

» **ROUNDTABLE 17**

## **Future regulation**

What the age of austerity will mean for the environmental regulatory system in the UK

» **REMEDICATION 26**

## **Protective nature**

Global cement and quarrying company Lafarge sets out to rehabilitate its operations

» **MEASUREMENT 32**

## **Benchmarking**

Comparing environmental performance can help your organisation to improve

# **the environmentalist**

[environmentalistonline.com](http://environmentalistonline.com)

April 2011



**Ecosystems:  
the core  
supply chain**

**iema**  
Institute of Environmental  
Management & Assessment

# Carbon (GHG) Accounting and Management

## *An IEMA-Approved 2-Day Training Course*

**Conestoga-Rovers & Associates (Europe) Ltd (CRA)** is pleased to announce the continued delivery of its IEMA-approved Carbon and Greenhouse Gas (GHG) Accounting and Management course. This two-day course is aimed at professionals responsible for measuring, reporting, and managing carbon dioxide and other GHG emissions for their organisation. Also, this course will help organisations develop accounting processes and reduction initiatives for the **Carbon Reduction Commitment**. The course modules will equip you with:

- *An appreciation of the background to climate change, and the business and socio-political drivers for addressing GHG emissions*
- *The capability to present business cases to senior management to gain commitment for initiatives to measure, reduce and report emissions*
- *An understanding of the key standards and protocols for GHG measurement and reporting*
- *The skills to develop a carbon (GHG) accounting system and to capture your organisation's footprint*
- *An understanding of techniques to reduce carbon and GHG emissions*

**Upcoming courses in the UK are planned for 14th-15th June 2011 in London and 21st-22nd June 2011 in Edinburgh. For more details, visit [www.cra.co.uk](http://www.cra.co.uk) or contact us at:**

**0115 965 6700 or [training@cra.co.uk](mailto:training@cra.co.uk)**



CRA's training partner, SHEMSI, delivers our IEMA-approved carbon course in Southeast Asia. For details, contact [mail@shemsi.com](mailto:mail@shemsi.com).

This course provides essential guidance on CRC Registration, Compliance and Emissions Reduction.

### ***Some of Our Areas of Expertise:***

Air Emissions Assessments  
BAT Assessment and Reporting  
Brownfield Redevelopment  
Carbon Footprint and Accounting Systems  
Clean Development Mechanism Design, Validation and Verification  
Climate Change Mitigation and Adaptation Strategy  
Corporate Risk Management  
CSR, Sustainability, and Reporting  
Due Diligence and Compliance Auditing  
EIA/SEA  
EMS/Integrated Systems

Energy and Resource Efficiency  
Environmental Site Assessments  
Environmental Training  
EPR Permit Management  
Geo-Environmental Investigations  
Health and Safety Management  
Liability Risk Transfer  
Organisational GHG Reporting  
Outsourced Environmental Management  
Renewable Energy  
Risk Assessments  
Soil and Groundwater Remediation  
Water and Waste Minimisation

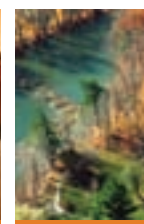


**CONESTOGA-ROVERS  
& ASSOCIATES (EUROPE) LTD**

UK Headquarters in Nottingham  
3,000 Staff in 90+ Offices

Tel: 0115 965 6700 Fax: 0115 965 5282 Email: [info@cra.co.uk](mailto:info@cra.co.uk)

[www.cra.co.uk](http://www.cra.co.uk) [www.CRAworld.com](http://www.CRAworld.com)



# APRIL

## NEWS

- 4** Restore revenue recycling or scrap the Carbon Reduction Commitment, says CBI
- 5** Changes to the feed-in tariff leave large solar projects out in the cold
- 6** Public wary of businesses' greenhouse-gas reduction claims  
New *environmentalist* website launches
- 8** **Budget special** Chancellor sets carbon floor price at £16 a tonne  
Greening company cars  
**In parliament** Alan Whitehead MP on why the GIB is a bank in name only
- 9** **Budget special** Lack of borrowing powers limits GIB role  
Planning for the future – a presumption in favour of sustainable development?  
Zero carbon U-turn
- 10** Big savings from resource gains, says Defra  
Sewage spill costs Thames Water £345,000
- 12** **Inside science** Defra scientists on why a 2°C temperature rise isn't always a 2°C rise

## BRIEFING

- 13** New regulations: hazardous substances, climate change, waste, water, energy, flooding, regulation, conservation
- 14** Latest consultations: waste data strategy for Scotland; revised tariff bands under the feed-in tariff scheme; state aid guidelines for phase III of the EU emissions trading scheme; implementing transport elements of the Renewable Energy Directive; and waste plans for Wales

## IEMA NEWS

- 4** Record-breaking response to survey on members' views on IEMA services  
IEMA conference 2011
- 35** From the knowledge hub: the IEMA greenhouse-gas report – six months on
- 37** Introducing the EIA Quality Mark – the new standard for organisations coordinating environmental impact assessments
- 38** Review of IEMA by the regions – from support services to *the environmentalist*

## FEATURES

### 17 Regulation in an age of austerity

The WSP/*environmentalist* roundtable brought together regulators and environment professionals to discuss the future of regulation in the UK

### 22 The business of ecosystems

Dr Mark Everard says that ecosystems are increasingly important to how businesses operate and outlines seven steps to better risk management

### 26 Protective nature

*the environmentalist* reports on the four-stage site rehabilitation process adopted by Lafarge, the global quarrying and construction materials company

### 30 Sustainabilitylive! 2011

Each of the five shows that make up Sustainabilitylive! have their own extensive seminar programme. Here, *the environmentalist* reviews what's on

### 32 Comparative performance

Chris Reynolds explains why benchmarking is an increasingly important business tool and how environment professionals can use it in their work





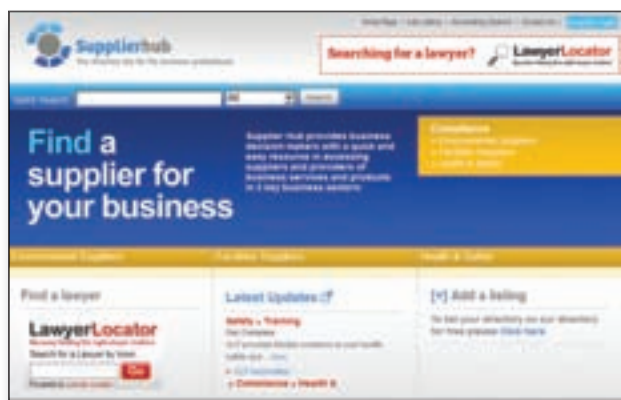
Looking for a product or solution to your **business problems?**



Make sure you visit Supplier Hub

Visit [www.supplierhub.co.uk/compliance](http://www.supplierhub.co.uk/compliance)

Supplier Hub is an **online business services directory** that is designed to provide an extensive database of products and services essential to environmental professionals, giving them immediate access to the resources they need.



The Institute of Environmental Management & Assessment (IEMA) is the UK's largest environmental professional body, providing practitioners with career guidance, ongoing support and development opportunities to ensure sound environmental performance delivers business benefit. IEMA is dedicated to placing professionals at the heart of change.

IEMA works alongside government, the media and industry to enhance the recognition of the profession and promote the importance of practitioners in combating climate change, working towards a low-carbon economy and building a sustainable future.

#### **IEMA**

St Nicholas House  
70 Newport  
Lincoln LN1 3DP  
tel: +44 (0) 1522 540069  
fax: +44 (0) 1522 540090  
email: [info@iema.net](mailto:info@iema.net)  
[www.iema.net](http://www.iema.net)

#### **Editor**

Paul Suff  
[paul.suff@lexisnexis.co.uk](mailto:paul.suff@lexisnexis.co.uk)

#### **Deputy editor**

Sarah-Jayne Russell  
[sarah.russell@lexisnexis.co.uk](mailto:sarah.russell@lexisnexis.co.uk)

#### **Managing editor**

Louis Wustemann  
[louis.wustemann@lexisnexis.co.uk](mailto:louis.wustemann@lexisnexis.co.uk)

#### **Senior sub-editor**

Adella Peyton

#### **Group advertising manager**

Sophie Wright  
tel: 020 8212 1913  
[sophie.wright@lexisnexis.co.uk](mailto:sophie.wright@lexisnexis.co.uk)

#### **Recruitment advertising**

Elaheh Umeh  
tel: 020 8212 1984  
[elaheh.umeh@lexisnexis.co.uk](mailto:elaheh.umeh@lexisnexis.co.uk)

#### **Senior marketing executive**

Victoria Newman  
[victoria.newman@lexisnexis.co.uk](mailto:victoria.newman@lexisnexis.co.uk)

#### **Design**

Jack Dougherty  
[jack.dougherty@lexisnexis.co.uk](mailto:jack.dougherty@lexisnexis.co.uk)

#### **Advertisement production**

John Woffenden  
[john.woffenden@lexisnexis.co.uk](mailto:john.woffenden@lexisnexis.co.uk)

#### **Publishing director**

Simon Collin  
[simon.collin@lexisnexis.co.uk](mailto:simon.collin@lexisnexis.co.uk)

#### **IEMA communications coordinator**

Katrina Pierce  
[k.pierce@iema.net](mailto:k.pierce@iema.net)

#### **Advertising, subscription and back-copy enquiries to**

Customer services,  
tel: 0845 370 1234  
The 2011 annual rate is £135.

#### **Printing**

Headley Brothers Ltd, Ashford, Kent

#### **Published by**

LexisNexis, Quadrant House, The Quadrant,  
Sutton, Surrey SM2 5AS  
[www.lexisnexis.co.uk](http://www.lexisnexis.co.uk)

© IEMA 2011

LexisNexis aims to provide authoritative and accurate information at all times. Its publications are, however, for guidance only and are not an official information source. All rights reserved. No part of this publication may be reproduced, stored in a retrieval system or transmitted in any form or by any means, electronic, mechanical or otherwise, without the prior written consent of the publisher and editor.

the environmentalist is  
printed by ISO14001  
certified printers on 55%  
recycled paper stock and  
despatched in biodegradable  
polywrap



# Uncertain times

Certainty is what the business community demands most from government when it comes to making investment decisions. What it does not like is frequent, or rapid, policy change. Businesses want to know that if they invest X amount now in measures to reduce emissions, by, for example, improving their energy efficiency or installing renewable-energy equipment, the government will not quickly change the rules of the game. Recently that has too often been the case.

The first signs that the new government may not provide the certainty businesses crave came last October, when, to the surprise of participants and business groups, it decided to scrap the revenue-recycling element of the Carbon Reduction Committee Energy Efficiency (CRC) scheme, without any prior consultation and with the announcement “tucked away” in a DECC document accompanying the Comprehensive Spending Review. The decision effectively created another carbon tax and was roundly condemned by business leaders. The review of the feed-in tariff (FIT) has cast another shadow over

**The first signs that the coalition may not provide the certainty businesses crave came last October when it decided to scrap the revenue-recycling element of the CRC**

the low-carbon business–government relationship. Plans to reduce the tariff for all solar installations above 50kW by a staggering 72% from August will render many brownfield and large rooftop sites uneconomic and will discourage investment in clean-energy generation. Parts of the UK, such as Cornwall, which saw large-scale solar farms as a way of driving growth will now not reap the economic benefits. An estimated 90,000 jobs across the UK will either disappear or fail to materialise if the cut in the FIT goes ahead, says the solar industry (p.5).

Changes to public policy, irrespective of the individual merits (the CRC is overly complex and the FIT is being scaled back partly because of incorrect projections and higher than expected returns), risk undermining confidence in the government, and its ability to provide a stable environment for low-carbon investment. At a time when the UK economy is still in the doldrums, the government should refrain from further tinkering and instead provide certainty to support investment in low-carbon technologies, which can provide the impetus for economic recovery.



**Paul Suff, editor**

Short cuts

## Scottish renewables sector gets a boost

The Scottish economy is to benefit from millions of pounds of investment in the renewable energy and carbon capture and storage (CCS) sectors, creating possibly thousands of new jobs. International engineering firm Doosan and Scottish and Southern Electricity (SSE) are the latest companies to confirm massive investment projects in the country. Doosan is to build a research and development centre of excellence for renewables at its current site near Glasgow, creating 200 new jobs. The company is also considering building wind turbine manufacturing sites in Scotland, which could bring in a further 1,700 jobs. Meanwhile, SSE has announced it is to invest £3.6 billion in a range of projects, including upgrading Scotland's electricity network and expanding its wind energy developments and CCS opportunities. The firm aims to create 7,000 jobs over the next five years. The announcements came as energy and climate-change secretary Chris Huhne pledged that the UK government would work to support the Scottish renewables sector and remove barriers to projects' success.

## EA to advise on climate-change adaptation

The Environment Agency (EA) will be responsible for advising businesses and local authorities on preparing for climate change from September 2011, Defra has announced. The agency will receive an additional £2 million of funding to take over the delivery of practical guidance to help organisations and communities cope with the increased risk of severe weather and flooding, which is currently provided by the UK Climate Impacts Programme (UKCIP). Chris Smith, chair of the EA, said: "These extra responsibilities enable us to build on the work we already do to tackle flooding and coastal erosion and manage precious water resources, water quality, wildlife and habitats."

# Restore revenue recycling or scrap CRC, says CBI

**Energy** The Carbon Reduction Commitment Energy Efficiency (CRC) scheme is untenable in its current form and should be scrapped if the government fails to restore the revenue-recycling element it surprisingly withdrew last year, says the CBI in a new policy document.

Under the CRC, participants have to purchase allowances to emit CO<sub>2</sub> at £12 a tonne. Originally, participating organisations could expect to receive back at least some of that expenditure depending on their performance in reducing emissions. But, in October 2010, DECC announced that revenues from the scheme, which had only started the previous April, would no longer be recycled to participants, effectively turning it into a carbon tax.

The aim of the CRC is to encourage businesses to reduce emissions by improving their energy efficiency, but the CBI warns that it is now questionable whether the scheme can deliver this outcome.

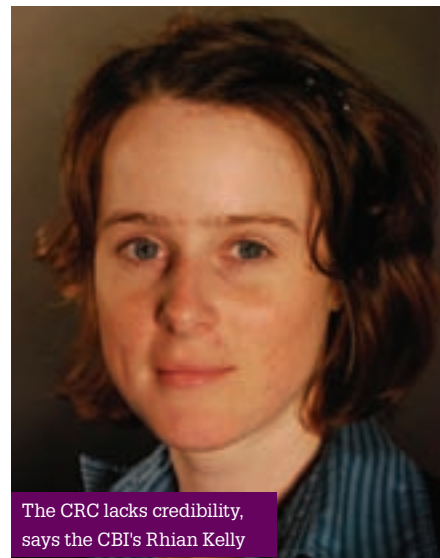
"We now have a carbon-reduction scheme that doesn't encourage companies to reduce carbon emissions, and actually adds to the cost of doing business," says Rhian Kelly, the CBI's new director of business environment.

The CBI argues that businesses will only take action to improve energy efficiency if the government reinstates the revenue-recycling incentive. "Without a proper incentive the scheme lacks credibility and has lost businesses' trust," says Kelly.

The CBI believes that scrapping the CRC is the only viable option if the government fails to bring back the original incentive.

However, energy minister Greg Barker recently told a DECC-hosted workshop on the CRC – part of the department's ongoing work to identify ways to simplify the scheme – that not recycling revenue creates a clearer and stronger carbon price signal on which businesses can make investment decisions.

He said the decision to not go ahead with the revenue-recycling element of the CRC, just seven months after the scheme was established, was a difficult one, but was taken to support the public finances. Barker also claimed that the CRC is more than a tax, as it combines a number of drivers, including the reputational



The CRC lacks credibility, says the CBI's Rhian Kelly

element in the performance league table which will be published each year.

"Some companies may not feel the reputational aspects are important but you can be sure that a supplier, customer, investor will be interested in it," he said.

Meanwhile, a report from offsetting organisation Carbon Retirement suggests that the CRC will not reduce emissions. According to the report, even if the CRC is successful in encouraging investment in energy efficiency and reducing UK energy production, net global emissions will not decrease as a result. This, says the report, is because energy production is covered by the EU emissions trading scheme (ETS), which has already set the volume of allowances available, so any allowances not purchased by UK energy companies will instead be purchased by other sectors.

Carbon Retirement wants the government to remove from the scheme each year the number of allowances equivalent to the volume of emissions reductions achieved by CRC participants. This will have no impact on CRC participants except for ensuring that their efficiencies genuinely translate into net emission reductions, says Carbon Retirement.

It also says that linking the CRC to the ETS, by permitting CRC participants to buy EU allowances, would help prevent the loss of the potential 90 million tonnes of greenhouse-gas savings expected through the CRC by 2020.

