Management 14 Update on 14001

Changes in the second draft of the revised EMS standard pose a big challenge for practitioners Recognition

Eyes on the prize

23

Winning awards can raise the profile of sustainability teams within their own organisation

Climate change

Kicking out CO2

26

A pioneering EU project offers environment professionals the opportunity to share knowledge





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View sample



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January

News

- Fourth carbon budget is sound, says committee on climate change
 SMEs target sustainability
- New EIA Directive edges forward after parliament agrees compromise
 SEA advances shale gas
- 6 Ecodesign will cut waste
 CR reporting is now "mainstream"
 In parliament Chris Davies explains
 why 2013 was the year of the fish
- 8 Staff engagement can save £300 million
 Online news A selection of news stories
 from environmentalistonline.com
- 9 Recycling rare earths is an EU priority
 UK tops European resource league

Legal brief

- **Recent prosecutions** Persistent pollution costs beef business £57,000; "bottleneck" creates sewage problem; firm and director guilty of illegal waste burn
 - **Case law** High court rules that mitigation measures agreed with Natural England obviated the need for a habitats assessment
- New regulations Emissions; hazardous substances; planning; marine environment; emissions trading
- 12 Latest consultations Airport noise; water environment; marine biotechnology; environmental permits; INSPIRE Directive Guidance Onshore oil and gas exploration; supply chain risks
- 13 Laying down the law Simon Colvin describes the first enforcement undertaking accepted following a pollution incident

Regulars

- Reviews The necessary transition; Working collaboratively; tochallengethethinking.co.uk
- 39 My career Sandra Norval, environment manager, Southern Railway

IEMA news

34 Update on changes to Full membership
 35 Responses to waste strategy and CCC report
 Policy update Nick Blyth describes

guidance due in 2014 on scope 2 emissions

36 IEMA and external professional events

Features



Significant changes have been proposed in the second draft of the revised ISO 14001. IEMA's Martin Baxter explains what they mean for EMS practice



From biodiversity offsetting to new rules on waste, *the environmentalist* highlights some of the major legislative and policy changes due in 2014



Becky Allen asks winners of environment awards why their organisation entered and for tips on how to make an application stand out to the judges



Paul Suff looks at the largest private-public partnership on climate change in Europe and how it is helping practitioners to share ideas and experiences



The Local Enterprise Partnership covering Norfolk and Suffolk is blazing a trail in support of the region's green economy. *the environmentalist* reports

Carbon (GHG) Accounting and Management An IEMA-Approved 2-Day Training Course

CRA Europe are pleased to announce new dates for our IEMA-approved Carbon and Greenhouse Gas (GHG) Accounting and Management course. This two-day course is aimed at professionals responsible for measuring, reporting, and managing carbon dioxide and other GHG emissions for their organisation. The course modules will equip you with:

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



The next courses in the UK are planned for 21st - 22nd January in Nottingham and 26th - 27th March in London. For more details, please visit www.cra.co.uk or contact us on 0115 965 6700 or training@cra.co.uk

New Training Courses in Environmental Sustainability and ISO 14001:2015

CRA is extending its training porfolio from 2014. Our new courses will focus on environmental sustainability and developments in management systems, which, together with our carbon training, will provide a holistic suite of courses to help organisations embrace a sustainable business strategy and management model.

CRA will be offering the new courses in IEMA's "All Jobs Done In A Greener Way" initiative, comprising:

- Working with environmental sustainability, a one-day course aimed at anyone in a non-managerial role;
- · Managing with environmental sustainability, a two-day course aimed at managers; and
- Leading with environmental stainability, a 3-4 hour interactive session for leaders.

Courses are tailored to organisations in any sector, and are aimed at participants with little or no prior training in environmental issues. The objective is to **increase awareness of the entire workforce**, to enable organisations to implement sustainable development strategies that will reduce costs, resource use and risks.

CRA will also be developing training courses for environmental professionals, leaders and managers to increase awareness of the forthcoming changes to ISO 14001, which is being revised for publication in 2015. These will help organisations equip themselves for the transition to ISO 14001:2015 with its new requirements for leadership, sustainable development, supply chain management and a host of other enhancements, including a completely new structure.

If you would like to know more about how CRA can help your organisation develop its own strategy for sustainable development or improve its competencies in this vital area, please contact Nigel Leehane on 0115 965 6700 or nleehane@cra.co.uk.



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From 2014 to 2020

Last year was about listening to our members, finding out what they want from IEMA and then developing a strategy for the Institute to the end of the decade. 2014 is about starting to deliver that strategy – Vision 2020. This year will see IEMA improve its services and begin the process of becoming more widely recognised. We will be providing a more proactive voice on a wider range of topics, with the aim of further raising the profile of the environment profession.

Central to improvements to the member experience is an enhanced structure for delivering, recording and recognising all continuing professional development activities carried out by members at every level. This facility is in the early stages of development and members will be kept updated on its progress throughout the year.

The member consultation that took place in 2013 also set the precedent for future growth and influence. Members told us that they want IEMA to extend its global reach in terms of membership and profile. Getting that kind of ambitious direction from members has been pivotal in the formation of our new guiding vision. It's a

big task, but one we relish. 2014 will see us develop a plan on how best to recruit more members from inside and outside the UK, and increase the Institute's global influence. This will involve working with policymakers, industry leaders and employers around the globe to ensure they are not only employing IEMA members,

This year will see IEMA improve its services and begin the process of becoming more widely recognised

but that they are empowering practitioners to do their best work and are actively recognising the fantastic contribution environment professionals make.

