

Industry

22

Collective action

Why Boeing, Rolls-Royce and other aerospace companies are working together on REACH

Policymaking

25

Brussels at work

Commissioners and MEPs have their say on how the EU helps to create a better environment

Remediation

28

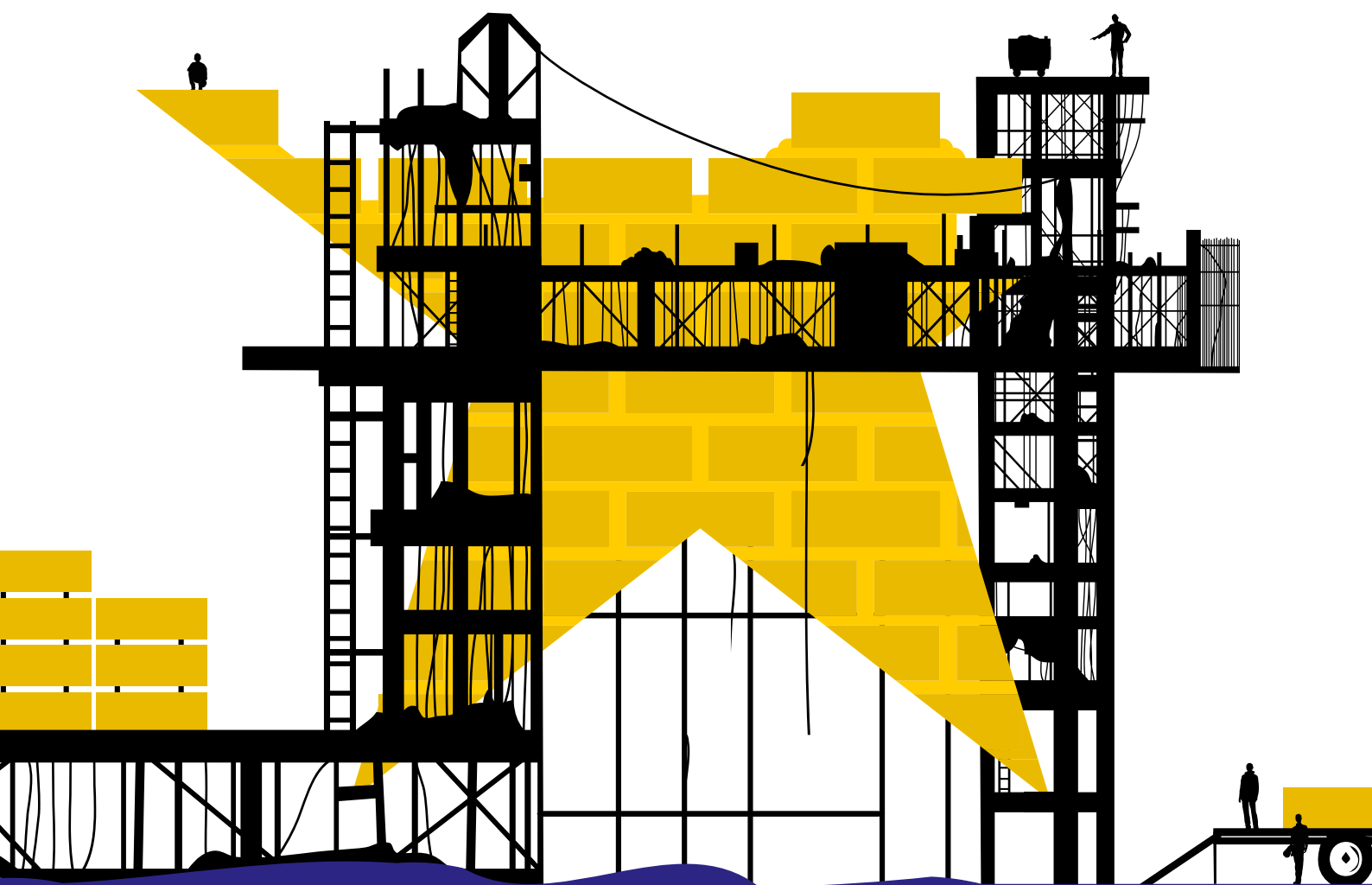
Deeper cleaning

Celtic Technologies employed new tools to clean up the site of a former chemicals factory

the environmentalist

environmentalisonline.com

April 2014



Rebuilding EIA

How the revised Directive
will reshape practice

iema
Institute of Environmental
Management & Assessment

Greenspace

takes the hard work out of compliance

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

- **Legal Register** updates and manages compliance
- **Aspect Register** controls your impacts
- **Bespoke email updates** and compliance calendar
- **Super-user** for multi-site functionality
- **Carbon Manager** reports your carbon footprint
- **Document Manager** hosts your policies, reports, documents and records

“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:

Tom Cullingford

t 0114 229 8900

e thomas.cullingford@watermangroup.com

www.watermangroup.com

To find out more visit

www.legalregister.co.uk

View sample



*Terms and conditions apply. Applications from £250/annum.

April

News

- 4** 14001 boosts compliance, finds ISO poll
Dclg opts to remove local powers
- 5** Osborne floors carbon price and hands large energy users £7 billion
- 6** Air pollution risks are growing
ERM wins best brand vote
In parliament Alan Whitehead criticises the changes to carbon price floor in the budget
- 8** IPCC says it is time for the world to choose
EIA update The latest on impact assessment
- 9** 2030 targets must be “fair”, says EU council
SMEs lack circular knowledge
Business plans ExxonMobil, Apple, BAFTA, Greenstone, Marks & Spencer, SAP
- 11** **The big conversation** Environmentalists comment on plans for biodiversity offsetting

Legal brief

- 12** **Recent prosecutions** 10-month sentence for director after timber site blaze; noise costs council £8,500; BP competes again in the US
Case law LexisPSL experts on the ongoing importance of *Lambson v Merlion*
- 13** **New regulations** Marine environment; built environment; environment protection; hazardous substances; planning; CRC; energy
- 14** **Latest consultations** Nagoya protocol; bee strategy; steel slag; “NORM” waste; refuse-derived fuel; decarbonising heat
Guidance NetRegs produces new e-learning tools; biodiversity modelling
- 15** **Laying down the law** Simon Colvin on a ruling that suggests companies at risk of nuisance claims can avoid injunctions

Insight

- 38** **Global focus** Thomas Tang describes how EIA is being applied in Hong Kong
- 39** **Change agent** Matthew Rowland-Jones, environment affairs manager at Rexam

IEMA news

- 34** Full membership changes take force
- 35** IEMA news coverage more than doubles
- 36** GACSO and IEMA cement their relationship
Policy update Martin Baxter on whether “smarter” guidance is better guidance
- 37** IEMA events and successful members

Features



16 Built to assess impacts

MEPs have backed revisions to the EU Directive on environmental impact assessment. IEMA expert Josh Fothergill explains what the changes mean



20 Our material world

This month's datafile highlights some of the environmental benefits of manufacturing materials, such as paper and steel, from recycled goods



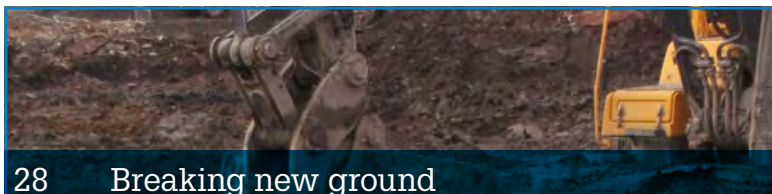
22 Flying in formation

Paul Suff finds out how the introduction of the EU REACH Regulation led to aerospace companies coming together to work on environment issues



25 What's the EU done?

MEPs Chris Davies and Fiona Hall, and commissioners Connie Hedegaard and Janez Potočnik chart the achievements of EU policymakers since 2009



28 Breaking new ground

The site of a former chemical plant at Avonmouth is now home to a new depot for Asda. *the environmentalist* reports on the remediation operation



32 Overcoming the knowledge gap

Jae Mather argues that sustainability professionals should share knowledge rather than fall into the age-old trap of continually reinventing the wheel

Green Thinking for the whole workforce...

LEADERS

Level 6 - Leading with Environmental
sustainability - Strategy & Leadership*

MANAGERS

Level 4 - Managing with Environmental
sustainability - Value & Opportunity

TEAMS

Level 2 - Working with Environmental
sustainability - Risk & Efficiency

...with new
**nationally recognised
qualifications from**

iema
Institute of Environmental
Management & Assessment

&

**City &
Guilds**

Sustainabilityskills.co.uk

contact us today for more information

phone: 0845 155 0310

email: skillscentre@whgrp.co.uk

**City &
Guilds**
Approved Centre

**cskills
awards**
CITB Commercial Skills
Awarding Organisation
Approved Centre



whg

**THE
SKILLS
CENTRE**

ESP

Working together in partnership

* subject to approval

Survival of the fittest?

No one will be untouched by the impacts of climate change, said Rajendra Pachauri, chair of the Intergovernmental Panel on Climate Change (IPCC) at the launch in Yokohama, Japan, of the latest report from the UN body (p.8). Yet some will be more touched than others, and many are already suffering the consequences of rising temperatures. The report, which focused on the risks posed by climate change, cites flooding, storm surges, sea-level rise, droughts and heatwaves as key hazards, and forecasts an increase over the coming decades in violent conflicts, food shortages and infrastructure damage. A growing number of animals and marine species, meanwhile, will face a high risk of extinction.

According to the scientists contributing to the 2,600-page report, global food supply is already being affected by higher temperatures, with yields of crops including wheat and maize beginning to decline. Ultimately, they warn of the potential for humanitarian crisis.

While heat stress, extreme precipitation, inland and coastal flooding, landslides, air pollution, drought and water scarcity pose hazards for people and assets in developed economies, these risks are amplified for those lacking essential infrastructure and services or living in poor-quality housing and exposed areas, says the report.

Developed countries, such as the UK, will be able to adapt by improving housing and building resilient infrastructure systems to reduce vulnerability – though this will come at a hefty price. The total cost of the flooding of the Somerset Levels has yet to be calculated, but insurers have estimated losses at around £1 billion. Government action to improve flood management in the area has started with stretches of the rivers Parrett and Tone being dredged, but such measures are not cheap and will cost around £1 million a mile.

Many governments, particularly in the developing world, simply do not have systems or resources to properly protect their populations. That's why the IPCC, while making it clear that measures must be taken to adapt to the climate changes already locked into after years of unabated greenhouse gas emissions, is keen that the report findings be used to galvanise global mitigation efforts now. Indeed, the world is finding it increasingly hard to cope with the changes wrought by the 0.8°C rise in global temperature that has occurred since 1880, so even higher temperatures – and the current trajectory is a 4°C rise by the end of the century – will test our ability, and that of ecosystems, to adapt.

"The one message that comes out of [the IPCC report] is the world has to adapt and the world has to mitigate," said Pachauri. Let's hope that policymakers are listening and they finally agree a way to tackle climate change effectively.

Adapting to climate change often comes with a hefty price tag and many developing nations simply do not have the systems or resources to properly protect their populations



Paul Suff, editor

The Institute of Environmental Management & Assessment (IEMA) is the professional home of more than 15,000 environment and sustainability practitioners from around the globe. We support individuals and organisations to set, recognise and achieve global sustainability standards and practice.

We are independent and international, enabling us to deliver evidence to governments, information to business, inspiration to employers and great stories to the media that demonstrate how to transform the world to sustainability. Join us at iema.net.

IEMA

Saracen House
Crusader Road
City Office Park
Tritton Road
Lincoln LN6 7AS
tel: +44 (0) 1522 540069
fax: +44 (0) 1522 540090
info@iema.net | iema.net

Editor

Paul Suff
paul.suff@lexisnexis.co.uk

Deputy editor

Sarah-Jayne Russell
sarah.russell@lexisnexis.co.uk

Managing editor

Louis Wustemann
louis.wustemann@lexisnexis.co.uk

Sub-editors

Mike McNabb, Brenda Morris
Angela Partington

Advertising sales executive

Jodie Fletcher
tel: +44 (0) 20 8212 1989
jodie.fletcher@lexisnexis.co.uk

Recruitment advertising

Sam MacKenzie
tel: +44 (0) 20 8212 1913
sam.mackenzie@lexisnexis.co.uk

Marketing campaign manager

Victoria Newman
victoria.newman@lexisnexis.co.uk

Design

Jack Witherden
jack.witherden@lexisnexis.co.uk

Advertisement production

John Woffenden
john.woffenden@lexisnexis.co.uk

Director of content

Simon Collin
simon.collin@lexisnexis.co.uk

IEMA communications coordinator

Katrina Pierce
k.pierce@iema.net

Advertising, subscription and back-copy enquiries to

Customer services,
tel: +44 (0) 845 370 1234
The 2014 annual rate is £135.

Printing

Headley Brothers Ltd, Ashford, Kent

Published by

LexisNexis, Quadrant House, The Quadrant,
Sutton, Surrey SM2 5AS
lexisnexis.co.uk

© IEMA 2014

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.

ISSN 14727625



the environmentalist is printed by ISO 14001 certified printers on 55% recycled paper stock and despatched in biodegradable polywrap



LexisNexis®

Short cuts

F-gas and waste rules

The European parliament has formally adopted two new regulations tightening rules on the shipment of waste and the use of fluorinated gases (f-gases). The existing waste shipment regulation (1013/2006/EC) does not contain detailed requirements for inspections and has resulted in some transporters funnelling their shipments through countries with less stringent regimes. Under the amending regulation, member states have until 1 January 2017 to put in place new detailed inspection plans. These plans must be risk-based and be reviewed every three years. Governments must also publish information on inspections. Meanwhile, the new f-gas regulation phases out the use of f-gases in equipment such as fridges and freezers from 1 January 2015 and limits the amount of hydrofluorocarbons (HFCs) that can be sold within the bloc.

Sustainable growth

New research sponsored by BSI indicates that the majority of large companies in the UK consider sustainability issues as offering opportunities for business growth. The survey of 150 environment, health and safety directors at firms with annual revenues of at least £350 million reveals that 70% believe sustainability is "well established" in their organisation and is considered by senior managers as a driver for growth and innovation. More than half (51%) of respondents also predict that sustainability will have an impact on their company's financial performance in the next two years. When asked about reporting sustainability data, all respondents confirm their company will be doing so in 2014, with 91% claiming such information would be integrated into annual financial reports. Alongside reporting on CO₂ and energy, more than two-thirds of those polled say their organisation publishes data on waste generation and water consumption. The results also reveal that 79% of firms have their sustainability data verified externally.

14001 boosts compliance

ISO 14001 helps organisations to meet their legal obligations and improve environmental performance, but the revised standard should include tougher requirements on pollution prevention, a global poll of users finds.

ISO has published the results of a survey on improving the environment management systems (EMS) standard. The "continual improvement" survey, which was conducted in early 2013, prompted nearly 5,000 responses from 110 countries, with more than half the feedback coming from organisations using the standard.

The results reveal that users believe 14001 brings significant value to their business by ensuring legal compliance (77%), boosting environmental performance (74%), and engaging managers (68%) and employees (62%). The respondents also report that the standard helps them to meet the requirements of their stakeholders (58%), improve their public image (58%) and ensure strategic objectives are met (55%).

The survey asked users the extent to which 14001 and its accompanying guidance should be strengthened in relation to the 19 areas identified by ISO in 2010 as "future challenges". Pollution

prevention is the area respondents feel is most in need of fortifying, followed by lifecycle thinking and resource efficiency.

In the latest draft of the standard, which ISO members backed a second requirement to "protect the environment" in January, a second requirement to "protect the environment" has been introduced to strengthened the commitment to prevent pollution. The text suggests that organisations could do this by ensuring sustainable resource use.

The survey also asked users how often they use annex A of 14001 and ISO 14004 and how useful they find the guidance. Although most users say they find both documents useful, around three-quarters also reveal that they rarely, if ever, refer to them. When asked how the guidance could be improved, the most frequently cited response is to improve their clarity and to further expand the content.

The survey report recommends that the ISO working groups tasked with revising 14001 and 14004 should ensure the language and phrasing used in both is "clear and simple". It also suggests the addition of more practical examples of how to implement an EMS in 14004, and that more should be done to improve awareness of the guidance documents.

Dclg opts to remove local powers

Local planning authorities will no longer be able to impose higher energy efficiency standards for developments than those set out in buildings regulations if recent amendments to the Deregulation Bill, now making its way through parliament, come into force.

The communities department (Dclg) has inserted a clause in the Bill to amend the Planning and Energy Act 2008 and prevent local authorities in England imposing their own energy standards. "Government policy is that all such requirements should be set out in building regulations," states the explanatory note accompanying the amendment.

The energy sector has reacted angrily to the plans. Andrew Warren, director at the Association for Conservation of Energy, said the objective was clearly to stop authorities setting energy standards for any building that are even marginally higher than those allowed by Dclg.

"[It] is denying any opportunity for more progressive councils to continue setting higher standards than the minimum," said Warren.

Dave Sowden, chief executive at the Sustainable Energy Association, described the decision to amend the 2008 Act as wrong. "It is perverse to drop the energy efficiency provisions – the most cost-effective component of the Act."

Dclg had put forward its proposals in a consultation last year. The Dclg reports that 63% of those responding to the consultation were in favour of moving to a building-regulations-only approach, but acknowledged that the energy sector was opposed to the proposal by nine to one.

It said that organisations responding from the renewable energy and consultancy sectors wanted the government to make a firmer commitment to delivering zero carbon buildings before local standards were removed.

Osborne floors carbon price and hands large energy users £7bn

The chancellor has capped the price of carbon until 2020 and pledged to cut manufacturers' energy costs by £7 billion in a move that IEMA has warned undermines climate change policies.

Measures announced in the 2014 budget will keep the carbon price floor (CPF) at the 2016/17 price of £18 a tonne of CO₂ until 2019/20. In his speech to parliament, George Osborne argued: "US industrial energy prices are half those in Britain. We need to cut our energy costs." In 2011, the chancellor had said the CPF would reach £30 a tonne in 2020.