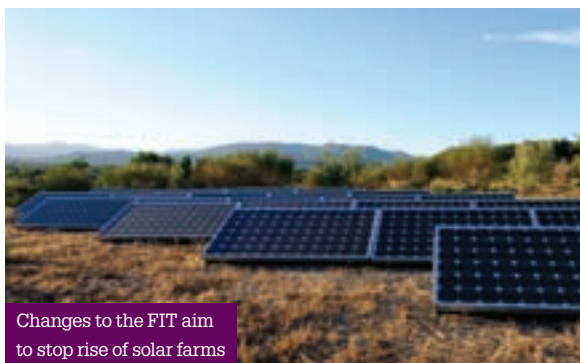
# FIT changes leave large solar projects in the cold

**Renewables** The UK's solar sector has severely criticised the government for proposing dramatic changes to the feed-in tariff (FIT).

Organisations from the renewable-energy sector condemned the government for failing to prepare the sector and crippling future solar projects after DECC published proposals to substantially reduce remuneration for solar photovoltaic (PV) installations larger than 50kW. Dave Sowden, chief executive of the Micropower Council, said: "While a review of large field-based solar projects was expected, the fast-track review of the whole FIT scheme has come as a bolt from the blue for the rest of the sector."

"The proposed tariff changes to projects over 50kW will result in the collapse of the rooftop solar market. School installations, community projects and virtually every aspect of the built environment market, outside of residential projects, will disappear."

Organisations from the sector claim the changes could threaten thousands of potential jobs. Ken Moss, chief executive at mO3 Power, said: "A buoyant solar power sector would have stimulated at least 90,000 jobs if the feed-in-tariffs had remained where they were." Ray Noble of the Renewable Energy Association, agreed.



Changes to the FIT aim to stop rise of solar farms

"This is an absolute disaster, no new projects will start if this proposal becomes law. This industry has been strangled at birth. The huge number of envisaged new jobs will disappear," he said.

Energy minister Greg Barker confirmed that the proposals are aimed at ensuring incentives reach domestic installations, rather than large-scale solar farms.

Sowden, however, argues that the government's failure to manage expectations could cost the economy billions. "When the government changes its policy on renewable-energy schemes with no warning, investors' perception of regulatory risk is increased and this could result in a demand for a greater rate of return. An additional 1% increase could cost £2 billion."

The proposed changes are subject to consultation, but if approved the new tariffs will apply from 1 August.

## Impact on Cornwall's economy

The government's proposed changes to the feed-in tariff (FIT) are particularly worrying for the Cornish economy, which has seen an explosion of interest in solar energy after the scheme was announced in April 2010.

"As the county with the highest levels of solar irradiation in Britain, we have received massive levels of interest from potential solar projects. We've already granted planning permission on eight projects, but if the government proposals come into effect I believe only one will go ahead," Tim German, renewable-energy and partnerships manager at Cornwall Council, told *the environmentalist*.

German, who has been discussing the proposals with energy and climate-change secretary Chris Huhne and Rachel Solomon Williams, DECC's newly appointed head of the FIT scheme, argues that large-scale solar projects that feed money and skills back into the local community can offer greater benefits than just domestic installations.

He is, however, unconvinced that the consultation will result in any changes to the proposals. He said: "There is a lot of opposition to these plans in Cornwall, but in my view the government made up their minds in advance of this consultation and these proposals will happen with no changes."

## Short cuts

### UK given three months to tackle air pollution

The European Commission has given the UK a three-month extension to tackle air pollution in London or face fines of up to £300 million. In December 2009, EU officials ruled that air quality in Greater London did not meet targets set out in the Directives (1999/30/EC and 96/62/EC) providing daily and yearly limits of concentration of airborne particles known as PM10. EU environment commissioner Janez Potočnik has announced that the UK government has until 11 June to meet the targets, but that the extension was dependent on the authorities taking short-term measures to control or suspend activities that contribute to the emissions. "Air pollution from PM10 has serious impacts on human health. That is why EU legislation sets strict standards. The commission expects member states to clearly demonstrate that they are doing their utmost, in the interests of their citizens, to comply with the standards in the shortest possible time," he said. To help improve air quality in the capital, the Department for Transport has committed an additional £5 million to help the mayor of London establish a "Clean Air Fund". The money will be used to put in place measures – including trialling dust suppressant technology – to reduce PM10 in a number of locations in central London.

## Guides for businesses

The UK government has published a series of 13 new products to help organisations ensure business growth, focusing on different challenges for business including research and development, finance and innovation. One product, *Improving your resource efficiency*, provides tools, guides, case studies and advice on how to ensure an organisation is using its resources effectively, as well as grants and loans to improve organisations' working practices. For more information, visit [www.businesslink.gov.uk](http://www.businesslink.gov.uk).



# Public wary of businesses' GHG claims

**Climate change** UK consumers want businesses to commit to cutting greenhouse-gas (GHG) emissions, but few trust claims of energy efficiency, according to surveys carried out for the Carbon Trust and the CBI.

Only 7% of those surveyed for the Carbon Trust said they believed organisations' plans and actions to reduce their environmental impact, while figures from the CBI found that just 16% thought manufacturers' claims about the efficiency of products were truthful.

Both surveys confirm the public's interest in companies taking an active role in tackling climate change, with 90% of respondents to the Carbon Trust poll saying they want companies to commit to cutting their GHG emissions by the 3% needed each year to meet the UK's 2050 targets. However, the majority were cynical about organisations' publicised commitment to combating climate change, with two-thirds doubting firms are actually cutting GHG emissions and more than half believing businesses only complete one-off improvements for publicity purposes.

Harry Morrison, general manager of the Carbon Trust Standard, said: "Consumers really want businesses to take action, but they are potentially mistrustful of unsubstantiated claims as to the green credentials of businesses and products."

The majority of those polled (60%) want to see third-party evidence from a "respected climate-change body" before they will believe companies' claims.

"The key to engaging consumers is a combination of a credible third-party certification process with consumer-friendly communications," said Morrison.

CBI director-general John Cridland agrees, warning that consumers are key to the transition to a low-carbon economy but they were often "baffled" by low-carbon products making different green claims. He said: "Businesses need to provide clear, consistent labelling that becomes a trusted universal standard. The success of A-G labelling for white goods such as fridges and washing machines shows that this kind of approach works."

"It is only when we get significant public buy-in of low-carbon goods that we will make real progress towards our



Consumers need credible evidence of emissions cuts

carbon-reduction targets. Unless we can get the public truly on board, then all the investment in new technology and all our low-carbon innovation will be for nothing."

The survey results came as the European Commission called for companies to participate in piloting its new method of measuring organisational and product environmental footprints. Businesses have until 13 May to apply to participate in the scheme, which covers the collection of data and the assessment of environmental impacts ([www.lexisurl.com/iema6593](http://www.lexisurl.com/iema6593)).

## New *environmentalist* website launches

**Online** *the environmentalist* is now online, giving environment practitioners instant access to an online library of up-to-date information crucial for day-to-day work and professional development. The website ([www.environmentalisonline.com](http://www.environmentalisonline.com)) holds not only the current issue but also a back catalogue of previously published articles, daily news updates, and a list of the latest regulations and consultations.

Launched on 29 March, the site is already receiving positive feedback from users. Graham Parry, managing director of environment consultancy ACCON UK, said: "I found the new website really easy to use and most importantly informative. I found consultation documents that I didn't know about. Well done, keep up the good work."

"As with the print magazine, we want the website to become a vital news source, full of intelligence and advice to help environment professionals manage the impacts of business," said *environmentalist* managing editor Louis Wustemann.



Alison Hall, head of commercial marketing at IEMA, said: "We're delighted that we have the online magazine site up and running, after an intense period of activity alongside the new printed version launch back in January. It really enables us now to combine news as it happens with analysis and debate, which keep IEMA members at the forefront of the latest knowledge and skills whenever they want it, wherever they are."

IEMA also views the site as a shop window for other professionals to see the difference that IEMA and environment

professionals are making within organisations. "The website showcases the talent within our membership and we expect our commercial partners to benefit from the increased awareness and reach which this new site will provide," said Hall.

The website will be rolling out new features over the next few months, including blogs and newsletters.

Alongside the new website, the magazine has also launched an account on Twitter (@The\_Envist) in order to share the latest environment news stories as swiftly as possible.

What do you think of [www.environmentalisonline.com](http://www.environmentalisonline.com)? The editorial team at *the environmentalist* would like to hear your opinions and suggestions. Please email them to [environmentalist@lexisnexis.com](mailto:environmentalist@lexisnexis.com) or join the conversation on the IEMA LinkedIn group at [www.lexisurl.com/iema6603](http://www.lexisurl.com/iema6603).





**"It's all about meeting the needs of our customers. My team are always on hand to provide advice and guidance and make the necessary practical arrangements too."**

Kayley, RRC Customer Services Manager

# NEBOSH and IEMA Environmental Training from RRC

RRC have been developing and delivering first class training for over 80 years and our reputation speaks for itself. Whether you're an individual looking to further your career or an organisation looking to train your staff, you won't find expertise greater than ours. We work hard to make training as easy as possible and we are always thinking of new ways to make our courses effective and enjoyable. Our tutors are highly experienced, friendly and approachable and our dedicated Customer Services team back this up with excellent support.

## RRC Environmental Courses



### IEMA Accredited Courses

- IEMA Introduction to Environmental Management Systems
- IEMA Foundation Certificate in Environmental Management
- IEMA Associate Certificate in Environmental Management

All available throughout the world by e-Learning and Distance Learning  
Online assessment available.



### NEBOSH Accredited Courses

- NEBOSH National Certificate in Environmental Management
  - NEBOSH Diploma in Environmental Management
- Face-to-Face Training in London and Bahrain

Distance Learning and e-Learning with exam venues throughout the world



### In company Training

We deliver training at a venue of your choice. Accredited courses available as well as bespoke training to meet the specific needs of your organisation.

RRC Training  
27-37 St George's Road  
London SW19 4DS

Telephone:  
+44 (0)20 8944 3108  
E-mail: [info@rrc.co.uk](mailto:info@rrc.co.uk)



# Budget special

## IN PARLIAMENT



A 'bank' in name only

**Alan Whitehead**  
MP for  
Southampton Test

Well, as a result of the Budget we are to have a Green Investment Bank (GIB) – sort of. It will be *called* a bank, and it will have up to £3 billion pounds at its disposal from its inception in 2012/13. But as in all budgets, it is wise to read the small print, and doing so highlights a rather different picture.

The Environmental Audit Select Committee recently published a report on the GIB, which underlined the imperative that it should, from the beginning, be a real “bank” – that is, it should have the ability to raise funds, to borrow, and to issue bonds: and in so doing, to be able to “lever” the funds that can really make the difference in green and low-carbon investment. This is particularly important in areas where, for a variety of reasons, the need is great but traditional funding is scarce. This model has already been an enormous success elsewhere in Europe – the KfW bank in Germany, for example. It is this picture that those who want the GIB to succeed would have been looking at the small print to confirm, but it was absent.

The GIB will be a bank in name only until at least 2015. That is the earliest point at which the government says the GIB may be able to acquire borrowing powers, and even then, the small print states, only “once the target for debt to be falling as a percentage of GDP has been met”. In other words, the bank will have no borrowing power until the Treasury declares it should.

This is all very disappointing for those who really thought that at last we could have a key instrument to help underpin the investment we plainly need to ease the transition to a low-carbon economy. There will be some limited investment, granted, but even a billion or so goes only a little way to underpin the scale of that task. That's what we've got available now, but it is way short of what is required. Let's be clear that, for the next few years at least, we'll be working with a green investment fund and not a bank.

## Chancellor sets carbon floor price at £16 a tonne

### CCAs extended while planned CCS levy discarded

**Energy** The carbon floor price (CFP) will be £16 a tonne of CO<sub>2</sub> from 1 April 2013, rising to £30 by 2020. It will apply to energy generators, and the government hopes it will help drive investment in the low-carbon power sector.

George Osborne told MPs that the introduction of the CFP is a world first, and that it will provide the incentive for £billions of new investment in the UK's dilapidated energy infrastructure.

David Porter, chief executive of the Association of Electricity Producers said that the floor price would increase the confidence of energy companies wanting to develop new low-carbon technologies for electricity production. There is concern, however, that the chancellor gave no indication of post-2020 price levels. “Investors will have serious doubts about the long-term credibility of the CFP policy as it is currently conceived. This is because it is a tax-based mechanism subject to annual votes in parliament,” commented Rupert Edwards, head of policy and market analysis at Climate Change Capital.

The floor price means that power companies will be taxed on their carbon emissions, but will be allowed to pass the cost on to consumers.

Duncan Sinclair, director at Redpoint Energy, estimates that the CFP will add around £5–£6 per MWh or 10% to electricity prices by 2020, and said it will have a significant impact on the earnings of power generators. Operators of coal and less-efficient gas plants will be hit hardest, potentially accelerating their closure, while operators of renewable-energy sources and nuclear power stations will pay little, but enjoy a windfall from higher electricity prices.

Industries covered by the EU emissions trading scheme (ETS) could also benefit, according to Christian de Perthuis, carbon tax expert and professor of economics at the University Paris-Dauphine. He says that putting a higher-than-EU-market carbon price on emissions (the price of ETS allowances is currently £15), will mean UK utilities spend more on emissions reduction, leading to a fall in the demand for ETS allowances. “By unilaterally putting a floor price on carbon for utilities

in the UK, Osborne will actually increase the constraint on the UK utilities sector but it will reduce for all other non-power utilities players subject to the ETS in the UK and in all other European countries, whatever their economic sector,” said de Perthuis.

With the introduction of a CFP, the chancellor said that the government would now not go ahead with a levy on energy bills to fund carbon capture and storage (CCS) projects. Instead, the government plans to fund CCS from general taxation, which has caused concern in the industry. Dr Jeff Chapman, chief executive at the Carbon Capture & Storage Association, said: “The problem is that without a dedicated instrument like the levy there is no guarantee the money will be available, which creates uncertainty. It would have been better to retain the levy, at least for the four planned CCS demonstration projects.”

The chancellor extended Climate Change Agreements (CCAs) to 2023, and increased the climate change levy discount on electricity for those who sign up for CCAs from 65% to 80% from April 2013.

### Short cuts

#### Greening company cars

Further measures to encourage businesses to use ultra-low-carbon cars were announced by George Osborne. He said the government will freeze company car tax (CCT) for cars emitting less than 95g of CO<sub>2</sub> per kilometre (gCO<sub>2</sub>/km) from April 2013. CCT will rise for all vehicles with emissions of between 95gCO<sub>2</sub>/km and 219gCO<sub>2</sub>/km by 1% from the same date. This follows the chancellor's previous announcement that in 2012, CCT will change so cars emitting less than 75 gCO<sub>2</sub>/km will be taxed at 5% of list price; cars discharging less than 99gCO<sub>2</sub>/km 10%; and cars emitting up to 100gCO<sub>2</sub>/km an 11% rate, rising by one percentage point for each 5gCO<sub>2</sub>/km band, to a maximum of 35%.



# Budget special

## Lack of borrowing powers limits GIB role

**Low-carbon economy** George Osborne awarded the planned Green Investment Bank (GIB) more seed-corn funding in the Budget, but refused to allow it to borrow money before 2015, potentially jeopardising investment in low-carbon projects.

The chancellor said that the GIB would “support low-carbon investment where the returns are too long term or too risky for the market”, and he promised that its initial funding would be £3 billion, rather than the £1 billion announced last year.

But business groups and investors said the bank, which is now due to become operational in September 2012, would be hampered by the chancellor's decision not to allow it to borrow until the public deficit is sharply reduced, by 2015 at the earliest.

“The additional £2 billion is welcome, but the bank should have powers to borrow from the outset to give investors confidence,” said CBI director-general John Cridland. His remarks were echoed by Andrew Raingold, executive director at the Aldersgate Group (AG), which had demanded that the GIB receive up to £6 billion in initial funding. Having the



power to borrow from day one would put the bank at the heart of the chancellor's plan for growth and ensure competitors in key green industries do not overtake the UK, he said.

Osborne said he hopes the GIB will raise £15 billion from the private sector, but the UK Sustainable Investment and Finance Association is concerned that because borrowing will not be allowed for at least another four years, investors may be reluctant to provide the bank with additional financial support. “The delay

and uncertainty about when the bank can start borrowing does not send the right signal to pension funds and investment managers,” commented chief executive Penny Shepherd.

Others, however, said that delaying the borrowing capability could mean that funds will be available when they will be most needed. “By allowing the GIB to borrow mid-decade, its lending can ramp up quickly

when the country's low-carbon capital requirements reach a critical point,” said James Cameron, vice-chair at Climate Change Capital.

Dr Gordon Edge, director of policy at RenewableUK, acknowledged this, telling the AG's post-Budget event that if operators know additional money will eventually be available through the GIB, they can prepare for that. “Certainly when it comes to offshore wind, the real ramp-up in demand for that cash is going to be post-2015,” he said.