It will take time to fully realise the scale of ambition set by members, but the gradual changes being introduced this year provide the foundations for IEMA to achieve its long-term goals. In the next 12 months, all members can expect an increase in the number of face-to-face and online events – over 250 this year – that will not only aid learning and development, but also strengthen IEMA's sense of community. These were two factors that members said were of vital importance throughout the consultation. The number of opportunities to receive useful updates about your membership, the latest environmental news, job opportunities and developments in policy and regulation will also increase in 2014. The IEMA newsroom – which reaches across the Institute's website, Twitter feed, LinkedIn groups, RSS feeds and occasional direct emails – now means members can receive daily updates from a selection (or all) of these key communication channels based on their preferences. Members are also invited to share their own news and successes through Twitter and LinkedIn to further support the IEMA community.

Vision 2020 is about IEMA supporting its engaged, ambitious and tenacious members. We've taken your guidance and we're now ready to run with our plan. This is the place to be, and you're going to see your contributions returned many times over.



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

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

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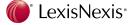
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Short cuts

Natura 2000 awards

The European commission has launched a new awards programme to recognise best practice in protecting biodiversity. The Natura 2000 awards are open to organisations involved with special areas of conservation and special protection areas, as classified under the Habitats Directive and the Birds Directive. The awards aim to boost public awareness of conservation areas and the work being undertaken to protect important European habitats and species. The five award categories span communication, conservation actions, socioeconomic benefits, reconciling interests/perceptions, and networking and cross-border cooperation. To qualify, projects must have been completed in the last five years and applicants will be assessed on the project's originality, effectiveness and durability, as well as its cost-benefit ratio and ability to be replicated at other sites. Organisations have until 18 February 2014 to apply. For more information or to apply, visit lexisurl.com/Naturaawards.

Newts licence works

New licensing processes introduced by Natural England in April 2013 are saving time for developers and consultants and helping the environment body to meet its target to reduce costs for those it regulates. Natural England reported in December that a new annexed licensing system for great crested newts had reduced the number of newt licence re-submissions by up to 25% and produced estimated savings of £85,000 in its first eight months. The process enables minor issues to be resolved between the applicant and Natural England without the need to resubmit the entire method statement and supporting documents. As well as reducing paperwork and process costs, this approach helps developers avoid delays to projects, which can be critical when dealing with species that hibernate, says Natural England. The success of the newt scheme means that annexed licences will be introduced in the spring to cover bats and dormice.

4th carbon budget is sound

The government has been told that there is no basis upon which to weaken the UK's long-term carbon reduction goals.

In its second report examining the fourth carbon budget (covering 2023–27), the independent committee on climate change (CCC) concludes that meeting the proposed target will not harm UK companies' ability to compete globally and that the government should reaffirm the budget as soon as possible.

Under the legally binding budget, the UK must reduce greenhouse-gas (GHG) emissions by 50% on 1990 levels. Although the government accepted the budget in 2011, it pledged to review the target in 2014 and scale back the cuts if other EU countries had not adopted similar goals.

According to the CCC, meeting the fourth budget will have only a small impact on energy bills and action already taken to protect energy-intensive firms will ensure the UK remains competitive. "There has been no change in the circumstances

upon which the budget was originally set that would justify a lowering of ambition. Therefore, the budget should not and cannot be changed," states the report.

With the UK committed to reducing its carbon emissions by 80% by 2050, the committee estimates that taking action to reduce GHGs during the 2020s will save more than £100 billion, compared with delaying action until 2030. "Acting to cut emissions through the 2020s provides insurance against the increased costs and risks of climate-related damage and rising energy bills that would result from an alternative approach delaying action," said Lord Deben, chair of the CCC.

IEMA welcomed the committee's conclusions and backed its call for clarity over the carbon reduction target. "It is essential that government confirms the budget as soon as possible to provide long-term certainty for investment in low-carbon energy infrastructure," commented Nick Blyth, policy and practice lead.

SMEs target sustainability

One-quarter of small and mediumsized enterprises (SMEs) in Britain say sustainability is one of their top three priorities for 2014, according to research from Lloyds Banking Group.

The findings are based on a poll of 1,008 SMEs with a turnover of up to £25 million. Of these, 87% have already implemented sustainable business practices, with more than half (54%) claiming such activities help them to reduce their costs, while 30% believe it increases their profitability. One-third of firms surveyed expect to increase their investment in sustainable business practices over the next five years. Meanwhile, 45% of companies that do not currently undertake sustainable business practices, claim they will start investing in such activities over the next five years.

Many SMEs say that a reluctance to invest in sustainability poses a risk to small businesses, with 39% believing that ignoring sustainable business practices will negatively impact on brand perception and 32% claiming that a lack of engagement in such activities will exclude them from tenders.

The research shows that SMEs tend to focus their sustainability efforts on more traditional practices, notably environment

activities, such as recycling and energy saving, rather than the broader range of sustainable business practices relating to supply chains and sourcing, for example. More than three-quarters (79%) of survey respondents report that the key sustainability practices they plan to pursue in the near future will relate to the environment, while 48% say activities will be aimed at making the company a more responsible business.