Although he claimed that investment in nuclear power, renewables, shale gas and energy efficiency would reduce energy costs, the bulk of the measures Osborne announced to bring down bills centred on offsetting the costs of climate change policies. He confirmed, for example, that the government would extend by four years the scheme to compensate energy-intensive industries for higher energy costs resulting from the introduction of contracts for difference. A second scheme, worth £1 billion to manufacturers, will be introduced from 2016/17 to reimburse firms for the costs of funding



the Renewables Obligation and the feed-in tariff. Meanwhile, electricity generated by combined heat and power plants will be exempt from the CPF.

Osborne claimed that without these measures "green levies and taxes" would account for more than one-third of a company's energy bills by 2020, risking many relocating overseas.

However, IEMA's executive director of policy, Martin Baxter, criticised the budget: "Long-term certainty is vital for business to secure investment in measures such as low-carbon technology and energy efficiency. By freezing the carbon price floor, the government risks failing to achieve its climate change policy objectives."

Short cuts

GHGs up and down

According to provisional data from Decc, the amount of greenhouse gases (GHGs) generated in the UK last year fell by 1.9% on 2012. The report attributes the drop to a switch from coal- to gas-fired power generation, which resulted in emissions from the electricity sector falling 7.5%. The change meant there was no overall rise in UK GHG emissions in 2013 despite other sectors reporting an increase. Decc's initial data indicate that emissions from businesses, for example, rose by 2.9% as a result of increased output in the iron and steelmaking industries, while emissions from industrial processes jumped 6%. Decc has also published provisional data on the UK's energy supply for 2013. It estimates that total energy consumption fell by 0.3% compared with 2012, and that electricity use fell by a further 0.5% in 2013 to reach the lowest level since 1998. Meanwhile, the independent committee on climate change praised the Scottish government for cutting CO₂ emissions at a higher rate than the rest of the UK during 2012, but warned that carbon saving measures need to be ramped up if the Scotland is to meet its target of a 42% reduction in emissions by 2020.

Budget short cuts

Green taxation

The chancellor announced that both the landfill tax and the climate change levy (CCL) rates will increase in line with inflation from 1 April 2015. The Finance Bill published on 27 March sets out the new rates. The standard rate of landfill tax will rise from £80 to £82.60 a tonne, while the lower rate will increase from £2.50 to £2.60 a tonne. The CCL main rates from April 2015 are as follows: electricity – £0.00554kWh; natural gas – £0.00193kWh; LPG – £0.01240kg; and other taxable commodities – £0.01512kg. The planned increases will result in the proportion of revenue from environmental taxes over this parliament (2010–15) rising from 0.5% to 0.8% – slightly less than 0.9% forecast by the office for budget responsibility (OBR) at the time of the 2012 budget. The OBR now forecasts that overall revenue from the CCL will peak in 2015/16 at £2.5 billion.

Funding flood defences

The chancellor confirmed an additional £140 million would be made available over 2014/15 and 2015/16 to help repair defences damaged in the recent severe flooding. He also pledged that the government would publish a long-term plan in the autumn to help channel investment into measures to protect the country from future flooding. Dr Colin Brown, director of engineering at the Institution of Mechanical Engineers, described the £140 million as a "sticking plaster" and urged the government to do more. "The government needs to be investing in new flood defences and ongoing maintenance projects to ensure long-term UK resilience, neither of which was mentioned by the chancellor. Equally, there was no mention of resilience plans for other extreme weather conditions, which the UK will be increasingly susceptible to in future years."

Water footprint rise?

New research suggests that rising global energy demand could lead to an increase in the water footprint of the energy sector of up to 66% in the next 20 years, though the scale of consumption will depend on the mix of energy technologies in use. According to the study, which is published in *Sustainability*, average energy demand will increase from 81.2 gigajoules (GJ) per person in 2012 to 96 GJ in 2035. Although all forms of energy generation require water, total demand varies significantly between energy sources. The researchers report that the water footprint of coal-fired energy generation, for example, is between 0.15–0.58m³ of water to produce one gigajoule of energy, while the amount of water consumed by wind power is as low as 0.0001m³/GJ.

In parliament



The carbon price:
a bungle too far?

There are two instruments in the UK to price carbon – the EU emissions trading scheme (ETS) and the carbon price floor (CPF). I'm a strong supporter of the ETS, but less keen on the CPF. Nonetheless, if the CPF exists it should be related properly to the European carbon price. In my column last July, I drew attention to the astonishing rises in the indicative future levels of CPF set out by the chancellor in his 2013 budget. In his latest budget (p.5), the chancellor decided to remove some of the proposed rises in the CPF.

The CPF now looks, as it did in 2013, like a ham-fisted piece of financial opportunism in the wake of the troubles of the ETS. Indeed, the reality of the CPF has been the exact opposite of its stated aim of encouraging "further investment in low-carbon generation by providing greater support and certainty to the carbon price".

Personally, I'm not crying buckets over the freeze in the CPF at £18 a tonne of CO₂ to 2019/20. What I think is worrying, however, is the way that the chancellor's indecision on the price will destabilise investment in energy infrastructure. Renewable energy projects have been built based on the assumption that the price of carbon will rise on a trajectory that no longer exists. Even investment in new gas-power plants is based on higher coal prices as a result of the carbon price.

New energy investment – particularly in low-carbon technologies – requires reasonably stable conditions over the long-term. The terms of investment do not necessarily have to be great – it just needs to be foreseeable and reliable. The chancellor's short-term games with the CPF will further destabilise the investment environment. And that is what will count, long term, for the low-carbon investment policy that the price support mechanism was originally intended to support.

Alan Whitehead, Labour MP for Southampton Test and a member of the House of Commons' energy and climate change committee.

Air pollution risks growing

New figures from the World Health Organisation (WHO) reveal that in 2012 around 7 million people died as a result of air pollution exposure. The finding, which means that poor air quality is responsible for one in eight global deaths, is more than double the previous WHO estimate and confirms that air pollution is now the world's largest single environmental health risk.

"Few risks have a greater impact on global health today than air pollution; the evidence signals the need for concerted action to clean up the air we all breathe," commented WHO director Dr Maria Neira.

The new estimates came as the Chinese government unveiled measures to reduce pollution, with premier Li Keqiang describing the smog that regularly descends over cities in China as "nature's red-light warning against inefficient and blind development". He told parliament that efforts would focus first on reducing particulate matter – both PM_{2.5} and PM₁₀ – and aim to eliminate outdated energy producers and industrial plants, which is the source of much air pollution.

At the same time, authorities in France introduced restrictions on cars entering Paris for several days in March to tackle air pollution. On 14 March, levels of



PM₁₀ levels in Paris reached twice the safe limit in March

PM₁₀ in the French capital reached 180 microgrammes (µg) per cubic metre, more than double the safe limit of 80µg.

Meanwhile, the EU environment council is set to debate a legislative package to improve air quality presented by the European commission in December 2013. The proposed measures include updating existing legislation and imposing further limits on harmful emissions from industry, traffic and energy plants. The commission says its plans will, by 2030, help to avoid 58,000 premature deaths, save 123,000 km² of ecosystems from nitrogen pollution and stop the acidification of around 19,000 km² of forest ecosystems.

ERM wins best brand vote

Sustainability consultancy ERM and assurance firm Deloitte are two of the best regarded brands in the global environment services sector, according to a poll of practitioners.

Research firm Verdantix surveyed 250 directors and vice-presidents responsible for environment, health and safety (EHS) in companies with annual turnovers of more than \$250 million on their perception of companies offering EHS assurance, technology, IT and consultancy services.

The respondents, who were based in 13 countries including China, India, the UK and the US, named Deloitte as the most respected EHS assurance and verification provider, with 55% saying they had a positive perception of the firm. Bureau Veritas and KPMG followed closely with 53% and 52% viewing the companies positively.

Certification bodies BSI and SGS, meanwhile, were named in a second group

of assurance providers that Verdantix described as having "moderately high" positive brand perception.

When asked about companies offering "environmental services", respondents placed ERM at the top of the sector, with Environ and CH2M Hill second and third respectively. Meanwhile, the list of IT software providers was headed by Microsoft, SAP and Oracle. According to Verdantix, Microsoft's popularity reflects the fact that many organisations are still using spreadsheets and databases to manage their EHS data. Of the specialist EHS software suppliers, BSI is revealed as having the highest positive brand perception among EHS directors (30%), followed by IHS (24%) and InteleX (22%).

Verdantix concludes that there is "huge scope" for companies in the EHS sector to improve their brand awareness, citing, for example, that less than 50% of assurance buyers had heard of Intertek or TUV SUD.



"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
- IEMA Lead Environmental Auditor



NEBOSH Accredited Courses

- NEBOSH National Certificate in Environmental Management
- NEBOSH Diploma in Environmental Management

Classroom Training – London, Birmingham, Chorley Newcastle, Bahrain, Dubai
Distance / e-Learning available worldwide

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

+44 (0)20 8944 3100
E-mail: info@rrc.co.uk
www.rrc.co.uk

RRC
INTERNATIONAL

IPCC says it is time for world to choose

Responding to climate change involves making choices about risks in a changing world, concludes the latest report from the Intergovernmental Panel on Climate Change (IPCC). It also warns that the world is, for the most part, ill prepared for those risks and that more ambitious adaptation is necessary as the climate and society continue to change.

"We live in an era of manmade climate change," said Vicente Barros, chair of IPCC working group II, which produced the report. "In many cases, we are not prepared for the climate-related risks that we already face." Unveiling the report in Yokohama, Japan, co-chair Chris Field described climate change as a challenge in risk management and said that risks would be substantially mitigated through adaptation and CO₂ reduction.

The report identifies five reasons for concern, including risks to unique natural systems, major biodiversity loss, severe economic impacts and extreme weather. "Heat stress, extreme

precipitation, inland and coastal flooding, landslides, air pollution, drought, and water scarcity pose risks for people, assets, economies, and ecosystems," states the IPCC. The scientists report that climate change is already affecting food supply, with crop yields of staples, such as wheat and maize, failing to keep pace with population growth.

Although the report confirms that effective adaptation measures can help build a more resilient global society, commentators urged governments to continue to try to prevent temperature rise and not just focus on adaptation. "Unfortunately we have left it too late to rely on reducing emissions alone and we cannot avoid all of the impacts. Some adaptation will be needed. But acting



swiftly to reduce CO₂ emissions will make adaptation easier," commented Dr Rachel Warren, lead coordinating author of chapter 19 of the report.

Celine Herweijer, a specialist in climate change and adaptation, and a partner at PwC, advised companies to secure greater resource efficiency and more strategic supply chain strategies. "In a world of changing climates, there will be shifts in trading and investment patterns, and price volatility of resources will be the norm."

EIA update

iema

EIA Directive

In March, the European parliament voted in favour of amendments to the revised EIA Directive (see pp.16–18). The final step is a vote by the council of ministers, which is expected this month. Under the timeframe agreed by MEPs and the European commission, member states have until spring 2017 to implement the revisions. If you missed the IEMA webinar on 18 March, which analysed the main changes to Directive 2011/92/EU, catch up at: lexisurl.com/iema21271.

New English planning guidance

The communities and local government department has launched its online national planning practice guidance (NPPG – planningguidance.planningportal.gov.uk). The NPPG covers both environmental impact assessment (EIA) and strategic environmental assessment. It also provides information on planning matters related to noise, air quality and climate change. As a part of the launch more than 150 government guidance documents were deleted, including DETR circular 02/99 on EIA

and the related good practice guide. The EIA focus in the online NPPG is firmly on regulatory compliance – the requirements of the Town and Country Planning (EIA) Regulations 2011 – and key pieces of case law. As such, it is likely that IEMA's 2011 EIA report (iema.net/eiareport) and EIA Quality Mark guides will play a greater role in directing good practice in the future.

Streamlining in Scotland

The Scottish government is working to improve information and assessments that support planning applications in Scotland. IEMA members are invited to complete the online survey (lexisurl.com/iema21283) from the devolved administration by 25 April to help establish the evidence base to test the success of future changes.

IEMA to launch guidance on noise impact assessment

IEMA has commissioned Graham Parry and Martin Broderick to finalise its long-standing project to issue guidance on noise impact assessments. Members provided their input at workshops in Oxford and London in March. The

guide will be available to purchase this summer, with the launch anticipated in August. Parry is an environment consultant at ACCON UK, while Broderick is honorary research associate in the faculty of technology, design and environment at Oxford Brookes University, and an examining inspector at the Planning Inspectorate.

EIA Quality Mark forum 2014

The theme of this year's EIA Quality Mark forum is "What is effective EIA?". The event, to be held at Ort House in London on 12 June, will include perspectives from government representatives, as well as lawyers, developers, practitioners and consenting authorities. A limited number of tickets for the forum are on open sale. These are priced at £250 (+VAT). Please contact t.clayton@iema.net to book a place.

EIA webinars

Future EIA webinars from IEMA include:

- 24 April – What is effective EIA?
- 29 May – Linking EIA, BREEAM and CEEQUAL.
- 26 June – Linking EIA and strategic environmental assessment.

2030 targets must be 'fair'

The European council has called on the commission to develop mechanisms that will ensure efforts to meet long-term climate change targets will be fairly divided among member states.

In its first meeting to discuss the commission's proposed energy and carbon targets for 2030, the council concluded that the policy framework must ensure support for renewable energy technologies, a secure and affordable energy supply and flexibility for member states to choose how to meet the targets. A reformed EU emissions trading scheme (ETS) must be central to the approach, it stated.

The council called on the commission to further develop elements of the framework. These include analysing the impact of EU-wide targets on individual member states, developing measures that will result in "fair effort sharing" across the bloc and ensuring that the plans do not make EU-based energy-intensive industries uncompetitive. The commission must also complete its review of the



Energy Efficiency Directive "in a timely manner", says the council, and develop a strategy for energy efficiency, which is currently missing from the proposed framework. The council will review the commission's progress at the end of June, and make a final decision on whether to implement the 2030 energy and climate change policies by the end of October.

Meanwhile, EU authorities have agreed legislation relating to the technical implementation of a second commitment period under the Kyoto protocol.

SMEs lack circular knowledge

Nearly half (48.5%) of small and medium-sized enterprises (SMEs) in Europe have not heard of the term "the circular economy", while a further 25% are not sure of what it means, according to a survey of SMEs in Belgium, France and the UK by the EU's Fusion Observatory.

The poll finds that just 9% of the 231 companies surveyed claim to understand the term and consider it in their business. A large proportion of the participating SMEs, including 60.5% in the UK, report that they recycle materials and repair equipment where possible, but few are looking to design out waste, and even fewer have examined their whole business process flow to reduce waste. Almost a quarter (23%) of firms say that quantifying the economic benefits would make the circular economy more relevant to their business.

Respondents were also asked to identify the material streams that offer the potential for the greatest gains in a circular economy model. Packaging waste is singled out as the material stream best suited to a circular economy approach, though only 14% of respondents put packaging in their top three.

The research comes as Green Alliance report that banning five key waste materials from landfill and ensuring they are recycled, remanufactured or reused could support 47,500 skilled jobs in the UK and save £3.8 billion of valuable materials from being lost to the economy. It also reveals that placing a blanket ban on landfilling wood, plastic, textiles, food and electronics would reduce the annual amount of waste being landfilled by 19 million tonnes and save 14.1 million tonnes of CO₂ equivalent a year.

Meanwhile, the environmental audit committee has launched an inquiry into growing a circular economy. MPs will examine: the potential economic value of resources contained in waste; the environmental benefits of the circular economy – including, design to reduce, reuse, repair/remanufacture and recycle; the potential benefits of alternative business models, such as leasing; and barriers to circular business models. Also, the Chartered Institution of Wastes Management has commissioned research on the waste sector can be best supported in delivering the circular economy. The findings will be unveiled in October 2014.

Business plans

US oil and gas giant **ExxonMobil** is to publish information on the risks that stricter limits on carbon emissions would pose for its business. A shareholder resolution seeking disclosure of potential stranded assets has now been withdrawn after the company agreed to publish online a carbon asset risk report, describing how the firm assesses the risk of stranded assets from climate change.

Apple chief executive Tim Cook, meanwhile, warned shareholders that the technology company would resist demands to drop environmentally friendly practices if they became unprofitable. "Cook made it very clear to me that if I, or any other investor, was more concerned with return on investment than reducing carbon dioxide emissions, my investment is no longer welcome at Apple," said Justin Danhof, from the conservative National Centre for Public Policy Research.

In the UK, the **British Academy of Film and Television Arts** and software company **Greenstone** are to redevelop the industry's carbon calculator, called Albert. Greenstone will redevelop Albert to improve its usability and analytical functionality.

Multinational consumer goods business **Unilever** has issued its first "green sustainability" bond, the first of its kind on the sterling market. Worth £250 million, it will finance projects linked to the company's sustainability ambitions, focusing specifically on reducing CO₂ emissions, water consumption and waste generation from its operations.

Marks & Spencer has become the first retailer to receive triple certification from the Carbon Trust for its achievements in reducing greenhouse-gas emissions, waste and water consumption.

Software company **SAP** has announced that it plans to use only renewable energy to power its data centres around the world. "Committing to 100% renewable electricity in our data centres and facilities is a natural consequence of our business model shift into the cloud," said Peter Graf, chief sustainability officer at SAP. The firm's latest integrated report reveals that its data centres consumed 173 GWh of energy in 2013, up 8% on 2012.

The ECO 2014

TECHNOLOGY SHOW

26th - 27th JUNE 2014

THE BRIGHTON CENTRE

The UK's premier event for sustainable energy, build, transport, technology & resource efficiency

Highlighting how embracing innovation in technology and low carbon solutions can save money and delivers genuine benefits to businesses cities and communities on-going

AT HOME
BIKES SEMINARS
PRODUCTS
ENERGY TALKS
ASTE BUILD
WATER MANAGEMENT SOLAR
WIND RECYCLE
RENEWABLE ENERGY
CATION LEARN SUSTAINABLE
GADGETS RETROFIT
WORKSHOPS INFORMATION



REGISTER FOR YOUR FREE TICKET NOW AT www.ecotechnologyshow.co.uk



The big conversation

The government set out its proposals for biodiversity offsetting in September 2013, and the *Guardian* reported recently that Defra secretary Owen Paterson was keen to press ahead with offsetting despite criticism of an Australian scheme he regarded as a model. The newspaper story prompted discussion on the IEMA LinkedIn page (iema.net/linkedingroup). Here is some of the conversation.