## Planning for the future

**Built environment** The Budget set out plans to streamline the planning system, which the chancellor described as a “chronic obstacle” to economic growth. Changes to the planning process are a key element of the government's “Plan for Growth”, which was released alongside the Budget documents.

Under the proposals, all bodies involved in planning decisions will have to prioritise growth and jobs, a new presumption in favour of sustainable development (SD) will be introduced, so that the default answer to such development is “yes”, major infrastructure projects will be fast-tracked through the planning system and there will be a 12-month cap on the time it takes to decide a planning application.

Martin Baxter, policy director at IEMA, says that making SD key to planning decisions raises all sorts of questions. “Does this mean the government is putting the environment at the heart of the planning system?” he asks. The answer, he states, will depend on the

definition of SD the government adopts. Baxter fears that economic growth may be the key factor in deciding whether a development is “sustainable”, and warns that major planning decisions will still have to comply with the Directives on environmental impact assessment and strategic environmental assessment even if the new presumption in favour of SD is established.

Business groups generally welcomed the plans. “It sends the right signals to attract the £200 billion needed for the UK's national infrastructure upgrade,” said CBI director-general John Cridland. By contrast, Neil Sinden, director of policy at the Campaign to Protect Rural England, said: “The planning measures present a potentially devastating threat to the countryside and are unlikely to boost long-term economic growth. The planning system exists to prevent unsustainable, unwanted and environmentally damaging development.”

The government aims to publish a draft presumption in favour of sustainable development in May 2011.

### Short cuts

#### Zero carbon U-turn

A surprise announcement in the Budget was the revision of the definition of zero carbon in the Building Regulations from 2016. Under the original plans, all energy used in new homes – from heating and fixed lighting to hot water and appliances – would count in determining the efficiency of a home from 2016. However, the government now says that appliances, which can account for up to 45% of a household's energy consumption, will be excluded from the definition. The building industry says this will significantly reduce the overall carbon-reduction target in new homes, by about one-third. The UK Green Building Council described the plans as a “U-turn” and said it revealed a shocking weakening of the government's green agenda. The government says emissions from the energy consumed by appliances will be addressed by other policies, such as the EU emissions trading scheme.



Short cuts

## Smart flood warnings

iPhone owners can now receive flood warnings direct to their phone. The Environment Agency has made a free application, called Flood Alert, available to members of the public and businesses that provides real-time flood information. The service sends localised warnings when flooding is possible, by phone, text or fax. It also gives users information on what they should do to help reduce flood risk, for example how to flood-proof a building. The application can be downloaded from Apple's iTunes website and is available throughout England and Wales 24 hours a day. Both an Android and a BlackBerry version will be launched in the next few months. At the same time, the Scottish Environment Protection Agency has launched its new Floodline direct warning service, which aims to give those at risk of flooding valuable time to take action and protect their homes and businesses. Anyone can sign up to the service ([www.lexisurl.com/iema6606](http://www.lexisurl.com/iema6606)) and receive details on the likelihood and timing of any potential flooding threat.

## Water scarcity 'growing issue' in the EU

Europe's ability to meet its demand for water has reached a "critical level" in many areas, according to the latest report ([www.lexisurl.com/iema6605](http://www.lexisurl.com/iema6605)) from the European Commission. During the 12 months to May 2010, 12 member states, including the UK, reported droughts or lower levels of rainfall or water shortages, with Cyprus, the Czech Republic and Malta confirming they "face continuous water scarcity". The report is the last in a series detailing the progress in addressing water scarcity and droughts in Europe. It concludes that problems with access to water are "not limited to Mediterranean countries", with "most European regions expected to be under medium or severe water stress by 2050 due to unsustainable water use, exacerbated by the effects of climate change".

# Big savings from resource gains

**Resource efficiency** UK business could save around £23 billion a year from resource-efficiency measures that are either no or low cost, according to new research from Defra ([www.lexisurl.com/iema6597](http://www.lexisurl.com/iema6597)).

The findings also indicate that a further £33 billion can be saved annually when investment in efficiency measures that have a payback of more than one year are implemented. In addition to saving money, better use of resources can reduce carbon emissions by between 29 and 90 million tonnes, says the environment department.

Commenting on the findings, environment secretary Caroline Spelman said: "Becoming more resource-efficient contributes to a business's bottom line, increases profitability and their capacity to grow. In addition to improving competitiveness, businesses could reduce carbon emissions by 29 million tonnes a year; so it's a win-win for business and the environment."

Defra says that reducing waste and diversion from landfill can produce around £18 billion of the potential no- or low-cost savings, with energy- and water-efficiency savings worth another £4 billion and £1 billion respectively. The report

estimates, for example, that 6.5 million tonnes of construction waste could be diverted from landfill and recycled, while the waste reduction opportunity for the industry is 1.17 million tonnes.

The environment department also highlights the barriers that need to be overcome to realise such savings. It points out that both lean manufacturing and waste reduction need to be driven by production management, but that environmental issues tend to be driven by environment managers or facilities managers with a focus on waste management.

Separate research by Eurobarometer reveals that 75% of European businesses have experienced an increase in material costs in the past five years, while 90% expect price increases in the future. To tackle this challenge, small and medium-sized enterprises (SMEs) are looking to eco-innovation as their answer. More than 40% of SMEs that have introduced an eco-innovation in the past two years said the investment had reduced material use by up to 20% per unit of output. The poll also shows that most European SMEs see limited access to materials as an important driver for eco-innovation.

## Sewage spill costs Thames Water £345,000

**Prosecution** Allowing thousands of litres of raw sewage to discharge into gardens, allotments, homes and streams over a 10-week period has cost Thames Water Utilities more than £345,000, bringing to an end a legal process that has taken eight years and has involved both the High Court and the European Court of Justice (ECJ).

Bromley Magistrates' Court heard that in February 2003 sewage escaped from a manhole in the garden of a property in the Kentish town. The discharge of sewage stopped the next day, before continuing intermittently over the next two months, peaking on 3 March 2003. On a number of occasions sewage was coming out of the manhole because the pumps set up by the contractors had run out of fuel, completely stopped, or else insufficient pumps were available.

Thames Water fought a legal battle against prosecution, particularly the Environment Agency's decision to pursue waste deposit offences. The water

company argued that escaped sewage is subject to the EU urban wastewater treatment Directive (91/271/EEC) only and not the waste framework Directive (WFD) (2006/12/EC). The ECJ ruled that wastewater escaping from a sewerage network did constitute waste for the purposes of the WFD, but said an exemption may apply if national legislation contains precise provisions to achieve the same level of protection of the environment required by the Directive.

The High Court, however, ruled that there is no other system of rules or laws that achieve the level of protection of the environment required by the WFD except the general waste legislation, so the sewage discharge is "controlled waste" for the purposes of s.33 of the Environmental Protection Act 1990.

Bromley Magistrates' Court fined Thames Water £204,000 for 15 environmental offences and ordered it to pay the agency costs of £139,689.98 and compensation totalling £2,250.

# Greenspace

takes the hard work out of compliance

**Greenspace** is a consultancy supported platform for your Environmental, Health & Safety Management Systems. Build your Greenspace site from a growing range of applications.

- Legal Register updates and manages compliance
- Aspect Register controls your impacts
- Carbon Manager to achieve your CRC or CSR goals
- Store and link to your ISO 14001 & OHSAS 18001 documents
- Publish your CSR report, carbon footprint and policy

---

**“Legal Register is a personal service that focuses sharply on the legislation that could affect our activities at our Stanlow complex. It gives me peace of mind for our ongoing compliance.”**

Steve Cross, Environmental Manager, Shell UK

---

For further information and to apply for a FREE\* trial, please contact:

**Guy Jeremiah**  
t 020 7928 7888  
e [info@legalregister.co.uk](mailto:info@legalregister.co.uk)  
[www.watmangroup.com](http://www.watmangroup.com)

To find out more visit  
**[www.legalregister.co.uk](http://www.legalregister.co.uk)**

## INSIDE SCIENCE

### When a 2°C rise isn't a 2°C rise

Limiting global temperature increases to below plus 2°C compared with the pre-industrial average is a long-standing goal for international climate-change mitigation efforts. A change in global average temperatures of plus 2°C above pre-industrial levels does not sound dramatic to most people. It is misguided, however, as changes in global average annual temperatures can mean much larger changes regionally, with greater extremes. The UK summer heatwave in 2003 led to more than 2,000 premature deaths in the UK, with the highest ever recorded maximum temperature of 38.5°C occurring in Faversham; the average summer temperature increase across the UK was just plus 2°C.

Research by the Met Office shows that for a 2°C global rise, the hottest day in a UK summer could increase by up to 8°C. In general, a global average of 2°C warming comprises greater than average

warming over land and lower than average over oceans, but there is much local variation. The Intergovernmental Panel on Climate Change in its fourth assessment report (released in 2007) suggested that 20%–30% of species could ultimately face extinction with temperature increases of 1.5–2.5°C. One of the striking things about the report was the shift in linking significant impacts to relatively smaller degrees of average temperature change compared with earlier assessments. In other words, as more evidence of climate impacts accumulates, it is becoming increasingly clear that a 2°C warming raises significant issues in a number of areas, and the assessment of “dangerous” levels of change has been shifted downwards, towards lower temperature increases.

In polar regions, for example, a global average temperature rise of 2°C could result in temperature increases of as much as 6°C, which includes feedback

where the normal “albedo effect” – ice reflecting much incoming solar radiation – is reduced due to ice melt. There are large uncertainties over the amount of sea level rise that may occur as a result of melting ice caps in Antarctica and Greenland. Different studies suggest ranges of sea level rise between 0.5–2 metres by 2100 if temperatures rise by less than 2°C.

Given the current lack of sufficient commitments globally to reduce greenhouse-gas emissions at the required rate to have even a 50% chance of limiting warming to no more than 2°C, much research effort now is focused on the risks and consequences of warmer scenarios, and the challenges in adapting to these.

*Professor Robert Watson (chief scientific adviser, Defra) and Dr Rupert Lewis (deputy director/head of evidence, Defra), Kathryn Humphrey (scientific adviser, Defra)*



## Help your career blossom with our environmental training

We provide a wide range of health, safety and environmental training courses:

- **IEMA Associate Certificate in Environmental Management (Distance Learning Version - coming soon)**
- **IEMA Foundation Certificate in Environmental Management**
- **IEMA Environmental Awareness**
- Courses are held at venues across the UK
- In-company training to suit your needs and budget

If you would like more information please call

**FREEPHONE 0808 100 26 89**

or email [training.enquiries@santia.co.uk](mailto:training.enquiries@santia.co.uk)

or visit our website















[www.santia-training.co.uk/environmental](http://www.santia-training.co.uk/environmental)

Santia Consulting Ltd are the UK's leading provider of solutions for health and safety risk management. We deliver the widest range of services on a national basis, including consultancy, training, auditing, reporting, inspection, testing and maintenance.






## NEW REGULATIONS

In force	Subject	Details
3 March 	Hazardous substances	EU Regulation 207/2011 amends Annex XVII of Regulation 1907/2006 – the REACH Regulation – by introducing restrictions on the placing on the market, and use, of diphenylether, pentabromo derivative and perfluorooctane sulfonates. <a href="http://www.lexisurl.com/iema6544">www.lexisurl.com/iema6544</a>
25 March 	Climate change	The Aviation Greenhouse Gas Emissions Trading Scheme (Amendment) Regulations 2011 amend the 2010 Regulations by altering the definition of a “UK operator”. <a href="http://www.lexisurl.com/iema6536">www.lexisurl.com/iema6536</a>
27 March 	Waste	The Waste (Scotland) Regulations 2011 amend various regulations in order to transpose aspects of the Waste Framework Directive (2008/98/EC), which sets the basic concepts and definitions related to waste management and lays down waste management principles, such as the “polluter pays” principle and the “waste hierarchy”. <a href="http://www.lexisurl.com/iema6538">www.lexisurl.com/iema6538</a>
30 March 	Waste	The Recycling, Preparation for Re-use and Composting Targets (Definitions) (Wales) Order 2011 sets out when local authority municipal waste is recycled, prepared for reuse and composted (art. 5) for the purposes of the targets in the Waste (Wales) Measure 2010. <a href="http://www.lexisurl.com/iema6531">www.lexisurl.com/iema6531</a>
31 March 	Water	The Water Environment (Controlled Activities) (Scotland) Regulations 2011 provide a mechanism to meet obligations under the Water Framework Directive (2000/60/EC). <a href="http://www.lexisurl.com/iema6532">www.lexisurl.com/iema6532</a>
1 April 	Climate change	The Climate Change Levy (General) (Amendment) Regulations 2011 amend the operation of the supplier certificate regime used to administer certain climate change levy (CCL) reliefs. The Climate Change Levy (Fuel Use and Recycling Processes) (Amendment) Regulations 2011 revoke the exemption from the CCL for commodities used in lead recycling. <a href="http://www.lexisurl.com/iema6517">www.lexisurl.com/iema6517</a> ; <a href="http://www.lexisurl.com/iema6516">www.lexisurl.com/iema6516</a>
1 April 	Energy	The Renewables Obligation (Scotland) Amendment Order 2011 amends the 2009 Order by introducing a number of changes, such as the phased support for offshore wind and the introduction of mandatory sustainability criteria for bioliquids in accordance with the Renewable Energy Directive (2009/28/EC). <a href="http://www.lexisurl.com/iema6539">www.lexisurl.com/iema6539</a>
1 April 	Energy	The Energy Act 2008 (Storage of Carbon Dioxide) (Scotland) Regulations 2011 amend the Energy Act 2008 as part of the implementation of the Directive on the geological storage of CO <sub>2</sub> (2009/31/EC). <a href="http://www.lexisurl.com/iema6541">www.lexisurl.com/iema6541</a>
1 April  	Flooding	The Regional Flood and Coastal Committees (England and Wales) Regulations 2011 cover the establishment of Regional Flood and Coastal Committees, which will replace the Regional Flood Defence Committees. <a href="http://www.lexisurl.com/iema6520">www.lexisurl.com/iema6520</a>
1 April  	Regulation	The Environment Agency (Levies) (England and Wales) Regulations 2011 allow the Environment Agency to levy Regional Flood and Coastal Committees for its flood and coastal erosion risk-management functions. <a href="http://www.lexisurl.com/iema6521">www.lexisurl.com/iema6521</a>
6 April  	Conservation	The Conservation of Habitats and Species (Amendment) Regulations 2011 amend the 2010 Regulations and ensure certain projects are subject to the requirements of the Habitats Directive (92/43/EEC). <a href="http://www.lexisurl.com/iema6515">www.lexisurl.com/iema6515</a>

## LATEST CONSULTATIONS


Closing date: 2 May

### Waste

 The Scottish Environment Protection Agency (SEPA) has launched a consultation on proposals for a waste data strategy for Scotland. The proposed strategy, developed by SEPA and Zero Waste Scotland, covers the period 2011–25 and aims to produce high-quality, robust waste data that will help Scotland better manage its waste and resources. The strategy also aims to deliver a number of benefits. These include: improving the understanding of what waste is produced and how it is managed; and provide waste producers, the resource management sector, the Scottish government and regulators with an information-base on which they can work towards delivering the objectives of Scotland's Zero Waste Plan.  
[www.lexisurl.com/iema6552](http://www.lexisurl.com/iema6552)

6 May

### Energy

 A consultation seeking views on proposed revised tariff bands under the feed-in tariff (FIT) scheme for solar photovoltaics over 50KW and farm-scale anaerobic digestion has been launched by DECC (p.5). The FIT payment-rate table in Condition 33 of the Standard Conditions of Electricity Supply licenses will be amended and the new tariffs will take effect from 1 August.  
[www.lexisurl.com/iema6553](http://www.lexisurl.com/iema6553)


11 May

### Emissions trading

 The European Commission is seeking views on new state aid guidelines for phase III (2013–20) of the EU emissions trading scheme (ETS). The amended ETS Directive (2009/29/EC) enables member states to adopt financial measures to compensate sectors for costs that are related to greenhouse-gas emissions and then passed on in electricity prices (indirect emission costs). The state aid is intended to minimise the risk these sectors face from carbon leakage (the relocation of industries to countries outside the EU with less strict environmental regulation). The commission is particularly keen on contributions from environmental-related organisations and industry associations subject to the ETS.  
[www.lexisurl.com/iema6551](http://www.lexisurl.com/iema6551)

2 June

### Renewable fuels

 The Department for Transport is seeking views on proposals to introduce new regulations transposing the greenhouse-gas intensity reduction requirements of the Fuel Quality Directive (2009/30/EC), and on implementing the transport elements of the Renewable Energy Directive (2009/28/EC) (RED). It specifically wants views on plans to amend the Renewable Transport Fuel Obligation in

order to to improve administration and implement the RED.