By contrast, engaging in charitable projects and working with the local community are not mentioned as a priority by any company intending to invest in sustainability for the first time.

"Businesses clearly see the benefits of sustainability, and they are carrying out their environmental responsibilities through recycling and being energy efficient," commented Stephen Pegge, external relations director at Lloyds Banking Group. "But for SMEs, sustainability also means interacting with charities, social enterprises and the community in which they operate; working responsibly within their supply chain and engaging with the next generation, through, for example, apprenticeship schemes."

New EIA Directive edges forward after compromise

The European parliament has dropped its plans to mandate environmental impact assessment (EIA) for shale gas projects in a compromise with the EU council.

After a fourth round of negotiations between the European parliament, the commission and the committee representing the 28 member states, an agreement was reached on the text for the new EIA Directive on 18 December.

While the full draft text is not publicly available, IEMA has learned that the proposal by MEPs to amend annex I and mandate EIA for all unconventional oil and gas extraction projects has been withdrawn. With the parliament in favour of broadening the revisions proposed by the European commission in October 2012 and the council advocating fewer changes, there had been concerns that an agreement on the new Directive would be delayed until after the European parliamentary elections in May.

The draft text is now expected to be formally approved by the European parliament, with the plenary vote expected in the next three months, and then by the council. "We aimed at finding a reasonable and balanced agreement without fundamental changes of the underlying Directive," commented



Valentinas Mazuronis, environment minister of Lithuania, which held the EU council presidency until the start of 2014 and listed EIA as one of its priorities.

The compromise text is understood to contain many of the commission's original proposals, including a broader scope; a requirement to describe reasonable alternatives; a central role for competent experts; and a requirement to implement mitigation and compensation measures.

However, there remains a lack of clarity on how the text approaches screening and scoping. EU policymakers have been advocating a late scoping process linked to planning applications. According to IEMA, such an approach risks confusing industry and fails to recognise the value of an early scoping process (lexisurl.com/iema17033).

SEA advances shale gas

Decc has published the outcome of a strategic environmental assessment (SEA) of onshore oil and gas exploration in Great Britain, claiming that shale gas production in the 2020s could boost energy security, contribute to economic growth, create thousands of jobs and plough almost £1 billion back into communities.

The independent study by consultants Amec sets out the potential economic and environmental effects of further onshore oil and gas activity by comparing "low activity" and "high activity" scenarios. The latter assumes that a substantial amount of shale gas is produced during the 2020s – 122–245 billion m³. Under this scenario, there would be beneficial impacts to the economy, such as supporting up to 32,000 jobs. However, the SEA also warns that high levels of shale gas production could have potentially adverse impacts on the

environment and communities, including an increase in traffic congestion, emissions and more pressure on water resources.

Hydraulic fracturing on such a scale could consume up to 9 million m³ of water a year, an increase of nearly 18.5% on the 48.5 million m³ of mains water supplied to the entire utilities sector annually, according to the assessment. The potential impact of large-scale shale gas extraction on the availability and quality of water, as well as on aquatic habitats and ecosystems, is uncertain, concludes the report.

It claims existing regulatory controls, including the planning system, should ensure that any adverse impacts are minimised, and energy minister Michael Fallon said effective regulation was vital to "unlocking the potential of shale gas" in the UK. "We must develop shale responsibly ... with robust regulation," he said.

Shortcuts

Remediation fund cut

The environment department has announced it is closing a scheme that provides grants to help cover the costs of investigating and cleaning up contaminated land in England. Defra minister Lord de Mauley confirmed in December that the contaminated land capital programme, which provides funds to the Environment Agency and local authorities, will close on 31 March. Between 1 April 2014 and 31 March 2017, Defra aims to provide a maximum of £500,000 a year for "absolute emergency cases" and to support ongoing priority remediation projects. However, this represents just one-quarter of the annual funding currently available. As of 1 April 2017, Defra will cease to support any contaminated land projects. The Chartered Institution of Water and Environmental Management (CIWEM) warned the move could hamper efforts to tackle pollution. "Local authorities are still under a legal duty to inspect their area and if the money is not available from grant funding, contaminated land officers will end up having to make a case to senior management for funding. This means going into battle against other frontline services," said Andrew Wiseman, a member of CIWEM's contaminated land network.

Rail scheme offset

Network Rail's first net-positive biodiversity offset scheme has launched in south London. The project, part of the Thameslink programme, involves London Wildlife Trust, Lambeth Council and consultants Parsons Brinckerhoff and aims to help restore parts of the Great North Wood, an oak forest that stretched from Croydon in the south to Camberwell in the north but which had largely disappeared by 1900. The scheme will see native species of trees and shrubs planted at Streatham Common and Brockwell Park. The project applies Defra's new metric for calculating biodiversity loss and the level of compensation needed, and has been named by the environment department as an offsetting demonstration project.

In parliament



The year of the fish

What was Europe's greatest environmental achievement in 2013? Surely it has been putting in place the policies needed to rebuild Europe's depleted fish stocks. Agreement was reached on reform of the EU common fisheries policy (CFP), and at its heart lies a new legally binding requirement that government ministers must aim to achieve stock levels above maximum sustainable yield by 2020. A curb on discards, decentralisation of day-to-day fisheries management, and the preparation of long-term management plans for every fishery all help to reinforce the core objective.