Nature – the last capitalist frontier?

“Biodiversity offsetting equals indulgences paid in a system administered by those who do not even begin to understand ecological complexities and are misguided by a notion that anything can be bought because everything has a price tag. Some may argue that there is not enough land for development. Others – myself included – would argue that there is not enough land being protected for biodiversity and resilient ecosystems. Ultimately, we are fully dependent on the latter. A very ‘inconvenient truth’ to some, perhaps?”

Richard Campen, FIEMA CEnv, associate lecturer at Derby and Sheffield Hallam universities

“While I think government policies are written by those who don’t understand ecological complexities, the growing number of projects globally that focus on some form of biodiversity offsetting mechanism shows a worrying trend in how we value our relationship with nature. With increasing separation between humans and nature, it is becoming easier for some to put dollar values on certain aspects that ‘service’ our needs. I feel we are doomed to continue pursuing this anthropocentric relationship that will never deliver truly sustainable outcomes unless we look for a more holistic and harmonious solution and accept humanity’s place within nature.”

David Masters, AIEMA, sustainability manager at Catlin

“So the basic concept is the government allows developers to tarmac over southern Britain because developers can ‘recreate’ the biodiversity, natural landscape, flora, fauna, microclimates, area climate and weather patterns in, say, the north of Britain. Can anyone see the flaw in that plan? Anyone remember the debacle around carbon offsetting a few years ago? Are we destined to repeat history here? I would question who is advising the environment secretary because, if he’s coming up with these decisions on his own, someone needs to sit him down and educate him. If he is reliant on a team of specialists/experts in the background it is even more worrying.”

Sue Smith, AIEMA, sustainable development coordinator at BAE Systems

“Biodiversity offsetting exemplifies a problem with ‘pricing the environment’. The economy needs to function within the environment because it can’t go anywhere else (yet), but government policy wants to bring the environment within the economy. Can that be done adequately? Or is it like beer and bottles: you can contain beer in a bottle but you can’t contain a bottle in beer alone.”

Chris Foster, AIEMA, environment management consultant and lifecycle assessment specialist

“Just a tinge cynical about this, but I suspect that abandonment of key low-lying areas susceptible to sea level rises or flooding, such as the Somerset Levels, to nature as a natural wetland would presumably qualify – saving the government the high cost of flood defence measures. Goodbye to the greenbelt in the South-East, hello Somerset national (wetland) park. Is that the sort of trade off we would be expecting to see from this policy? Be careful: the motivation behind this policy may have little to do with its headline purpose.”

Paul Dumble, MIEMA CEnv, Pauls Environment Limited

“I just can’t understand this. Has anyone told these people that things do not grow on trees overnight?”

Richard Parker, environment and sustainability adviser

Criticism by MPs

Defra’s proposals for a biodiversity offsetting scheme were described by the parliamentary environmental audit committee last year as “overly simplistic”. The MPs said the plans did not offer enough protection for important habitats, such as sites of special scientific interest (SSSIs) and ancient woodland. The committee concluded that the proposals set out in a green paper in September 2013 were not sufficiently sophisticated to evaluate the complexity of habitats, particularly the potential impact on individual species. Committee chair Joan Walley, said: “The assessment process [to calculate biodiversity loss] proposed by government appears to be little more than a 20-minute box-ticking exercise.” The MPs recommended that the metric for assessing loss should be changed to give more significance to the national importance of SSSIs, for example, and that the scheme should be mandatory.

The IEMA view

IEMA gauged the views of members to Defra’s proposals for biodiversity offsetting after the green paper was published. “Very few professionals believe the current Defra proposals have adequate safeguards,” reported IEMA. It also said that professional opinion was that biodiversity offsetting would not be significantly progressed without some level of mandatory requirement from the government. In its official response to the consultation on the plans, IEMA warned that biodiversity offsetting was not straightforward and developing a credible scheme would be challenging. Evidencing the value or “equivalence” of traded units is more difficult than for carbon offsetting, it said, arguing that biodiversity offsetting should be used only within the context of the mitigation hierarchy with safeguards to avoid the practice of developers “jumping” to an offset solution.



Recent prosecutions

Case law

Recalling the case of *Lambson v Merlion*

The 2008 case of *Lambson Fine Chemicals v Merlion Capital Housing EWHC 168* continues to have implications for developers of brownfield sites, particularly the need for good due diligence. The 40-acre site in Castleford had been used to manufacture chemicals since the 1860s. Lambson Fine Chemicals operated at the site for 30 years and in 2004 sold the property to Merlion Capital Housing for £12.2 million for proposed commercial and residential development. Lambson spent a year demolishing the factory, with Merlion retaining £500,000 to deal with the costs of the resulting clean up. After the purchase, Merlion found that 14,000 tonnes of soil at the site contained “blue billy”, a waste product that contains high concentrations of cyanide. Merlion refused to pay back all of the retention money, claiming that the cost of removing the blue billy would amount to £425,000.

Merlion's legal case was that Lambson had fraudulently misrepresented the sale in that a director had stated in writing that the firm had “no knowledge of any further contamination... other than that specifically identified in the environmental survey report” (ESR). In the counterclaim, Lambson highlighted that full disclosure had been made and referred to environmental provisions in the sale contract. The judge held that: Lambson had given full disclosure by providing the ESR; both parties were fully aware the site was contaminated; there was no actionable misrepresentation, because Lambson had no knowledge of any further contamination; and Merlion should pay the balance of the retention.

Keith Davidson

Lexis®PSL

10-month sentence for director after timber site blaze

Arcwood Recycling in Ilkeston has been fined £8,000 and ordered to pay costs of £7,500 for causing water discharge activity without the authorisation of an environmental permit. The company was also fined £42,000 for breaching fire safety regulations, while its director, Luke Barker, was sentenced to a 10-month custodial sentence and disqualified from being a director for eight years.

Derby Crown Court heard that Barker, who became director of A1 Wood Recycling in March 2012, changing the firm's name to Arcwood Recycling in May 2012, had received several warnings from the Environment Agency about the timber-recycling yard. It had initially operated under an exemption, but received an environmental permit in January 2012. Agency officers recorded concerns about the poor management systems at the site throughout 2012, highlighting in April, for example, that there was too much wood for the yard to operate properly as the different piles could not be separated effectively. Between March and July 2012, Saint Gobain, the owners of the site, received numerous complaints about the amount of wood stored there.

On 15 September 2012, a fire broke at the site which firefighters were not able to put out until 28 September. As a result, firefighting water entered the Erewash Canal, affecting a 6km stretch of the canal and killing thousands of fish. The agency spent a week elevating oxygen levels in the canal to an acceptable level and removing the dead fish. The operation cost £200,000. In addition, personnel from Derbyshire Fire and Rescue Service spent 4,678 hours at the scene, costing £107,000, and some nearby businesses were forced to close for up to two weeks.

Commenting after sentencing, the agency officer in charge of the investigation said: “We had spoken with the operators on a number of occasions, seeking action to address our concerns. By not taking our advice, there has been a significant impact on local wildlife, as well as the high costs of responding to the [fire] incident.”

Noise costs council £8,500

The Local Government Ombudsman (LGO) has ordered Hinckley and Bosworth Borough Council to pay £7,500 to two families who endured years of excessive noise because the authority failed to take swift enforcement action. The council must also donate £1,000 to the village schoolroom committee for the benefit of other residents who had joined in this complaint.

Kirkby Mallory residents, who live near the Mallory Park racing circuit, complained to the LGO that the council had failed to take action when the previous track operator breached the conditions of an enforcement notice, and increased the number and frequency of events. A noise attenuation notice issued by the council in 1985 specified the number of events that could be held at the track. In 2012, for example, events were planned for 27 of the 32 Saturdays between April and October when the 1985 notice allowed only four. The residents complained to the council in March 2011, but it did not start collecting evidence for a prosecution until August 2012. Court

proceedings against the (now former) race-track operator started in February 2013.

The LGO also recommended that the council consider whether alterations to the track and the introduction of spectator bunds had reduced noise levels.

BP competes again in the US

BP has reached an agreement with the US Environmental Protection Agency (EPA) to resolve all matters related to its debarment from government contracts following the Gulf of Mexico oil spill in April 2010. The EPA described the oil giant as lacking in “integrity” in November 2012 and cited the criminal negligence of the firm as the reason for barring it from tendering for new government contracts. BP has now agreed to obligations relating to safety and operations, ethics and compliance, and corporate governance. The explosion on the Deepwater Horizon rig killed 11 people and resulted in the release of 4.9 million barrels of oil into the sea. The company reports that settling claims and financing clean-up and restoration work has so far cost it more than \$26 billion.

New regulations



In force	Subject	Details
13 Feb 2014 	Hazardous substances	Decision 2014/85/EU allows biocidal products containing copper used in the control of Legionella bacteria in water to be placed on the market in the UK until 31 December 2017. lexisurl.com/iema17515
19 Feb 2014 	Environment protection	The Regulatory Reform (Scotland) Act 2014 introduces a duty on the Scottish Environment Protection Agency, among others, to promote sustainable economic growth. The Act also enables the making of regulations to apply a “fit and proper person” test to decisions on pollution prevention and control permits and extends enforcement options, creating a new offence of “significant environmental harm”. The offence covers damage to the quality of the environment, human health and other organisms, as well as impairment or interference with amenities or other legitimate uses of the environment. lexisurl.com/iema18877
25 Feb 2014 	Built environment	The Building (Amendment) Regulations (Northern Ireland) 2014 revise the types of buildings that must meet minimum fuel and power conservation standards. New buildings for occupation by public authorities are required to be “nearly zero energy” by 1 January 2019. All other new buildings must be nearly zero energy by 31 December 2020. The Energy Performance of Buildings (Certificates and Inspections) (Amendment) Regulations (Northern Ireland) 2014 require recommendation reports accompanying energy performance certificates to include cost-effective and technically feasible energy-efficiency measures that could be carried out with and without major renovations. lexisurl.com/iema18883 ; lexisurl.com/iema18884
26 Feb 2014 	Energy	Regulation 176/2014 amends 1031/2010 to reduce the quantity of allowances to be auctioned under the second phase of the EU emissions trading scheme (2013–20). This so-called “backloading” measure temporarily withdraws 900 million allowances between 2014 and 2016 to tackle oversupply, which has caused the price of carbon to plummet. Of the total, 400 million allowances will be withdrawn in 2014 – 100 million each quarter. The withdrawn allowances are scheduled to return to the market between 2019 and 2020. lexisurl.com/iema20765
29 Mar 2014 	Hazardous substances	The Town and Country Planning (Hazardous Substances) (Scotland) Amendment Regulations 2014 amend the 1993 Regulations to reclassify heavy fuel oil as a petroleum product, increasing the threshold where hazardous substance consent is required. lexisurl.com/iema18886
31 Mar 2014 	Marine environment	The Marine and Coastal Access Act 2009 (Commencement No. 6) Order 2013 brings into force the provisions of the Marine and Coastal Access Act 2009 concerning the declaration of an exclusive economic zone and consequential amendments to other legislation. The Merchant Shipping (Prevention of Pollution) (Limits) (Revocation) Regulations 2013 revoke the 1996 and 1997 regulations, which are superseded by the declaration of an exclusive economic zone under s.41 of the Marine and Coastal Access Act 2009. lexisurl.com/iema17115 ; lexisurl.com/iema17256
1 Apr 2014 	Planning	Three new regulations relating to measures in the High Hedges (Scotland) Act 2013 have entered into force: the Town and Country Planning (Tree Preservation Order and Trees in Conservation Areas) (Scotland) Amendment Regulations 2014; the High Hedges (Scotland) Act 2013 (Commencement) Order 2014; and the High Hedges (Scotland) Act 2013 (Supplementary Provision) Order 2014. lexisurl.com/iema18887 ; lexisurl.com/iema18888 ; lexisurl.com/iema18889
1 Apr 2014 	CRC	The CRC Energy Efficiency Scheme (Allocation of Allowances for Payment) (Amendment) Regulations 2014 correct an error in the 2013 Regulations on the pricing of special allocations. The CRC Energy Efficiency Scheme (Amendment) Order 2014 makes a number of changes to the scheme. The gas or electricity supplied by a landlord to a mineralogical or metallurgical installation or one covered by the EU emissions trading scheme or a climate change agreement, for example, will not now be included in the landlord's CRC obligations. lexisurl.com/iema18890 ; lexisurl.com/iema18893

This legislative update has been provided by Waterman's Legal Register available at legalregister.co.uk

Latest consultations



21 Apr 2014

Nagoya protocol



The environment department has launched a consultation on how the rules on the use of genetic resources are implemented in the UK. Under the 2011 Nagoya protocol, the international treaty on access and benefit sharing for genetic resources, both the EU and the UK must set down new rules for researchers to ensure they use only resources that have been accessed in accordance with the laws of the country providing them.

lexisurl.com/iema18903

30 Apr 2014

Steel slag



The Environment Agency is consulting on a draft quality protocol (QP) setting out the end of waste criteria for the production and use of steel slag aggregates in construction applications. Compliance with the criteria in a QP is sufficient to demonstrate that the fully recovered product may be used without undermining the effectiveness of the EU Waste Framework Directive (2008/98/EC) and without the need for waste management controls.

lexisurl.com/iema19141

2 May 2014

Bee strategy



Defra is seeking views on a proposed national strategy for

bees and other pollinators in England.

The strategy sets out proposals to safeguard the insects given their vital role in pollinating many food crops and wild plants, and their contribution to food production and the diversity of the environment. The environment department says that bees and other pollinators face a wide range of environmental pressures, including: the intensification of land-use and habitat loss, which are causing a decline in food sources and shelter; pests and diseases; invasive species; use of pesticides; and climate change.

lexisurl.com/iema18906

8 May 2014

'NORM' waste



The UK government and the devolved administrations are consulting on a strategy to manage naturally occurring radioactive materials (NORM) waste. The joint policy is to facilitate the sustainable and efficient management of low-level radioactive waste in line with the waste hierarchy. The aim is to support and encourage waste producers to avoid the production of unnecessary waste and to manage arisings in the most environmentally appropriate way. The Scottish government, which is coordinating the consultation, developed the draft strategy following a strategic environmental assessment (SEA).

lexisurl.com/iema17495

9 May 2014

Refuse-derived fuel



Defra has issued a call for evidence on refuse-derived fuel (RDF) for domestic use and export. The aim of the consultation is to gain a greater understanding of the RDF market in England, and identify and address any negative issues. The environment department is keen to ensure that RDF is limited to material that cannot be recycled effectively, and the combination of fuel and technology is sufficient to deliver clear environmental benefits.

lexisurl.com/iema18905

9 Jun 2014

Decarbonising heat



The Scottish government has issued three documents on decarbonising heating. The first is entitled *Towards decarbonising heat: maximising the opportunities for Scotland*, and is the government's draft heat generation policy statement. It sets out how low-carbon heat can reach more householders, businesses and communities and a clear framework for investment in the future of heat in Scotland. The two other documents are: the accompanying strategic environmental impact assessment, which sets out an environmental report of the policies included in the draft policy statement, and the interim equality impact assessment.

lexisurl.com/iema19144; lexisurl.com/iema19146; lexisurl.com/iema19148

New guidance

e-learning tools

The Scottish Environmental Protection Agency and Northern Ireland Environment Agency have jointly developed a set of e-learning tools to help businesses and their employees learn about environment regulations and good practice. The NetRegs tools now available cover the following topics: preventing pollution – a general guide; waste electrical and electronic equipment; sinks, drains and sewers; duty of care for waste (Scotland); and renewable energy – a guide for businesses. They are available at enetengage.com/netregs.

Biodiversity modelling

Natural England has developed a new map-based modelling approach to help assess the vulnerability of priority habitats to climate change (lexisurl.com/iema19150). The national biodiversity climate change vulnerability model indicates the relative risk to priority habitats in different areas and helps guide interventions to increase their resilience. The habitats are set within 200m x 200m grids and assessed for: their sensitivity to climate change (high, medium or low); their adaptive capacity, reflecting local circumstances which increase or decrease vulnerability, such as habitat fragmentation, variety in topography, current management applications and site conditions; and their conservation value in terms of the designation status of protected sites. The model is built using geographic information systems, so the analysis can be presented as maps at a variety of scales, giving a visual representation of the areas vulnerable to climate change.

Laying down the law



The nuances of nuisance

Simon Colvin on a ruling that suggests firms at risk of nuisance claims may be able to avoid injunctions



Nuisance is something that comes up frequently in relation to manufacturing and waste operations, as well as development activities.

In a legal context, nuisance means the “unlawful interference with another’s rights”, whether that is in relation to property or someone else’s health, safety or comfort. If the actions of another party amount to a nuisance, the affected individual might be able to seek damages and/or an injunction through the courts to prevent the alleged nuisance.

In February, the Supreme Court issued its judgment in the long-running case of *Coventry v Lawrence* ([2014] UKSC 13). The case concerned the impact of noise from a speedway and motor-racing track on a nearby residential property. The court confirmed that the activities at the track did amount to a nuisance and at the same time clarified a number of grey areas in relation to the law.

Some of these issues were also touched on in the case of *Biffa v Barr* in 2012 (see panel, right). The case concerned whether odours from a landfill site amounted to a nuisance and whether the existence of an environmental permit provided a defence to a claim of nuisance. The Court of Appeal decided that it did not. In *Coventry* the court considered a number of important questions, two of which are particularly relevant for environment practitioners:

- Does planning permission provide a defence to a nuisance claim?
- When is an injunction available to someone bringing a nuisance claim?

activity being undertaken. Often, such sites will also have environmental permits that run in parallel to the planning permission, and govern emissions to air, water and other possible impacts on the environment. The *Biffa* case confirmed that, just because an activity or an impact is permitted, the permit does not, in itself, provide a defence to a nuisance claim.

