 percent in France, and 9 percent in Germany and you get the picture. If we are to reach our target of 15% percent we have a serious mountain to climb.

And a good place to start is electricity. Our electricity demand

is going up, not down – transport technology is switching towards electric vehicles, and heating and industry are becoming electrified. Electricity demand will double by 2050 according to some forecasts; therefore it is essential that we decarbonise our UK electricity market if we want to keep the lights on.

#### **Role of consumers**

Today, electricity constitutes a third of the average UK household's carbon dioxide emissions. Switching to a 100 percent renewable electricity tariff can be a quick and easy way to reduce our carbon footprint.

Pretty much every energy provider now has a green electricity tariff. But not all green tariffs are created equal. The independent Green Energy Supply Scheme launched earlier this year guarantees the environmental benefit of our green electricity supply, in much the same way as the Fair Trade mark guarantees the ethical provenance of products we buy. It also requires energy suppliers to display their fuel mix – this percentage breakdown of all the different sources of suppliers' energy is a good indicator of companies' commitment to renewable energy.

We also need to change how energy is used in the UK. For too long we have taken for granted that, at the flick of a switch, the lights come on. But the more we can reduce our overall energy consumption, the greater the proportion we will be able to supply with renewables. Good Energy believes that understanding where our energy comes from makes us value it more and use it less.

Simple steps – like using energy-efficient light bulbs and making sure our homes are sufficiently insulated –don't only reduce energy waste but also cut costs. And it's easy and inexpensive enough to install an energy monitor – being told exactly how much electricity we're using and when is a great incentive for switching things off. Studies show that households with an energy monitor use an average of 15 percent less energy.

#### Generate our own

Once we've reduced our energy consumption and switched to a 100 percent renewable tariff, what can we do next? How about microgeneration?

Individuals and communities installing small-scale renewable technologies, such as solar panels and small wind turbines, have an important and growing role to play in the UK's renewable energy future. The energy landscape, once dominated by large, faceless corporations, is being transformed into an energy democracy that supports thousands of independent generators making clean, green energy in homes and communities across the country.

In April 2010 the Government introduced its Feed-in Tariff (FiT), a financial incentive for generating our own renewable electricity. The FiT makes microgeneration much more financially attractive – the scheme income can help to repay any bank loan needed for installation. Payments are inflation-linked for all generators and tax-free for domestic properties. They are also guaranteed for 20 to 25 years, depending on the technology, and paid for total generation, including the units for personal domestic use. Thanks to the FiT, the payback time for an average household with a south-facing roof is now less than 10 years, a reduction that has resulted in an explosion of small-scale renewable energy installations.

Also on the horizon are the Renewable Heat Incentive and the Green Investment Bank, both of which the government has pledged to introduce as part of a raft of green measures. The heat incentive will reward those generating renewable heat, for example by heating water through solar thermal panels and heating homes through heat pumps, while the bank should make it easier for people to invest in renewable technologies.

#### Towards a 100 percent renewable future

In July 2010 the German government stated that by 2050 it could source 100 percent of its electricity from renewables. Good Energy's research proves not only that we in the the UK can reach our EU emissions reduction targets, but that we too could be 100 percent renewable by 2050 – and we've mapped out a pathway to do it. We need to change UK energy at every stage of the process, from grid management to investment, and from research and development to transport. For example, because renewable electricity comes from Nature's abundant resources – wind, water and the sun – its output isn't always predictable. Our systems require massive improvements in how to forecast, store and manage renewable power, and how to back it up. As consumers we also need to develop a new, much



closer and more intelligent relationship with the energy we use. It won't be easy; but a 100 percent renewable future by 2050 is possible.

#### If you're interested in these ideas and want to know more about Good Energy, please use this link:

#### blueandgreenenergy.com

as it helps underwrite our magazine's production costs without costing you a penny extra on any services you buy. Thank you.

## Questions for Juliet?

Juliet Davenport, the writer of this article, will be our Green Dragon next month. What questions would you like us to ask on your behalf? Please send them to **dragon@blueandgreentomorrow.com** 



## Readers' Resources

Want to know what you have in common with your fellow readers? Here's a list of 20 items for you to choose from. We'll share the readers' top 10 in a future issue and online.

Have you been influenced in your decision making by any particular publication or other source of insight? Below are 20 possible candidates – we'd love you to tell us which, if any, you've found useful and to hear about any personal favourites of yours we haven't included.

#### **Principles**

a) **Cradle to Cradle: Remaking the Way We Make Things** Originally published in 2002, this 2008 book is by Michael Braungart and William McDonough and discusses how industrial processes ... mcdonough.com/cradle\_to\_cradle.htm

b) **Intergovernmental Panel on Climate Change** Founded in 1988, it has become the nearest thing we have to world consensus on the need to change our ways. It is reviled and praised in equal measure for its approach. ipcc.ch

c) **"Our Common Future"** a report published in 1987. Sometimes called the "Brundtland Report", it was the first to lay down the principles of sustainable development, most memorably in the phrase "[...] which meets the needs of the present without compromising the ability of future generations to meet their own needs". un-documents.net/wced-ocf.htm

#### d) Sustainable Energy: Without the Hot Air

This book boils the realities of energy use down into terms we can all understand. When publishing it (free of charge online) in 2008 the author, Professor David JC MacKay, said, "I'm concerned about cutting UK emissions of twaddle – twaddle about sustainable energy." withouthotair.com

e) Stern Review (October 2006) on the economics of climate change. This was an official call to action, sponsored by the Chancellor of the Exchequer. hm-treasury.gov.uk/independent\_reviews/stern\_review\_economics\_climate\_change/sternreview\_index.cfm

f) **The Long Now Foundation.** This doesn't really do decades or centuries; it considers our impact across millennia. It was founded in 01996, a reminder that we have another dating problem looming in about 8,000 years! http://longnow.org

#### **Measurement and reporting**

g) AMEE. Originally standing for Avoiding Mass Extinctions Engine, this is Gavin Starks's heroic attempt to measure the world's environmental impacts. Information is collected, validated and rated and is readable by both humans and computers. AMEE has been described as "the Switzerland of carbon standards". amee.com

h) **Carbon Disclosure Project**, the place where thousands of organisations go to declare their environmental credentials. Covering greenhouse gas emissions and climate change strategies, it's a useful reference point for customers, investors and other stakeholders. cdproject.net i) **Energy Star**, an internationally recognised environmental standard for consumer goods. Outside the USA it is mostly associated with computer equipment. energystar.gov

j) **Trucost**. It helps organisations measure and manage the environmental impacts associated with their operations, supply chains and investment portfolios. Putting a price on such impacts, it enables organisations to understand environmental risk in business terms. trucost.com

#### Guidance

k) **Carbon Trust**, a source of help, information and, possibly, investment. It encourages businesses and the public sector to cut carbon emissions, save energy and commercialise low carbon technologies. carbontrust.co.uk

l) **DirectGov**. This is a one-stop shop for all manner of government information. In particular, it provides background on and insight into climate change and related countermeasures. direct.gov.uk/en/Environmentandgreenerliving/ Thewiderenvironment/

m) **Environment Agency**. This takes a broad view of the environment and sustainable development, ranging from sea defences to waste management. It acts as both an adviser and a regulator. environment-agency.gov.uk

n) **Forum for the Future**, which promotes sustainable development. It helps major organisations to re-engineer their operations and change attitudes and behaviour among their customers, suppliers and staff. forumforthefuture.org

o) **Netregs**. This provides details of current and upcoming UK environmental legislation. netregs.gov.uk/netregs/legislation/

p) **UKSIF (UK Social Investment Forum)**, a membership organisation. It focuses on responsible investment and other forms of finance that support sustainable economic development, enhance quality of life and safeguard the environment. uksif.org

q) **Your Ethical Money, an EIRIS initiative**. This helps consumers sort out their values, build an investment strategy that fits and sidestep the money-grabbing antics of less scrupulous organisations. yourethicalmoney.org

#### Campaigners

r) **Friends of the Earth**. Founded in 1969, it is a network of national organisations, all of which are concerned with environmental and social issues. foe.org

s) **Greenpeace**. Started in 1971, it describes itself as "an independent, campaigning organisation which uses nonviolent, creative confrontation to expose global environmental problems, and to force the solutions which are essential to a green and peaceful future". greenpeace.org

t) **WWF (World Wildlife Fund)**. This gets involved in projects aimed at reducing humanity's ecological footprint – the amount of land and natural resources needed to supply our food, water, fibre and timber, and to absorb our  $CO_2$  emissions. http://wwf. panda.org/what\_we\_do/footprint/

## So, what do you think? To tell us quickly and easily, just visit us at: **www.bluegreentomorrow.com/survey**

Feel free to add your own particular favourites to your response.