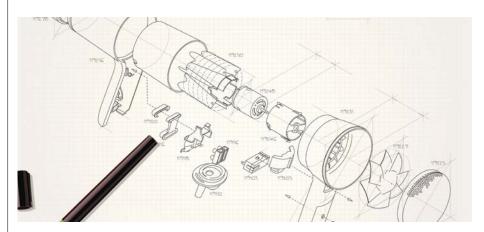
If the policy change represented nothing other than mere words, I might ask for proof of delivery before offering praise. But the signs of improvement are manifold, or at least they are away from the Mediterranean and Black Sea, where different policies exist and nations outside the EU are involved.

The European commission reports much improvement. In 2011, there were 51 species where data on numbers were poor in the North Sea and Atlantic, but that number is now just 12. And EU fisheries ministers are listening to the scientists. At their December meeting, ministers embraced the principles of the new CFP, setting tough quotas in the belief that short-term pain will provide long-term gain. The commission says that 30 stocks in the North Sea and Atlantic will now be fished at maximum sustainable yield by 2015.

Researchers at York University have revealed that the wooden fishing vessels of a century ago were landing proportionally more fish than the technologically sophisticated marine hunters of today, with fish landed then often bigger than those now seen. Ocean warming and acidification pose new problems, but the depletion of stocks is almost entirely due to overfishing. If the 2013 reforms lead to more and bigger fish in Europe's seas, that will be an enormous achievement.

Chris Davies MEP is the Liberal Democrat environment spokesperson in the European parliament.

Ecodesign will cut waste



The government has called on businesses to rethink how they design products and pledged to improve the availability of finance to support resource efficiency.

In its new waste prevention programme for England, Defra commits to extending its £1.5 million waste prevention loan fund and spending £800,000 on developing an initiative to help local authorities and companies form partnerships to tackle waste, such as through reuse schemes. It also pledges to educate banks on the business case behind resource efficiency in a bid to boost private finance options.

Launching the programme, resource minister Dan Rogerson said: "Products

should be designed to use fewer resources from the start and with longer lifetimes, repair and reuse in mind. Preventing waste from being produced in the first place is not only good for the environment, but for the economy. I want businesses to manage all resources more efficiently."

The government's own procurement standards are to be altered to include waste prevention and reuse criteria. Meanwhile, Defra is to work with public sector organisations to help them cut waste, starting with the NHS. The programme also commits the government to clarifying the definition of waste by next summer, to better account for reuse and repair.

CR reporting is 'mainstream'

More than 70% of the world's largest firms now publicly report on their sustainability performance, but few are considering the financial impacts of environmental risks, according to research from KPMG.

In its eighth report on global corporate responsibility (CR) reporting practices, KPMG concludes that big business now considers CR reporting a "mainstream business activity". The research, which examined stand-alone CR reports and sustainability information in financial reports from 4,100 companies worldwide, confirmed that 71% are publishing data on CR, compared with just 12% in 1993 when KPMG first examined how companies were disclosing non-financial details. It also reveals that more than half of the firms examined incorporate CR data into annual reports, compared with 20% in 2011.

"Companies no longer ask whether they should publish a CR report. We believe that debate is over," states the report. "The high rates of CR reporting in all regions suggest it is now standard practice worldwide."

Yvo de Boer, KPMG's global chair of climate change and sustainability services, said: "CR reporting is the process by which a company can gather and analyse the data it needs to create long-term value and resilience to environmental and social change. CR reporting is essential to convince investors that your business has a future beyond the next quarter of the next year."

KPMG also assessed the CR reports of the world's 250 largest firms and found that, while 81% identified environmental and social risks to their operations, just 5% included information on the financial value of those risks.

Meanwhile, the International Integrated Reporting Council has published its first framework for integrated reporting. Download it for free from: theiirc.org.



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Staff engagement can save £300 million

UK workplaces are missing out on more than £300 million a year in savings by not encouraging employees to adopt behaviour to reduce energy use and waste, claims new research from the Carbon Trust.

It found that less than a quarter (23%) of UK employees have been asked to help save energy at work, and less than half (47%) are concerned about the cost of energy for their employer even though the vast majority (92%) reveal they are worried about their own domestic energy costs.

Figures from the trust reveal that getting staff to turn off lights, for example, can produce significant financial and carbon savings – up to £55 million a year if energy used for lighting is reduced by 10% and an annual reduction in emissions of 164,000 million tonnes of carbon equivalent (MtCO2e). Other areas providing opportunities to involve staff in helping to generate savings include: reducing air travel by 5%, which saves £28 million and 1.5 MtCO2e a year; and turning down

office temperatures by 1°C, which can save £35 million and 194 MtCO2e.

The survey of 1,135 UK employees reveals that praise can spur positive action. Sixty per cent of respondents claim they would be more likely to save energy at work if they were

praised, with management approval almost as effective as money in motivating staff - 60% say they are more likely to take action if financially rewarded, and 58% are more likely to if their actions are recognised. However, just 22% of those polled say they are confident that they know what actions to take to save energy at work, and only 16% are sure they have the authority to do so.