[www.lexisurl.com/iema6548](http://www.lexisurl.com/iema6548)  
[www.lexisurl.com/iema6547](http://www.lexisurl.com/iema6547)


10 June

### Waste

 The Welsh Assembly government (WAG) has launched a consultation on a collections, infrastructure and markets sector plan as part of its action to support “Towards zero waste”, the overarching waste strategy document for Wales. It covers the preparation for the reuse and recycling of waste, treatment, and recovery and disposal of residual waste in Wales as well as the markets for recycle (recyclable material), compost and anaerobic digestion (recycled food waste). The plan aims to ensure that clean, high-quality recycle is processed and used in Wales.  
[www.lexisurl.com/iema6550](http://www.lexisurl.com/iema6550)

22 June

### Waste

 The Welsh Assembly government (WAG) is also seeking views on a draft food manufacture, service and retail sector plan as part of its action to support “Towards zero waste”, the overarching waste strategy document for Wales. The draft plan covers three key areas: waste prevention, recycling, and treatment and disposal.  
[www.lexisurl.com/iema6549](http://www.lexisurl.com/iema6549)

## EVENTS CALENDAR

Date	Course	Location and details
3–4 May 2011	10th annual responsible business summit	Novotel London West <a href="http://www.lexisurl.com/iema6073">www.lexisurl.com/iema6073</a>
23–24 May 2011	Nitrous oxide, the forgotten greenhouse gas	Kavli Royal Society International Centre, Chicheley <a href="http://www.lexisurl.com/iema6503">www.lexisurl.com/iema6503</a>
24–26 May 2011	Sustainabilitylive! BEX, ET, IWEX, NEMEX, SB	NEC, Birmingham <a href="http://www.lexisurl.com/iema6069">www.lexisurl.com/iema6069</a>
25–26 May 2011	5th annual HSE excellence Europe conference	London <a href="http://www.lexisurl.com/iema6504">www.lexisurl.com/iema6504</a>
26 May 2011	Wind and marine energy in Wales	Mercure Holland House Hotel, Cardiff <a href="http://www.lexisurl.com/iema6506">www.lexisurl.com/iema6506</a>
14–15 June 2011	The new politics of water: water security and economic growth in emerging economies	Chatham House, London <a href="http://www.lexisurl.com/iema6502">www.lexisurl.com/iema6502</a>

# the environmentalist

Looking to grow in a new role?

Searching for a new opportunity?

[www.iema.net/jobs](http://www.iema.net/jobs) has over 400 live vacancies within the environmental field.

Visit us to find your new job now!

To advertise, please call

Elaheh Umeh

t: 020 8212 1984

e: [Elaheh.umeh@lexisnexis.co.uk](mailto:Elaheh.umeh@lexisnexis.co.uk)



**University of Salford**  
A Greater Manchester University

## Study Health and Safety Law and Environmental Law at a Distance

**YOU DON'T NEED TO LIVE ON OUR DOORSTEP TO ACHIEVE A MASTER'S DEGREE FROM THE UNIVERSITY OF SALFORD**

**LLM and MA Degree in Health and Safety Law and Environmental Law**

If you are a lawyer, manager, policy maker, enforcement professional or work in health and safety, environment or a related area and are aiming to enhance your qualifications, then this unique distance learning programme is for you.

In addition to Health and Safety Law and Environmental Law, the programme addresses topical issues such as:

- ✦ International and European Standard Setting
- ✦ Enforcement Issues
- ✦ Corporate Manslaughter
- ✦ Employers' Liability and Social Security
- ✦ Regulation of Occupational and Environmental Hazards and Hazardous Activities
- ✦ Industrial Pollution Control

**It gives you an excellent opportunity to strengthen your professional development and develop your career in a new direction.**

Combine independent learning with attendance at teaching sessions held at Salford Law School's new state-of-the-art building. Starting in September 2011, this programme is not to be missed!

**For further information, please contact:**

**T: +44 (0)161 295 6800**

**E: [enquiries-law@salford.ac.uk](mailto:enquiries-law@salford.ac.uk)**

**[www.law.salford.ac.uk](http://www.law.salford.ac.uk)**

**Salford Law School**



# BUTTERWORTHS ENVIRONMENTAL LAW NEWSLETTER

*keeps you from looking 'green' in front of colleagues and clients*

**Butterworths Environmental Law Newsletter (ELN)** is an authoritative, well-researched and incisive newsletter, written by leading practitioners and experts at Trowers & Hamlin, which offers commentary and analysis on environmental law. **Butterworths Environmental Law Newsletter** offers an excellent mix of in-depth features; case, legislation and current awareness updates; and articles covering both technical and practical pieces.

The layout allows easy navigation and is well-suited to a time-pressured day. It is an essential companion for the busy environmental lawyer, environment managers, CSR managers and local authority officers and lawyers.

**Butterworths Environmental Law Newsletter** is an essential companion in helping busy environmental lawyers, local authorities and businesses keep fully up to date regarding environmental law developments; it provides timely updates with no waffle.

## News Update

A monthly round-up of key news of importance to environmental lawyers, including practice points, consultations, planned legislation, and forthcoming cases.

## Legislation Update

A round-up and analysis of recent and forthcoming legislative changes with expert commentary.

## Case Reporter

Summaries of recent key environmental cases, with additional analysis and commentary to provide you with the most up-to-date quality case reports and summarised digests. Our case sections save you time finding the most relevant case information.

## Features

Leading practitioners provide an excellent mix of high quality features analysing and commenting on the major developments relating to environmental law of critical importance to practitioners.



## TAKE OUT YOUR SUBSCRIPTION TODAY!

1 ☐ YES! I would like a 12-month subscription to *Butterworths Environmental Law Newsletter*, please invoice me for £204 per year for 12 issues.

### 2 My Delivery Details \*Required Fields

\*Title (Mr/Mrs/Ms) \*First Names

\*Surname

\*Job Title

\*Company

\*Address 1

\*Address 2

\*Address 3

\*Town

\*Postcode

Telephone

Email

Signature

Date

### 3 Return Your Order

Marketing Department, LexisNexis, Freepost RSJB-BCTH-ZGUB,  
Quadrant House, The Quadrant, Sutton SM2 5AS

Tel +44 (0)845 370 1234

Fax +44 (0)20 8212 1988

Email [newsales@lexisnexis.co.uk](mailto:newsales@lexisnexis.co.uk)

Please quote response code  
**AD8085**

#### Privacy Policy

We have a commitment to protecting your privacy. We may use the information we collect from you to keep you informed of LexisNexis products and services. We do not sell, trade or rent your email address to others, but we may pass your postal details to trusted third parties. If you do NOT wish to be kept informed by mail ☐ phone ☐ fax ☐ email ☐ of other LexisNexis products and services, please tick the relevant box. ☐ If you do NOT wish your mailing details to be passed onto companies approved by LexisNexis, to keep you informed of their products and services, please tick the box.

For further details of our privacy policy please visit our website at:  
[www.lexisnexis.co.uk/contact\\_us/privacypolicy.html](http://www.lexisnexis.co.uk/contact_us/privacypolicy.html)

SOLUTIONS FOR KNOWLEDGE-DRIVEN PROFESSIONALS

Client Development

Research & Knowledge  
Solutions

Practice & Productivity  
Management

Risk & Compliance



LexisNexis®



# Regulation in an age of austerity

**Paul Suff** reports on *the environmentalist*/WSP roundtable event where the participants discussed the future of environmental regulation

All governments promise to reduce regulatory “burdens” on business, and the coalition is no different, although, given the need to cut costs, it might be under greater pressure to succeed than previous administrations.

Shortly after taking office, business secretary Vince Cable outlined an action plan to reduce regulation. The plan included introducing a “one-in, one-out” approach to regulation, so that new regulatory “burdens” on business are only brought in when reductions are made to existing regulation. “We need to reduce regulation and at the same time meet our social and environmental ambitions. This demands a radical change in culture away from the tick-box approach to regulation,” said Cable.

Last month *the environmentalist* reported on how Defra is currently engaged in a rolling review of its entire regulatory stock as part of its response to the “one in, one out” rule, and its work with the Department for Business, Innovation & Skills (BIS) on a range of proposals to streamline waste regulation, including the potential for standards and certification to play a larger role in regulation and enforcement.

These reviews are taking place against a backdrop of cuts to regulatory budgets, which could see the Environment Agency (EA) facing a potential reduction of more than 16% from its 2010/11 allocation for permitting, water and partnership work.

In March, *the environmentalist* and WSP jointly hosted a roundtable event to discuss how environmental regulation might change in response to the challenge posed by the government’s better regulation drive and declining resources.

## The existing hierarchy

**Martin Bigg**, professor of environmental technology innovation at UWE and former head of industry and waste regulation at the EA, kicked off the discussion by outlining a model of the existing regulatory system.



**Mitchell Leimon** – head of environmental and product regulation at the Department for Business, Innovation & Skills. His role covers regulations relating to waste electrical and electronic equipment, the restriction of hazardous substances, end-of-life vehicles, and waste tyres and industrial batteries.



**Martin Bigg** – is professor of environmental technology innovation at UWE and the former head of industry and waste regulation at the Environment Agency, a role that involved developing and implementing the integrated pollution control and environmental permitting regimes.



"In delivering a risk-based, outcome-focused approach to regulation there is essentially a hierarchy," he explained.

At the "top", **Bigg** says, are the industry leaders: the big players, such as oil and energy companies, which are high profile and generate high shareholder value. Whatever they do has to be right for the business in terms of being economically viable and protecting their reputation. They need the occasional steer. Below them are slightly smaller businesses, say parts of the chemicals industry. They know they have to get regulation right, and may need advice to do so. Next are diverse sectors such as the waste industry, consisting of five or six very large players, and lots of very small companies. They need guidance and support. At the bottom of the hierarchy are what **Bigg** describes as "illegals", those organisations that do not aspire to adhere to environmental regulation.

"There are relatively few companies in the 'top' group, but, generally, they go beyond compliance because they have a vested interest in doing so. But at the bottom, you have firms that will try to cut any corner they can. So that at the top the regulatory effort is all about getting the permit right. It's about outcomes. Let's face it, the regulation of the power station should be a 'doddle'; we just have to agree the technologies, time scales and emission limits and they get on with it. At the other end of the spectrum it's all about compliance and enforcement. Many industries don't need regular inspection, but the public expects someone or some body to be watching its back."

The model of regulation outlined by **Bigg** is familiar to the other participants, but several question the fairness of the existing process. "The model that Martin has set out is instantly recognisable," comments **Mitchell Leimon**, head of environmental and product



**Miles Watkins** – director of sustainable construction at Aggregate Industries, where he has worked for 15 years. In addition to the environment, his role also includes communications and marketing. Aggregate Industries is part of the Holcim group.

**Terry A'Hearn** – former deputy and acting chief executive at the Environment Protection Authority in Victoria, Australia, and now director of regulatory innovation at WSP Environment & Energy. In his former role, Terry led reforms that cut some company's regulatory costs by as much as 50%, while producing stronger environmental outcomes.



regulation at BIS. "It makes sense, but implementation has to be consistent. Regulation is supposed to establish a level playing field for businesses to operate [in] but we hear a lot of complaints."

**George Davies**, head of environmental compliance at Heathrow Airport, part of BAA, and **Miles Watkins**, director of sustainable construction at Aggregate Industries, both agree that fairness in how regulators deal with different organisations is an issue, believing that regulators tend to focus more on larger than smaller businesses because they're often easier to target.

One of the main problems we face is the unevenness of the regulatory playing field. We can acquire a small firm, and once it's no longer an SME the regulators are all over it

"We could have a problem with a water discharge at Heathrow and the regulator will always come to us, but the source might be one of the many other businesses that operate at the airport," comments **Davies**.

"One of the main problems we face is the unevenness of the regulatory playing field. It is quite interesting; in the past we've grown by acquisition, so we'd buy some of the companies at the bottom of Martin Bigg's hierarchy, the so-called 'illegals' and seek to move them up by making them compliant," explains **Watkins**. "And, once it's no longer an SME the regulatory authorities, particularly councils, are all over it. We always get the feeling that they think that now a bigger company owns



it we have a better chance of getting them to upgrade to the appropriate standard, but they would not bother when it was just an SME.

"As soon as you transition from the bottom to the middle point on the 'hierarchy', you attract lots and lots of regulatory activity. You think, hang on a minute: we're a fairly large company, but we're competing locally, in a 20–30 mile radius from the site, with family-owned businesses and there is no level playing field. The cost and operating perspective is very important. So, I'd say that in many respects, I don't really have a beef about the content of *what* is being regulated but about the *how*. From my experience, companies like mine get 'picked on,'" **Watkins** continues. He also believes that companies that have made significant environmental commitments become targets for regulators. "Because we decided to make a lot of environmental commitments, we've made a rod for our own back: the regulator knows that when it sends us a list of things to do, we have to make it right or we get poor publicity," states **Watkins**.

A perceived lack of fairness is partly the result of businesses having to deal with more than one regulator. "It's a myth that big businesses don't complain about regulation and enforcement. And for smaller businesses, regional variations and officials' personal interpretations can make investment decisions very tricky," says **Leimon**. He illustrates this with an example from Scotland: "I recall an oil company being told to meet 'aspirational' emissions targets, regardless of what the legal limits were. And the company had its post-doctoral chemists working to get it to a compliant position, but unfortunately there was no one in the local council with relevant skills to talk to." **Davies** and **Watkins** also picked up on the lack of consistency among regulators. "BAA has got six

airports across the UK. In my experience, consistency is lacking," says **Davies**. "We get regulated less by the EA and more by local authorities, such as for planning permission etc. It can be a real mixed bag," **Watkins** states. "We need clarity about what is regulated at the centre and what is regulated locally."

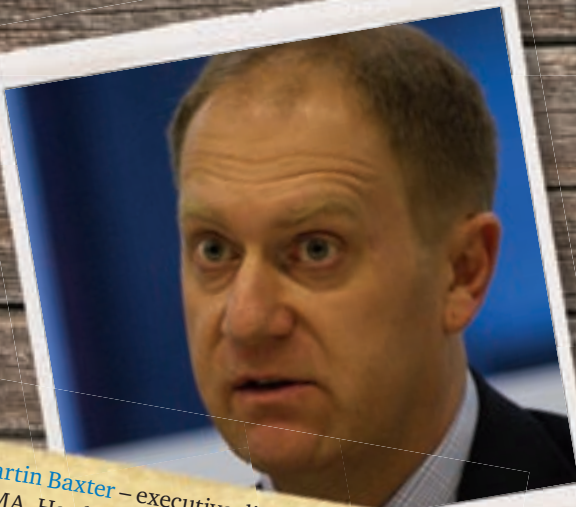
Another bone of contention with the existing regime is the overlap between different regulations. "There is too much regulation and too much overlap. Regulation should be narrow and be there to help businesses," said **Watkins**. **Bigg** accepts this. "I think our waste regulation appears a confusing mess. It overlaps with planning, and has made difficult all the things we are trying to do in terms of reusing valuable materials."

**I dropped the pile of regulations out the window and said let's start again and develop an approach to both reduce business burdens and deliver good environmental performance**

#### The way forward

The discussion then turned to creating a new regulatory regime, and focused on improving both relationships between regulators and the regulated, the skills of environmentalists in regulatory bodies and companies; developing local or corporate-wide approaches; and piloting new ways of regulating.

**Terry A'Hearn**, recently appointed director of regulatory innovation at WSP Environment & Energy, provided insight from his previous role as deputy and acting chief executive at the Environment Protection



**Martin Baxter** – executive director of policy at IEMA. He also leads the UK delegation to ISO on all environmental standards and chairs the environmental accreditations panel within UKAS, the UK accreditation body.



**George Davies** – head of environmental compliance at Heathrow Airport, which is part of BAA. His role is focused on supporting all the business units at the airport. He previously worked in HSE consultancy and at the Environment Agency.



Authority (EPA) in Victoria, Australia. "We had objectives of cutting 'red tape' by 90%, and cutting development approval times from four months to one month," he says.

**A'Hearn** explains that giving companies the opportunity to develop their own regulatory framework can work. He uses the example of a dairy in Victoria to illustrate how this might operate: "We [EPA] held a workshop with the senior management team. We'd taken along paper copies of the regulations covering the site. I picked these up and dropped them out of an open window and said to them let's start again from scratch now we've put these rules outside and develop an approach that both reduces the burden on you and delivers good environmental performance for us." The outcome was that 26 licences with 228 pages of prescriptive obligations were replaced with a single licence with three pages of outcome-focused conditions.

"But that can only work if there is trust between the parties," says **A'Hearn**. Other speakers developed the issue of trust. **Leimon**, for example, also believes trust will be important in modernising the regulatory regime. "Regulators have to trust reputable business people to do the right thing, and encourage businesses to use standards and accreditation rather than constant engagement with public bodies. High levels of contact,

**Regulators need to see where the biggest environmental impacts arise. For most businesses these impacts are in the products, not the processes**

even with friendly enforcement officers, local and national, can be a major frictional cost for business," he says. "The quid pro quo can be tougher sanctions when 'good' businesses do get it wrong, but I haven't met a businessman who disagrees with that, in theory. They want to see effort redirected towards the real high-risk areas featuring crime and environmental risk."