## **Green Idylls under Grey Skies?**

## Lena Semaan wonders which winter holidays in the UK could tempt you away from those long-haul beaches and exotic destinations.

You hung on resolutely during the credit crunch, refusing to let it affect your holiday plans. But now the Government's decided to take a machete to public spending, it somehow doesn't feel right to be travelling. Well, not overseas anyway. Moreover, your better half has decided that this will be the year your household reduces its carbon footprint.

"Does that still include Europe?" you ask hopefully. It appears that it does. Haunted by childhood memories of miserable motorway interludes en route to inhospitable B & Bs that seemed more like military camps, you despair. Yet, a sizeable chunk of the population has discovered that in the past 10 years the UK's tourist industry has raised its game so much that holidaying here isn't just an alternative, it's often a first choice.

Granted, winter in the UK has little to do with hot beaches, but a beach isn't everything. Instead of fighting it, why not go with the seasons? This is a great time to book yourself into a grand hotel in one of the UK's iconic cities like York, Bath or Liverpool, grab a guidebook and discover just what makes foreign tourists come here in droves. We're lucky enough to live in a place where castles exist in real life, not just history books. Many of Britain's former aristocratic houses offer hotel-style accommodation. You could even book out a whole one and gather your extended family together for an unusual Christmas house party. The Stay UK castles are a good place to start.

#### www.historic-uk.com/StayUK/CastleHotels.htm

Proving that we are indeed a nation of inventors, clever hoteliers haven't just been building places to stay; they've been creating places that offer memorable experiences where green credentials add to the experience, be that luxurious, wild or basic.

For instance, in certain corners of Britain old farm buildings combine with modern clean technology to create an experience that is both eco-friendly and relaxing. One such is Buckshead Eco-Cottage on the Welsh–English border, which sits within a working organic farm. It's completely off-grid: a wind turbine supplies electricity, and water from the local spring is heated by solar panels, backed up by a wood-burning stove. You don't need to drive there either, as they'll collect you from the local railway station. The organic vegetables in the kitchen garden are yours to pick (thoughtfully) and you'll have wonderful views over the Clun Valley. It sleeps four and costs from £300 a week.

#### www.buckshead-ecocottage.co.uk/

Those clever Finns know a fair bit about sustainable living and, with their long dark nights, they're also pretty nifty at maximising heat and light. On the coast at Ravenscar near Whitby, eight lodges that were constructed and flat-packed in Finland bring modern eco-thinking to Yorkshire. The lodges have views over Robin Hood Bay, feature sun-trapping roof terraces and use a clever heat exchange system to save energy and clean the air. Each lodge sleeps between two and four people, and has a kitchen area, free Wi-Fi and a DVD player. Lodges cost from around £615 a week.

#### www.ravenhall.co.uk/

Under the banner of Feather Down, several small-scale farms provide a tented camping experience that leans decidedly towards comfort rather than austerity. Each spacious tent has a canopy bedroom as well as other sleeping areas, with proper mattresses and luxurious bed linen. Heating and cooking are done by means of a wood-burning stove in the middle of the living room, encouraging family gatherings and perhaps even the kind of conversations you remember having when life's pace was slower.

All Feather Down farmers are committed to helping the countryside towards a sustainable future, with each farm close to a nature reserve or other rural conservation area. You won't need to bring anything from home because it's all been well and truly thought out. The farm shop sources goods locally, if not from the farm itself. Kids can visit the henhouse to collect eggs for breakfast; there's a wood-fired oven for baking bread; and bicycles are available to rent. And at night you can sit outside your tent with a glass of wine and watch the stars.

#### www.featherdown.co.uk/

Three women with a positive and clear collective vision set up the Scarlet Hotel in Cornwall, aiming for sustainable style and a warm welcome. As they explain on their website, "Our hotel would remind us why we cherish our husbands and friends and love their company. It will be somewhere to laugh and enjoy simple pleasures." Rising to the challenge of creating affordable luxury, the owners offer an eco-haven for adults wanting to treat both themselves and the planet well. The hotel makes optimum use of natural heat and light, employs a combination of energy sources, and reduces, reuses and recycles wherever possible. Its 37 stunning rooms allow each guest to benefit from sea views and a balcony. Prices start at £155 a night for lone travellers and £190 a night for couples.

The pleasures may be simple; however, the breathtaking views and location make this an escape to rival anything you would hop on a plane for. The interior is filled with bright colours, beautiful art and the kind of big-scale, large-cushioned furniture that invites serial lounging. The Ayurvedic spa offers further opportunity to restore inner calm and outward appearances. Imagine taking a seaweed bath in a warm tub overlooking the sea – bliss!

#### www.scarlethotel.co.uk

We hope these ideas might encourage you to consider an ecofriendly break here in the UK. After all, it can only help your relaxation to know that you are saving the planet too! Do let us know what you think if you visit any of the places we've suggested, and tell us if you've found other similar destinations that our readers might like.

# Join the homegrown energy movement

Good Energy is an energy supplier with a difference – we believe that the way energy is made and used in the UK needs to change. All of our electricity is 100% renewable and our main tariff is independently certified by the Green Energy Supply Scheme.

We believe energy doesn't have to come from big power stations, it can be made by ordinary people up and down the country. As well as making our own electricity from our wind farm in Cornwall, we support more than 1500 independent renewable generators around the country.

By joining the greenest possible electricity supplier, homes and businesses have the opportunity to play a part in something important.

Switch now and quote 'Blue and Green' and you'll get £25 off your first bill.

www.goodenergy.co.uk 0845 456 1640



**Together we do this** 



## Sporting Goods and Sweatshops

#### Connor Sephton investigates how Nike faced up to its critics and tackled staff issues in its overseas operations.

Following press criticism regarding the working conditions of its labour force, Nike has become keen to show its commitment to improving the quality of life for factory workers in Eastern Asian countries such as Indonesia and Vietnam. The multibillion dollar empire has forged allegiances with the Fair Labour Association in America, while also commissioning an audit from Ernst & Young into its business practices abroad.

On 18 May 1998 a columnist from The New York Times had described Nike as setting a benchmark standard for factory working conditions. This was prompted by a speech in May of the same year, from Nike's founder Phillip Knight, in which he spoke of 12 promises to transform the health and safety, pay, training and minimum age of employees.

They were certainly promises that needed to be made. Life magazine's iconic image of a young Pakistani boy stitching a football damaged public perception of the company in 1996. And in 1997 it was revealed that factory workers in Vietnam were being subjected to levels of toxic fumes 177 times above the limit imposed by the Vietnam Government. Nike's ethical reputation was tarnished.

Yet, in May 2001, three years after Knight had promised "some fairly significant announcements", Global Exchange published a 118-page report called "Still Waiting for Nike to Do It". The people-centred human rights organisation, which plays a key role in highlighting the plight of factory workers, wrote in detail about which promises had been met and what reforms were still needed.