"Employees are the greatest asset of UK business, but when most of us enter the



office, we take far less care to save energy and use resources efficiently than we do at home. The good news is that employees are willing to help," commented Richard Rugg, managing director of programmes at the Carbon Trust.

To help change behaviour, the trust has issued new guidance for firms on developing programmes to engage employees to make green choices, alongside practical solutions to overcome common barriers (lexisurl.com/iema17212).

From environmentalistonline.com...

Energy Act

The government's plans to reform the UK's electricity sector have passed into law. The Energy Act 2013 received royal assent on 18 December, paving the way for the creation of an electricity capacity market, including payments for demand reduction, and long-term contracts for difference (CfDs), which will guarantee a certain level of payment for electricity generated from low-carbon sources. It also sets a cap on the amount of emissions that can be generated from new fossil-fuelled power plants, and outlines regulation for nuclear power. In addition, the Act confirms the closure of the Renewables Obligation to new entrants from April 2017, with support for large-scale renewable energy projects being provided instead by feed-in tariffs with CfDs. The Act also includes provision for the energy secretary to set a 2030 decarbonisation target for the electricity sector. However, the earliest this can be set is 2016. environmentalistonline.com/EnergyAct

EU f-gas ban

European policymakers have agreed legislation that will phase out the use of f-gases in refrigeration equipment and limit the amount of hydrofluorocarbons (HFCs) that can be sold in the bloc. The Regulation, which is soon to be formally adopted, bans the sale of commercial fridges and freezers containing HFCs with a global warming potential (GWP) of 2,500 – a warming effect 2,500 times stronger than the equivalent amount of CO2 - from 1 January 2020; and those with a GWP of 150 from 1 January 2022. Centralised refrigeration systems with a capacity of 40kW and a GWP of 150 will also be banned from 2022, while stationary air conditioning (AC) systems containing less than 3kg of f-gases, but with a GWP of 750, cannot be sold from 2025. The Regulation also includes bans on movable AC devices, foams containing HFCs, technical aerosols and domestic equipment.

environmentalistonline.com/fgas

ETS backload

EU member states have backed moves to withhold the sale of 900 million allowances under the emissions trading scheme (ETS). On 16 December 2013, the European council voted in favour of proposals enabling the commission to postpone the sale of credits scheduled for 2013-16, until 2019-20. The move will be a one-off change to prevent the current surplus of ETS allowances from continuing to depress the price of carbon. Owing to the economic downturn, the commission estimates that there were 2 billion surplus ETS allowances when the third phase of trading started on 1 January 2013. As a result, the price of carbon fell to record lows last year, undermining the ability of the scheme to incentivise big energy users to cut their greenhouse-gas emissions. EU countries voted on 8 January on details of how the auction calendar for ETS allowances is to be changed up to 2020.

environmentalistonline.com/ETSvote

Recycling rare earths is an EU priority, finds research

EU policy needs to encourage the development of technology and infrastructure to recycle rare earth elements (REEs) to ensure sufficient long-term supplies, according to new research published recently in the journal *Environmental Science & Technology*.

The Dutch-based research team used lifecycle and material flow methods to estimate the quantities of neodymium and dysprosium contained in end-of-life products collected in global and EU-27 recycling programmes up to 2030. The study focused on neodymium magnets, which also sometimes contain dysprosium and are used in computer hard disk drives, direct-drive wind turbine generators and electric motors in hybrid electric vehicles.

The researchers predict that recycling rates for both elements will rise substantially by 2030 as higher volumes of end-of-life products, predominantly wind turbines and electric and hybrid vehicles, enter waste streams. By the start of the next decade, around 450 tonnes of neodymium and 10 tonnes of dysprosium could be recycled globally, they say. And by 2030, the research forecasts that the amount of recycled neodymium will rise to 2,200 tonnes, while 460 tonnes of dysprosium will likely be recovered. This



represents 9% and 7% respectively of total global demand for these elements.

Meanwhile, the Environment Agency has issued an environmental permit to Wolf Minerals UK to operate a mining waste facility at Hemerdon in Devon. It means that Wolf can shortly start production at the site, which will be one of the world's largest tungsten mining operations, and according to the company, is the first significant mine to be constructed in the UK in more than 45 years.

UK tops EU resource league

Eurostat has ranked the UK and Luxembourg as the most resourceproductive countries in the EU.

Dividing gross domestic product by material consumption (domestic raw material extraction and raw material imports minus raw material exports), the first resource efficiency scoreboard from the statistical service at the European commission reveals that, in 2011, the UK and Luxembourg generated €3.22 and €3.21 of economic value respectively per kilogramme of raw material. The scores reflect the countries' more service-based economies, which consume relatively few raw materials, says Eurostat.

Member states whose economies have a larger manufacturing component score less well. The resource productivity of Germany, for example, was €1.82 per kilogramme of raw material in 2011.

The resource productivity indicator is one of 30 covering natural resource consumption that make up Eurostat's resource efficiency scoreboard. Also included are indicators for waste production and emissions from buildings and transport, for example.

Another is the eco-innovation index, which focuses on the inputs and outputs from research and innovation activities, as well as associated environmental outcomes, in each member state. The Scandinavian trio of Denmark, Finland and Sweden scores highest in this area, with an average score of 139.85. By contrast, the UK scores 100.88, only slightly above the 28-bloc average of 100.