Coventry looked at whether planning permission might provide a defence to a nuisance claim. The answer from the Supreme Court is that it does not: planning permission might be relevant in terms of the extent of the nuisance and the remedy available to complainants, but it does not provide a defence.

Availability of injunctions

Understandably, the operators of industrial or waste sites are wary of the threat of an injunction if their activities give rise to the threat of a nuisance claim. While regulators might be prepared to allow an operator some time and space to get a site’s operations back into compliance with the planning permission and/or environmental permit, those neighbouring the site might not be so accommodating.

Historically, those affected by nuisance were said to have a *prima facie* right to an injunction to prevent the nuisance continuing, in addition to damages for the past impact of the nuisance. This has concerned operators because an injunction has the potential have a significant impact on commercial activities. *Coventry* makes it clear that injunctions should not be the default approach of the courts; they should be much more flexible in their approach to the appropriate remedy – such as awarding damages for future breaches instead of an injunction.

operators to cause whatever level of nuisance they wish on the basis they will be able to pay off those affected. When deciding on the appropriate remedy, the courts will consider the cause of the nuisance and the steps taken by an operator to address the problems.

If an operator is proactively pursuing solutions to the cause of the nuisance and engaging with those that have been affected, the courts are more likely to consider that damages are appropriate redress for future breaches. On the other hand, if an operator appears to be doing nothing on the basis that damages will be the remedy, and they can afford to pay those affected, the courts are more likely to grant an injunction.

Practitioners need to consider the approach of the courts to injunctions when advising operators on how to deal with non-compliance with permits and planning permissions, as well as the likelihood and outcome of nuisance claims. A proactive approach by the operator to finding a solution to the cause of the nuisance and in engaging those affected is likely to help persuade the courts not to grant an injunction.

The Biffa case

In *Barr & others v Biffa Waste Services Ltd* [2012] EWCA Civ 312, the Court of Appeal reversed a landmark ruling by the High Court that compliance with an environmental permit could defeat a nuisance claim. Thirty residents brought a claim against Biffa for smells arising from the operation of a nearby landfill site. Biffa held a waste management permit for tipping pre-treated waste, subject to conditions that included taking measures to “control, minimise and monitor” odours. Despite the High Court finding in favour of Biffa, the Court of Appeal ruled that the permit did not authorise the emission of new smells and that there was no requirement for claimants to prove breach of the permit. For more information on the case visit: environmentalisonline.com/Biffa

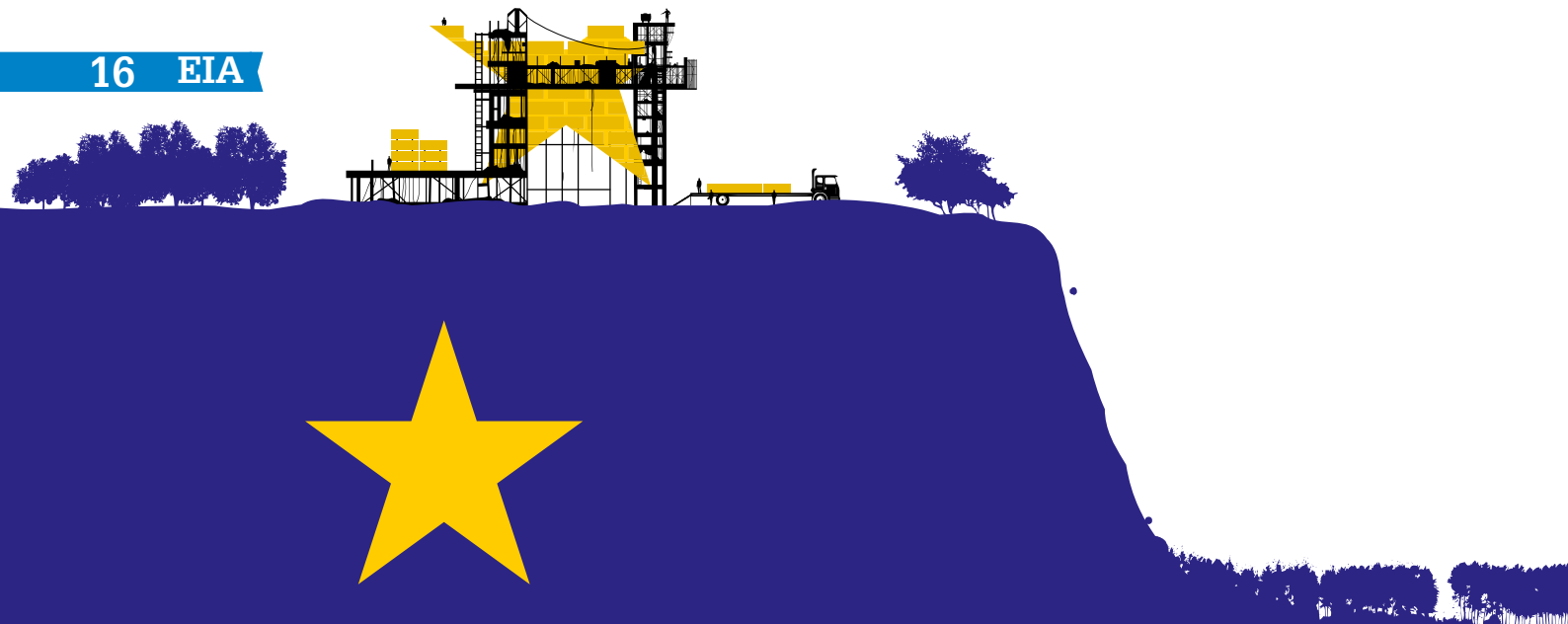
Planning permission

Many operational sites will have detailed planning permissions that control the

No green light

The *Coventry* case should not, however, be interpreted as a green light for

Simon Colvin is a partner and head of the environment team at Weightmans LLP. Follow him on twitter @envlawyer.



Built to assess impacts

Following the adoption by MEPs of revisions to the EIA Directive, **Josh Fothergill** explains what the new legislation will mean for practitioners

On 12 March, the European parliament voted overwhelmingly in favour of accepting revisions to the EU Directive on environmental impact assessment (2011/92/EU) (EIA). As EIA is applied to up to 26,000 project proposals each year across the bloc, from bridges and ports to motorways and landfill sites, the changes could benefit environmental and economic performance across the continent.

Stuck in the past?

The revision process began in July 2009 with the publication of a report by the European commission into the effectiveness of the original Directive (85/337/EEC). The report concluded that, while EIA had improved the consideration of the environment in decision-making across Europe, changes were needed to improve consistency and to move beyond a procedural approach to one that also focused on quality.

The revision process started with public engagement and IEMA provided a leading voice by holding regular discussions with the commission. In October 2012, the commission presented at IEMA's EIA Quality Mark forum, giving participants a preview of its proposed revisions. The commission's proposals marked a sea-change in the tone of the revision process. It moved from being led by the commission to a political debate, resulting in a shift from a bottom-up engagement, which took account of practitioner views, to a top-down approach. The debate then often centred on the polarised views of environment versus development.

This sparked confrontation when, in October 2013, MEPs narrowly backed amendments that would have required all unconventional hydrocarbon activity – such as shale gas exploration – to undergo mandatory EIA. This would have resulted in a more restrictive approach being applied to shale gas operations than to nuclear

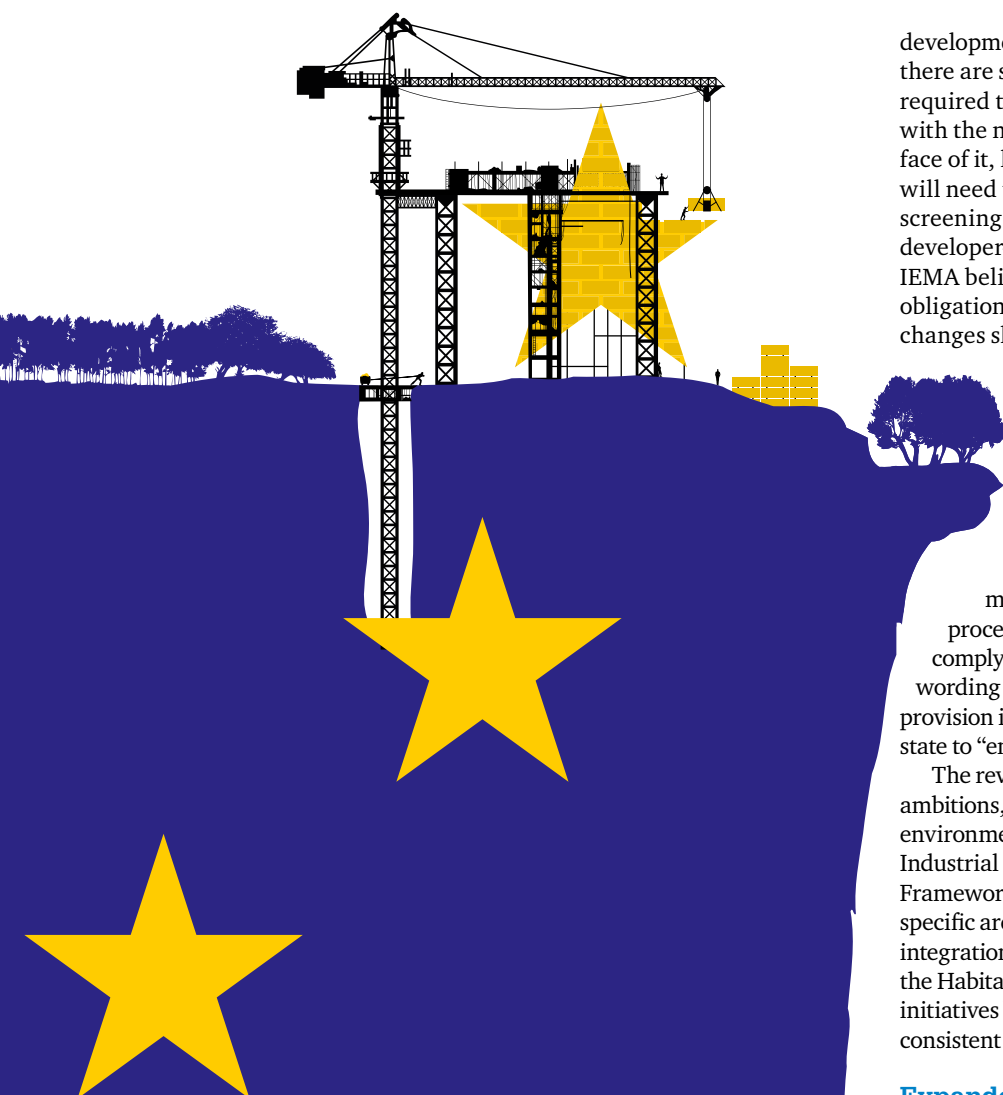
reactors. This amendment was deeply unpopular with a number of member states, including the UK, and risked stalling the revision of the Directive. Parliament's approach proved naive, as the council of ministers had sufficient votes to veto the amendment and, with limited time before the forthcoming European elections in May, MEPs appeared to find themselves on the backfoot in negotiating the final revisions.

The outcome is that the revised Directive fails to make any amendments to either annex I or annex II, so there is no direct reference to unconventional hydrocarbon exploration or extraction. As a result, there is considerable legal ambiguity around this area and this uncertainty fails to serve the needs of anyone. Developers are left to determine their own approach to EIA, while communities worry their environmental concerns will not be considered in the decision-making process.

Empowering professionals

Despite these issues, the revisions to the EIA Directive provide a “big win” for practitioners in terms of recognising and enhancing the fundamental role of environment and sustainability professionals. Under revisions to art.5(3), EIA reports – the revised term for environmental statements – must be prepared by “competent experts”. Furthermore, the powers of the EIA coordinator and topic leads are significantly extended with a new art.8(a). It requires all design modifications, additional mitigation measures and monitoring proposals related to significant adverse effects to be incorporated into the consent. Art.8(a) also requires member states to ensure developers deliver these measures during implementation.

This means that environment and sustainability professionals will no longer have to hope the consenting authority picks up and includes the mitigation they have identified in the consent. The change will also make it



difficult to remove design elements aimed at protecting the environment post-consent, during detailed design, which is likely to extend the role for EIA practitioners in this part of the development process. Their role in identifying “alternatives” also has the potential to be strengthened. Although annex 4 still limits consideration by practitioners to alternatives “studied by the developer”, an expanded definition of alternatives includes reference to project design. So there is now a clear legislative basis to include a description of the main changes resulting from the pre-application iterative design process in the EIA report, including a description of why the preferred approach was chosen.

Streamlined procedures?

IEMA raised concerns over the commission’s original proposals on screening, which would have resulted in more than 100,000 screening reports and decisions each year in the UK alone. Thankfully, the final amendments retain the use of thresholds and criteria determined by member states related to annex 2 projects, which should ensure only those projects with the potential to generate significant environmental impact require screening. Nonetheless, for

developments covered by the revised screening process there are substantial changes. Developers will be required to submit a screening report that is compliant with the newly introduced annex IIA, which, on the face of it, looks like a mini-EIA. Competent authorities will need to provide enhanced explanation of their screening decisions and have to take into account developer-proposed design measures and mitigation. IEMA believes the revisions considerably extend this obligation rather than streamline it. However, the changes should act to improve the quality of screening throughout the UK, which has on occasion been found wanting under the existing planning system.

Another key aim of the revision has been to improve how EIA interacts with other assessments required by EU legislation. This is tackled through amendments to art.2, which will ensure member states provide either coordinated procedures or have a single joint procedure to comply with the directives on EIA and habitats. The wording in the text related to the application of this provision is weak, however, requiring only a member state to “endeavour to coordinate assessments”.

The revisions in this area fall far short of early ambitions, which aimed to integrate EIA with strategic environmental assessment (2001/42/EC), the Industrial Emissions Directive (2010/75/EU), the Water Framework Directive (2000/60/EC) and numerous topic specific areas. While the revisions do not prevent wider integration, it is clear that any streamlining, beyond the Habitats Directive (92/43/EEC), will be down to initiatives by individual member states, leaving no consistent way to measure progress between countries.

Expanded themes

The revisions provide useful clarity on the focus of the EIA Directive in terms of environmental topics. The main changes are included in art.3, which expands the topics that should be considered in each EIA, even if they are later scoped out. The new topics are:

- biodiversity – expanding on flora and fauna;
- human health – replacing human beings;
- land; and
- the project’s vulnerability to accidents and disaster.

Although climate change is still not directly referred to in art.3, the need to consider it is confirmed through revisions to annex IV. This will require every EIA report to consider “the impact of the project on climate change... and the vulnerability of the project to climate change”. This is a positive move and will help build on IEMA’s leading work in this area (see iema.net/eia-cc, for example), which helped provide the framework for guidance published by the commission in April 2013.

What may be the most significant change in topic focus, however, is rather hidden on first reading of the text and relates to assessment factors in the efficient use of natural resources. Annex IV is amended to require the project description to include information on a development’s operational energy use and the

Main amendments to EIA Directive

Changes	Location in the revised Directive
Linking EIA and the Habitats Directive	Art.2(3)
Screening becomes a mini-EIA and allows for mitigation	Art.4(3 and 4) and new Annex IIA
New environmental topics:	
- biodiversity, human health, land and disaster risk	Art.3
- resource efficiency and climate change	Annex 4
Use of experts to prepare EIA report for developer, and to examine it for the competent authority	Art.5(3)
Requirement to deliver EIA design modifications and mitigation irrespective of being conditioned	New art.8a(4)
Introduction of monitoring for significant adverse effects	New art.8a(1)
Three-year transposition period and transitional arrangements	Art.2 (of the amendment)
Other substantive developments:	
- definition of EIA;	Art.1(2)
- determinative result of voluntary scoping request;	Art.5(1)
- restriction on developers acting as competent authority – for example, county councils on waste and highways;	New art.9a
- introduction of penalties for infringements; and	New art.10a
- definition of cumulative effects.	Annex IV

quantities and types of waste likely to be produced during construction and operation. The consideration of cumulative effects is similarly amended to ensure their assessment is conducted to take into account “any existing environmental problems related to... the use of natural resources”.

Unfortunately, the commission’s original proposal to include consideration of ecosystem services in the revised Directive has been dropped. This does not necessarily rule out their inclusion, but the omission of a specific reference to ecosystem services will disappoint many EIA practitioners who believe the inclusion of such services would set the context for substantive changes in EIA practice over the next 10 years. The development of ecosystem services assessment in EIA is now likely to be led by the assessments conducted under the Equator Principles – the risk management framework adopted by financial institutions to determine, assess and manage the environmental and social risks in projects – rather than by European practice.

Delayed benefits

One troubling element in the final agreement is the timeframe for transposing the revised Directive into domestic legislation. It is common practice to allow two years for countries to develop their own regulations. The three-year period provided to transpose the amendments to EIA rules is disappointing, given the revisions mainly build upon existing processes, rather than developing new ones. The timeframe means the UK need not implement the revisions until spring 2017.

Even then, many projects will continue to be assessed under the existing Directive’s rules for around 18 months. This is because the transitional rules allow any project scoped under the existing Directive to be

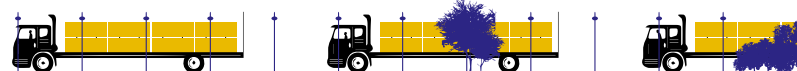
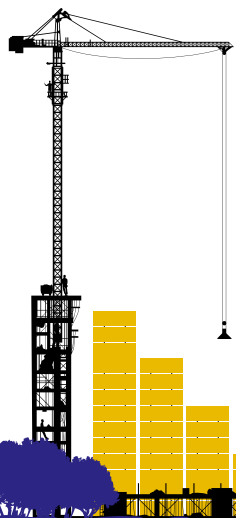
exempt from the new requirements when its application is submitted for development consent. In the case of nationally significant infrastructure projects in England and Wales, the period between scoping and application is generally between six and 18 months. As such, the majority of the £310 billion of investment required to deliver the 550 projects in Infrastructure UK’s national plan may well be assessed without the benefits of the revised requirements, such as those relating to climate, accident and disaster resilience.