One such promise was that the air quality in each workplace would conform to US standards and be inspected regularly to ensure the compliance of Nike's contractors. However, with managers in factories receiving advance warning of inspections, and air quality reports not being released into the public domain afterwards, critics feared that there would be a lack of accountability, and that scrutiny would not be possible.

Earlier, in September 2000, a Global Alliance report focused on Indonesia and funded by Nike's own contributions to the consortium confirmed: "We have raised disturbing issues about the workplaces in Indonesia where some of their products are made. No worker should be subject to some of the working conditions reported in this assessment." From its survey of 4,000 workers, representing a total of 54,000 employees in nine factories, Global Alliance found that three in every ten members of staff said they had seen or endured sexual abuse this amounts to 18,000 victims when the data is extrapolated. There were also reports of violence from supervisors towards those working slowly, and threats of cleaning toilets as punishment if targets weren't met. Critics were discovering that, less than 18 months after Phillip Knight's passionate speech, Nike was still battling to improve the conditions for employees in its 500,000-strong, 50-country supply chain.

The Indonesian survey feedback wasn't all bad. The hour-long interviews with factory workers revealed that relationships between employees and supervisors were generally positive;



and many workers stated they wouldn't hesitate to ask for help and advice from their line manager if it was required. Despite these positive elements, though, in February 2001, three months before the release of "Still Waiting for Nike to Do It", Nike produced a remediation plan in response to the damning findings relating to its Indonesian factory conditions.

So, what real influence have these significant documents had on the ethical practices of Nike as it tries to maintain growth and preserve profits without compromising workers?

One of the issues, both then and now, is overtime. While some factory workers willingly volunteer to take on more work to increase their income, others speak of pressure to work longer shifts involuntarily – with some women even sacrificing their right under Indonesian law to two days of menstrual leave a month. To combat this, Nike's "Corporate Responsibility Report" (www.nikebiz.com/crreport), which forms the basis of Nike's newly formed code of conduct, outlines how subcontracted factories can be penalised through a grade system if more than 10 percent of their workforce clock in excess of 60 hours a week. It also requires employees to take one day off in every seven. And where workers were once exploited over pay, all factory employees are now paid in line with the minimum wage set by local government. The report states that hourly rates should be "equitable, competitive and locally relevant".

Nike's "Corporate Responsibility Report" agrees, stating "Nike believes that local wage setting is best done by negotiations between workers, labor representatives, the employer and the government. [...] Nike increasingly sees the need for further regional and global discussions among suppliers, governments, NGOs [non-governmental organisations] and – importantly – workers, about the degree to which wages across the industry are meeting workers' needs."

Yet, progress in the factories once said to represent "the hidden cost of commercialisation" is strong. While it might be a good thing that the products created by Nike promote healthy living, the ethical health of its business is equally important, if not more so. And part of that is ensuring a good quality of life for the hundreds of thousands of workers in its supply chain.

Nike has at last caught up with The New York Times statement of 12 years ago; it really is now setting "a standard other companies should match".

## S<mark>HOPPIN</mark>G

## 12 Ideas for Christmas

Why not have a sustainable Christmas? We've selected these products based on established criteria, with independent experts' advice to guide us through the complex issues involved. All of our products are assessed against five key criteria: 1) ecological, 2) organic, 3) fair and sustainable trade, 4) natural living and 5) wellbeing. This is just a small selection of what we have on offer; you can find a whole lot more at www.blueandgreentomorrow.com/shopping

#### Spa Organic Bath Votive Candle - £7.95

For a slow release of delightful scents and gorgeous ambient light, these votive candles will enhance any space. They burn for 40+ hours. Four wonderful fragrances: Happy Heart, Joy, New Energy and Tranquility.



#### Handpainted Wooden Stacking Santa Set - £16.95

This set of six nesting, stacking santas have been hand painted by fair trade artisans. Full of character, these santas make a great display on a mantlepiece this year, or bring a smile to a friend or relative as a gift. Dimensions: Largest: W: 7cm, H: 12cm.



Visit blueandgreenshopping.com for some more great deals

#### Braintree hemp Organic Cotton Beret - £15.95

This eco-friendly knitted blend of hemp and organic cotton beret will keep your head warm and cosy in style. One size only. 55% Hemp, 45% Cotton



#### Large Paper Potter £15.95

Make an endless supply of plant pots for seedlings or larger seeds such as squash or marrow, from strips of old newspapers. The Paper Potter is great fun for children. D: 9cm x H: 15cm.

#### Spiezia Facial Cleanser £21.95

This fabulous Organic Facial Cleanser uses a unique blend of organic essential oils to decongest clogged pores, regulate sebum production and soften and soothe the skin. Can be left on the skin as a deep cleansing face mask.

#### Spotted Pig Ironwork Watering Can - £22.95

The perfect gift for the gardener who has everything. Made by a Fair Trade (BAFTS) certified producer, this wonderfully different watering can is sure to create a talking point in any garden. Crafted from iron in the shape of a spotted pig, it is guaranteed to stand out.

#### Bird Bistro Bird Feeder £5.95

Bright and colourful small bird feeders will look great in your garden, and the birds will love them too! Solid FSC timber with water based colouring in red, yellow or blue. H: 20cm, W: 13cm, D: 9cm





#### Multi Zip Spiral Necklace £23.95

Perfect for lower necklines. With pretty ribbon, beads and intricate spiralled design, this fair trade necklace has been made from recycled zips. Get your friends talking about your ethical jewellery.

#### Fair Trade Jigsaw Clock Puzzle £12.95

Piece together this colourful wooden fair trade clock and learn to tell the time as well. A great fair trade gift for any child or parent. Suitable for ages 3+. Diameter: 15cm.



#### Fair Trade Bell Decorations £11.95

Festive handmade papier maché bell decoration, hand-painted in a variety of beautiful lacquer colours. The six assorted bells are made and painted entirely by hand in Kashmir. *NB: Due to the handmade nature the designs, colours and dimensions may vary.* 



#### Vintage Union Jack Patchwork Cushion Cover £22.95

A wonderful combination of different tartans have been stitched together to create this fair trade vintage effect union jack cushion cover. Dimensions: W: 46cm, L: 46cm. Cushion not included.H: 12cm.



#### 6 in 1 Solar Toy £13.95

A great way to learn the power of solar energy. No batteries. See how solar energy can power an airboat, windmill, puppy, and two different planes. Hours of fun for age 10+.H: 12cm.





## **HM Treasury Spending Review**

On 20 October 2010 Chancellor George Osborne delivered the Coalition Government's Spending Review. We consider its implications, focusing particularly on environmental sustainability.

Looking at last month's HM Treasury Spending Review, you have to ask yourself, "What would Conservative or Labour have done if they were the government of today?" We are not a political magazine and we wouldn't want to have a go at either party in any detail, but it's highly likely that the Coalition has produced a better review than any of the parties would have done were they acting alone.

So just how good is it? Our interest is in the planet generally and the small part we live on specifically. As Britons, we can affect the first by inventing stuff, exporting it and providing supporting services. The second, the domestic bit, is the primary subject of the Spending Review. And the bottom line for environmental and sustainability issues? Our verdict is, "Not bad, but sneaky in parts."

Green-leaning activists are outraged that the Department for Environment, Food and Rural Affairs (DEFRA) is taking such a big hit, but they seem not to notice that the Department of Energy and Climate Change (DECC) is being treated altogether more kindly, especially where expenditure limits are concerned. DEFRA's will shrink 34 percent cumulatively over four years while DECC's will grow 41 percent.