Eurostat says that the scoreboard (lexisurl.com/iema17205) supports the implementation of the commission's resource-efficient Europe initiative.

Short cuts

PwC tops BREEAM

The highest ever BREEAM score has been awarded to the newly refurbished head office of accountancy business PwC. The nine-story building above Charing Cross station in central London was awarded a BREEAM "outstanding" score of 96.31% after being completely refitted. Together with ensuring that 95% of all the construction materials used were from ISO 14001 certified sustainable sources. PwC has also installed green walls, water efficient toilets and a new building management system. The 41,800 square metre office block, which was built in the early 1990s, has also been fitted with a new combined cooling, heat and power plant (CHP). The CHP plant will be fuelled by waste vegetable oil sourced from the local area. "The impressive score for this iconic building shows just how much can be accomplished," said Gavin Dunn, director at BREEAM.

Biomass boost at Drax

The opening of new biomass storage facilities and distribution systems at the Drax power station in Yorkshire means the UK's largest coal-fired plant is on course to become its largest single renewable electricity generator by 2016. The biomass conversion will ultimately see three of the six generating units at the power station converted to burn sustainable biomass in place of coal, reducing annual carbon emissions from the plant by around 10 million tonnes compared to levels today, according to Drax. The plant first started burning biomass in place of coal in 2003. The first unit was fully converted to burn biomass in April 2013, and a second will come on stream later this year, with the final unit converted in 2016. Most of the biomass burned at Drax is sourced from the US. The company adopted a biomass sustainability policy in 2008 and claims that the feedstock comes from sustainably managed forests where overall the rate of growth equals or exceeds the rate of extraction, so forest stocks and therefore the carbon stocks of forests are not depleted.

Recent prosecutions



Case law

Mitigation obviates need for habitats assessment

The high court has dismissed a challenge to the granting of planning permission for a residential development in Exminster near a special protected area (SPA) and special area of conservation (SAC). In Smyth v Secretary of state for communities and local government & others [2013] EWHC 3844, the claimant argued that the inspector was not lawfully able to conclude that there was no real possibility the development would have any appreciable adverse effect on the integrity on the nearby SPA and SAC. In dismissing the claim, the court was satisfied the local planning authority had already carried out an appropriate assessment and had taken the view there would be no likely significant effects as long as the mitigation measures agreed with Natural England were adopted.

As the "competent authority", the inspector had discretion to determine whether the proposed development complied with the Conservation of Habitats and Species Regulations 2010. It was a matter for the inspector's judgment as to the appropriate weight to give to each party, and the inspector was entitled to give considerable weight to advice from Natural England, said the court.

The court's attitude to mitigation as a means of avoiding appropriate assessment has varied over the past few months. The decision in Smyth takes a similar approach to the judgment in Feeney v Secretary of state for transport [2013] but contrasts with that in Champion v North Norfolk District Council [2013] - see environmentalistonline.com/feeney and environmentalistonline.com/ champion for more information.

Jen Hawkins

Lexis_{PSL}

Persistent pollution costs beef business £57,000

Repeated pollution of a watercourse bordering its premises in Worcestershire has cost A&A Rodenhurst Limited, which operates an intensive beef-rearing business at Wadborough Park Farm near Pershore, £57,000 in fines and costs.

Worcester magistrates also issued a court order requiring the company to bring its slurry and silage storage facilities up to minimum industry standards and to undertake other improvement works to protect the local water environment. All of these works must be completed by 30 June 2014.

The court was told that on site visits in late 2011 and early 2012 officers from the Environment Agency found a large slurry lagoon located too close to the watercourse, in contravention of legislation designed to ensure the protection of the environment from agricultural operations. A second slurry lagoon in use at the farm was also below standard, and a silage store lacked the necessary effluent collection and storage infrastructure.

Remedial work undertaken by A&A Rodenhurst to prevent further pollution of the watercourse was unsuccessful, and work to improve slurry and silage storage at the farm was deemed to be insufficient. In March 2012, the company was served with a legal notice requiring specific works to bring the relevant farm infrastructure up to industry standards. The firm failed to comply with the notice.

A&A Rodenhurst was fined £37,000 and ordered to pay £20,000 in costs after pleading guilty to four charges under the Environmental Permitting Regulations 2010 and the Water Resources (Control of Pollution) (Silage, Slurry and Agricultural Fuel Oil) (England) Regulations 2010. Wadborough Park Farm is also subject to an abatement notice, which was issued by local authorities in February 2012 because of the persistent odour problems at the site. An appeal against the notice was rejected in August 2013, with costs were awarded against the company.

'Bottleneck' creates sewage problem

South West Water has pleaded guilty to two offences of discharging sewage effluent from its Camels Head sewage treatment works at Plymouth into a tributary of the Tamar Estuary.

The consent to discharge for the site states that sewage can only be discharged from the storm weir – a physical barrier that can be set at different height levels when flows exceed 420 litres per second. But investigations after numerous sewage spills in 2011 revealed that the weir at Camels Head had been set at 340 litres a second. This meant the weir operated more often than it should have and that untreated sewage was discharged.

South West Water said a pipework restriction further along the treatment process acted like a "bottleneck", preventing the site coping with a higher flow than 340 litres a second.