The final word

Although the revision process itself has left much to be desired, the agreed amendments do provide a useful contribution to the advancement of EIA. The revised Directive does, for example, correct what was arguably its biggest flaw in the existing regime: the absence of mandatory monitoring for significant negative effects. The introduction of monitoring will provide practitioners and academics with the prospect of substantial new data on the efficacy of EIA, ensuring future practice is driven by real world feedback and providing the basis for continuous improvement in EIA practice through the 2020s. Also, in providing environment and sustainability professionals with more control, the revisions have given EIA every chance of continuing to deliver real value in the future.

However, the success of the revised Directive will depend on how it is transposed. The focus of IEMA members must now turn to ensuring the implementing regulations, across Europe, deliver effective EIA in practice.

Josh Fothergill is policy and practice lead on environmental impact assessment at IEMA. He also leads the EIA Quality Mark registration scheme (iema.net/qmark).



Lexis[®]PSL Environment.

Check your blind spot.

Lexis[®]PSL gives you the what, how *and* Y.

Lexis[®]PSL may look similar to other practical law services. It's just as speedy and easy.
Lexis[®]PSL comes with practice notes, checklists, tables, updates, precedents, drafting notes and time-saving tools.

But for it to make complete sense, you need the Y.

Lexis[®]PSL links directly to the underlying authority and expert commentary you rely on:
All England Law Reports, All England Law Reports European Cases, Consolidated UK
Parliament Acts and SIs, EU Legislation and Materials and more.

Lexis[®]PSL. Take a free trial at www.lexisnexis.co.uk/FadEv

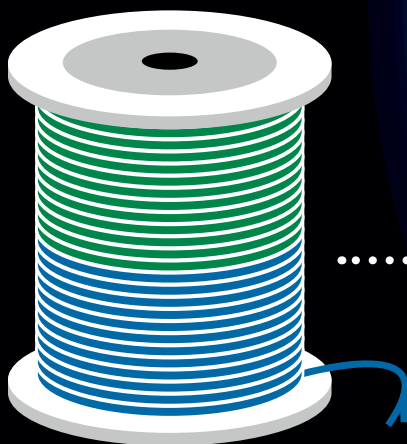
Our material

Manufacturing new materials from recycled goods uses less energy and fewer natural resources compared with primary production. Here are the facts:

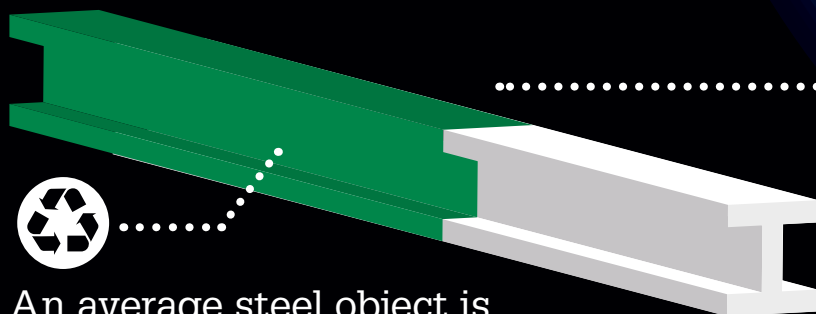


Scrap tyres used as fuel can produce the same amount of energy as oil and **25%** more than coal

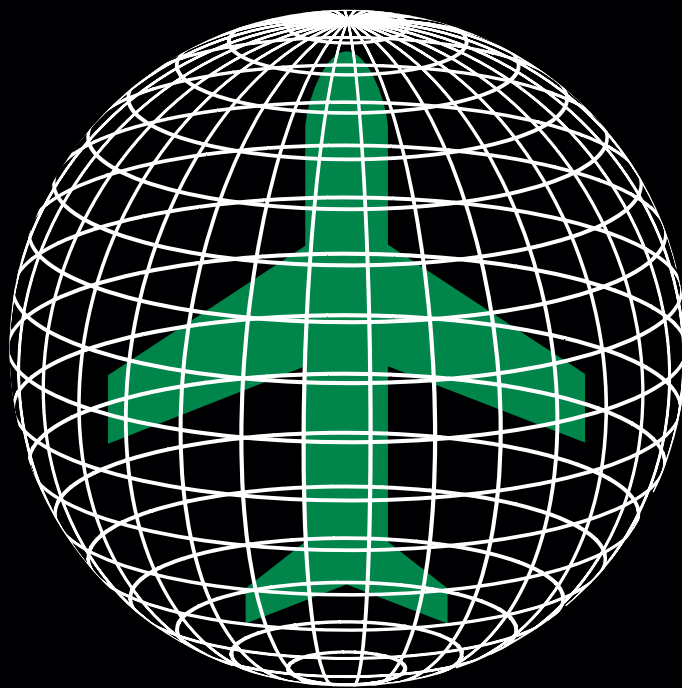
Of all collected textiles, around **50%** are reused and **50%** are recycled



An average steel object is composed of about **60%** recycled material

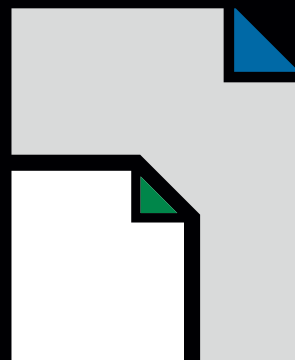


world



The global material recycling industry saves at least **500 million tonnes** of CO₂ each year – more than the annual carbon emissions from world's aviation sector

Recycling paper uses **65%** less energy than manufacturing new paper



06:00
HRS



Recycling a single plastic bottle can conserve enough energy to light a **60-watt bulb** for up to **six hours**

Flying in formation

Paul Suff hears how the world's major aerospace companies established a global environment group to collaborate on REACH

Manufacturing aeroplanes is a complex process, involving the production of a wide range of components from around the world. It is also an industry in which competitors often use the same suppliers. Original equipment manufacturers (OEMs), like Airbus and Boeing, which dominate the global manufacture of large passenger aircraft, and Brazil's Embraer and Canada's Bombardier, which produce the majority of smaller, short-haul jets, rely on a common group of tier-one suppliers, such as engine producers GE and Rolls Royce, and makers of avionics systems like Thales and Honeywell. Below them, many of the same tier-two and tier-three suppliers provide a multitude of components and parts.

To develop a common set of standards across the supply chain and ensure the sector's environmental impacts, which are increasingly under scrutiny, are addressed cost-effectively, 11 major companies formed the International Aerospace Environmental Group (IAEG) in September 2011. "IAEG is a non-profit forum to develop industry-wide consensus on standards for emerging health and environment issues, such as chemical material declarations and reporting requirements," says Christer Hellstrand, chair of the organisation and director of capabilities and compliance for environment, health and safety at Boeing.

REACHing for a common approach

The advent of new environmental requirements, notably the introduction of the EU REACH Regulation on chemicals, was the spur for the IAEG.

Communication about the hazards and uses of substances along the supply chain is at the heart of REACH. It requires suppliers, for example, to provide core hazard data on substances – including details of a chemical's properties, uses and safe handling methods – to the European Chemicals Agency (ECHA) in Helsinki. It also requires firms to communicate risk management measures to the users of those substances, such as aerospace OEMs. Where substances are identified as being of very high concern and included in the REACH candidate list, art.33 stipulates that suppliers of "articles" – everything from aero engines to mobile phones – containing the substance in a concentration above 0.1% have to provide enough information to allow for the article's safe use by recipients.

The aerospace industry uses a range of substances and speciality chemicals, so simplifying the exchange of substance data has been a priority for the IAEG. "Asking suppliers for information on a common list of substances and in a common format increasingly made sense to OEMs like Boeing and Airbus," says Hellstrand.

Steve George, REACH programme executive at engine company Rolls-Royce, comments: "Customers all want the same information but, unless the industry adopts a common approach to disclosure, you risk having to supply the necessary data in a number of ways. That is very inefficient."

The focus of IAEG since 2011 has, therefore, been on developing an industry standard for communicating the chemical content of products, together with agreeing

a declarable substance list and the data that suppliers need to disclose. "So far, 80% of the work of IAEG has been on chemicals," reports Nigel Marsh, global head of environment at Rolls-Royce. "It's about the industry working together to identify where substances are being used and, where necessary, develop a plan to phase them out and deliver substitutes, as well as raise awareness of any issues concerning new substances coming on to the market."

George adds: "Having a declarable list, keeping it up to date, and knowing exactly what materials and hazardous substances each component contains means the industry is better able to manage the impacts of REACH, in terms of compliance and in managing supply chain continuity. The system will take time to mature, but it will eventually become easier to check each substance and component, reducing the burden across the industry."

Hellstrand says that aerospace is simply following the path pioneered by the automotive industry. In 2000, the sector created its international material data system – which is the repository for product content and is used by vehicle manufacturers and suppliers to gather data for various reporting requirements – and, in 2009, the first version of the global automotive declarable substance list followed. Hellstrand confirms that IAEG is on track establish the first voluntary, global declarable substance list for the aerospace industry.

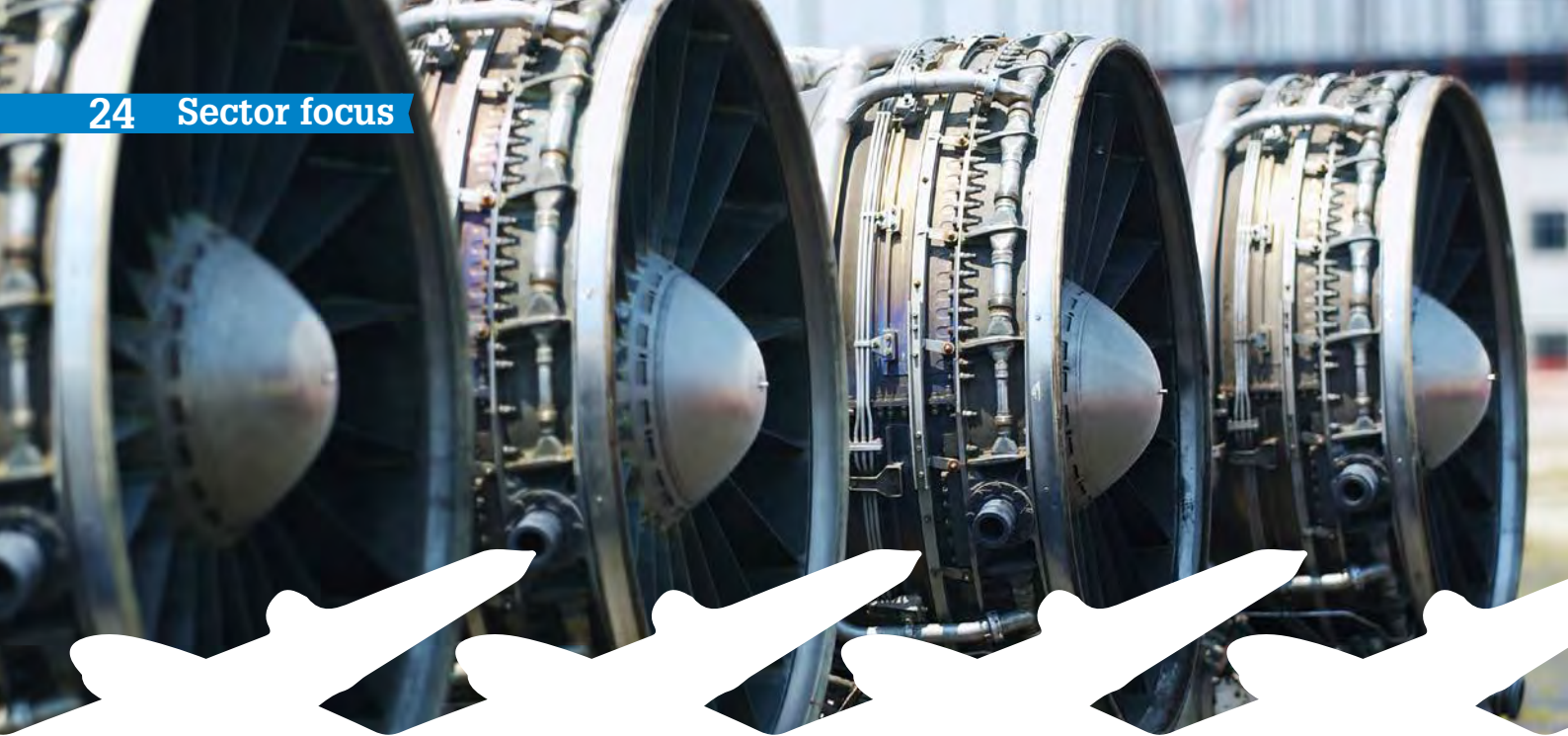
Once the standard has been agreed, the next step will be to ensure it is accessible across the industry. Having agreed the data requirements, George explains that the final hurdle to overcome before it can become the de facto industry-wide standard is an IT one, as companies invariably operate different computer systems. "Small firms may only use Microsoft Office, for example, so we need to have a data exchange system that works efficiently for all suppliers," he says.

Permission to continue

Widely available data on substances and materials will also help the aerospace industry's ongoing management of REACH and similar regulations, particularly in identifying and managing priority chemicals. Under the Regulation, the continued use of substances of very high concern, such as persistent bioaccumulative toxic compounds, must be authorised. Companies have to apply for authorisation to use the substance in specific circumstances and demonstrate that the risks associated with use are either adequately controlled or that the socioeconomic benefits outweigh the risks. If a firm fails to meet these requirements it must switch to other safer, alternative substances or technologies.

"There are some substances we know won't be available in the future, which could limit our access to a coating or an alloy, so we have to identify an alternative," says Marsh. Aerospace products, however, typically have 25–30 year lifespan, so there is a degree of caution when considering substitutions. "We have to be able to ensure performance and reliability and ask if the new coating is as good as the previous one, for example."

George also points out that the REACH candidate list – the first step towards a substance requiring



authorisation and which, at the end of 2013, contained 151 substances – is updated every six months, so it is important that the industry knows where these substances are being used and develop a common approach to the authorisation process. He cites hexavalent chromium as an example of where the industry needs to adopt a common authorisation process. “Hexavalent chromium provides wonderful corrosion protection and we do not want to compromise on product quality, but it poses a health risk to workers,” says George. “So, we need to move away from using hexavalent chromium where we can, and use it responsibly where we cannot.”

Last year, Rolls-Royce became the first company to seek an authorisation under REACH. This is for the continued use of bis(2-ethylhexyl) phthalate (DEHP), which the company uses during the diffusion bonding and manufacture of aero-engine fan blades. The scientific committees of the ECHA concluded in January that adequate control had been demonstrated by Rolls-Royce for the specific use applied for. The final decision to authorise continued use of DEHP by the aero-engine firm will be made by the European commission.

Going further

Chemicals are not the only focus of IAEG, however. It has established two further working groups. One is developing guidelines for reporting greenhouse-gas (GHG) emissions by the industry. IAEG has been working with the World Resources Institute (WRI) on the guidance. It will be a supplement to the GHG protocol, the widely used international accounting tool for emissions. Hellstrand says the aim has been to produce consensus on a voluntary standard to be used by aerospace companies. A draft was agreed in October 2013 and was out for comment until 17 January. Final approval will be sought at the IAEG annual meeting in Cincinnati in April.

The global nature of the aerospace industry means that English is not the first language for many suppliers, which can create confusion and be a barrier to effective collaboration. So creating a standard set of environmental vocabulary to replace the multiple forms of jargon used throughout the supply chain has been the focus of an IAEG working group. Hellstrand reports that the first version of the common vocabulary has

more than 1,000 entries, and is now being tested. It is expected go live later this year, and IAEG is considering making it public.

Hellstrand says IAEG will establish further working groups as issues emerge that affect the whole industry. “Members of the working groups are all volunteers, so we need to prioritise and not take on too much.”

United aerospace

One challenge IAEG had to overcome was an initial reluctance to share information. “There is a lot of proprietary information in our products, so we’ve had to carefully handle issues of intellectual property and patents,” explains Hellstrand. “We have successfully established a process that allows us to do that now.”

“The compliance rules are read out before the start of every meeting, so everyone knows what is and isn’t acceptable,” says Marsh, who had previously been a member of ASD, the trade body for the aerospace and defence industries that worked on the REACH Regulation before its implementation in 2007. Marsh says that REACH was, and remains, a big challenge for the sector so the business case for IAEG was very strong. “The whole aerospace industry faces the same issues and concerns with REACH but there was no unified voice to raise them. Aerospace already had a mature group for quality, which was working well, so setting up a similar body for the environment and casting aside concerns about working with competitors has not been a problem.”

IAEG has more than doubled in size since 2011 and its members now represent more than half the world’s aerospace market by revenue. Marsh expects more suppliers to join, particularly once the first tools, such as the standard on reporting chemical content, become available. “I can see the group growing to more than 100 companies,” he says. “Aerospace companies from Brazil, the EU and the US are already well represented, but we need to get more firms in Asia involved as many of our suppliers are located there.”

With other countries, including China and Korea, pursuing their own versions of REACH, expansion of IAEG almost guaranteed. “The EU has led the way on chemicals, but aerospace is a global industry. What we put in place to manage substance use here will need to satisfy regulations around the world,” says Hellstrand.



What's the EU done?

Commissioners and MEPs highlight the outgoing EU administration's achievements in environment policy

Europe goes to the polls in May to elect 751 members to the European parliament. Those MEPs will represent more than 500 million people in 28 member states for the next five years. 2015 will see more changes, with the next group of EU commissioners appointed. While further stabilisation of Europe's financial systems will be high on the agenda, environment issues will also require the attention of the new parliament and commission.

Protecting nature and strengthening ecological resilience, boosting sustainable, resource-efficient, low-carbon growth, and effectively addressing environment-related threats to health are among nine priority objectives up to 2020 listed in the 7th environment action programme, which was formally agreed in November 2013. The programme builds on the strategic initiatives developed over the past few years, such as the EU roadmaps on resource efficiency and the low-carbon economy. According to the commission, achieving the

objectives set out in the programme will require better implementation of EU environment law, cutting-edge science, investment in environment and climate change policies, and improving the way in which environmental concerns and requirements are reflected in other policies.