These two numbers alone give a sense of the Spending Review's intent in environmental terms. While DEFRA has to encourage the building of flood defences and environmental stewardship schemes, DECC's role is to encourage low carbon energy and heat generation. Crudely stated, one has to protect and adapt; the other has to attack. Hardly a word appears in the Review about other environmental essentials such as water and waste, apart from announcing the ditching of seven waste processing initiatives.

It has to be said that, politically, Chancellor Osborne played his hand well. In his earlier budget, he warned of cuts of up to 25 percent and sought consultation. After thanking the Labour Party for its suggestion that the average cut should be 20 percent across unprotected departments, he brought his recommendations in at 19 percent and then sought the approval of the House. Olé.

#### **Dirty trick**

Regarding the environment, the dirtiest trick Osborne played was with the Carbon Reduction Commitment (now renamed the CRC Energy Efficiency Scheme) in which heavy users of energy are expected to buy allowances to cover their tonnage of CO<sub>2</sub> emissions. In the original scheme, those who most improved their performance were rewarded with a share of this revenue. Now the revenue goes straight to the Exchequer. With the "reward" side of the equation removed, the carrot has become a stick. It's nothing short of a £1 billion stealth tax, which could become a gold mine if (or should we say when) the rate per ton is increased or the catchment for the scheme is widened. At the moment, it applies only to the top 5,000 companies in terms of energy consumption. You can say two good things about this: 1) the start date has been deferred by a year to 2012; and 2) it will push companies to reduce their carbon emissions where to do so would cost less than the levy.

At a personal level you've probably got very mixed feelings about the Spending Review. On the one hand, you see slivers of



money being taken away from you here and there that, when added together, could equate to an exotic holiday or similar. On the other hand, you may be thinking, "Well, something had to be done." Some of you will consider the measures unfair; others will be happy to "do their bit". Whatever your point of view, feel free to share it through "Readers' Letters". In the meantime, let's take a closer look at the sustainability-related measures.

Take transport, for example. It's true that new infrastructure has to be built and existing systems have to be maintained. But why encourage train fare increases when the aim is to get people out of the air and off the roads? Why cut bus subsidies to operators by 20 percent? These plans don't seem to be sending the right message. No doubt with an eye to the grey vote, though, pensioners will still get their travel passes. And presumably the many road building plans will reduce emissions. If not, what are they for, exactly?

Perhaps the Government doesn't really expect us to change our behaviour and is building out in the expectation of a flood of electric and hydrogen fuel-cell vehicles. If that's the case, we're going to need to upgrade our energy and service station infrastructures way beyond anything we can imagine at the moment. Starting in January 2011, the Government is going to start dishing out up to £5,000 towards the cost of ultra low emission vehicles. Rather like the scrappage scheme that preceded it, little thought seems to be have been given to the lifecycle environmental cost of such measures. Cars have to be made (raw materials, carbon emissions, water, waste), run (electricity is only as clean as the power station that creates it), and disposed of eventually (its parts reused or upcycled ideally).

#### **Green innovation**

As a nation we need new, relevant inventions that can improve the quality of life and bring us foreign revenues. With developing countries churning out science graduates by the million, it's vital that we sustain some kind of advantage. The relatively good news is that the Science Budget is being retained in cash terms, although this means that this year's £4.6 billion will be worth less each year. As in so many aspects of this Spending Review, we really are expected to get more and more out of less and less. Those of us in business are very familiar with this story. It can always be done. It just means change, and that's something that strikes fear into many people's hearts.

The Government is to invest £1 billion into an independent "UK-wide" Green Investment Bank. Many economists consider this amount laughably inadequate and have been pitching £2 billion to £6 billion as an absolute minimum. However, the proposed small figure has its advantages. It sends a signal that this is not a "free for all"; nor is it open to every wacky idea. It is intended to lend to projects with a reasonable chance of success that will contribute to the UK's green infrastructure. "Offshore wind farms" is the example given in the Spending Review. The aim is to get things moving. The bank's capital reserves will be boosted by sales of government-owned assets. The intention seems to be to attract private capital as well, but the details of the structure of the bank still need to be hammered out. If the bank is truly "UK-wide" in any traditional sense, then that billion is going to burn off like morning mist on a sunny day. The bank has to be slim, central but accessible to all.

The Feed-in Tariff for microgeneration of electricity, which seems very generous at the moment, will be reviewed in four years' time. You can bet it won't be good news, though. The present tariff will, hopefully, have done its job of introducing people to the realities of home-grown electricity generation. The focus will probably turn towards giving good tariffs to people installing the most effective technologies. However, industry insiders are certain that existing recipients will not see their tariff reduced. Well, that's good news. Along with this comes the promise of a Renewable Heat Incentive in 2011–12, which will reward you for installing green heating – typically ground source or solar thermal.

On a grander scale, the Government has earmarked £200 million to help ports accommodate offshore wind farm equipment and set up local manufacturing facilities.

The Review contains a lot of sustainability-related initiatives, but they are primarily aimed at increasing our clean energy capacity and reducing our carbon emissions. Two things scarcely mentioned are water and waste. Actually, water isn't mentioned at all, except to say that the Water Services Regulatory Authority (or Ofwat) was not part of the Spending Review Process. Perhaps this is because water is largely privatised and, apart from Ofwat and the Consumer Council for Water, the Government doesn't have much to do with what's going on. These organisations are currently being reviewed with an eye to their fitness for purpose. Water, it seems, is on the political radar; just not to the extent that it impacts this Spending Review.

However, on waste recycling the Government has decided that it can withdraw from seven proposed PFI-funded projects but stick with a further eleven. The reasoning is two-fold. According to DEFRA, "This will reduce estimated central government PFI expenditure by £3 million per annum in 2014–15 rising to £26 million per annum from 2017/18 onwards." And the other reason is that "these projects will no longer be needed in order to meet the 2020 landfill diversion targets set by the European Union". These targets come with heavy fines attached to failure, meaning that the motivation for treating our waste seems more about avoiding fines than ensuring any environmental benefits.



In an ideal world we'd reuse most of what we currently send to landfill, we'd make things easier to recycle in the first place and we'd minimise unnecessary packaging. We wouldn't just accept landfill as a necessity. Increasing numbers of companies are seeing the opportunities in waste, the so-called "trash to cash" organisations. They separate and make use of what they can, even if it sometimes means burning it for energy, and compact what's left before sending it to landfill.

#### And, finally ...

You can see, then, why we rate the Review, "Not bad, but sneaky in parts." And, of course, we're restricting ourselves to its sustainability aspects. For a broader look, let's take some clippings from better qualified commentators.

In late September the IMF visited the UK and was broadly positive about the Chancellor's intentions. It hasn't commented since the Review announcement, but after the visit it said: "The UK economy is on the mend. Economic recovery is underway, unemployment has stabilized, and financial sector health has improved. The government's strong and credible multiyear fiscal deficit reduction plan is essential to ensure debt sustainability. The plan greatly reduces the risk of a costly loss of confidence in public finances and supports a balanced recovery."

Angel Gurría, Secretary General of the OECD (Organisation for Economic Co-operation and Development), says: "The measures are tough, necessary and courageous. Acting decisively now is the best way to secure better public finances and bolster future growth." In a separate statement, the OECD confirms that "Mr Gurría supports the UK's continuing willingness to back its commitment to a greener economy with further budgetary resources."

The Economist's report (headlined "Ouch!") states that "the government's bet that the private sector will generate growth as the public sector retrenches remains just that: a gamble". It also says that "Mr Osborne was also right to protect capital spending as far as possible: despite its economic value, such investment is often the first thing that myopic cost-cutting governments sacrifice."

Well, the course has been set for the good ship UK. Some of its passengers aren't going to be looking forward much to the voyage. A big question mark hangs over the ability of the captain and crew to navigate the storms and choppy waters ahead. Some even doubt the seaworthiness of the vessel. But if intentions equate with actions, with a few exceptions the UK should emerge into calmer waters in time for the next election.