The company claimed that the treatment works would have flooded if sewage had not been allowed to discharge from the storm weir. Plymouth magistrates' court fined the company £50,000 and ordered it to pay £8,375 costs.

Firm and director guilty of waste burn

Derbyshire-based company East Midlands Developments Limited and its director Stephen Rye have been found guilty at Mansfield magistrates' court of charges related to burning waste at the Annesley Hall Estate in September 2011. The company was found guilty of an additional charge of illegally bringing construction and demolition waste on to the site.

Following a fire at the estate, officers from the Environment Agency found evidence at the blaze site of tree cuttings, plastic items, paper and fragments of construction materials. They also discovered a large amount of construction and demolition waste.

In 2009, the company received a warning letter from the agency about the unauthorised burning of waste at Annesley Hall. At the time of the 2011 incident, it did not have an environmental permit or any exemptions that allowed burning of waste onsite, or for importing construction and demolition waste. The firm was ordered to pay a £7,000 fine and £8,000 in costs, while Rye was fined £800 and ordered to pay £877.55 costs.

New regulations



In force	Subject	Details	
15 Nov 2013	Emissions	European commission Regulation 1143/2013 amends Regulation 1031/2010 on the timing, administration and other aspects of auctioning of greenhouse gas emission allowances for the EU emissions trading scheme in Germany. lexisurl.com/iema17118	
25 Nov 2013	Hazardous substances	European commission Regulation 1087/2013 amends Regulation 1005/2009 on substances that deplete the ozone layer and the reporting of methyl bromide. The substance can no longer be placed on the market or used for quarantine and pre-shipment applications, so Regulation 1087/2013 ends the requirement for member states to report each year. lexisurl.com/iema17119	
16 Dec 2013	Hazardous substances	The REACH Enforcement (Amendment) Regulations 2013 amend the 2008 Regulations. Changes include: inserting an updated definition of "REACH" in reg 2; including the Office of Rail Regulation as a new enforcing authority in regs 3(2), 4, 7, 8, 9, 12 and 13; and inserting a new regulation (reg 24) requiring the secretary of state to conduct regular reviews of the operation of the Regulations in England. lexisurl.com/iema16981	
17 Dec 2013	Planning	The Localism Act 2011 (Commencement No. 3) Order 2013 brings into force elements on section 122 – pre-application consultation – not already in force. The Town and Country Planning (Development Management Procedure and Section 62A Applications) (England) (Amendment) Order 2013 relates to compulsory pre-application consultation under section 61W of the Town and Country Planning Act 1990. It also inserts a new Part 1A into the Town and Country Planning (Development Management Procedure) (England) Order 2010 on the pre-application consultation duty. A new art 3A of the 2010 Order states that this duty will apply to applications for planning permission in respect of any development involving a wind power installation of more than two turbines or where the hub height of any turbine exceeds 15 metres. lexisurl.com/iema16989; lexisurl.com/iema17113	
21 Dec 2013	Marine environment	The Water Environment (River Basin Management Planning: Further Provision) (Scotland) Regulations 2013 make further provision for the protection of the water environment. The Water Environment (Shellfish Water Protected Areas: Designation) (Scotland) Order 2013 designates 84 areas of coastal water or transitional water within the Scottish River Basin District (SRBD) as "shellfish water protected areas". The Water Environment (Shellfish Water Protected Areas: Environmental Objectives etc.) (Scotland) Regulations 2013 provide further protection for shellfish water in protected areas within the SRBD. lexisurl.com/iema16979; lexisurl.com/iema16977	
31 Dec 2013	Marine environment	The Marine Pollution and Merchant Shipping (Revocation) Regulations 2013 revoke the following regulations: the Oil in Navigable Waters (Transfer Records) Regulations 1957; the Oil in Navigable Waters (Records) Regulations 1972; the Merchant Shipping (Safety Convention) (Transitional Provisions) Regulations 1981; and the Prevention of Oil Pollution Act 1971 (Application of Section 1) Regulations 1984. lexisurl.com/iema16982	
1 Jan 2014	Marine environment	The Marine Licensing (Pre-application Consultation) (Scotland) Regulations 2013 require certain licensable marine activity in inshore waters to undertake a pre-application consultation in terms of sections 22 to 24 of the Marine (Scotland) Act 2010. lexisurl.com/iema16684	
31 Jan 2014	Emissions trading	The Greenhouse Gas Emissions Trading Scheme and National Emissions Inventory (Amendment) Regulations 2013 amend the Greenhouse Gas Emissions Trading Scheme Regulations 2012 and provisions of the Greenhouse Gas Emissions Trading Scheme (Amendment) and the National Emissions Inventory Regulations 2005. Changes relate to penalties for operating an installation without a permit; UK registry of project credits issued under the Kyoto protocol; and approval of projects under the protocol and the preparation of a national inventory of greenhouse-gas emissions. lexisurl.com/iema17120	

To find new regulations by jurisdiction visit environmentalistonline.com/search and enter your search criteria

Latest consultations









31 Jan 2014 Airport noise

Current night flying restrictions at Heathrow, Gatwick and Stansted airports end in October 2014. The transport department is consulting on its proposals to largely extend the existing system. In particular, it mentions the permitted numbers of movements and noise quotas at each airport. The plan will only apply until October 2017 because the Airports Commission is due to report in 2015, and it is likely to propose changes to night restrictions on aircraft. lexisurl.com/iema16993