In the past five years, the European parliament, has achieved much to improve the environment and tackle climate change. It introduced stricter rules on industrial emissions, mandatory energy-saving measures and tougher targets for the collection and recycling of waste electrical and electronic equipment (WEEE). The commission has also been at the forefront of negotiations to agree a successor to the Kyoto protocol.

To discover what those involved consider the most important policy achievements since parliament was elected in 2009 and commissioners were appointed in 2010, *the environmentalist* asked MEPs Chris Davies and Fiona Hall, and commissioners Connie Hedegaard and Janez Potočnik to select their favourites.

Fiona Hall

Fiona Hall is MEP for North East England and a member of the European parliament's committee on industry, research and energy (ITRE). She views the recast Energy Performance of Buildings Directive (2010/31/EC) (EPBD), which was adopted in May 2010 and aims to cut energy consumption in buildings, as a major achievement of the current administration.

Hall explains: "The EPBD requires for the first time at EU level that in future all new buildings are 'nearly zero energy' buildings; it also puts the first requirements for energy efficiency improvements on existing buildings when they undergo major renovation. Existing buildings are one of the biggest sources of CO₂ emissions and have the greatest potential for cost-effective energy efficiencies, so it is important to tackle this area."

Hall also cites the Energy Efficiency Directive (2012/27/EC) (EED) as a key achievement. She was lead negotiator on the Directive for the ALDE – the Alliance of Liberals and Democrats for Europe – in the European parliament. "The EED covers the entire EU economy from demand to supply side, with a particular

focus on existing buildings and end users," she says. "It also puts provisions on demand response in EU energy policy for the first time. Of the bloc's three 2020 targets, the 20% energy efficiency target is the only one not on track – the EED aims to rectify that."

Another area in which Hall has played a leading role was the recent review of carbon emissions from passenger cars, which confirmed the 2020 target of 95g CO₂/km and how to reach it. Hall was the rapporteur – a "liaison officer" for a committee, who presents reports to the plenary sessions of parliament and follows proposals through the legislative process – on the ITRE opinion on the review of the 2009 Regulation (443/2009) on CO₂ emissions from cars. "The outcome of the review gives the EU car industry investment certainty, and will stimulate further innovation and development of zero emission cars, such as electric vehicles," she says.





Chris Davies

In May 2013, MEPs and representatives of EU governments and the European commission agreed major reforms to the EU common fisheries policy. According to Chris Davies, MEP for North West England, this reform could arguably be the parliament's biggest green policy achievement, despite it not being primarily handled by its environment committee. Similarly, Davies praises the EED, which was led by the ITRE committee and aims to curb energy demand across the bloc, and must be transposed by member states by 5 June 2014.

In terms of policies that the environment committee has helped to bring to fruition, Davies and his parliamentary team highlight several pieces of legislation in which the committee and MEPs played pivotal roles. The first is the Industrial Emissions Directive (IED), which applied in the UK to new industrial installations from 7 January 2013 and existing ones from 7 January 2014. The IED imposes stricter limits on air, soil and water pollution from around 50,000 industrial sites across Europe. "The European parliament fought successfully for higher common standards in the IED," says Davies.

Another policy in which parliament significantly strengthened the draft proposals, says Davies, was in combating global deforestation by making importers responsible for not selling products from illegally logged forests and by putting in place a traceability requirement (Regulation 995/2010).

Davies also says parliament has been instrumental in ensuring that the EU will have the most comprehensive legislation in the world on reducing fluorinated gases. On 12 March, MEPs backed new rules that had already been informally agreed with EU ministers and which will reduce the use of hydrofluorocarbon gases by 79% by 2030. "This legislation is likely to set the standard all over the world and spur global action," he argues.

Davies believes MEPs should also take credit for the recast WEEE Directive (2012/19/EU) and the recent agreement on revisions to the Environmental Impact Assessment (EIA) Directive (p.16). "Thanks to a strong position by parliament, member states will be obliged to collect and recycle more discarded WEEE, while MEPs also made it harder for unscrupulous operators to ship e-waste illegally out of the EU," says Davies. "EIA is a key tool in environmental policy and it will now be modernised and strengthened – for example, by widening its scope and raising the requirements on conflicts of interest and independence of experts."



Connie Hedegaard

Climate commissioner Connie Hedegaard argues that the consideration given to climate change in the EU budget covering 2014–20 as one of the most significant achievements of the current European commission and parliament. "One-fifth of the budget's €960 billion will be devoted to climate-related policies. Compared with the previous budget this is almost a threefold increase," she says. "It is a completely new way to design a budget. To achieve this increase, emissions mitigation and climate adaptation actions will be integrated into all the major EU spending programmes, in particular regional development, energy, transport, research and the common agricultural policy."

The commission recently put forward climate and energy goals for 2030, including cutting greenhouse-gas (GHG) emissions from the bloc by 40% and sourcing 27% of energy from renewable sources. The proposed targets would replace the existing "20-20-20" objectives, which require the EU to cut GHGs by 20% against 1990 levels. Hedegaard says the 2030 proposals will require the bloc to take bold climate action while ensuring the future competitiveness of the European economy.

"These goals will improve the predictability for companies that create jobs and for the energy sector to

ensure stable energy supplies for Europe at the lowest possible cost," she believes. "The strong emphasis to produce more clean energy locally will help to reduce the gigantic energy bill that Europe spends to import fossil fuels – which currently stands at around €1 billion every single day."

She also notes that the commission's plans to reduce GHG emissions by 80% by the middle of the century – set out in its roadmap for moving to a competitive low-carbon economy in 2050 – has for the first time presented a "vision of how Europe can cost-efficiently achieve the transformation to a clean, competitive and environment-friendly society, while following the scientific advice to reduce global warming".

Hedegaard, who was previously a politician and journalist in Denmark, was a member of the Danish government that hosted the 2009 Copenhagen climate talks (COP15) and has been lead negotiator for the commission at subsequent COPs. She is also keen to endorse the EU's leadership in the international negotiations to deliver a successor to the Kyoto protocol.

"At the initiative of the EU and the developing countries most vulnerable to climate change, agreement was reached at the Durban climate change conference [COP17] in December 2011 to launch negotiations on a new global climate agreement covering all countries," she says. "The new agreement is to be adopted by 2015 in Paris and to enter into force in 2020."

Janez Potočnik



Janez Potočnik is the commissioner for the environment. He points out that Europe's economic growth needs to be less dependent on the intensive use of resources. "Resource efficiency and innovation are essential to improving Europe's competitiveness and creating jobs," he says. The commissioner also highlights the high degree of protection that EU measures afford environmental media across the continent. "For these reasons, protecting our natural capital, increasing resource efficiency and ensuring that existing rules are applied have been high on the agenda of this commission," he says.

Potočnik maintains that positive trends in shifting the EU into a resource-efficient, low-carbon economy can already be seen. "Moving to a circular economy and a recycling society is a key component of this... [and] this is why we set out a vision for 2050, milestones for 2020, and a comprehensive framework for action based on a broad definition of resources – from metals and minerals to ecosystems, biodiversity, water, air, land and soil."

Saving Europe's natural capital is the aim of the commission's biodiversity strategy (adopted in April 2012), which, says Potočnik, is underpinned by actions to help Europe reach its goal of halting the loss of biodiversity and ecosystem services by 2020. "These actions were set in motion during this mandate and they cover a wide range of issues. These include:

full implementation of EU nature legislation to protect biodiversity; better protection for ecosystems, and more use of green infrastructure; more sustainable agriculture and forestry; and a bigger EU contribution to averting global biodiversity loss."

Potočnik, who was previously commissioner (from 2004 to 2010) for science and research and a Slovenian government minister, also highlights three forthcoming measures that he believes will have an enormous positive impact. "To combat marine litter and plastic waste, we have proposed legislation to reduce by 80%, or ban altogether, the 100 billion plastic bags we use and discard every year in the EU," he says of the first. A second measure concerns air pollution, which Potočnik describes as one of Europe's biggest silent killers. "We have opened legal cases against 17 member states [including the UK] and proposed new measures aimed at saving lives and protecting people's health."

Finally, Potočnik regards the planned review of waste strategy as significant. "In the coming months, we will propose a major policy review and initiatives on waste. Already, during this term we have seen Europe's recycling rates increase and thousands of illegal landfills close as a result of legal action we have taken."



ADAM INTRODUCED
REUSE AND RECYCLING
INITIATIVES WHICH
DELIVERED SAVINGS
OF £100,000
TO THE BUSINESS

iema

Institute of Environmental
Management & Assessment



**People
like Adam
say:**

My role as an Environmental Manager is increasingly driven by commercial needs. A solid environmental strategy is no longer a 'nice to have', it's a requirement because the construction industry understands that good practice delivers profitability.

Just consider the facts. In 2011, I was able to reduce the company's waste to landfill by 70% to turn a cost into £30,000 revenue, reduced the group energy

consumption by 3% and made an annual saving of £100,000 on waste management.

Every business needs to find ways to cut costs, especially when times are tough and I've been able to do that right across our operation.

It's also worth remembering that in a competitive and fast moving industry like construction, a good reputation is priceless

Join IEMA at www.iema.net/mystory and change your world

Breaking new ground

Celtic Technologies has won awards for its work remediating the site for Asda's new Avonmouth distribution depot. *the environmentalist* reports


Portside in Avonmouth is now home to a 492,000 sq ft chilled distribution centre for the retailer Asda. It opened in December 2013, but the site previously had a long industrial history: from a munitions and chemical weapons plant during the First World War; zinc and lead smelting with sulphuric acid production until 1972; and the manufacture of pharmaceuticals, agrochemicals and refrigerants until the facility finally closed in 2008. This history meant the site was regarded as one of the most contaminated in south-west England and its remediation was a complex and challenging project.

Environmental remediation contractor Celtic Technologies has been recognised by the specialist publication *Brownfield Briefing* for its innovative work on the site, recently sharing an award with its project partners Environmental Resources Management (ERM) and McLaren. It is fitting that the team won the category of "best use of a combination of remediation techniques" because the project required the use of a diverse range of sophisticated remediating technologies. One of these, the innovative surfactant enhanced aquifer restoration (SEAR) process, had yet to be tried and tested by Celtic on a project of this scale – and with the works bound by tight contractual timescales, there was no room for any slippage if it was not successful first time round.

Sustainable remediation

Celtic Technologies is a subsidiary of EnGlobe, a global provider of environmental services that prides itself on using sustainable solutions to treat contaminated soils and groundwater. EnGlobe is currently working on projects in Israel, North America and France. Established 20 years ago, Celtic was one of the first companies to provide remediation services in the UK and since its inception the company has developed a strong track record. It was also involved, for example, in the clean up of the Buncefield oil storage depot following the explosion in 2005 that destroyed the Hertfordshire site (see panel, p.31).

Sustainability is central to Celtic's operations, and the company was one of the first in its sector to gain ISO 14001 accreditation. Historically, remediation projects have been predominantly landfill-driven, although this is now changing, as Martin Holmes, regional operations director, explains: "There are sustainable solutions to carrying out remediation work and Celtic makes every effort to avoid sending waste to landfill. Our aim is to achieve 100% material recovery and reuse onsite." Celtic is atypical for a remediation contractor in that it carries out every stage of its work in-house, rather than subcontracting out some elements. This approach enables the company to retain strong ownership of every detail of every project, says Holmes. To achieve this holistic delivery on contracts, the firm



employs 60 people, many of whom are highly specialised in their field, including geologists and environment professionals.

Scoping the project

Celtic and its partners, sustainability consultants ERM and construction company McLaren, undertook a detailed assessment of the 62-acre Avonmouth site to develop an appropriate remediation strategy and support their planning application to the local authority and the Environment Agency. ERM carried out a programme of “high-resolution site characterisation” (HRSC) assessments, a sophisticated technology that uses scale-appropriate measurement and sample density to map the distribution of contaminants. This involved using cone penetrometer testing and a membrane interface probe as well as, for the first time in the UK, a BAT groundwater sampler that enabled the team to collect discrete groundwater samples to provide an accurate assessment of chlorinated solvent distribution. The HRSC works identified that the contaminant mass was present to a depth of 14.5 metres.

The HRSC programme and earlier investigations of the site indicated the scale of the technical challenges facing Celtic. The scoping exercises had identified multiple contaminant source zones with impacts from metals, petroleum hydrocarbons and chlorinated solvents that were mainly chloroform and trichlorofluoromethane at concentrations likely to represent dense non-aqueous phase liquids (DNAPL). DNAPLs are liquids that are both denser than water and are immiscible in or do not dissolve in water. They tend to sink below the water table when leaked in significant quantities and their penetration into an aquifer, or underground layers of rock, makes them difficult to locate and remediate.

The potential risk of mustard gas and materials left behind as a result of the site's previous life as a munitions and chemical weapons factory also posed unusual health and safety management challenges. An equally serious hazard during the project was posed by the volatile nature of the chlorofluorocarbons (CFCs) detected resulting from the site's more recent manufacturing activities.

In addition to facing a complex remediation project, Celtic also faced logistical challenges. The works had to be carried out within a tight commercial timescale in parallel with the overall redevelopment programme undertaken by McLaren. This meant that there were a lot of people and activity onsite at the same time. Once underway, the progress of the remediation project was not helped by the wet weather conditions, which made the job that much harder for the workers on the ground. “Despite these obstacles, we met every performance

criterion for the project and it was completed on schedule and on time, and in a sustainable manner,” confirms Holmes.

Layer by layer

The project design identified that a combination of techniques were needed to deal with the different types of contamination at the Avonmouth site. The choice of approach also depended on the depth of the contaminated area that Celtic had to remediate. The techniques were applied in stages, with many of the treatments overlapping.

The first step was to deal with the contaminated shallow soils, the topmost layer of material. Celtic's key aims for this stage of the work were to reduce the volume of soil for offsite disposal to a minimum and apply a method that would allow the material to be treated and reused onsite. The team also wanted to maintain the existing geotechnical properties of the soil and minimise contaminant release to the atmosphere. To achieve these criteria, Celtic installed an ex-situ soil vapour extraction (SVE) system, combined with carbon filtration, which was able to treat all of the material.

This stage of the remediation works involved excavating 22,000 tonnes of contaminated material from five locations across the site. “By applying a stringent excavation, segregation, assessment, classification and stockpile management system, we were able to retain 100% of the excavated material onsite,” says Holmes. “Around 52% of the material was immediately reused as part of the wider redevelopment scheme without being treated. The remainder required treatment.”

To carry out the treatment, Celtic installed more than 4km of aeration pipework underneath the contaminated soils, connected to a high-volume vacuum system. It took 11 weeks for the treatment system to reduce the contaminant concentrations in the soils to a level where they could be safely reused.

The next phase of the remediation works involved dealing with the contaminated perched water. First, Celtic needed to prevent the perched water in the shallow contaminated soils migrating towards the watercourses surrounding the site. Initially, the remediation strategy specified that a protection barrier should be built for this purpose, but once onsite ERM and Celtic developed a more pragmatic and lower-cost approach, installing instead a trench to capture water along the site boundary followed by treatment of the water.

“This demonstrates how it is still possible to develop the remediation strategy once the works are underway if there is a more effective solution,” says Holmes.

Celtic developed a treatment method that not only allowed the perched water in the shallow soils to be removed in a controlled manner, but which could also be carried out at the same time as the soil excavation work. One of the challenges encountered with this process was to remove a large proportion of the suspended solid content in the water to ensure that Celtic's treatment system could maintain high efficiency.

Celtic designed a series of interconnecting trenches, filtration sumps and settlement lagoons, which were very successful in removing almost all suspended

1,515,000 litres

amount of
perched
water
treated

Water treatment

The treatment process deployed at the Avonmouth site consisted of a dissolved air flotation unit to remove ultra-fine particles.



Soil remediation

Celtic installed more than 4km of aeration pipework underneath the contaminated soil.

solids prior to the water treatment system. The water treatment system included a dissolved air flotation unit to remove ultra-fine particles, reducing the unnecessary blinding of the granular activated carbon and thereby minimising the volume of offsite disposal. A total of 1,515,000 litres of perched water was collected and treated, with no loss of water as the treated water was pumped back into the ground.

Dig deep

The most technically challenging stage of the remediation works at the Avonmouth site was dealing with the deeper-level contamination, which reached a depth of 14 metres in some areas.

The team considered several potential techniques and eventually settled on conventional hydraulic recovery followed by SEAR. The hydraulic recovery removed some contaminant mass and further defined the location of the contaminated areas. This helped to increase the efficiency and sustainability of applying the SEAR by targeting the wells with the greatest contaminant mass. Gradually, the number of wells needed shrank, reducing the level of pumping activity.

Celtic undertook rigorous tests in its UK and EnGlobe's Canadian laboratories to determine the most suitable surfactant mix – substances added to a liquid to reduce its “surface tension” – as well as the correct amount and concentration of the mix that should be pumped into the ground to loosen up the contaminated mass. Although not an experimental technique, Celtic had not previously used SEAR on a project of this scale, which presented a significant challenge for the firm. In addition, this heavy stage of the remediation work involved working with large volumes of highly volatile contaminants.

During the phases of groundwater treatment, Celtic extracted 11,690,000 litres of groundwater containing a total of 2,500kg of contaminant mass, which was removed using the company's treatment system.

The SEAR phase of the works was a success, yielding an increase in contaminant recovery of three to four times what would have been possible to achieve if only conventional hydraulic pumping had been used.

An award-winning project

There are several reasons why Celtic feels that the Avonmouth project deserves its accolade from



Celtic
Design and Construct Remediation

Brownfield Briefing. “Throughout the project we made every effort to follow best practice, from the conceptual approach to the remediation, design and implementation of the works,” says Holmes. “This approach allowed the project to achieve the best possible outcomes, on time and within realistic commercial boundaries.”