### **Green Dragon**

**Andy Redfern** talks about how his own blue and green dreams led to the founding of Ethical Superstore.



Instead of shopping by brand or store, how about shopping by ethics? This might sound crazy and complicated but Ethical Superstore makes it easy. Whatever your ethical stance, it's highly likely you'll find something to suit. You don't have to declare your values, you just search for what you need – washing-up liquid, disposable nappies, solar device chargers, whatever – and you know if it's carried it satisfies a number of ethical criteria. Its disposable nappies, for example, are made from bamboo fibres that are easily cultivated, need no fertilisers or pesticides, and are 70 percent more absorbent than cotton. Ethical Superstore is a great idea and it owes half of its existence to co-founder and CEO Andy Redfern.

#### In the beginning

After eight years as international director of Traidcraft, Britain's leading fair trade organisation, Redfern decided to start a new business putting ethically-minded consumers in touch with tens of thousands of products reflecting their values.

A mutual friend pointed out his shared aspirations with co-founder Vic Morgan, who'd formerly helped Traidcraft establish a candle supply chain. Morgan, a Harvard MBA, had worked at a major consulting firm and, most importantly, had created a wholesale fair trade business in the USA, now owned by a subsidiary of National Geographic. Redfern, as well as establishing Traidcraft, was a closet techie with an electronic engineering degree and eight years' experience writing for and editing computer magazines.

In 2004, exploiting their complementary backgrounds, Redfern and Morgan created a web consulting and marketing company to generate the funds needed to launch their "big idea". With enough money for six months, they brought in ethical products magazine New Consumer to act as the marketing arm of their fledgling Ethical Superstore.

Realising they needed external funding they wrote their first business plan in October 2005. The first funding round closed in June 2006, followed by new funding rounds every year since. The business doubled in size for three consecutive years. Redfern says, "It's like starting a new business every year. What worked last year won't work this year. Last year's logic becomes this year's folly. It's always interesting, never boring."

#### The man

So how does someone with an electronic engineering degree come to be running a business like this? The answer lies partly in his techie background – when the company needed an "online marketplace" for other companies' products Redfern wrote it in three weeks – but also in his introduction to the thinking of EF Schumacher through his 1973 book, Small is Beautiful. Redfern says, "My life has been at its most frustrating when I've moved away from the values expressed in that book." He was 18 when he encountered Schumacher's work as part of an ecology course at Warwick University and a subsequent "engineering and appropriate design" course module. (It was also the book that changed my life – Ed.) That's only part of the story, though; the church and its values are important to him too.

Redfern's Traidcraft work took him to places like Bangladesh, Malawi, India, the Philippines, Zambia, Tanzania, South Africa and Pakistan. He says, "It opened my head up in terms of issues." Eager to share his new understanding with his family, he encouraged his wife and two of their children (they have five, three of them adopted) to visit Malawi to experience life out there, including 24 hours in a village with no electricity or water. They discovered that "things" don't make you happy. About the Malawians he recalls, "These people enjoy life and local celebrations despite the absence of things that we call 'necessities."

Redfern is reluctant to speak of dislikes. When pushed, however, he settles for "bad drivers" and "me culture". The first relates to his having been knocked off his bike twice and side-swiped by a lorry while driving. As for the second, he can't abide people who are "long on 'rights' but short on 'responsibilities".

About what he likes he's much more forthcoming. He lists his family, sport, the church and green politics. At weekends it's football, rugby, skateboarding, dance and ballet; and he likes to be around for a couple of hours in the evenings too. This means that his working day starts at 5 a.m. On losing his deposit as Green Party candidate in Gateshead, he reflects, "at least I gave the disaffected something to vote for".

#### The future

When asked to look forwards, Redfern notes, "Changing consumption patterns can make a difference. Organic, fair trade, cutting down on meat can all change our impact on the world." He likes the idea of people coming together to meet local goals, as with the Settle electricity generation project in the Yorkshire Dales. (See page 26 for a link.) He's confident about the future for companies with sustainability and ethics at their core.

But he's equally concerned about "green fatigue", worrying that, "People are becoming immune and weary." Just like *Blue* & *Green Tomorrow*, Redfern believes in making it easy and leading by example. He says, "So much of the green message has been people-bashing; we won't bash people into doing the right thing. Recycling should be as obvious and instinctive as putting on seat belts when we get in the car; unlike 30 years ago, when we had to be told to 'belt up."

#### And finally

Having spent years thinking and acting differently from the mainstream, Redfern tells us, "Bucking the trend is both easy and hard. It's easy to say you're different, but much harder to actually live it."

Luckily, his life is evidence that it's worth the effort.

Take a look at our **ethical Christmas shopping** feature on **page 16**. It has all sorts of ideas to make both giver and recipient feel good. Please use the link provided as it helps underwrite our magazine's production costs without costing you a penny extra on goods purchased. Thank you.

#### Finance - The Way Forward?

Mark Robertson of EIRIS looks at how the finance sector might regain the public's trust.

The finance sector has certainly got itself into a pickle over the past two years. Levels of public trust and confidence in financial institutions are at an all-time low.

Yet, within the finance sector are organisations and individuals who have been and are still focusing on ethical and responsible investment practices and personal behaviour. These organisations can continue to build their reputations because, at an individual level, they never really lost them.

The path to finance sector rehabilitation is likely to be one in which financial firms position themselves as the eyes and ears of investors looking for, and dealing with, forthcoming problems in the marketplace. Finance companies need to work on protecting the interests of all, rather than seeking simply to avoid disaster themselves (with mixed success) and trying to stay one step ahead of the regulators.

This means seriously addressing issues like climate change and biodiversity and ways in which globalisation could fail to benefit everyone. Each of these themes contains the seeds of mass value destruction for the world's investors if not properly addressed.

What kind of culture and leadership is appropriate for a finance sector that needs to play its part in long-term sustainable wealth creation for the benefit of society as a whole?

The answer to that question could lead to a new approach that might indeed generate fresh public esteem for the finance sector and all who work in it.

EIRIS - Experts in Responsible Investment Solutions, eiris.org

## **B&GT** - A Free Paper in Every Sense

So, what are we about?

Our owner, Blue & Green Communications, is not a typical publisher.

And we're not a typical magazine. We provide print and online versions of *Blue & Green Tomorrow* at no charge to readers, despite a hefty print and postage bill.

Most magazines make money from one or all of subscriptions, cover price, advertising, sponsorship or commission on products sold from their pages.

We know that a subscription or a cover price would significantly reduce our readership, so we've built our model on the other revenue streams.

Does this compromise us or put us in the pockets of commercial interests? Not at all. Our partners are selected from a small pool of companies in the UK that share our vision about sustainability and ethical behaviour. While this tightly restricts who we can work with, we're happy with that restriction. Anything less would be unethical. Each partner offers our readers its goods or services at a price that is guaranteed to be the best available. You don't pay any more for buying through our site - we just receive a small commission on each purchase made.

The same restrictions apply to advertisers. We won't take advertising from someone unless we believe they share our vision and/or values. If you feel an advertisement is inappropriate, let us know and we'll explain our reasoning. If we make a mistake we'll apologise, donate the revenue to charity and no longer carry the

#### From Austerity to Prosperity?

Lee Smythe, of Smythe & Walter financial planners, offers tips on managing your finances better, even in uncertain times.

The Government Spending Review was short on detail, but we can be certain of a few things: times are tough and for most people both taxes and retirement age are on the increase.

This means that there's never been a better time to review your finances to ensure you're doing all you can to protect yourself from the Chancellor's squeeze.