**Bigg** agrees: "We need regulation that is built more on trust than enforcement. We don't need a model similar to the US that is centred on litigation."

**David Symons**, director at WSP, also says that more, and better, dialogue is required between industry and regulators to improve trust: "There are so many exciting ways that businesses are using environmental issues to innovate, grow revenue and increase resilience. These need to be taken into the regulatory arena." **Symons** believes that regulators need to focus more on outcomes rather than processes and provide assistance to ensure organisations attain the desired performance. "Regulators need to see where the biggest environmental impacts arise, and then help reduce these. For many businesses these impacts are in the products, not the processes."

"My aspiration," says **Bigg**, "is that regulation is not just seen as a 'back-stop' to achieve and maintain environmental standards, but that it is also regarded by industry as a 'signpost' to developing approaches that provide long-term benefit for both the business and the



**David Symons** – director at WSP Environment & Energy. He works with businesses on sustainability and compliance issues. He also leads on both sustainability in WSP and on its innovation activities.

environment. We want business people to come to regulators and ask 'can you help me?' And as regulators we have to be able to say yes, we can."

**Davies**, however, is doubtful that a high degree of trust can be generated while a regulator such as the EA continues to prosecute businesses. "Most businesses

will be reluctant to talk to the regulator if they have a problem through fear of being prosecuted," he warns. "We'd like to go to the regulator and say 'this process isn't working, can

you help us?' But that hasn't been the reality." **Watkins** is also sceptical. "Too often the regulator spends more time worrying about the process rather than building relationships," he says. "That has to change," says **Bigg**.

**Watkins** advocates the introduction of an account management system by regulators, so a business always works with the same person at, say, the EA. "An account manager at the regulator would act as the interface between the company and the agency, and that would build a relationship and foster trust. That would be a big improvement," he advises.

Several participants also believe that improving environmental competence at both site level and among regulators could help improve working relationships as well as enable businesses to do more for themselves as regulators' resources diminish.

"As you step away from regulation you need to improve the ability of organisations to improve their environmental outcomes," says **Martin Baxter**, director of policy at IEMA. "That's about improving the skills in both the business community and regulators, and developing the structures to deliver good environmental performance. But you need to go further. Managers need to see how they can both reduce environmental impacts and deliver value: the two are not mutually exclusive. It's about building products that have fewer environmental impacts."



**Bigg** agrees. He points out that health and safety professionals are covered by one IOSH standard and asks why the environmental sector can't develop a similar standard for environmentalists, both for those working in industry and regulators. "Any change in regulation will ultimately depend on the competency of the people involved," says **Bigg**.

In addition to improving competence among environmentalists, **Baxter** also says the focus of regulatory change should be local. "We need to think in a local context about the value an organisation creates. That includes shareholders, the environment and social elements, like jobs and amenities. We need to put it all together to ensure everybody gets something out of it."

**Leimon** says it is the coalition government's emphasis on localism that could see it succeed in fundamentally altering businesses' experience of the regulatory system. "The need for environmental-impact businesses to engage with local opinion is greater than ever," he says.

**Watkins** demonstrates how localism could work in practice and prevent any problems escalating by highlighting the example of quarrying at Little Paxton in Cambridgeshire. Measures adopted by Aggregate Industries, which runs the site, include: involving local experts and enthusiasts where possible rather than bringing in people from outside the area; developing good and timely communications between staff and volunteers monitoring the wildlife, which prevents mistakes in routine operations and can lead to biodiversity being maximised; and writing management plans with specific objectives that are achievable with the resources available.

Most businesses will be reluctant to talk to the regulator if they have a problem, through fear of being prosecuted. Too often the regulator spends more time worrying about the process than building relationships

**Baxter** advocates the extension of primary authority partnership agreements that currently apply mainly for health and safety and involve a company working with one local regulator on regulation. Asda, for example, has such an agreement with Wakefield Council. "Dealing with just one regulator would simplify the regulatory process significantly," he says.

This led to a discussion about whether corporate-wide permits could be a way of reducing the regulatory burden. **A'Hearn** outlined how the EPA's regulatory reform work with Australian water authorities consisted of corporate licensing, streamlined annual reporting and trade waste partnerships. It is not clear how this would work in practice though. "It would be complicated because businesses are all different," says **Watkins**. "Management of our airports is largely decentralised, so I'm not sure how a corporate licence to operate would work in such situations," comments **Davies**. "I can see corporate permits or licences working for big players," adds **Baxter**. "But that raises the question of how you deliver it at local level."

**A'Hearn** suggests that a good way of developing things such as corporate permits is to pilot them in selected sectors. "I'd run four or five 'innovation' trials in composting and aggregates, for example. Get the industries and regulators together and see if there is a better way of regulating. It is not nearly as difficult to run pilot schemes as it is to change the whole system, and you can learn lessons and modify," he advises. **Baxter** agrees that piloting new regulatory approaches could be a good way of moving forward.

Finally, **Bigg** challenges those around the table to demonstrate to government and regulators that the introduction of a more flexible, transparent and light-touch regulatory regime would lead to better environmental outcomes. "If regulators threw the rule book out the window, can you live up to it?" he asks. "Yes, we can," claims **Watkins**, "because risk and opportunity is how we manage our business."

*the environmentalist* and WSP roundtable took place on 10 March at WSP House in London. WSP and *the environmentalist* would like to thank all those who took part.





# The business of ecosystems

Ecosystem services are crucial to how we live and businesses must take them seriously, argues **Dr Mark Everard**

**P**ut simply, ecosystem services define the benefits people derive from nature. Many familiar goods such as fresh water, food and fibre are traded today through the economy. However, nature provides many more services with no assigned value. These “invisible”, yet critical, services include regulation of climate, air quality, flooding, culturally valued landscapes, recreational opportunities, habitat for wildlife and pollination. The diverse humanitarian and environmental consequences of excluding these services from economic systems and decision making, and the subsequent degradation of ecosystems crucial to continuing human wellbeing and economic opportunity, are becoming increasingly evident.

The UN Millennium Ecosystem Assessment (MEA), published between 2004 and 2005, assessed the status of all major global habitat types and determined their likely ability to continue to sustain human wellbeing. The MEA classified existing ecosystem services into four categories: provisioning, regulatory, cultural and supporting (see panel, p.24).

The MEA concluded that there will be dire consequences if society does not redress its relationship with ecosystems in a concerted manner. However, growing understanding of our dependence on ecosystem services results in a correspondingly greater effort to find innovative ways to protect them. Change, the MEA assures us, is still possible.

## Evolving economy and business environment


Our economic model is rooted in the conversion of primary resources into useful products. Consequently, consumption of natural resources and product disposal closely tracks economic performance.

Given that the market economy is the main means by which society interacts with nature’s primary resources, it is inevitable that intensive agriculture and fisheries as well as other extractive, manufacturing and

commercial activities are flagged as major contributors to ecosystem degradation at all scales. However, to blame business and absolve its burgeoning and ever hungrier customer base is naïve. What is clear is that, if commercial exploitation and consumption habits are close to the roots of contemporary problems, they are also close to potential solutions. Also, there is compelling evidence that more dependable profit stems from business models accounting for their impacts on nature and its services.

We live in a very different world to that of the Industrial Revolution, although the modern economy still embodies many of its anachronistic assumptions. There are far more people on this planet, and also a whole lot less “nature” to share between our spiralling numbers. Lifestyles are vastly more resource-intensive, with industrialising nations rapidly adding not merely to population but also to mean-per-capita resource demand as they seek to catch up with the profligate habits of the already industrialised world.

We are also, at least in the “better-educated and media-savvy rich world”, vastly more environmentally literate. And we have vigilant non-governmental organisations (NGOs), an intrusive media serving many specialists’ interests, and, of course, the internet and all manner of social networking offering real-time, global-scale sharing of images, knowledge and commentary. Corporate behaviour and influence, however far down extended supply chains, may be only a couple of mouse-



clicks away from public disclosure. There is nowhere to hide, nor any perspective of the “footprint” of business on the natural and human worlds that can safely be overlooked.

### Business risks

All businesses depend upon flows of resources, finance, employees, customers and confidence.

Through these avenues, all businesses ultimately rely upon the services provided by nature. There are essentially three types of businesses in terms of the directness of their connection with natural systems.

First, there are the businesses that depend directly on primary ecosystem resources. These include the water industry, organisations dependent upon harvested or grown food or forest products, and mining or quarrying enterprises. These businesses have often been in the vanguard of schemes to secure both sustainable primary resources and good corporate reputation as part of a wider societal “permission to operate”.

Stewardship schemes are one pragmatic business-driven approach for such organisations. Well-established exemplars include the Forest Stewardship Council (FSC) and Marine Stewardship Council (MSC) schemes, respectively providing transparent mechanisms to assure forest-derived and fish-based products from source to retailer. Kingfisher,

whose UK retail brands include B&Q and Screwfix, was an instigator of FSC and remains committed to driving forward sustainable timber sourcing. Unilever is one of the world’s biggest consumers of fish, founding the MSC in cooperation with WWF in 1996 in recognition of the ethical and business sense of ensuring sustainable stocks. Further examples include promotion of catchment management by water companies, such as United Utilities, which safeguards the quality and quantity of raw water as the primary resource of sustainable business.

The second tier of companies is “one step removed” from being dependent directly on primary ecosystem resources, but is still reliant on thriving ecosystems for continuing success.

Firms in this cluster include those providing tourist and activity services, such as angling, trekking, mountain biking and bird watching, as well as some drink and food companies. Leaders in this category promote NGO or other initiatives to safeguard the waters, landscapes, ecology or other elements of habitat on which their customers depend to use their products.

**Reputation, potentially influenced by disclosures about sourcing, including supply-chain impacts on ecosystems, can exert an influence on the bottom line**

This is also the terrain of cause-related marketing. An example of this is where, say, food and drink manufacturers and retailers promote tree-planting, educational or other environmental initiatives that resonate with the values of their primary customers.

The third business category is the largest, and many of this group may perceive themselves as operating in some “hyperspace” beyond nature. These include many in the computing and telecommunications industry, online retailers, financial services companies and pretty much every other enterprise in all sectors.

Leaders in this group include the Co-operative Group, which has long-standing ethical and environmental policies that seek to reduce its “footprint” on ecosystems and those dependent upon them. These range from sourcing recycled paper in-house and from print suppliers, to investment in carbon-offset schemes that include forest planting or protection to restore habitat for wildlife and people, and a check list of schemes that its banking arm will not loan money to owing to those schemes’ unacceptable impacts on ecosystems and human rights.

From ecologically sound site management to seeking water- and carbon-neutrality in the design of infrastructure and supply chains, there is much that all businesses can do to assess and then self-beneficially address their impacts on ecosystems and their supportive services. After all, every enterprise has a metabolism that – whether realised or not – ultimately rests upon nature.



## The Millennium Ecosystem Assessment classification of ecosystem services

### Provisioning services

Fresh water  
Food (eg crops, fruit, fish, etc)  
Fibre and fuel (eg timber, wool, etc)  
Genetic resources (used for crop/stock breeding and biotechnology)  
Biochemicals, natural medicines, pharmaceuticals  
Ornamental resources (eg shells, flowers, etc)

### Regulatory services

Air-quality regulation  
Climate regulation (local temperature/precipitation, greenhouse-gas sequestration, etc)  
Water regulation (timing and scale of run-off, flooding, etc)  
Natural hazard regulation (ie storm protection)  
Pest regulation  
Disease regulation  
Erosion regulation  
Water purification and waste treatment  
Pollination

### Cultural services

Cultural heritage  
Recreation and tourism  
Aesthetic value  
Spiritual and religious value  
Inspiration of art, folklore, architecture, etc  
Social relations (eg fishing, grazing or cropping communities)

### Supporting services

Soil formation  
Primary production  
Nutrient cycling  
Water recycling  
Photosynthesis (production of atmospheric oxygen)  
Provision of habitat

This includes more obvious factors such as consumption of water, food, fuel/energy, paper and timber-based furniture, but also more indirect dependencies such as the vulnerability of sites, supply chains and customers to flooding, adverse weather and other climate-impacted factors, resource scarcities or adverse publicity. Corporate reputation among staff, customers, suppliers and investors, potentially influenced by disclosures about corporate sourcing, distribution, site management and supply-chain impacts on ecosystems, can also exert a major influence on the bottom line.

### The economics of ecosystems

A French/German study in 2008 concluded that the (2005) worldwide economic value of pollination services provided by insects was €153 billion. If this sounds a little abstract for day-to-day business decisions, many other studies are also demonstrating the economic value of ecosystem services. The Economics of Ecosystems and Biodiversity (TEEB), an international initiative, sought to do so in more

pragmatic terms by drawing attention to the global economic benefits of ecosystem services, and the growing costs of biodiversity loss and the damage done to ecosystems.

Reporting in 2010, TEEB developed workable values to support practical action, drawing together expertise from the fields of science, economics and policy. Among a variety of interim reports was one specifically addressing the business community, *TEEB for Business* ([www.lexisurl.com/iema6479](http://www.lexisurl.com/iema6479)). It proposed a set of seven steps businesses could take, starting with “identify the impacts and dependencies of your business on biodiversity and ecosystem services.” Subsequent steps include assessing business risks and opportunities, considering management, integration with wider corporate social responsibility initiatives, and engaging with stakeholders.

The seven TEEB measures have significant overlaps with steps proposed in my 2009 book, *The Business of Biodiversity*. My first step requires an organisation to accept that its business has fundamental dependencies on biodiversity and the services that it provides. The steps then proceed to address audits of impact, rates of use of natural resources, risk analyses, using or creating appropriate stewardship schemes, exercising purchasing power to influence markets, inclusion in management systems, and embedding in corporate culture and strategy.

### Prudent risk management

The approaches of both *The Business of Biodiversity* and TEEB are based on prudent risk-management. Businesses have vastly more risks to consider in an ever more concerned, digitally connected future. Worries about resource security, the primary preoccupation of many of our first-tier companies noted earlier, remain pressing as we overwork our soils and oceans, over-abstract water and forest resources, and edge out functional and valued ecosystems with continued human sprawl.

The same considerations lie behind corporate engagement with the climate-change agenda, another ecosystem service recently and suddenly entering the market. Responses to climate-change issues include recognising a wide range of business risks that include pre-empting resource security, vulnerability to changing climate, corporate reputation, changing regulation and taxation, innovating to realise new opportunities, and so forth. Businesses thus already have a great deal of experience in responding to emerging issues.







**Dr Mark Everard** is visiting research fellow at the University of the West of England, and author of a number of books, including *The Business of Biodiversity*. Visit Mark at [www.markeverard.co.uk](http://www.markeverard.co.uk)

This same agile engagement needs to be extended to corporate footprints on all ecosystem services, reflecting that the many benefits that ecosystems confer on human wellbeing are ultimately connected to business success. Part of this is defensive and includes pre-empting issues such as resource security, potential future liabilities, and likely changes in regulation and the tax regime. However, the greater emphasis should be on proactive realisation

of business opportunities, including innovating into new markets, developing strong and trusted trading partnerships and brands, promoting confidence and loyalty among customers, motivation and retention of quality staff, and assuring investors that the company is here for the long term as a responsible player in society. "Doing well by doing good" may be an overused phrase, but it is certainly apposite in this situation.

The Prince of Wales recognises this as both a need and an opportunity. He used his invitation to address the European Parliament earlier this year to highlight the need to integrate fully into public and private sector decision-making the unbreakable economic and ecological links in energy, agricultural, water and industrial sectors.

Through deeper understanding and engagement with this reality, Prince Charles sees opportunities for the simultaneous building of economic and environmental resilience, noting that: "Otherwise, I fear, nature's bank will go bust and no amount of quantitative easing will fix it."

The advantages of being proactive are well known in the boardroom. Ecosystem services provide a framework for 360° risk management to reinforce business resilience through environmental and social responsibility. There are things that organisations can do today to gain a foothold in the longer-term future informed by ecosystem services (examples of the kinds of steps businesses can take are outlined in the panel, right).

### Promoting corporate confidence

Businesses require strong signals to give them confidence. The signals from the UK government could not be clearer about embedding the ecosystem approach at the centre of decision making.

These signals include: the UK-wide National Ecosystem Assessment due out in May; Defra reconstituting itself under the Natural Value Programme (NVP) explicitly to put "the value and interdependencies of nature's services at the heart of decision making"; and the development of a supplement to HM Treasury's *Green Book* – its

guide for central government, setting out a framework for the appraisal and evaluation of all policies, programmes and projects – on the internalisation of ecosystems thinking into decision making.