Celtic’s award entry cites many instances of best practice, ranging from the project’s strong focus on carbon reduction throughout the works – for example, the use of HRSC and the methods to increase soil reuse rather than offsite disposal – to the use of innovative techniques, such as SEAR. The application of leading-edge technologies typically went hand in hand with significant programme acceleration and further opportunities to reduce energy consumption, delivering even greater sustainability benefits.

Given the nature of the project, health and safety considerations were paramount. The remediation area was completely segregated from all other subcontractors, and Celtic and McLaren delivered regular “toolbox” talks to staff on health and safety. There were no incidents or accidents recorded throughout the entire project and, after intensive daily environment monitoring of the site and along the site boundary, neither were any environmental issues raised throughout its duration.

Celtic believes that the way it designed and delivered the project also helped to achieve a significant reduction in the potential pollution burden. “The remediation approach developed by Celtic and ERM for the contaminated soils was very successful as the process did not modify or change any of the geotechnical properties of the soil, and it provided a treatment system that could treat all of the material in one batch over a relatively short time,” says Holmes. “On completion of the treatment all of the remediated material has been reused on the site.”

The strong ethos of collaboration that characterised the working relationship between Celtic and its partners was also a key factor to the project’s success, believes Holmes. “A more traditional contractual model would not have achieved the high level of communication and collaboration that we established at Avonmouth,” he argues. “This relationship enabled aspects of the project, such as water treatment rates, to be discussed and assessed throughout the works and modified to meet the required timescales.”

The project team also made every effort to develop a solid working relationship with regulators, such as the Environment Agency. Holmes’ advice to other practitioners leading on remediation projects is to engage with regulators as early in the process as possible to ensure that they are fully aware of what to expect. The regulators were kept regularly informed throughout the Avonmouth works and were also invited to the site on occasion so that ERM and Celtic could demonstrate the remediation techniques, as well as to share information about the works and to address any questions that the officers had. “The early buy-in of the regulators was key to closing the site out efficiently,” adds Holmes.

Cleaning up after Buncefield

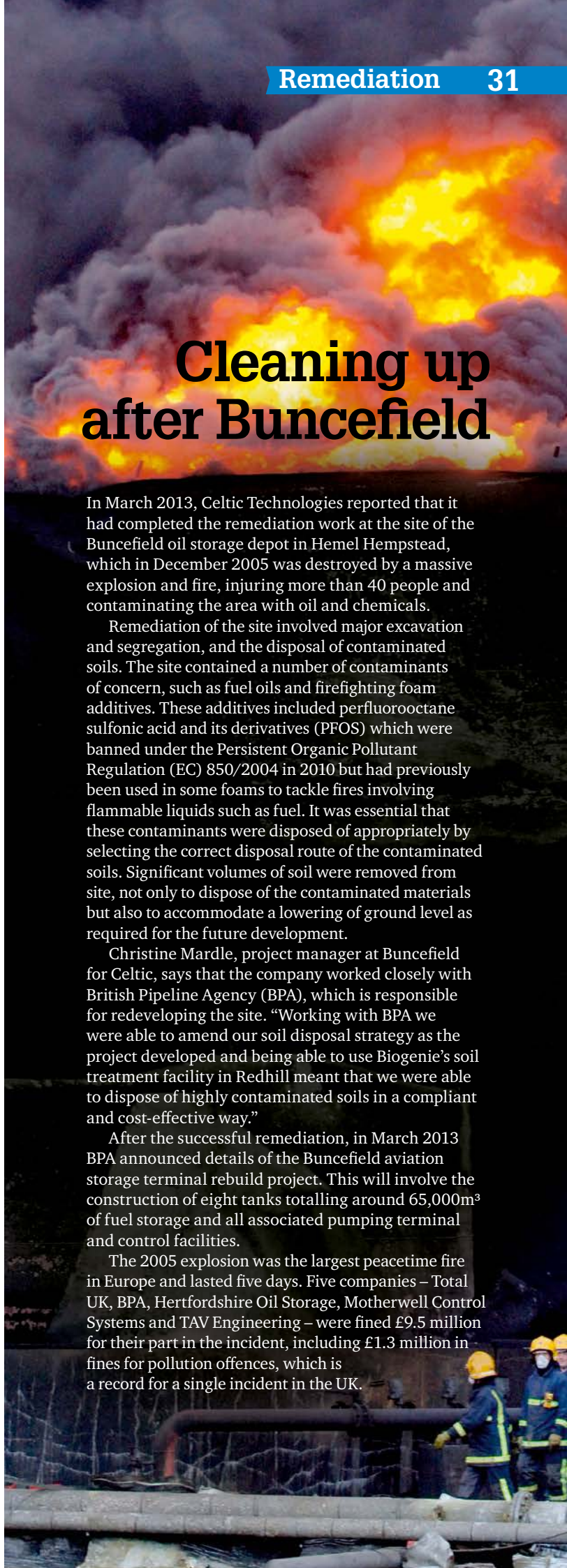
In March 2013, Celtic Technologies reported that it had completed the remediation work at the site of the Buncefield oil storage depot in Hemel Hempstead, which in December 2005 was destroyed by a massive explosion and fire, injuring more than 40 people and contaminating the area with oil and chemicals.

Remediation of the site involved major excavation and segregation, and the disposal of contaminated soils. The site contained a number of contaminants of concern, such as fuel oils and firefighting foam additives. These additives included perfluorooctane sulfonic acid and its derivatives (PFOS) which were banned under the Persistent Organic Pollutant Regulation (EC) 850/2004 in 2010 but had previously been used in some foams to tackle fires involving flammable liquids such as fuel. It was essential that these contaminants were disposed of appropriately by selecting the correct disposal route of the contaminated soils. Significant volumes of soil were removed from site, not only to dispose of the contaminated materials but also to accommodate a lowering of ground level as required for the future development.

Christine Mardle, project manager at Buncefield for Celtic, says that the company worked closely with British Pipeline Agency (BPA), which is responsible for redeveloping the site. “Working with BPA we were able to amend our soil disposal strategy as the project developed and being able to use Biogenie’s soil treatment facility in Redhill meant that we were able to dispose of highly contaminated soils in a compliant and cost-effective way.”

After the successful remediation, in March 2013 BPA announced details of the Buncefield aviation storage terminal rebuild project. This will involve the construction of eight tanks totalling around 65,000m³ of fuel storage and all associated pumping terminal and control facilities.

The 2005 explosion was the largest peacetime fire in Europe and lasted five days. Five companies – Total UK, BPA, Hertfordshire Oil Storage, Motherwell Control Systems and TAV Engineering – were fined £9.5 million for their part in the incident, including £1.3 million in fines for pollution offences, which is a record for a single incident in the UK.



Overcoming the

Jae Mather argues that the evolving sustainability profession should resist falling into the age-old trap of reinventing the wheel

Fifteen years ago, the focus of environment practitioners was generally on environment management and impact assessments, usually in government organisations and the business sector. Then, with the emergence of corporate social responsibility, sustainability roles began to appear in large companies. Next, small and medium-sized enterprises started looking seriously at sustainability. But, in 2008, the recession pushed sustainability back to the “nice to do pile”, or it became something to do when the economy returned to “normal”.

Now, it appears that many conventional business roles in mainstream organisations are responsible for various aspects of the sustainability agenda. Many people will say that this is a positive move, as one thing that the sustainability profession has been criticised for is that the mission was always more important than business imperatives. Others will view the transition as a natural maturation of sustainability. They will argue that non-sustainability professionals taking on sustainability issues will enable mainstream business skill sets to be used to advance environmental and social strategies. But there are drawbacks.

Institutional wisdom

Recently I spoke at a large business conference on sustainability where I followed eight business speakers who spoke predominantly of sustainable business being not about pursuing a greater environmental mission, rather that it is essentially only about the business case. I enjoyed hearing about five exciting sustainable business projects as they perfectly demonstrated exciting innovation, opportunity and sustainability. However, what I found interesting was that I had come across three of the five ideas before.

In conversation with the speakers afterwards I found out that they were largely unaware of the other related projects. It was obvious to me that there was a great deal of reinventing of the wheel going on. We seem to be losing the institutional wisdom that had been so hard won by others who have worked in this field.

As an example, one of the projects was a large business that had invested a fair amount of time in establishing whether environmentally friendly cleaning products met their existing quality, supply reliability and cost requirements. These alternative products were integrated into the existing cleaning

contract but were met with resistance by contractors, and only a few of the products used in its buildings changed eventually. The company is now waiting until the contract comes up for renewal to decisively make the switch to using products with a less damaging environmental footprint.

Maidstone Borough Council did much of the background work on the efficacy of such products nine years ago, winning multiple awards as an example of best practice. Case studies about this project are readily available and even the technical specification can be found. If the business wanting its cleaning contractor to switch to alternative products had been aware of the council's story, it could have more easily overcome many of the stumbling blocks it encountered.

This tale underlines the importance of business leaders understanding that giving mainstream business professionals responsibility for sustainability requires up-skilling beyond the mere job at hand: they also need the knowledge that comes from working on sustainability for years – if one is unaware of the bigger picture apparent success can equal failure. An individual might be very competent at aspects of sustainability but, if it is just a pin that has been added to their lapel, the big picture is often lost.

Say, for example, that you are one of the world's leading kitchen firefighters and you have just put out one of the most challenging fires of your career, but you now face a fire on a sinking boat. It doesn't matter how good you may be, in the absence of context it could be largely irrelevant. This is where people with a greater skills set in sustainability come in and can help with context and historic reference.



knowledge gap

Interdependence essential

What is becoming common today is that some leading businesses are striving to have zero impact on the environment. That is not enough; they need to have a positive impact, not only to make up for their historic negative impacts, but also to demonstrate what can be achieved and that tackling sustainability issues can also be good for the bottom line.

It is not a question of being profitable or being sustainable. There are no businesses in the medium to long term that can be profitable without becoming ever more sustainable. As Ray Anderson, the founder of Interface, said: "Business is the only institution that is large enough, persuasive enough and powerful enough to lead humankind out of this mess."

But businesses need to learn from each other on sustainability and that means those charged with managing these issues need to stop reinventing the wheel and take note of what has already been achieved.

Jae Mather, MIEMA CEnv, is the co-founder of Carbon Free Group UK and director of sustainability at HW Fisher & Co.

the environmentalist

Get up to speed
with proposed changes to
ISO 14001

ISO 14001, the world leading environmental management standard, is being revised. In April, ISO published a committee draft of the new edition proposing new requirements concerned with organisational strategy, the role of leaders, life-cycle impacts and supply chains.

Subscribe to **the environmentalist** and discover what the proposed changes are and what they will mean for you.

Subscribe for just £108*

 **online** www.environmentalisonline.com/subscribe-today

 **email** newsales@lexisnexis.co.uk

Please quote promotion code: **17720AD**

*Normally £135. Only available to new subscribers and cannot replace an existing subscription



 **LexisNexis®**

iema
Institute of Environmental
Management & Assessment

A division of Reed Elsevier (UK) Ltd. Registered office 1-3 Strand London WC2N 5JR. Registered in England number 2746621 VAT Registered No. GB 730 8595 20. LexisNexis and the Knowledge Burst logo are trademarks of Reed Elsevier Properties Inc. © LexisNexis 2013 0813-007



Full membership changes take force

As previewed in recent issues of *the environmentalist*, the application and interview processes for Full membership of IEMA changed on 1 April. The new route to achieving MIEMA status came into force at the same time as the standards and competences for Full membership fully aligned with those for Chartered environmentalist.

The new application and assessment processes have been streamlined to make registering and being interviewed for Full membership more accessible to more people. This will maximise uptake of this level of IEMA membership, while clarifying the skills and knowledge expected of a Full member.

Eligibility and competences

Revisions have been made to the eligibility criteria for a MIEMA. To qualify for Full membership, the applicant must:

- be a member of IEMA (Affiliate membership is the minimum requirement);
- have a relevant master's degree or the ability to demonstrate the equivalent level of knowledge; and
- have sufficient knowledge and practical experience to demonstrate how they meet the standard.

The revised Full member competences go into more details as to the requirements. Applicants must now:

- be able to explain fundamental environment and sustainability principles, and their relationship with businesses and other organisations;
- understand environment and sustainability strategies, policies and legislation, insofar as they relate to their area of professional activity;

- be able to critically analyse, interpret and report environmental data to inform sustainable decision making and provide advice;
- identify and analyse problems and opportunities from an environmental perspective to develop and deliver sustainable solutions;
- use communication to drive effective environmental and sustainable business practices;
- embed sustainable thinking in organisations insofar as it relates to their area of professional activity;
- manage and deliver environmental improvements and resilience; and
- educate, influence, persuade and challenge others to lead and promote sustainability.

Application

Along with the relevant application forms and declarations, when applying for Full membership applicants are now also required to submit:

- a 2,000-word paper (previously one of 4,000 words were required);
- their current CV; and
- a copy of their MA or MSc certificate (where applicable) or a supplementary 500-word paper to demonstrate the equivalent level of knowledge.

Where applicants had previously been asked to supply a job description and demonstrate where their role was in their organisation, the 2,000-word paper, CV and MA/MSc certificate or supplementary paper, now give applicants ample opportunity to demonstrate their knowledge and experience to the assessment panel ahead of their interview.

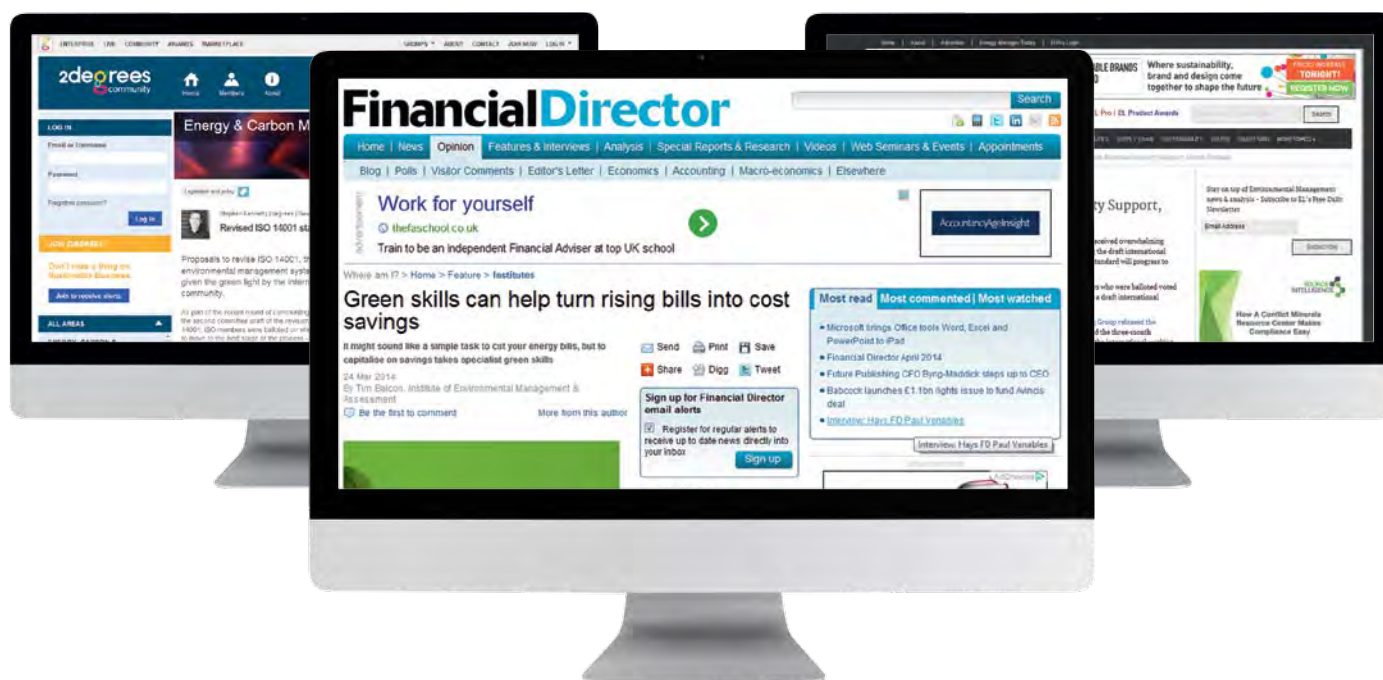
Peer assessment

Once an application has been processed, the applicant will be notified of their assessment date. This assessment involves an interview by two assessors via an online videoconference, lasting between 45 and 75 minutes, and will test the interviewee against both IEMA's Full membership criteria and the Chartered environmentalist criteria.

The level of knowledge and experience needed to become a Full member is parallel to that required for Chartered environmentalist – that is, if an applicant can achieve the MIEMA criteria he or she should also meet the CEnv criteria. Successful applicants will be awarded MIEMA and subsequently offered CEnv status.

The interview length has been extended from 40–60 minutes to allow candidates sufficient time to demonstrate how they meet the competences required. The interviews now take place via online teleconference as standard; the option to request a face-to-face interview is still open to applicants, but availability is limited to scheduled dates and will be subject to a surcharge. This method ensures that anyone with an internet connection can attend their assessment from wherever they are in the world, and will save a collective 25,000 miles of travel a year by assessors and candidates.

To find out more about Full membership, go to iema.net/membership-full or call a member of the IEMA team on +44 (0)1522 540069. Full details on the new application process and support materials are available at iema.net/membership-dual-support.



IEMA news coverage more than doubles

Members made clear throughout the consultation last year on IEMA's Vision 2020 that they wanted the Institute to increase its media presence to raise the profile of the environment profession. IEMA has always engaged with relevant environmental and business titles on key issues – such as our call for the UK government to introduce mandatory greenhouse-gas reporting and the revision of ISO 14001. However, members said they wanted IEMA to appear in the media more often, and speak on more issues in greater depth.

As a result, since the start of 2014, IEMA has responded positively. The first quarter's list of media coverage demonstrates that the Institute's independent and evidence-based comment is in demand from many online, print and broadcast organisations.