It isn't all bad. Commitments of £1 billion to a green investment bank and £200 million to offshore wind power are a step in the right direction that will open up opportunities for investors. And, despite the proposed austerity measures, it's still possible for the average person to shelter savings and investments and reduce the amount of tax he or she pays.

With careful planning, even simple measures can make a huge difference to your overall tax bill.

You can save up to £10,200 in an ISA each year. This is good because any gains or interest received aren't counted as part of your income and so aren't liable for tax.

The rules about how much you can pay into your pension fund are being simplified too. From April 2011 the annual limit will be £50,000 – although a reduction for some, this is a higher limit than was expected. On top of that, you'll get tax relief on contributions at your highest rate, which could now be as much as 50 percent.

You can reduce your taxable income in lots of ways – saving you money – and you can also benefit from investing in the environment and clean energy.

So, do yourself a favour and take the time to have an unbiased review of your finances with an independent financial adviser. You may just find that austerity has a silver lining after all.

#### advertisement.

The IFAs you see in our magazine are all members of UKSIF or the EIA or have met EIRIS's criteria for yourethicalmoney.org. As a result they all adhere to the highest ethical standards and have a specific interest in encouraging socially responsible investing. If you feel this isn't the case, please let us know and we'll work with the membership to encourage better practice.

The most important thing to know is that our editorial is completely independent of our commercial activity. Everything our journalists write is impartial and fair and will be as questioning of our advertisers and partners as of anyone else. We know the moment we compromise this, we will lose your trust. If you feel we've crossed this line, please let us know.

That said, you can help

keep *Blue & Green Tomorrow* free by buying products through our website, as that's how our partners recognise our role. If asked where you heard about the service, please mention us.Finally, we will be giving back 5 percent of our profit to charities operating in the ethical, environmental and socially responsible sectors. We'll publish details each year and give you a readers' vote on where the donation goes.

IFAs – independent financial advisers

UKSIF – membership network for sustainable and responsible financial services

EIA – association of financial advisers from around the UK, dedicated to the promotion of green and ethical investment

**EIRIS** – provider of independent investment research into the environmental, social, governance and ethical performance of companies

## **Good Advice**

Getting good independent financial advice can be hard. Whether you rely on friends and family, banks and building societies, financial professionals, websites, or the media in general, how do you know you're getting good and independent advice? With the current financial uncertainty the answer matters more than ever.

Importantly, if you want your investments to do some good or you just want to minimise the harm they might be doing, there's a network of advisers which focuses on ethical or socially responsible investment. The Ethical Investment Association (EIA) supports sustainable and responsible finance in both theory and practice, and demands the highest levels of professional knowledge and integrity from its members. Here we showcase a number of advisers who make the grade.

In our view, these are the good guys in financial advice: independent, ethical and experienced. But don't take our word for it – speak to them.



#### **EIA Statement of Principles**

Members agree to support the work of and to disseminate information about UKSIF and the work of its members.

Members commit to assist, either individually or with other UKSIF members, in improving the public's understanding of sustainable and responsible finance.

Members strive to act with a high degree of personal integrity, maintaining honourable relationships with colleagues, clients and all those who rely on the member's professional judgement and skills.

Members seek continually to maintain and improve the knowledge, skills and competence relevant to their profession and be diligent in the performance of their occupational duties.

Members make an affirmative commitment to apply honest, thorough and diligent methods of research and evaluation.

Members agree to obey the laws and regulations relevant to their profession and avoid any conduct or activity that would cause unjust harm to others.

UKSIF is the membership network for sustainable and responsible financial services

#### Your guide to finding an ethical financial adviser in your area



The Financial Services Authority (FSA) sets out clear guidelines for getting advice on its CFEB Money Made Clear website – the Consumer Financial Education Body (CFEB) being one of the FSA's positive initiatives. You can download a brochure from moneymadeclear.org.uk or from our website, but its key points are:

- Prepare for any discussion by being clear about your financial goals what do you want your money to do for you and how risk-averse are you?
- Ask the right people for the kind of advice you want banks and building societies offer advice but they may not be independent, promoting only their own products. It's not always the case but it's worth checking if you want a broader view of your options.
- Take time to find a firm that can give you the service and range of products you need everyone's financial needs are different, so don't feel bad about shopping around.
- Ask up front how much the advice will cost you and how you'll have to pay it could be a fee or commission or a combination of both and usually you can pay directly or have the cost deducted from your investment. Check which method your adviser plans to use advisers have to be honest about this. We've heard horror stories and don't want you to be ripped off.

Make sure you ask questions about any recommended products – they need to be right for you. Good questions to ask your adviser and yourself are:

- Does this product meet my needs?
- What are the risks?
- What are the charges and how are they paid?
- How do the charges compare to similar products
- Is this the best deal I can get?
- If there are regular payments, for instance with a mortgage, what happens if I can't keep up with them?
- If I decide to invest long-term, what happens if I need my money earlier than planned? Are there any penalties for early withdrawal?
- If I take out a mortgage, what happens if I repay it earlier than expected? Are there any penalties for early redemption?
- What is the tax position?

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## Can Ethical Investing Harm Your Wealth?

## Lena Semaan examines the potential for financially and mentally rewarding investments.

With the promise of healthy returns and a clear conscience to boot, socially responsible investing is an appealing proposition. Against a background of heightened global awareness of issues such as climate change, ethical investments have shed their alternative hippie image and embedded themselves firmly in the mainstream.

Unfortunately this hasn't necessarily led to greater clarity for the consumer – if there was any to begin with. The idea of putting the words "ethical" and "investment" in the same sentence would have been almost unthinkable 20 years ago and for many looking to invest it can still be both confusing and off-putting. Recognising this, many "ethical" funds have since been rebranded as the less value-laden "socially responsible investments", or SRIs.

The reasons for this are logical enough. For one thing, while it would be delightful to bask in the notion of universal ethics for all, the fact is that one man's tobacco farm employment scheme is another's Death Valley. Moreover, a change in life circumstances can alter our viewpoint on what is or isn't ethical. Take drug testing on animals, for example: you might have been vehemently opposed to it at one time, but later medical breakthroughs might have led you to change your opinion.

If you're considering taking up the mantle of the socially responsible investor it's worth remembering that there are no perfect companies. Even if a fund makes it through the screening process for being environmentally responsible, it may yet violate the principles of moral responsibility. For instance, a company that receives the all-clear on gambling and pornography might fall out of favour because of its military connections. Of course, there will also be people who happily argue that to create a free world in which good things can happen strong military systems are necessary.

The problem is that it can be difficult for potential investors to see the environmentally sustainable wood for the trees. First, you have to comb through the fine print in the marketing documents to figure out whether the companies really do believe what they profess. Then you have to look at the numbers and decide whether the projected returns are worth putting your faith in. But investing responsibly means just that.

To help distinguish between SRI funds, industry players talk in terms of "dark green", "medium green" and "pale green" funds. The theory is that the darker the green, the more likely it is that the fund will differ substantially from mainstream share funds. Dark green funds actively seek to invest in industries that input positively into society, such as renewable energy, or water and waste management. Medium green funds are often simply about avoiding contentious industries such as gaming, tobacco or uranium mining. And pale green funds are generally those that select companies that are less bad than their competitors.

The approach most widely used by investment funds tends to be "best of sector" or "sustainable" investing. The fund manager selects companies with the best environmental and social



records of all available funds. When it comes to commercial pressures to produce strong returns, SRI fund managers are in the same boat as any other fund manager.

This isn't necessarily a violation of their remit: while you may not like the way a supermarket group sources its food, you might acknowledge that its work practices and treatment of employees are both sustainable and sound. In the US, stocks of publicly traded companies that make Fortune's list of the "100 Best Companies to Work For" also tend to perform exceptionally well. On the face of it such companies might not produce "ethical" goods or services; however, treating millions of workers well is regarded as a major plus point these days.