There will also shortly be a Natural Environment white paper, which will aim to advance the integration of ecosystem-based thinking across all policy areas. In Wales, the Natural Environment Framework is doing a

## Identifying the impacts and dependencies of its operations on biodiversity and ecosystems services is the first of seven steps a business needs to take to develop a workable strategy

similar job to the NVP, while ecosystem services are also permeating the thinking of international bodies and national governments across the globe. These factors fundamentally change the decision-making terrain for businesses, including multinational enterprises. Today, customers and investors deselect businesses that cannot give assurances about eliminating child labour, harmful chemicals and rainforest destruction from their practices, including in their supply chains.

As wider awareness of nature's services and their implications for people pervades societal consciousness, the impacts of corporate behaviour across all ecosystem services will come under the same spotlight. Taking ecosystem services fully into account will be where the innovations, reputation gains and avoidance of future liabilities are to be found as we head into tomorrow's economic markets.

### Examples of steps businesses can take to address ecosystem services

- The dependency of the business on all ecosystem services should be explored at high level in the company.
- Consider what this implies for business risk (scarcities, reputation, etc) across all service categories.
- What product innovations, process changes and other business opportunities will reduce impacts on ecosystems and their services?
- Consider whether stewardship schemes could be used (or developed) to address particular risks, or whether working with others in similar ways could advance a common agenda.
- What other business alliances, for example working with NGOs, could also help address dependencies on ecosystem services?
- How can your purchasing power be militated for changing supplier behaviour and hence your vulnerabilities along supply chains?
- Consider how your leadership role could become a market differentiator.
- Report transparently and accountably to develop your trustworthiness and promote your "brand".
- Embed ecosystem considerations into management systems and strategic planning right across the organisation; they are NOT peripheral issues!

# Protective nature

*the environmentalist* reports on Lafarge's commitment to habitat restoration at its quarries

Most people would not draw an immediate parallel between a heavy industry, such as quarrying, and protecting rare and endangered species, such as the dingy skipper butterfly, badger and frog orchid. In the past, quarries were typically worked and then abandoned, with no thought for the impact on the ecosystem this left in their wake. But modern planning regulations have boosted the protection of biodiversity much higher up the business agenda.

Lafarge, a quarrying and construction materials company employing 80,000 people around the globe, has long been committed to enhancing biodiversity and integrating its quarries into the natural environment to create habitats for various plant and animal species. As far back as the 1970s and throughout the 1980s, there were many examples of Lafarge quarries and groups of naturalists forming joint initiatives, but these partnerships were localised and informal. For instance, the rehabilitation of Bamburi quarry in Kenya began in 1971, long before most industrialised countries had legislation on the issue.

This ad hoc approach started to change in the mid-1990s when Lafarge became the first industrial company to sign a contract with the Muséum National d'Histoire Naturelle in France. This partnership involved drawing up scientific inventories at Lafarge's French sites, with total transparency, and working on rehabilitation projects. It also paved the way for setting up a coordinated redevelopment strategy applicable to all of the group's 730 quarries in 70-plus countries. In 2000, this culminated in a signed partnership agreement between Lafarge and WWF, another first between a multinational industrial company and a non-governmental organisation involved in protecting the environment. This partnership, which remains in place today, has been instrumental in formalising Lafarge's biodiversity approach.

The company is now the proud recipient of numerous external awards for its biodiversity work, with its commitment in this area being hailed as a beacon for other businesses. As David Park, restoration manager at UK Lafarge Aggregates & Concrete, comments: "As a result of our collaboration we have developed a biodiversity management plan

and innovative methods to redevelop our quarries – our partnership has set a precedent in the cement sector and in industry as a whole."

## Early start, long process

The rehabilitation of a quarry into a viable natural site is a lengthy programme – it takes years to make it a success and should therefore be started early, says Park.

Any planning application by Lafarge to extend a quarry includes the rehabilitation plan, which is in place well before any activity starts on-site. For particular sites in or close to sensitive areas that are home to a wide variety of plant or animal species, the timescale for rehabilitation can extend to many years.


Dry Rigg, Lafarge's gritstone quarry in North Yorkshire, is a case in point: this sensitive site is located in a national park and lies adjacent to a Site of Special Scientific Interest (SSSI), and its rehabilitation plan will run for 25 years post-closure. This is mainly due to the time it will take for the quarry void to fill with water. But the biodiversity work to create habitats and help wildlife at Dry Rigg have already been set in motion. More than 25 species of bird now breed there, including the raven and locally threatened lapwing. More than a hundred pairs of sand martins are also regular breeders. Scarce dragonflies and butterflies can be seen on the restored fen area, which also houses a healthy population of rare great crested newts.

Lafarge always budgets for the work needed to rehabilitate a quarry at the outset, as part of its operating costs. This ensures that its redevelopment and biodiversity work is a built-in cost of the quarry's operations, just like any other operating cost. This is calculated by adding a certain number of pence to the cost of quarrying per tonne of material. The cost of rehabilitation varies enormously depending on the type of site.

## Four-stage process

Lafarge's collaboration with WWF has resulted in the development of a four-stage management system





Following the stage-one analysis, a “site biodiversity fact sheet” is produced, providing a detailed breakdown of the biodiversity features of the quarry that provides the groundwork to prepare the site sBAP.

By the end of 2010, 97% of Lafarge’s sites worldwide had been screened, with just one new site yet to be analysed. Around 30, or 10%, of these active sites require a biodiversity action plan. The target is that, by the end of 2012, all 30 will have one in place.

#### Site biodiversity action plans

An sBAP forms part of a quarry’s wider rehabilitation plan (which also deals with wider environmental issues). “The action plan is used both as a statement of the current biodiversity interest in the site and what may be achieved in the future,” says Park. “This involves the appropriate management of existing biological resources and the development of future interest through habitat creation.”

The sBAP is structured around the identification of “broad habitats” and their relationship to “habitats of principal importance” (as defined in the National Environment and Rural Communities Act (NERC) 2006). So, for example, one broad habitat in one sBAP is described as “woodland”, which in this case links to two habitats of principal importance, lowland mixed

**Lafarge always budgets for rehabilitation work at the outset to ensure that a site’s biodiversity work is a built-in cost just like any other operating cost**

for the rehabilitation of its quarries: analysis, scheduling, action and review. The first stage entails analysing the site and identifying its level of sensitivity; if the environment is deemed to be sensitive, the company incorporates a biodiversity management plan into the quarry’s operations and rehabilitation plan.

This biodiversity planning work builds on the environmental impact assessment that pays close attention to biodiversity at each stage of the quarry’s life, from extraction to rehabilitation.

A “biodiversity checklist” is used at the initial screening stage, covering areas such as:

- biodiversity conservation – sites of ecological interest within a 2km radial area of the site such as an SSSI, or a World Heritage site, or one with a national, regional or site biodiversity action plan (sBAP) in place;
- whether the site is located near to key ecosystems services/functions (eg stopover, feeding, breeding areas along migratory routes); and
- whether the site is home to habitats that are providing local communities with a source of livelihood.

deciduous woodland and wet woodland. In turn, the latter links to UK National Biodiversity Action Plan priority habitats, as well as to local ones.

The same process is carried out for the species already found on the site. For example, under “mammals” for the sBAP for Dry Rigg, the “species of principal importance”, according to NERC, are bats and the brown hare. The UK National Biodiversity Action Plan priority species is the brown hare, while the local ones (in this case Durham County’s) are bats, brown hare and badger. As well as mammals, under “species” the plan takes into account birds, invertebrates and plants. In this way, Lafarge is trying to create habitats of both national and local importance.

The sBAP does not only take into account the biodiversity already present at the site, but the potential for creating new habitats and encouraging rare species that are not currently present. For each priority habitat, a brief description of the site is provided, followed by the consideration of targets, actions, implementation dates and potential partners. All four areas are reviewed on a five- to 10-year cycle.

#### Working in partnership

Lafarge works closely with specialists to expand its understanding of biodiversity and to realise its rehabilitation plans. These include international experts from WWF, and the company has also created two panels to provide a critical perspective



## Biodiversity in action: examples of Lafarge's global initiatives



Lafarge workers planting olive groves in Morocco

### North Wales – quarry rehabilitation in a maritime setting

Dinmor Park quarry, on the Isle of Anglesey, was mined until the early 1980s. Stone was shipped by sea and this required the construction of a large pier and other facilities that marred the natural beauty of the coastal scenery. Lafarge acquired the site and decided to restore it. As well as removing the pier, foreshore stabilisation systems were put in place to counter wave erosion. To offset the lack of topsoil, the quarry floor has been covered with crushed stone to promote the growth of new vegetation and a fish farm has been established to help stimulate the local economy.

### Germany – protecting sand martins

At the Rahmstorf quarry, sand mining and nature conservation go hand in hand, says Lafarge. The objective is to preserve the nesting habitat of the sand martin, a rare species of swallow that comes to nest in the quarry every year. The first males return from tropical Africa in late April and begin to dig their cavities; the walls occupied by the birds are left intact until they leave in late July. Mining operations are not suspended but are carried out in other parts of the quarry, taking care to avoid disturbing the birds.

### France – the creation of a wet meadow

The wet meadow is an increasingly rare ecosystem and plays a useful role in flood control, as well as supporting a wealth of biodiversity. In France, these ecosystems have been disappearing over the past few years due to the establishment of extensive agriculture. Lafarge undertook a €130,000 trial project, creating a wet meadow in La Bassée near Paris. Three hectares were established in 1996 and 1998 and, by 2001, the ecobalance confirmed the success of the project.

### Morocco – producing olive oil in a rehabilitated quarry

Lafarge has replanted more than 70,000 trees in the Meknes region of Morocco, including 12,000 olive trees that have already experienced their first olive harvest. Lafarge in Morocco also aims to install an observatory and a quarry museum dedicated to geology and biodiversity.

### Canada – the snapping turtle

Lafarge in Canada has diverted two waterways and recreated their occupants' habitat at Brookfield cement plant. The project became a reality thanks to a strong partnership with Ducks Unlimited, experts in creating wildlife habitat. In all, 2.3 million tonnes of materials were moved for the diversion of the two brooks. Many ponds have been created that attract a wide range of species, some of which are very rare, including the great blue heron and the snapping turtle (so-called because of its bad temper).



Dry Rigg quarry is home to the rare great crested newt

of its sustainable development efforts, including an advisory panel on biodiversity. This panel was created in 2006 to develop Lafarge's biodiversity strategy and to contribute ideas to improve and develop it. Its membership is drawn from around the world and members are selected for their expertise in biodiversity, ranging from the preservation of fauna to the management of natural zones.

At a local level, Lafarge works with a wide range of national, regional and local conservation and wildlife groups, and interested parties, to help realise its biodiversity vision for the site, including Natural England, external specialists, local authorities and tenant farmers.

A redevelopment plan takes time to implement, which is why, internally, Lafarge is gradually incorporating biodiversity protection into its training programmes. It has tested pilot training courses in the subject and research is under way to identify relevant employees – such as quarry managers, excavation teams and geologists – and their specific needs. Globally, a vast internal awareness-raising and communications campaign was also launched for 2010, the UN International Year of Biodiversity.

### Good for business?

The debate about the value of biodiversity and its link to continuing economic viability, including business success, is gaining recognition. It is an agenda that has long been a priority for Lafarge. Park agrees that, regardless of the environmental and business benefits biodiversity protection attract, its work in this area still represents a significant cost to the business.

And sometimes Lafarge's strong commitment to biodiversity can be disruptive to the business on a practical level. In France, for example, employees noticed that two bird species, the bank swallow and the European bee-eater, were nesting in stockpiles of materials. These materials were cordoned off and, since then, some storage areas have been reserved for these colonies of migrating birds. However, says Park, the costs and adaptations incurred by Lafarge's biodiversity strategy are but another layer of complexity in an already complicated business environment.

And the benefits cannot only be measured in individual company terms. The role of the natural world and its impact on the economy and how we live is, says Lafarge, "priceless" and therefore well worth the company's investment.



## Sira Management Systems Certification

Sira provides UKAS – accredited management system certification services to a broad range of industries worldwide.

**For more information please contact Sira**

### Sira services include:

- ISO 9001, ISO 14001, OHSAS 18001 certification
- MCERTS product and personnel certification
- MCERTS effluent flow monitoring inspection
- Integrated audits



Tel: +44 (0) 1322 520500 or email: [management.systems@siracertification.com](mailto:management.systems@siracertification.com)  
[www.siracertification.com](http://www.siracertification.com)

**sira**  
CERTIFICATION



**Cambio  
Environmental Ltd**  
Training & Consultancy

- Accredited courses (IOSH, IEMA & NEBOSH)
- Combined syllabus programme leading to multiple qualifications
- New venues and courses for 2011
- Envyable pass rates on all programmes

## 2011 courses

**We offer the longest running integrated environmental qualification programme in the UK, giving you the opportunity to study at a location, pace and style that suits you.**

### Foundation level qualifications

IOSH Managing Environmental Responsibilities  
IEMA Foundation Certificate

### Intermediate level qualifications

Nebosh Certificate in Environmental Management  
IEMA Associate Certificate

### Advanced level qualifications

Nebosh Diploma in Environmental Management  
Advanced Environmental Practitioner course

- 5-day block release format with start dates throughout the year;
- a choice of public course venues;
- choose your own rate of progression - from closely spaced weeks to extended programmes;
- transfer with credit from comparable programmes;
- in company delivery options.

### CPD/Short courses

Carbon management  
Resource efficiency  
Waste strategies  
Sustainable procurement

### Multiple UK venues for 2011 public courses

Abergavenny, Cardiff, Swindon, Worcester & Maidstone



**Call 01873 890819 or visit [www.cambio-uk.com](http://www.cambio-uk.com)  
for course venues, dates and details**



# Sustainability*live!* 2011

*the environmentalist* highlights what's on at this year's event

One of the UK's leading events for the environment, water, land, energy and sustainable business sectors, Sustainability*live!*, is again being held at the NEC in Birmingham. This year's event runs from 24 to 26 May and, as in previous years, is made up of five shows: the International Water and Effluent Exhibition (IWEX); the Environmental Technology Exhibition (ET); the National Energy Management Exhibition (NEMEX); Brownfield Expo (BEX); and Sustainable Business – The Event (SB). Each show has its own extensive seminar programme.

## IWEX

There are more than 35 seminars at this year's IWEX event. Topics include legislation and policy, flood management and sustainable drainage systems (SUDs), water and wastewater treatment, industrial water treatment and smart metering.

Day one opens with Jim Marshall, policy and business adviser at Water UK, giving an overview of the latest legislation and policy. Other highlights include: Russell Knight, water resources manager at Heathrow Airport, outlining how the airport, the busiest in the world, is acting to reduce its environmental impact at the same time as increasing its use of chemicals, such as glycol and potassium-based de-icing solutions, which affect its wastewater treatment systems.

## ET

Environment Technology 2011 is the 20th such event and includes a wide range of technology suppliers, covering everything from air pollution control to waste

minimisation. Seminar topics at ET 2011 include: air pollution, business continuity, energy to waste, "green" transport, the low-carbon transition, MCERTs, recycling, resource efficiency and zero waste.

## NEMEX

NEMEX is the UK's leading energy and renewables event. Seminar themes range from government policy and carbon-reduction strategies to energy management in buildings, and grants and financing.

There are several sessions on energy management standards, including a progress report on ISO 5001 – the international standard for energy management, which is expected to be published shortly – and the EU energy audits standard by Martin Fry from ESTA, while Viki Bell from BSI will reveal how the BSI Kitemark and Energy Reduction Verification scheme is faring, following its launch in 2010.

## BEX

The Brownfield Expo is the UK's main event for contaminated land solutions. Its seminar sessions this year are grouped around 12 themes, including liability and risk assessment, land regeneration, soil stabilisation and spill control.

Seminar sessions include: Andrew Barton, business development manager at QDS Environmental, on how surfactant flushing provided a breakthrough at the UK's first carbon-neutral remediation project; Ian Heasman, associate director of brownfield and sustainability at Taylor Wimpey, on the research work of the NICOLE Brownfield Working Group into liability transfer from industrial land holders to brownfield users; and Mark Prout, associate director at TCM, on how to sustainably and practically deal with Japanese knotweed growing in contaminated land.