Between 10 January – the date of IEMA's first piece of 2014 media coverage in *The ENDS Report* – and 31 March, IEMA received more than 8,000 words of coverage in 50 articles and broadcasts across 28 media outlets. This is a 150% increase in coverage on the same period in 2013. The fact that the Institute has appeared on multiple occasions in some titles – *The ENDS Report*, *Business Green* and *Environment Analyst*, for example – demonstrates how IEMA is increasingly regarded as a reliable and authoritative commentator on environmental issues.

A notable piece of coverage came on 21 February, with Martin Baxter, IEMA's

executive director of policy, appearing on BBC Radio 5Live's *Shelagh Fogarty* show to provide an environmental perspective into the flooding, which at the time was affecting large parts of the West Country and parts of Wales.

Commenting on the need for skilled professionals to be kept at the front line of flood defence management and for better leadership from the government, Baxter said: "We need a coordinated response which uses the expertise of environment and sustainability professionals to mitigate challenges like flooding because they are the ones who understand the issues and have the technical knowledge to apply the right measures."

"Government agencies and parties really do need to work much closer together, along with IEMA and other organisations, because we need a consensus for action and we need to provide communities with the necessary flood protection."

The Institute's increased visibility in the media has not been limited to providing comment and reaction to news stories. Through effective media relations, IEMA has provided well positioned opinion pieces to non-environmental publications. In March, for example, policy and practice lead Nick Blyth wrote a detailed piece on reporting greenhouse-gas emissions for *Facilities Management* magazine, while chief executive Tim Balcon provided an enthusiastic account

of the value of environmental skills to business for *Financial Director* magazine. Balcon's piece concluded with a call to finance directors to use their influence to ensure their organisation is protected from risk and positioned to make savings.

"Green skills are for the 21st century, a time where the future of business is more threatened by the changing climate than a faltering economy," he wrote. "Investing in green skills not only protects businesses from legal and environmental risks, but strengthens the organisation's ability to innovate and accumulate savings."

"Financial directors, with your eye on the security of your entire business, have the ideal leadership opportunity to ensure that the right people with the right skills are in place to stimulate valuable savings."

Raising IEMA's media voice as an authority in non-environmental titles ensures that those working in roles and industries outside traditional environment management receive its messages on skills and practices. With campaigns targeting national, international, HR and business titles planned for the coming months, widespread coverage is set to increase throughout 2014.

IEMA's proactive and reactive media commentary will continue throughout 2014, and members can find out where IEMA is achieving coverage as it happens via the Institute's Twitter feed @iemanet.

Policy update



Smarter guidance?

The government's policy of "smarter guidance" is intended to make it easier for organisations to understand what they have to do to comply with environmental legislation. The government states it will only produce guidance where it is "uniquely placed to do so". This will, in general, exclude guidance on good practice.

With more than 8,000 environment-related guidance documents, there's clearly a lot to look at. But in streamlining that guidance, there is a risk that useful documents will be removed, particularly those that help steer users through grey areas that have emerged from case law. Moreover, withdrawing guidance that is cross-referenced by other policy documents will leave practitioners in limbo.

There's already evidence of this problem in the new online national planning practice guidance (NPPG) – a distillation of advice on topics such as climate change, environmental impact assessment (EIA) and low-carbon energy – and the cancellation of a number of government circulars and directions to local planning authorities.

Concerns raised by IEMA on the test version of the NPPG have not been addressed. These relate to guidance on local authorities' assessment of cumulative effects in screening and scoping EIAs, and the list of indicative thresholds for projects likely to require EIAs under schedule 2 of the EIA Regulations – both of which raise the potential for legal challenge.

So, why might this streamlining of guidance be a concern? The new sentencing guideline for environment offences makes clear that fines for companies should "have a real economic impact... [and] bring home to management and shareholders the need to improve regulatory compliance". The absence of good practice guidance might increase firms' dependence on expert advice, or leave them unwittingly exposed.

Martin Baxter is executive director of policy at IEMA. Follow him on Twitter: @mbaxteriema.

IEMA and GACSO cement their relationship

Following the announcement in March that IEMA and the Global Association of Corporate Sustainability Officers (GACSO) would be joining together, members of both organisations gathered for an event to mark the beginning of the collaboration.

The evening reception was held on 10 April at Stationers' Hall in the City of London, with 70 IEMA and GACSO members gathering for an event entitled "A transformative collaboration for global sustainability".

With support from event sponsor Ricoh, IEMA's vice-chair, Richard Powell OBE, and GACSO's chair, Stuart Poore, marked the joining together of the two membership organisations by signing a memorandum of understanding, which establishes the terms and intended actions of the relationship.

Opening the event, Poore outlined IEMA and GACSO's collective ambition to ensure that sustainability is at the heart of every organisation. He told the audience that the GACSO board had complete confidence that, by joining with IEMA, the association would benefit from an increased profile.

Powell and IEMA's chief executive, Tim Balcon, echoed Poore's comments, each saying that IEMA had heeded members' calls to ensure that corporate sustainability became a core focus of its



future work and that the Institute had a responsibility to grow the profession.

GACSO founder Alan Knight spoke about the business case for the merger, giving insight into GACSO's origins and how, with IEMA's leadership and resources, the association could expect to grow in size and influence.

Through roundtable discussions, those attending the event were able to directly hear the thoughts and aspirations of the members of both bodies on how they would like the collaboration to work. GACSO members had a platform to express how their careers can and should benefit from this new relationship, and how their role is crucial to IEMA's vision to "transform the world to sustainability". With a plan of activity now in place for members of both organisations who work in sustainability roles, the IEMA and GACSO leadership were able to demonstrate what members can expect to benefit from and contribute to over the coming months and beyond.

IEMA and GACSO would like to thank Ricoh for its support of this event. For further updates on GACSO, go to iema.net or gacso.org.

Changes to renewals

Members are advised that from 1 June 2014 some membership renewal fees will be subject to a £2 increase. The change will be applied to Graduate and Affiliate, Associate, Full and Fellow memberships – student membership is exempt from the increase. Joining fees for new members will also alter from 1 June to ensure all annual fees are aligned.

Graduate renewals, which are always charged at a concessionary rate, will be £52 from 1 June. Affiliate renewals will be £112 and renewal for all professional levels – Associate, Full and Fellow – will cost £147. VAT is not applied to these membership subscriptions, so basic membership fees (excluding any specialist register or CEnv

charges) will appear as detailed here on your next renewal.

This alteration to membership subscriptions is being applied to ensure IEMA can meet the costs associated with providing existing membership services and enable the Institute to invest in a new and extended programme of events, professional development opportunities and online accessibility.

Renewals due before 1 June will be charged at the current rate. All members whose renewals are due on or after 1 June will be advised in advance of their exact fee for their 2014/15 membership. Visit iema.net/membership-toolbox for full details of the membership fees and FAQs.

More successful IEMA members

IEMA would like to congratulate the following individuals on recently upgrading their membership as part of their ongoing commitment to learning and professional development.

Associate

Samer Akl, RTI
Carol Betts
Neil Crosby
Tom Day, Murco Petroleum
Emma Devenport
Beth Emberton, Arup
Sarah Hickey, Financial Conduct Authority
Pablo Hijano Ruiz, Eurofins Holdings
Luke Hobson, RSK Group
Gill Hutton, Agripa Solutions
Thomas Jackson, Brand-Rex
Richard Keighley, Veolia Environmental Services
Damien Keneghan, Halcrow

Group (CH2M Hill)
Andrea Leiter
James Locker, Clegg Construction
Michelle Margetts, Jas Bowman and Sons
Jenny McGrother, AWE
Thomas Miles, University of Cumbria
Ben Miller, Land Use Consultants
Sophie Moeng, ENCO
Joanne Morphet, Highways Agency
Karen Moutos, Agrivert
Joe Norton, RSK Group
Robert Paul, Cape Industrial Services
Marc Powell, GroundSure
Nadine Robinson
Lillian Sanderman, Marine Management Organisation
Benjamin Shaw
James Sutcliffe, Lloyd's Register EMEA
Denise Thomas, Somerset

Food, Safety & Environment
Peter Thorne
Christina Tsiarta, Julie's Bicycle
Catherine Walsh, HM Government of Gibraltar
Marc Williams, ERM
James Woodfield, ENERGUS

Full

Guy Mercer, The Rhead Group
Frauke Urban, University of London

Full and CEnv

Grant Anderson, Nottingham Trent University
James Baron, Environment Agency
Mark Broomfield, Kimberly-Clark
Rebecca Casey, Ove Arup and Partners
Lachlan Fulton, Rider Levett

and Bucknall
Lisa-Jayne Hawker, Parsons Brinckerhoff
Kerry Laing, Alcan Aluminium UK
Giovanni Lupaldi, TGE Group
Jamie Roddie, Mabbett and Associates
Robert Squires, Kellogg's
Philip Tamuno, East Midlands Ambulance NHS Trust
Michael Webley, Sellafield Limited

Upgrading your membership is key to you gaining the professional recognition you deserve, it can help you secure the job you want and may even help you achieve a higher salary. Learn more by visiting iema.net/upgrading-your-membership or call +44 (0)1522 540069.

IEMA events

Date	Region/Time	Topic
16 Apr	South West	Social (Exeter)
22 Apr	Republic of Ireland	Introduction to biogas technology
29 Apr	Scotland West	Zero Waste Scotland – resource efficient house and energy performance certificates
1 May	South East	Social (London)
8 May	South East	Social (Southampton)
15 May	North East	SITA Tees Valley energy-from-waste plant
15 May	Yorkshire and Humber	The future of sustainable manufacturing
21 May	South West	Social (Exeter)
22 May	Yorkshire and Humber	Eco-fair (Leeds)
5 Jun	South East	Social (London)
Webinars		
16 April	12:30–1:30pm	Achieving IEMA Full and CEnv membership

External events

Date	Region	Topic	Further information
14 May	Birmingham	Energy management forum	sb-energy.net/home
17–19 Jun	London	Energy and environment expo 2014	energy-enviro-expo.com
26–27 Jun	South East	The eco technology show 2014	ecotechnologyshow.co.uk



Hong Kong

Thomas Tang gives an insight into how EIA is being used in the special administrative region of China

Since 1997, the pace of development in Hong Kong has been remarkable. Core infrastructure projects such as an international airport, several kilometres of rail and roads, and the development of new residential areas have created a unique urban development model for a densely packed city. Hong Kong also faces many social and environmental problems, and these raise concerns about the sustainability of this model.

The environmental impact assessment (EIA) process is one tool used to minimise these impacts. Hong Kong's EIA Ordinance came into force in 1997 and places a statutory requirement on projects that will have an adverse impact on the environment to obtain permits for construction, operation and

decommissioning, if applicable. The permits ensure the recommendations of EIA studies are implemented during the different stages of the development's lifecycle. Often, environmental monitoring audits and independent professional assessors are required. In practice, the EIA process is straightforward for less complex developments. However, the increase in local political and social pressures has resulted in the incorporation of public engagement to ensure that the views of stakeholders are heard.

This is no easy task and, as in the case of Hong Kong's planned incinerator, some projects have faced judicial reviews where consensus has not been reached. In a way, it is a sign that the EIA process is working; it is giving the public an opportunity to contribute. The law also formalises

consultation with Hong Kong's advisory council on the environment, a group comprising members of environmental advocacy groups and EIA experts.

As well as identifying areas of high ecological value, such as country parks and wetlands, Hong Kong's EIA process also considers: geographical and geological issues; land resumption; site constraints; constructability; the project's flexibility and maintenance; and disruption to the community. The latter is crucial in the site selection process and, where necessary, in compensation proposals. EIA is one of Hong Kong's major institutional tools for environment planning and management and, as development continues in the coming decades, it will remain a crucial means of protecting the environment.

Dr Thomas Tang, FIEMA CEnv, is corporate sustainability director at AECOM, Asia.



Read the latest news daily at
environmentalstonline.com



ONLINE OFFERS

As an IEMA member you can access:

- daily news updates
- *the environmentalist* blog
- searchable archive of *the environmentalist* articles
- links to the latest consultations
- details of new regulations
- links to upcoming events
- daily updates of the latest jobs

Accessible anytime, anywhere,
you need never be without the UK's
leading environment management magazine

the environmentalist



www.environmentalstonline.com

iema
Institute of Environmental
Management & Assessment

Canning impacts

Matthew Rowland-Jones explains how he is helping Rexam's employees and clients to encourage consumers to recycle more cans



The odds are that, although you won't have heard of my employer, Rexam, you will have used hundreds of its products. Rexam is a manufacturer of drinks cans with plants spread across North, Central and South America, Europe, Africa, Middle East and Asia, and a client roster that includes Coca-Cola, Carlsberg and SAB Miller. Rexam produces 60 billion metal cans each year and the company understands that the biggest thing it can do to reduce the carbon impacts of its products is to recycle them, which is where I come in.

I've been working as the environment affairs manager for the European division for three and a half years, and my role is quite unusual for a sustainability practitioner. While my colleagues in the engineering and manufacturing teams are doing great work to lower the impacts of the firm's manufacturing operations – cutting energy use and making our cans lighter, for example – my job is to help spread the resource efficiency message beyond the walls of our factories.

My role is, on the whole, an externally facing one. I spend most of my days talking to customers and industry bodies about the sustainability work Rexam is doing and about promoting recycling to end consumers. On the surface, it might sound strange for a business-to-business company to concern itself with the public, but we've been doing a lot of carbon footprint work in recent years and we know that the environmental impact of our cans is ultimately controlled by the consumer.

Rexam has long been involved with recycling campaigns led by the packaging industry and helped to create several, including the "Every can counts" scheme. Every can counts was launched in the UK in 2009 to encourage consumers to recycle their cans when they are out. In recent years, Rexam has helped to rollout the campaign across Europe, but what I'm most proud of is that we have been really successful in involving our customers. The UK drinks firms participating in the campaign – Carlsberg and AG Barr – are Rexam customers, and their brands access consumers in a way that the packaging industry can't. Last year, for example, Carlsberg came on board and did some great activities at the music festivals they sponsor.

A big part of my role is about linking people and organisations. I take pride in the fact that Rexam has great relationships with its customers and can talk to them about the value of programmes like Every can counts. Similarly, I lead Rexam's involvement in Carlsberg's circular community project, including our certification to the cradle-to-cradle programme, which aims to improve the environmental performance of cans across their lifecycle.

One initiative I'm particularly proud of, is Rexam's "Community can challenge". This is a competition across 16 of our European plants to encourage staff to spread the word on the importance of recycling in their local community. The scheme has its origins in the "Great American round up", an annual competition across the US and Canada to see which manufacturer can collect the most cans for recycling. Despite not being the biggest firm in the market, Rexam's North American division has won the round-up five years running and, inspired by the success of our colleagues, we decided to launch a similar competition in Europe.

Designing the competition was my project and translating something that was designed to operate in one country, with similar attitudes and recycling infrastructure, to operate across multiple countries with very different cultures and recovery facilities was a challenge. I started by visiting the North American division to learn how it runs activities for the competition and how it inspires and motivate staff to get involved. Then it was a case of bringing that knowledge back to Europe and talking to people at our plants across the continent about the unique cultural and logistical issues posed in each country.

One difference I had to bear in mind, for example, is that levels of consumption differ dramatically. The average person in the UK, for example, consumes 100 cans of drink a year, whereas someone in Turkey drinks far fewer, closer to 10–20. This is why the project has two awards: the first recognises the plant that has collected the largest number of cans by weight, while the second is presented to the plant that does most to engage its community. Judging this second award is no easy task. We look at a range of things from the amount of press and publicity the plant has gained locally, to the approach the plant adopts and the audience it targets.

The competition is now in its fourth year and each cycle has seen our plants collect five tonnes of cans by engaging with their local communities. The feedback from the staff involved is also positive. Although working on the competition is in addition to their day job, staff say they enjoy engaging the community. It also helps to raise employee awareness of the importance of recycling and how it is crucial to Rexam's sustainability aims. Seeing the challenge succeed has been a massive achievement and learning about the different nuances between how the different plants have gone about tackling the same project has been fascinating.

Matthew Rowland-Jones, AIEMA, is environment affairs manager at Rexam.

www.jobs.environmentalstonline.com

the
environmentalistjobs

Official jobsite of

iema
Institute of Environmental
Management & Assessment

To register for FREE job email alerts, go to
www.jobs.environmentalstonline.com



Advertisers include:



trusted to deliver™



From the publishers of

the
environmentalist

www.jobs.environmentalstonline.com



RPS

New job opportunities

RPS Group is major global energy, planning and environmental consultancy with over 5,000 staff and with offices in Europe, Australia, SE Asia, Middle East, Russia, Africa, America and Canada. RPS HSE provides consultancy on property, land and businesses for planning / development, due diligence, and operational management purposes.

Due to continued growth we are seeking highly motivated and dynamic individuals to grow our central London, multi-disciplinary Environmental team.

Principal Geotechnical Consultant/Technical Director

Ideally 10 years experience in a geotechnical consulting role, with extensive experience of foundation and basement design, ground improvement, retaining structures, slope stability, settlement analysis and finite element analysis.

Experienced in the use of and compliance with Eurocodes.

Strong client management skills, proven success in developing and maintaining clients.

Principal Contaminated Land Consultant

Ideally 7 years experience in a geo-environmental role applying contaminated land, risk assessment and liability principles, within a consultancy context.

Knowledge of preliminary risk assessments, intrusive investigation design & management, quantitative risk assessments (ground gas risk, human health & controlled-waters, including use of CONSIM software & P20).

Experience of remedial appraisals, remedial design, supervision & verification.

Thorough knowledge of relevant legislation, technical guidance & codes of practice.

Apply to join us now at
www.joinrps.com or email
hse Recruitment@rpsgroup.com

Creative People
making a difference

WATCH THE 'ISO 50001 & COSTA' E-MOVIE HERE

"Costa roastery have reduced emissions by 32% per tonne of coffee roasted, won new business and saved over £200,000 since having an NQA certified ISO 50001 energy management system in place."

Oliver Rosevear, Energy & Environment Manager, Costa.

Go to www.nqa.com/movies or scan here



NEVER STOP IMPROVING



NQA are the only
UKAS accredited
certification body
for ISO 50001 in
the UK.
ISO 50001 will
provide exemption
from ESOS.