For most people, the necessity of having a fund manager do the work for them means probably having to accept investing in companies that don't actively harm, rather than in companies that proactively do some good. However, for the diligent investor who has the time and inclination to do his or her own research, there are plenty of dark green options out there that also provide excellent returns. While we're not in the business of recommending, a good starting point is to look at clean technology, healthcare, efficient transport, recycling and waste management.

And then there's the all-important bottom line. Investment returns enjoyed by SRIs in recent years have helped to shatter any lingering view of socially responsible investing as a compromise, where you get to feel good despite the numbers not being so great. Instead, SRIs have shown they can equal and even outperform traditional investment funds.

Ultimately, SRIs are part of the money market. This means that if things generally are bad, SRIs too will perform poorly, as happened with the credit crunch of 2008. It also means that the same caveats apply to SRIs as to any other sort of investment: spread your risk; understand what you're investing in; balance your portfolio; and decide whether you want growth or income.

Given the multi-layered nature of SRIs it's possible to be as committed or as casual as you wish. As to whether any one SRI is better than another, as with ethics themselves, the decision is a highly individual one, based both on your own values and on your hard-nosed expectations of what an investment should deliver.

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## To Bee or Not to Bee?

#### Certain species face disruption of their environment, often with serious consequences for mankind. The question is what, if anything, should we be doing about it? Nick Slawicz investigates.

Human behaviour directly affects both animal and plant kingdoms. The sprawl of humanity – not to mention the need to feed, clothe and house some seven billion people – impacts considerably around the globe. Estimates of the scale of this impact vary, but news coverage continually warns of species becoming endangered as a result of human wastefulness and irresponsibility.

The image of a lone polar bear on a shrinking ice-floe has become photographic shorthand for the environmental cost of climate change. But there are other iconic indicators. For instance, the rising price of traditional fish and chips in the UK is a direct result of cod overfishing in the North Atlantic. Despite efforts to combat this spanning 20 years, cod stocks still haven't recovered. It's a hit to our wallets, but an even bigger hit to the region's marine ecology.

Of course, Atlantic cod and polar bears aren't likely to vanish completely from the face of the planet, thanks to conservation programmes, fisheries, protective legislation and public awareness. But this protective action only reminds us that we cannot ignore threats of extinction.

The question of extinction is widely debated with regard to climate change. A great many 'lost species' turn out to be not lost at all; and, while in 1979 Norman Myers claimed in The Sinking Ark that some 40,000 species become extinct every year, some scientists argue that the figure could be more much lower – 25 species a decade since 1600.

More so than extinction, then, the real damage to ecosystems is likely caused by subtle shifts in the balance of individual species, which in turn affect the surprisingly delicate interplay between species groups. Although a degree of population flux is natural, many ecosystems are now facing dramatic equilibrium shifts with which they are ill-equipped to cope.

Many such shifts are clearly the result of human activity, such as global warming, logging in the Amazon and overfishing of marine stocks. But other shifts, such as those affecting honey bees, are caused more subtly. Do we need a different approach, and, if so, what?

Honey bees might lack the photogenic appeal of polar bears or the immediate impact on human eating habits of Atlantic cod, but their survival has become far less assured over the past few decades. Colony Collapse Disorder (CCD), or Honey Bee Depopulation Syndrome (HBDS), is now a recognised complaint of apiarists and honey farmers the world over.

Although questions about the long-term decline of feral bee populations were raised almost 40 years ago, it wasn't until 2006 that commercial beekeepers were hit by massive population losses. In each of the next four years, around a third of managed bee populations failed to survive the winter. This constitutes an enormous loss, especially when additional summer losses are taken into account.

A declining bee population means far more than a global honey shortage. Estimates suggest that honey bees pollinate a third of the crops we eat, giving their presence in the agricultural world a value of approximately £26 billion per year.



A honey bee feeding on an ox-eye daisy in Great Henny on the Essex-Suffolk border. Photo by Dean Morley.

Likely causes vary. Many place the blame squarely on human shoulders. Global warming can cause flowers to bloom early, thus disrupting yearly cycles; pesticides damage bees' food sources; and electromagnetic radiation interferes with bees' navigation. But, while it can seem that every environmental lobby is adopting the disappearance of bee colonies as "proof" of inevitable ecological disaster with little in the way of hard evidence, there might be another explanation.

A recent joint study by the US Army and academics from the University of Montana in Missoula suggests that bee deaths might be caused by the interaction between a virus and a fungus, both of which need to be present to impact on apian health. This, of course, raises other questions. If CCD is a natural crisis, can an interventionist approach be considered ethical? Should the law of the wild take over?

The simple fact is that, while no one knows for certain what causes CCD, we ignore at our peril the huge ramifications such a seemingly insignificant ecological shift is having on human agriculture and society as a whole. We need a solution that will not only save billions of pounds in lost crops, but will also help to sidestep the dangers of having to adopt new and aggressive fertilising methods to maintain crop yields.

Being green is no longer about a hands-off approach to the environment; it's too late to leave it as it was before humanity showed up. We must face facts and be practical. Without new agricultural methods, such as those pioneered by Norman Borlaug in the 1970s, up to a billion more people – a sixth of the world's population – may have gone without enough food. Without conservation programmes many of the world's most recognised exotic species – mountain gorillas, orangutans, giant pandas and so on – would have significantly lower numbers in the wild.

It seems logical, then, to aim for a solution that benefits both animals and humans. If we as a species can preserve the honey bee whilst ensuring that ingrained farming methods are maintained, it seems clear that intervention – in this case, in the form of developing a fungicidal cure that should help to reduce the CCD crisis – is sensible. As we take pains to enable other species to flourish, we must also intervene for our own sake at times, especially when said intervention helps to keep the balance.

After all, Homo sapiens is a pivotal part of our ecosystem too.

## Our World in 2011

We've rummaged the listings for events and occasions you might want to note. We're bound to have missed things that are very important to you. Why not let us know?



#### January

1	Start of the Hungarian presidency of
	the European Union
1	Estonia to adopt the euro
17-21	International Conference on Renewable Energy, Jaipur, India
26	Capita's National Big Society Conference, London

#### **February**

2-4	Green Energies & Technologies International Show, Cannes, France
3	Lecture: "Severn Barrage Appraisal", Bristol
3	Chinese New Year
16	RSC Lecture: "A Pollutant's Tale", Plymouth
26	Space shuttle starts final mission

#### March

Ecobuild 2011, London
1st International Conference on Governance for Sustainable Development of Caribbean
Small Island Developing States, Antilles (We dare you to put that on your expenses!)
Shrove Tuesday
Sustainable Business Summit, London

**22-23** Marketforce and ASI's The Future of Utilities Conference, London

#### April

1-2	UK AWARE: The No. 1 Green & Ethical Lifestyle Show, London
10-13	1st International Conference on Clean Energy, Dalian, China
18	Passover begins
22-25	Easter

#### May

- 5 National Assembly for Wales election
- 5 Scottish Parliament election
- 5 Local authority elections in England
- 14 FA Cup Final
- 19 5th Global Conference on Ethics, Evil, Law and the State, Warsaw, Poland
- **26** (to 6 June) Hay-on-Wye Festival

#### June

- **1-6** (from 26 May) Hay-on-Wye Festival
- **20** (to 3 July) Wimbledon
- **22-26** Glastonbury Festival

California will open the world's largest solar power plant

Several electric vehicles are expected in the USA The IPv4 unallocated address pool will run out The Nord Stream natural gas pipeline from Russia to Germany will open