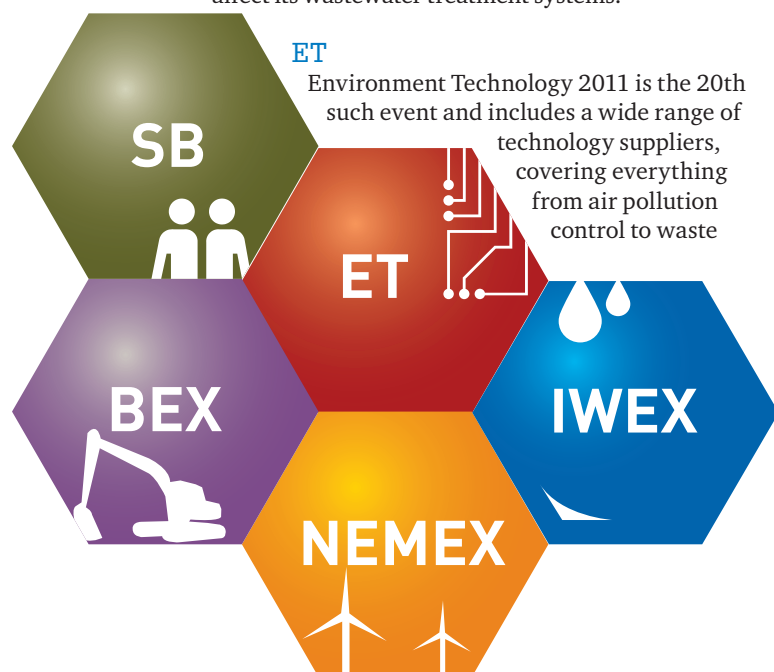
## Sustainable Business – The Event

There is a complete three-day conference programme on the main stage at SB – The Event.

The Tuesday programme includes a session examining the coalition government's plans, and a joint presentation by Dr Paul Taylor, from the Carbon Trust, and Simon Houghton-Dodd, head of quality and sustainability at Tate & Lyle, on footprinting and measurement.

Day two includes a session on integrated reporting from Mike Nightingale, head of sustainability at British American Tobacco, and Richard Ellis, director of corporate social responsibility at the Alliance Boots Group.

In addition to the conference and seminar programmes, Sustainability*Live!*, which is free to attend, also has more than 400 exhibitors. Come and visit *the environmentalist* team at stand U51. [www.lexisurl.com/iema6575](http://www.lexisurl.com/iema6575)





## **Sustainabilitylive!**

24-26 May 2011 NEC Birmingham, UK

Leading the way for a sustainable future

[www.sustainabilitylive.com](http://www.sustainabilitylive.com)

# Leading the way towards a sustainable future

At the UK's largest event for the ENVIRONMENT, WATER, LAND, ENERGY  
and SUSTAINABILITY sectors



### **SUSTAINABILITYLIVE! CONSISTS OF...**

-  **ET:** The UK's largest environmental exhibition for the manufacturing industry
-  **IWEX:** The UK's leading exhibition for the water and wastewater industry
-  **BEX:** The UK's land regeneration event
-  **NEMEX:** the UK's longest running exhibition for the energy and renewable energy industry
-  **SB – THE EVENT:** helping businesses maximise profits while minimising environmental impacts through reducing their carbon footprint

### **DON'T JUST TAKE OUR WORD FOR IT...**

*Sustainabilitylive! provides a benchmark on what is happening in the industry. Attendance is always worthwhile. I never fail to learn something and pick up new contacts.*

Gareth Williams, Northern Rail,  
Energy Solutions Manager

**Register now for FREE entry at**  
**[www.sustainabilitylive.com/suslive](http://www.sustainabilitylive.com/suslive)**



# Comparative performance

Benchmarking is an increasingly important tool in business.

**Chris Reynolds** shows how environmentalists can use it

**B**enchmarking is the process of comparing performance, and environmental practitioners increasingly have to demonstrate their knowledge and understanding of what it entails. It is easy to overlook just how simple the concept is. The important thing is to understand how benchmarking fits within the bigger picture and adds value for an environmental professional.

Most of us start our benchmarking as children, in simple activities such as assessing how our pocket money and our Christmas presents compare with those of our friends and siblings. Having benchmarked our own situation, we can make personal decisions such as campaigning for more pocket money. Taking this simple concept into the workplace, the key factor in benchmarking is what does our employer want to know? For those of us in environmental occupations this typically involves assessing how our company's performance compares with its peers or other organisations – whether on a macro scale or for very detailed issues. However, all organisations are different and there may be as many variations of benchmarking as there are organisations. To keep things simple we will concentrate on the benchmarking of organisations, although it is worth remembering that the benchmarking of products or processes is often undertaken within organisations or by independent third parties.

## Asking the right questions

The important points to be aware of when conducting benchmarking are:

- What do you want to compare and want to know?
- Which organisations are you seeking to benchmark with (same industry, size, locality, for example)?
- What do you intend to do with the comparative information when you have it?
- What level of detail are you really seeking?

Typically, benchmarking will be used to assess performance against immediate peers. This provides a form of lagging indicator of performance – all other things being equal (an important point that we will come to later) – and gives senior management a feel for whether priorities, policies or efforts need to be altered in any way.

Companies comparing directly with their peer group are likely to be looking at very focused information to assess their performance on specific issues.

Different organisations will not all react to the results of benchmarking in the same way; their response will be influenced by company culture – whether the company sees itself as a leader in its sector and takes action to maintain that position, or simply wishes to be “in the pack”, in which case it might only take corrective action if benchmarking shows it to be lagging behind the average. This, of course, might be issue-specific. For instance, a company that has built a reputation on product safety might wish to demonstrate a leadership position in all aspects of safety to avoid undermining that image. But the same company might be less concerned to be leading in other benchmarked areas, even related ones such as environmental performance. At the other end of the spectrum, a





**Chris Reynolds** is competitiveness and climate change executive at the Chemical Industries Association

much broader benchmarking of activities, taking place between sectors, can lead to improvements in the way a company manufactures or delivers a product or service. This can generate a competitive advantage by transferring new best practice from one sector to another, and indeed innovation itself can be driven in this way. This type of benchmarking requires careful interpretation and intelligent investigation into change management possibilities.

### Not all things are equal

I said we'd come back to the issue of "all other things being equal". Care does need to be taken when interpreting benchmarking results because rarely are "all other things equal". Worse still, it is possible to completely misinterpret the situation. Take, for instance, the situation where it is required to report a certain type of incident to a regulator. Benchmarking of similar organisations might reveal that company C is the best performer, with fewest incidents. However, if company C has poor reporting procedures, this benchmarking exercise may not only have identified the wrong high performer, but masked another important issue altogether, namely that company C has inadequate reporting procedures. Company C may remain blissfully unaware of this problem until something goes badly wrong.

Just as important in benchmarking is the need to ensure the differences in performance identified are not explained simply by different operating conditions or product mixes that distort the benchmarking results. In benchmarking energy efficiency, for example, which might be done on the basis of energy use per product unit, it is unlikely that one company's product will be identical to another company's. It is therefore important to understand fully the unit of comparison, to avoid drawing misleading conclusions.

### Back home

Most of this article has focused on external benchmarking, but internal benchmarking can be very useful in driving performance improvements. Companies manufacturing on multiple sites can benchmark site performance in a range of topics including emissions and resource efficiency. Some companies compete internally for new manufacturing projects using information that can be benchmarked in the final decision. With product carbon footprinting becoming more common, a manufacturing unit may

### Typical benchmarking methods

Taking part in a large formal benchmarking exercise, often across all sectors but with subsector results, is a good way of benchmarking performance. The Environment Index, which forms part of Business in the Community's programme, provides detailed comparisons both within sectors and with the whole business community. While league tables are now less transparent in this index – which used to be called the BiE Index of Corporate Environmental Engagement – it remains a high-level corporate responsibility benchmarking tool aimed at the most senior levels of business organisations. Another example is the league table that will form part of the mandatory Carbon Reduction Commitment Energy Efficiency scheme, which will be published for the first time later this year. This will provide useful benchmarking information on participants' energy use, and such benchmarking is seen by the government as an important driver for energy efficiency.

Topic-related benchmarking exercises are conducted in cooperation with competitors and other organisations. These will often be informal affairs but may be organised through a common body, such as a trade association or mutual initiative. Such comparison is likely to be used by professionals in specific areas, such as environmental management, as a means of assessing benchmarked-company performance in areas that are important, but not critical to the competition between companies. In the public sector, for instance, London local authorities benchmark their energy performance in this collaborative way.

Informal benchmarking is conducted by gathering data on competitors. For very informal benchmarking it is possible to do a desk-based assessment from published information gathered about other organisations, or by asking questions informally, to judge how you think your systems and performance compare with others. In some ways consultants, employed in an advisory capacity, also provide useful informal benchmarking information. By bringing their experience of other organisations they will often have a more rounded feel for what is standard performance and what would be sector-leading performance. There are also times when consultants provide an ongoing benchmarking structure for specific issues, usually providing feedback to contributors indicating where they are in relation to a range of competitors, but keeping the exact positions of the competitors confidential. These are usually based on annual surveys with an annual subscription.

There is also benchmarking for specific purposes. For example, the benchmarking that takes place within the EU emissions trading scheme (ETS). This sets benchmarks for energy efficiency within different industry sectors to establish a measure of best practice from which ETS allowances can be determined. Once the exercise is complete and implemented for its principal purpose, it then provides a position that companies can measure themselves against, in this case demonstrating the gap between company performance and best practice.

have to compete for a new product based on the cost of production as well as lowest energy inputs.

Environmental professionals need a reasonable understanding of the issues involved in benchmarking. The best way to fill gaps in knowledge is to consider how you benchmark, or would benchmark, your own organisation. Then ask questions of colleagues in order to fill any gaps in your own knowledge. In this way you will add the experience of others to your own, and you never know, by asking the questions you might trigger the activities that lead to performance improvements and even greater knowledge.



## Record-breaking response to survey

**Values** Our latest round of research closed in early March with the highest response ever to an IEMA survey.

The “What do you value” survey asked members to rate and comment on the membership services and features they value and used over a two-week period.

By the closing deadline (4 March), 2,912 members had completed the online questionnaire. This fantastic response is the largest that IEMA has ever experienced. The previous best, for the 2007 salary survey, achieved 2,759 responses. However, the response rate in 2007 was 29%, higher than the 22% response rate for the “value” survey. The difference is because IEMA had approximately 3,000 fewer members in 2007. The recent IEMA practitioners’ survey, which included the pay and benefits information published in the March issue of *the environmentalist*, had 2,318 responses.

Both the “values” and “practitioners” polls demonstrate that more and more members are contributing to our surveys and research. We hope this trend continues and that an increasing number of members choose to take part when they next see an invite from IEMA in their inbox.

IEMA would like to thank all of the 2,912 members who took the time to respond to the values survey. Your views and comments will now be used to

help shape IEMA’s future membership services. We will be letting all members know the outcome of the survey over the coming months.

### Member views included in new energy-efficiency report

Research and findings from IEMA featured in a new influential report launched at the House of Commons and reported in *the environmentalist* in March.

Carbon Connect’s report, entitled *Energy Efficiency: The Untapped Business Opportunity*, used evidence from IEMA’s 2010 greenhouse-gas (GHG) management and reporting special report – which was based on a large-scale survey of members – to support its own findings. The report also draws on the findings of three evidence sessions where individuals, organisations and business leaders presented information on the challenges of improving energy efficiency, the greening of energy supply, and the finance and implementation of projects.

In addition to supporting mandatory GHG reporting, the report builds on IEMA’s GHG management hierarchy and calls on the government to deliver energy policy in line with the priorities of an energy hierarchy of “Avoid, Reduce, Substitute, Compensate”.

Drawing on IEMA research, it also acknowledges the potential of



environmental management systems for achieving carbon and energy savings, along with the importance of skills and the essential role of sustainability professionals.

The Carbon Connect report is further recognition of IEMA members’ views across the mandatory carbon-reporting issue and the value of our shared voice.

The Institute welcomed its publication. Policy director Martin Baxter said: “Environmental practitioners working within business will welcome this report as further recognition that their role makes a real difference. Businesses that are managing energy as a resource are seeing real benefits from enhanced productivity and competitiveness.”

## IEMA conference 2011 – save the date

**Conference** Readers of *the environmentalist* should keep mid-November free in their diaries to ensure that they have no commitments that will clash with the date of the IEMA conference 2011.

Following the success of the Environment and Business conference last year, the November 2011 event will again be held in London. The two-day conference will take place on 15–16 November at Savoy Place in central London and will feature a powerful line-up of speakers, workshops and exhibitors that will each contribute to the development of environmental skills, knowledge and thought leadership.

The theme, content and new features of this year’s conference will be announced



in future issues of *the environmentalist* but details of the venue and other preliminary details can be found at [www.lexisurl.com/iema6554](http://www.lexisurl.com/iema6554). Members will be contacted over the coming weeks with more details about the theme of the conference, the early-bird booking offer and other exciting details.

### More successful IEMA members

IEMA would like to congratulate the following individuals on the success of their Full (MIEMA) and Dual (MIEMA and CEnv) membership applications.

#### Full

**Ian Pennington**, GlaxoSmithKline  
**Shehu Saleh**, SKM

#### Dual

**Inga Doak**, Invensys Rail  
**Deborah Dunsford**, Environment Agency  
**Peter Jones**, GHD  
**Andrew Reay**, ABB  
**Lucy Swan**, Atkins  
**Amy Tharakan**, TNEI  
**Thomas Wells**, Campbell Reith

# From the knowledge hub

## The IEMA greenhouse-gas report: six months on

In October 2010, IEMA's special report on greenhouse-gas (GHG) management and reporting presented the results from detailed engagement work with members, including workshops attended by 200 environment and sustainability practitioners and findings from a comprehensive survey with nearly 2,000 responses. The report represents a substantial body of evidence on the progress and issues faced by practising professionals across a range of sectors. Here Nick Blyth, senior adviser at IEMA, provides an update on some of the issues identified and developments under way.

IEMA has made wide use of the report to inform decision makers and government departments – including the Department for Business, Innovation & Skills, DECC and Defra – and communicate the unique practitioner evidence base to influential networks and stakeholders. For example, IEMA evidence was one of four supporting sources used by Defra in its November 2010 report to parliament titled *The contribution that reporting of greenhouse gas emissions makes to the UK meeting its climate change objectives – a review of the current evidence*.

IEMA members indicated that GHG reporting by organisations is in itself central to achieving and sustaining progress with a clear relationship between reporting and the achievement of carbon reduction. Eighty per cent of practitioners expressed support for the introduction of a “mandatory requirement” for businesses to regularly report their GHG emissions – in line with provisions in the UK's Climate Change Act 2008. A range of organisations is now supportive of the introduction of a mandatory reporting requirement; the government's next steps on this important issue are awaited with interest.

A number of issues and concerns identified by IEMA members are also being addressed through new guidance. Short guidance notes are being compiled on specific or “problematic issues” such as:

- green tariff electricity;
- carbon neutrality; and
- GHG schemes and standards.

The guidance notes will seek to explain, clarify and resolve some of the confusion that exists on specific topics, with the first,

on green tariff electricity, available from April 2011.

In addition to guidance, a number of workshops and events have helped to take forward key issues from the report. These included workshops at IEMA's 2010 conference on making the business case for carbon reduction, GHG inventory management (preparing for verification), carbon tools and calculators and many more. IEMA steering groups are similarly responding. The east of England group held its own regional conference in late March on making the business case for climate change and resource efficiency.

Managing and reporting of GHG emissions in supply chains and across product life cycles (Scope 3 emissions) is a significant challenge for practitioners. Pressure is starting to be felt in supply

chains: 39% of active practitioners face pressure to manage or report on GHG, and 28% are placing pressure on their suppliers. Recent and current work from WRI and WBCSD is under way, providing two new GHG Protocol standards – the product accounting and reporting standard, and the corporate value chain (Scope 3) accounting and reporting standard ([www.lexisurl.com/iema6555](http://www.lexisurl.com/iema6555)). IEMA's report is also being used to inform a number of wider related developments, including the revision of PAS 2050 – specification for assessing the life cycle GHG emissions of goods and services.

To get involved in our developing practitioner guidance or simply to find out more about IEMA's current work on GHG management, contact Nick Blyth at [n.blyth@iema.net](mailto:n.blyth@iema.net).

### IEMA EVENTS

Date	Region	Topic
<b>Regional events</b>		
4 May	South East	Social networking
4 and 5 May	South East	Sustainable business practice workshops
10 May	North East	Cockfield anaerobic digestion plant visit (fully booked)
10 May	Wales	Sustainable business practice workshop
11 May	Midlands	Sustainable business practice workshop
12 May	South East	Social networking
17 May	Scotland Central	Sustainable business practice workshop
18 May	North East	Sustainable business practice workshop
23 May	South West	Landscape and ecology (fully booked)
25 May	South East	Establish change management and sustainable development in your organisation
25 May	South West	Social networking
<b>CPD workshops</b>		
11 May	North West	Environmental law and legislation
18 May	Midlands	Introduction to EIA and SEA



# Introducing the EIA Quality Mark

**Quality control** On 18 April IEMA launched the EIA Quality Mark, establishing a new standard for organisations that coordinate environmental impact assessments.

The scheme allows consultancies and developers that regularly carry out environmental impact assessments (EIAs) to make a voluntary commitment to undertaking quality practice. IEMA is responsible for the operation of the scheme and monitoring each registrant's ongoing compliance to its commitments.