A new definition of the kilogram is expected

#### July

1	Start of the Polish presidency of the
	European Union
1-3	(from 20 June) Wimbledon
4	American Independence Day

- International Olympic Committee decides host city for 2018 Winter Olympics
- 14 Bastille Day, France
- 14-17 British Open Golf, Kent
- 27 (to 7 August) 22nd World Scout Jamboree, Rinkaby, Sweden

#### **August**

- 1 Ramadan begins
- 1-7 (from 27 July) 22nd World Scout Jamboree, Rinkaby, Sweden
- 12 (to 4 September) Edinburgh International Festival

#### September

- **1-4** (from 12 August) Edinburgh International Festival
- 5 European Photovoltaic Solar Energy Conference and Exhibition, Hamburg, Germany
- 17 (to 3 October) Oktoberfest, Munich, Germany

#### October

1-3	(from 17 September) Oktoberfest, Munich,
	Germany

- 7 Yom Kippur begins at sundown
- **26** Diwali

#### November

- 5 Guy Fawkes (Bonfire) Night
- **13** Remembrance Sunday
- **24** Thanksgiving, USA
- 26 Islamic New Year

#### December

- 25 Christmas
- **31** US troops scheduled to leave Iraq
- **31** Hogmanay/New Year's Eve

## WIN ENERGY & SHOPPING VOUCHERS

## Free clean energy for a year and £100s of vouchers to be used in our online store

On 5th November 2010 we launched Blue & Green Tomorrow. You're holding the first issue in your hands.

In future issues Blue & Green Tomorrow will continue to provide a balanced, honest and optimistic outlook on news, travel, shopping, money that affects you and our planet.

#### But we're not the experts on what interests you, you are.

We would really like your help to craft our content. Please complete our reader survey and you'll be entered into our prize draw. We can then ensure that you are kept-up-to date on the topics that interest you.



All your answers are completely confidential. This information is simply used to guide our editorial team.

Thank you for your time.

## www.blueandgreentomorrow.com/survey2010



## Films

If you're anything like us, which we believe you are, these films and books will appeal to you.

#### Avatar (2010)

He may have thought about it for 12 years and been waiting for film technology to catch up, but James Cameron's truly epic sci-fi movie makes it all worthwhile. And don't let that sci-fi label put you off. Avatar takes the story of colonisation and exploitation of natural resource to its logical "otherplanet" extreme as greedy business interests ruin the untouched world of Pandora. The result is a moving and beautiful film experience akin to The Mission or 1492: The Conquest of Paradise. This film's narrative and imagery are as good in 2D as they are in 3D, too, so don't feel you have to wear silly glasses to enjoy it.

Rated 4/5 on amazon.co.uk

#### Home (2009)

Yann Arthus-Bertrand, famous for The Earth From Above, a photographic aerial portrait of our planet, takes us on a sensational journey above 50 countries as seen from the sky and provides us with a beautiful view of our Home. Planet Earth is ill, but another future is possible if we all decide to write it together. Thus, the filmmaker's message is profoundly optimistic. Home can be seen for free at home-2009.com/us/ index html

Rated 4.5/5 on amazon.co.uk

## The End of the Line (2009)

Our world's demand for fish is increasing, as is the technology available for harvesting our seas. But the rise in industrialised fishing has not come without consequences. Oceanographers and environmentalists believe our fish consumption levels and farming methods are taking an irreparable toll on the oceans. Some speculate that our seas could be "fished out" by 2048 if current trends don't change.

Rated 4/5 on amazon.co.uk

#### Age of Stupid (2008)

The film begins in the year 2055 in a world ravaged by catastrophic climate change; London is flooded, Sydney is burning, Las Vegas has been swallowed up by desert, the Amazon rainforest has burnt up, snow has vanished from the Alps and nuclear war has laid waste to India. An unnamed archivist is entrusted with the safekeeping of humanity's surviving store of art and knowledge. Apocalyptic, but instructive and thoughtful, this film will make you think about the legacy we are leaving our children

Rated 4.5/5 on amazon.co.uk

#### The Corporation (2006)

The inspiration behind Blue & Green Tomorrow, this film's central thesis is that corporations have one purpose - to generate profit. All other considerations, be they environmental, social or political, are secondary unless they support the continuing maximisation of profit. Profoundly affecting everyone who sees it, The Corporation stops at nothing, from child exploitation to support for dictators, in pursuit of its aim. Chilling.

Rated 4.5/5 on amazon.co.uk

## Books

#### Sustainable Energy: Without the Hot Air (2008)

This book takes a cold hard look at energy – where it comes from and how we use it. David JC MacKay introduces it with the words, "I'm concerned about cutting UK emissions of twaddle twaddle about sustainable energy. Everyone says getting off fossil fuel is important and we're all encouraged to 'make a difference,' but many of the things that allegedly make a difference don't add up." Sustainable Energy is a mine of useful information about what works and what doesn't. It's free to download at withouthotair.com or you can buy a paper copy at Amazon.

Rated 5/5 on amazon.co.uk

#### Cradle to Cradle: Remaking the Way We Make Things (2008, 2nd edn)

William McDonough and Michael Braungart strongly believe that manufacturing, and living for that matter, should follow natural cycles. Nature often reuses waste material to make something better. In manufacturing, waste is mostly downcycled or dumped. But it doesn't have to be this way. Cradle to Cradle contains the sort of important lessons we need to learn, and act on, to prevent life on our planet becoming eventually unsustainable.

Rated 4.5/5 on amazon.co.uk

#### Physics for Future Presidents (2006)

Richard A Muller's science book covers all the topics that might matter to a future president. In plain English, he guides the reader through 25 topics divided into Terrorism, Energy, Nukes, Space, Global Warming and New Technologies. You don't have to be a president to read it, just someone trying to get to grips with the modern world. Our tip is to dip in and out according to your interests reading it straight through is exhausting! Rated 5/5 on amazon.co.uk

#### The Real Global Warming Disaster (2009) Regardless of your beliefs, it's

always good to understand other people's perspectives. In this deeply researched and well-written book, Christopher Booker tells us how we're all caught up in a kind of mass hysteria about global warming. You may not like the man, you may not agree with his fundamental "it's nothing to do with us" thesis, but you do have to respect the effort he's put into defending his point of view. You'll emerge reeling, but you'll probably still conclude that a light footprint on Earth is what we should all be aiming for.

Rated 4.5/5 on amazon.co.uk

#### Whole Earth Discipline: An Ecopragmatist Manifesto (2009)

Stewart Brand trained as an ecologist. He also created the Whole Earth Catalogue, a much thumbed bible of the counter culture in California and beyond. In Whole Earth Discipline he paints a picture of our world as he sees it today, showing some of our cosy theories about making life better to be, well, to put it plainly, completely barking mad. He argues that cities are the most sensible places to live, that nuclear power is essential and that genetic engineering holds massive potential for good. But, whatever his concerns for the West, his message is one of hope, and still resonates with his ecological roots.

Rated 4/5 on amazon.co.uk

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#### **GREEN REVIEW**

## LINKS Where did I see...?

As you've whizzed through the magazine, you might have thought, "I must remember that." But as real life gets in the way, we thought you'd like a reminder of all those references and links buried in the news and in our articles.

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Spending Review hm-treasury.gov.uk/spend\_index.htm Royal Society http://royalsociety.org National Ethical Investment Week http://neiw.org

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#### CARTOON



So there you have it. You've seen what we have to say and there are plenty of opportunities to tell us what you think (pages 3, 11, 12 and 26). You could even win free clean energy for a year or vouchers for some essential Christmas shopping. But here's the thing. We want our magazine to be as closely aligned to what you want to read as possible. So ...

Why not contribute? If you've the burning desire to write about a topic close to your heart – as long as it fits *Blue & Green Tomorrow's* ethical and environmental stance – please do. You may get your name in print and be asked back for future issues.

#### Send all articles to articles@blueandgreentomorrow.com

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