The new EIA Quality Mark places an emphasis on sharing, learning and improving the practice of environmental impact assessments. The EIA Quality Mark looks at quality across an organisation's EIA activities, including its management processes and approaches to the development of staff competence.

## Kicking off

IEMA is pleased to welcome 38 of the founding organisations to the EIA Quality Mark, which include organisations that completed the transition from the Institute's previous corporate EIA register and those which piloted the new application process.

The Institute actively engaged environmental impact assessment practitioners in developing the new scheme, ensuring that the EIA Quality Mark is rigorous, efficient and capable of driving real quality improvements across practice.

Some of the registrants have told IEMA about how valuable this new scheme will prove to be:

- Doug Ford, UK business group director of environment at consultants Royal Haskoning, describes the EIA Quality Mark as having "teeth", which will "help the industry achieve well overdue higher and consistent quality in this vital part of permitting, while further supporting our EIA practitioners".
- Christine House, director of environmental planning at engineering consultancy Wardell Armstrong, believes the EIA Quality Mark is a "wonderful opportunity to further develop staff skills using IEMA's structured EIA assessment criteria." Her colleague, technical director Jon King, who helped pilot the scheme, is equally enthusiastic:



"The EIA Quality Mark will be of great benefit in the benchmarking of EIAs and in raising the standards of environmental statements."

The Environment Agency is the first developer to be awarded the EIA Quality Mark thanks to the standard of EIA practice shown by its National Environmental Assessment Service (NEAS).

Ross Marshall, NEAS's director, explained why they chose to become the first developer to join the scheme: "NEAS joined the EIA Quality Mark scheme to demonstrate the value as an asset operator that environmental impact assessments bring to our own infrastructure programmes and emphasise the need for continuous

performance improvement. We are proud to be the first recipient of the EIA Quality Mark."

## Getting started

The EIA Quality Mark has been specifically designed to ensure it generates multiple benefits for registrants, IEMA members and all those interested in improving UK EIA practice.

All of IEMA's members will benefit from the new scheme through access to:

- A growing library of more than 375 non-technical summaries from environmental statements, including approximately one-third of all those submitted across the UK in 2010 – **these are available now.**
- Weekly articles on EIA at *the environmentalist* online – **available from mid-May.**
- Access to a growing catalogue of case studies of effective EIA practice – **available from June.**
- An increasing number of EIA events, including a trial of EIA webinars – **starting from July.**

The EIA Quality Mark is open to all organisations that regularly coordinate statutory environmental impact assessments in the UK. If you are interested in finding out how your organisation can join the scheme, visit [www.iema.net/qmark](http://www.iema.net/qmark) for information on how to apply.

## The EIA Quality Mark's commitment to excellence

- 1 *EIA management* – using effective project control and management processes to deliver quality in the EIA coordinated and environmental statements produced.
- 2 *EIA team capabilities* – ensuring that all EIA staff have the opportunity to undertake regular and relevant continuing professional development.
- 3 *EIA regulatory compliance* – delivering environmental statements that meet the requirements established within the appropriate UK EIA regulations.
- 4 *EIA context and influence* – ensuring that all EIAs are effectively scoped and that they transparently indicate how the process, and any consultation undertaken, influenced the development proposed and any alternatives considered.
- 5 *EIA content* – undertaking assessments that include a robust analysis of the relevant baseline, assessment and transparent evaluation of impacts and an effective description of measures designed to monitor and manage significant effects.
- 6 *EIA presentation* – delivering environmental statements that set out environmental information in a transparent and understandable manner.
- 7 *Improving EIA practice* – enhancing the profile of good-quality EIA by working with IEMA to deliver a mutually agreed set of activities, on an annual basis, and by making appropriate examples of our work available to the wider EIA community.

IEMA is pleased to welcome the following organisations onto the EIA Quality Mark



[www.iema.net/qmark](http://www.iema.net/qmark)



# Review of IEMA by the regions

**Member views** While members were independently telling IEMA how they value membership, the 13 regional steering groups (RSGs) were collectively delivering their own review of services provided by the Institute.

The series of meetings throughout the first quarter of the year allowed the UK and Ireland groups to understand IEMA's new direction and to look at the more fulfilling and rewarding activities available to the groups that will collectively help support the delivery of the Institute's Vision 2014.

## Regional support

The RSGs stated that they wish to play a bigger role in welcoming new members to IEMA but need to have what they call "information plus" on the Institute's current projects, research and initiatives so that they can engage effectively with the membership. Some of the RSGs also said the expertise and intelligence present within the groups is not currently being utilised to its full potential. IEMA plans to change this and ensure that the knowledge, talent, skills and thought leadership the individuals within the RSGs have to offer are applied where the entire membership can benefit.

## Professional development

"Environment practitioners need to be 'chameleons', able to communicate to all," the RSGs told us. They said that the role of the practitioner as an agent of change, and having a professional development framework that supports this, is fundamental. In the steering groups' view, members should be taking part in more relevant continuing professional development rather than just "more" development opportunities. IEMA plans to rectify this with the forthcoming launch of its Competency Framework, which will allow members to self-assess their level of knowledge and experience against professional expectations and IEMA membership levels.

Also, every group highlighted the importance of mentoring, and each offered to support and enter the mentoring scheme in some form.

## Events

IEMA's regional events are typically driven and organised by the RSGs – with

support from the Lincoln head office – in order to deliver a locally relevant, comprehensive and useful programme.

The RSGs took the February meetings as an opportunity to feed back on the current events system, budgets, and standardisation across the regions. While there are improvements to be made – both to assist the RSGs and to increase the value of each event for the membership – the general view of the regional events is that they are constantly improving in terms of quality, and member attendance is currently at a record high. However, it was unanimously felt that members increasingly wish to access their professional development across a broad range of platforms.

## International profile

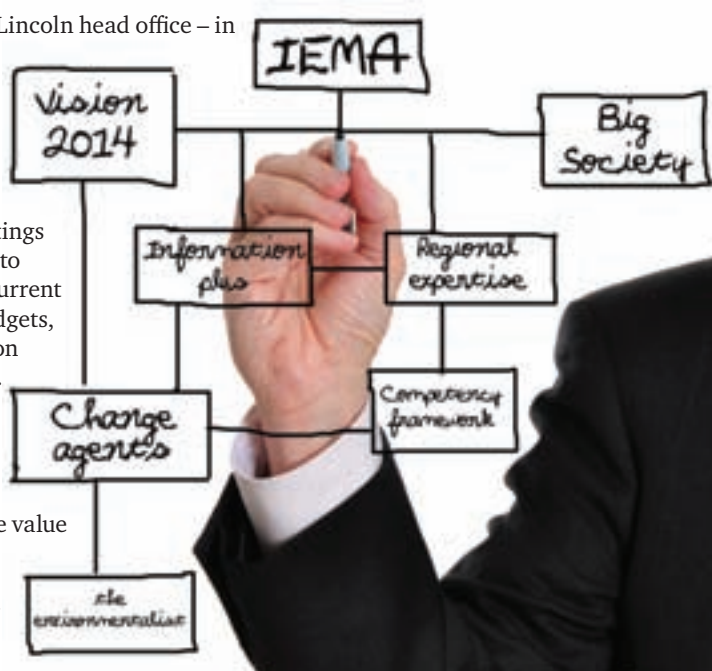
The UK and Ireland groups make up 12 of IEMA's 13 RSGs. The international group is an umbrella for the smaller groups of members that have formed throughout the rest of the world, assembling to form continent- or country-specific networks of environmental and sustainability professionals. The RSGs contacted so far have strongly advocated the importance of an increased global reach via strengthened support for the fledgling international groups.

The importance of the global perspective and the horizon-scanning work being carried out by IEMA was also discussed by every one of the groups.

## *the environmentalist*

The launch issue of the new-look *the environmentalist* had been seen by the RSGs in the weeks leading up to the February meetings. The feedback they offered was realistic and very useful for future improvements.

The consultation and new regulation sections were – by a long way and almost



unanimously – seen as being the greatest benefit of the changes to the membership magazine. However, they also said that there is a need to contextualise some of the feature articles for Northern Ireland, Scotland and Wales.

We quickly responded with an article on "The One Wales: One Planet" initiative, featuring an interview with Welsh environment minister Jane Davidson in the March issue. Similar articles are planned over the coming months for both Northern Ireland and Scotland.

This initial review of the magazine was largely positive and it is seen as an important move for the Institute and its membership.

RSGs are populated by members of the Institute who give up their time to support the aims and objectives of the organisation. IEMA believes that the best way to meet the needs of its members is to ensure that our regional steering groups reflect the diversity of the Institute's membership. We like to see all sections of the environmental profession represented. If you would like to get involved with IEMA's steering groups, contact [info@iema.net](mailto:info@iema.net) or visit [www.iema.net/regions](http://www.iema.net/regions) to learn more.



These 2 posts provide an exciting opportunity to join our very successful environmental projects team, based within beautiful countryside at Redhills, near Penrith. The Environmental team work with businesses throughout Cumbria to support them in making environmental improvements.

### Technical Support Advisor

This role will directly support the work of our environmental Auditors, assisting with the completion of reports, database input, statistical analysis, and dealing with requests for advice from clients. The position is primarily office based, but will require delivery and support at workshops and seminars throughout Cumbria, with some direct client contact.

Closing date – Friday 29th April 2011

Interviews – Wednesday 11th May 2011

### Environmental Advisor

This post will deliver a 1 year project to support businesses improve their environmental performance through workshops, seminars and remote assistance. The successful candidate will plan, market and deliver a series of events throughout Cumbria, to meet the needs of businesses from all sectors. You will also update our website, write and issue newsletters and marketing materials, and support the auditors in their work.

Closing date – Friday 29th April 2011

Interviews – Friday 13th May 2011

For further details, and an application pack, please visit our website at

[www.crea.co.uk](http://www.crea.co.uk)

Supported by



## Site Safety & Environment Supervisor – Wallingford

Operating out of our Wallingford office and reporting to our Quality, Environment & IMS Manager, this mobile role is very much hands-on. You will support our Integrated Management Systems Department in implementing health, safety and environmental processes at site level, ensuring continuous improvement in Fugro's performance. Significant travel should be expected.

Your day to day responsibilities will include providing practical solutions, support and feedback to management and site workers. You will:

- participate in site mobilisation and set up
- raise awareness of environmental, safety and health mitigation issues
- conduct quality, health & safety environmental based internal audits and inspections
- deliver practical training on-site
- participate in incident and accident investigations

Flexible, pragmatic and with strong problem solving abilities, you will need to have excellent communication skills as your remit will find you interacting and communicating with a wide range of people, at all levels.

Experienced in an environmental and/or safety role within the construction or geotechnical industries, you must hold the IEMA certificate in Environmental Management and/or NEBOSH Construction Certificate and/or NVQ level 3 in Occupational Health & Safety gained within a construction or civil engineering environment.

A full driving licence is required. Your salary will depend upon your experience. Our benefits package includes a pension scheme, private healthcare, life insurance and an active social club.

To apply, please send your CV and a covering letter, including your current salary to Dee Hancox, HR Assistant at [hr@fes.co.uk](mailto:hr@fes.co.uk) or telephone 01491 820494 for an application form. Closing date: Tuesday 31st May 2011

Further company details can be found at [www.fes.co.uk](http://www.fes.co.uk) and [www.fugro.com](http://www.fugro.com)

# RPS

## Leading Experts With Diverse Experience

Continued growth in our Scotland offices has resulted in the following key vacancies:

### EIA Practitioners – Glasgow/Edinburgh

Due to growing demand, we are seeking EIA practitioners at all levels to join our teams in Glasgow and Edinburgh. Roles are predominantly, but not exclusively serving the windfarm sector, both onshore and off. Experience in these areas is therefore highly desirable. As well as proven technical knowledge of windfarm development and the consenting process, you will also possess excellent project management skills, strong commercial awareness and a track record of delivering excellent quality work on schedule and to budget.

In return, these roles offer a highly competitive salary and benefits package. They also provide an excellent opportunity to join one of the UK's leading environmental consultancies, continuing RPS' success in Scotland and around the UK.

To apply, simply forward a copy of your CV to Geoff Thorpe, Recruitment Manager, RPS Planning & Development via e-mail at [geoff.thorpe@rpsgroup.com](mailto:geoff.thorpe@rpsgroup.com).

RPS is an equal opportunities employer.

NO AGENCIES



### Principal/Associate Ecologist – Scotland

We are looking for an experienced Ecologist to join our 27-strong Ecology team in Scotland, with the option to be based in Glasgow or Edinburgh. You will need to demonstrate experience and competence in the main aspects of ecological consulting including some or all of: Phase 1 Habitat Surveys protected species surveying and licensing, ecological impact assessment, client liaison and other relevant business skills. You should also be able to demonstrate the ability to lead a team and to develop our business within the region. Experience of working in the energy sector, and in particular onshore wind farms, would also be advantageous but not essential. You will be undertaking travel to sites to undertake field surveys, and so a full driving license is essential. GIS skills and experience would also be advantageous.

[rpsgroup.com](http://rpsgroup.com)



# Soar to great heights

with Temple Group



Temple Group was established in 1997 and is an independent multi-disciplinary consultancy providing environmental, planning and management services. We have an enviable reputation as an industry leader and innovator and a prestigious client list including Defra, FTSE 100 companies (various), Network Rail, TfL, BAA and HS2 Ltd.

In response to significant growth in the business, we continue to develop and strengthen our multi-disciplinary, technical and management capability and there are a number of outstanding opportunities, based at our office near Shad Thames, Central London, for individuals with experience in:

- Climate & Carbon
- Environmental Impact Assessment
- Energy & Renewables
- Equality Impact Assessment
- GIS
- Health Impact Assessment
- Programme & Project Management
- Socio-economics
- Stakeholder Management
- Strategic Environmental Assessment
- Sustainability
- Town Planning/Master Planning
- Transport & Works Act

**Business Development Director:** £80,000 - £110,000 + bonus

**Operations Director:** £80,000 - £110,000 + bonus

**Technical Directors:** £65,000 - £100,000 + bonus

**Technical Director (Head of Acoustics):** £65,000 - £100,000 + bonus

**Principal Consultants:** £40,000 - £70,000 + bonus

**Senior Consultants:** £33,000 - £45,000 + bonus

**Consultants:** £25,000 - £35,000

**Junior Consultants:** £20,000 - £27,000

**Marketing & Sales Manager:** £35,000 - £50,000

We are also in the process of expanding our **Associate Network**. If you are interested in joining our network, please send your CV to [recruitment@templegroup.co.uk](mailto:recruitment@templegroup.co.uk)

**Closing date for applications: Friday, 27 May 2011. Early applications welcome - please note that interviews will be programmed before the closing date in response to early applications.** For further information, job specification or application with covering letter and CV please email [recruitment@templegroup.co.uk](mailto:recruitment@templegroup.co.uk) or contact **Evy Skinner** on **01825 790964**. To find out more about Temple and the work we do, visit our website at [www.templegroup.co.uk](http://www.templegroup.co.uk)





We are dedicated to helping you  
find your ideal position within the  
energy and environmental sectors.

**[www.serlimited.com](http://www.serlimited.com)**

**Senior Port and Maritime Engineer – Scotland**

Up to £40,000 + Package

Renewable energy experts – progressive role

**Environmental Consultant – London**

£28,000 – permitting experience needed

Multi-disciplinary consultancy

**EIA Project Manager**

To £65,000

Prestigious worldwide consultancy

**Associate Director of Air Quality**

c £60,000 + Package

Global environmental specialists

**Offshore Renewables Project Manager**

To £42,000 + Benefits

Expanding specialist consultancy

**Senior Technical Risk & Safety Consultant**

£40–60,000 + Benefits

International offshore consultancy – London

**Bid Manager – Oxford**

To £35,000

Green waste consultancy

**Geo-Scientist – South East**

£40,000 + Bonus

Offshore cabling

**Senior Geotechnical Engineer – W Mids**

To £43,000

Prestigious UK consultancy

**Sales Co-ordinator – Kent**

£24,000 + Bonus

Major renewables contractor

**Principal Renewable Consultant – London**

£45,000 + Benefits

International consultancy

**Energy Consultant – South East**

To £40,000 + Car

Engineering background preferred

For more information about any of the above opportunities,  
please contact **Sam** or **Richard** on **01282 777414**,  
or alternatively please send your CV to **[sam@serlimited.com](mailto:sam@serlimited.com)**



**WATA**

*environmental  
training*

**NEBOSH Certificate in Environmental Management**

**NEBOSH Diploma in Environmental Management**

**IOSH Working with Environmental Responsibilities**

**IOSH Managing Environmental Responsibilities**

**HEMA Foundation Certificate in Environmental Management\***

**HEMA Associate Membership Certificate Course\***

Contact **WATA** on

**01480 43 55 44** or

**[www.wata.co.uk](http://www.wata.co.uk)**

**for more information**



\*HEMA courses are delivered in association with CAMBIO