31 Jan 2014 Water environment

New and updated standards are being proposed for Scotland's water environment by the devolved government. The plans, which are out to consultation, will update how the Scottish Environment Protection Agency (Sepa) applies standards in river basin management planning and provide Sepa with a guide on protecting the water environment in Scotland. The proposals are based on recommendations from the UK's technical advisory group on the Water Framework Directive (2000/60/EC), a partnership between environment

and conservation agencies. Sepa currently applies standards put in place in 2009, prior to the publication of the first river basin management plans. lexisurl.com/iema17126

10 Feb 2014 Marine biotechnology

Marine biotechnology - defined as the use of biological marine resources as the source or the target of biotechnical applications – was identified by the European commission as one of the five focus areas in its September 2012 communication Blue growth: opportunities for marine and maritime sustainable growth. The commission is now developing an in-depth understanding of the sector and its future trends to determine whether further action at the EU level is needed to accelerate its development. As part of this examination, the commission is looking for information about the sector as a whole alongside data from individual stakeholders to help it establish a robust understanding of the sector's strengths and weaknesses. It is also asking for information on the risks and opportunities that further development of the industry could involve. lexisurl.com/iema16994

12 Feb 2014 Environmental permits

The Welsh government is consulting on the fees local authorities charge to recover their costs for regulating sites subject to environmental permits. Fees and charges for local air pollution prevention and control (LAPPC) and local air – integrated pollution prevention and control (LA-IPPC) are set under the Environmental Permitting Regulations 2010. Businesses covered by LAPPC or LA-IPPC include: chipboard and glass manufacturers; foundries; animal renderers; crematoria; and paint manufacturers. lexisurl.com/iema17128

24 Feb 2014 INSPIRE Directive

A consultation to support the first evaluation under the INSPIRE (infrastructure for spatial information in the European community) Directive (2007/2/EC) has been issued by the European commission. INSPIRE aims to establish a system for collating spatial information in Europe to support community environment policies, as well as activities that may have an impact on the environment. lexisurl.com/iema17125

New guidance

Onshore oil and gas

Decc has published guidance on onshore oil and gas exploration in the UK, which it describes as an "interactive roadmap" explaining the licensing, permitting and permissions process for such exploration, including shale gas and coal bed methane operations (lexisurl.com/iema17129). It provides a basic, indicative overview of the process, highlighting key pieces of legislation and regulation, and identifying required actions and best practices at various stages. There is a separate section for each part of the UK, reflecting the different legislative frameworks that apply and various regulatory bodies that have responsibility for operations in each geographical area. Each section contains an overview diagram which allows users to click through for more detail on areas such as the pre-application consultation process and appealing against a permit rejection.

Supply chain risks

The climate ready team at the Environment Agency has published new guidance (lexisurl.com/iema17130) on assessing and managing climate change risks in supply chains. It provides information on climate risks and opportunities, and demonstrates how this knowledge can be integrated into established business practices for addressing risk across supply chains. A five-step framework in the guidance is aimed at businesses to help them understand what a changing climate and extreme weather would mean for them – there are special sections to address particular issues for small and medium-sized enterprises. The five steps are: is climate change a material issue?; plan to respond; assess risks and opportunities; prioritise and identify actions; and manage your risks. The framework helps businesses to think through and identify new risks and opportunities in their supply chain, and to work out how to respond, says the document. Accompanying the framework are five case studies that illustrate how specific components of the framework can be implemented.



Laying down the law

Civil sanctions and water pollution

Simon Colvin describes the first enforcement undertaking accepted by the Environment Agency for a pollution incident



nforcement undertakings (EU) are a form of civil sanction available to the Environment Agency in relation to certain environment offences. An EU is a formal offer from an organisation that has committed an offence to take steps that would make amends for noncompliance and its effects. To date the majority of EUs accepted by the EA have related to offences that have not had an environmental impact. Many have been connected to waste packaging offences. These can be described as "paperbased" offences that have a very easily discernible financial benefit.

What we have seen very little of so far is the use of EUs for offences that have resulted in environmental damage. That is primarily because they are not available for offences outlined in the Environmental Permitting Regulations 2010, under which sit the majority of water pollution and other offences that often result in harm to the natural environment.

A recent case I was involved with sheds some light on how EUs can be used effectively after a pollution incident.

Fish kill

In September 2012, during a highways related construction project, a process failed allowing styrene, an oily organic compound, to escape into a nearby watercourse and kill a number of fish.

Following an investigation by the agency, it was confirmed that one of the offences committed fell under section 4 of the Salmon and Freshwater Fisheries Act 1975 (SAFFA). Unlike water pollution offences covered by the environmental permitting regulations, civil sanctions are available for SAFFA offences. After some discussion, the regulator confirmed that it would consider an EU.

My colleagues and I worked closely with environment consultancy Environ to prepare the scope for an assessment that would determine the baseline condition of the affected watercourse, as well as an assessment of the damage and confirmation of the next steps for compensatory actions.

The agency's guidance on EUs presents a fairly inflexible process in terms of their preparation and submission – presumably because in the majority of cases there is no environmental harm and the financial benefit is readily identifiable. Where harm has occurred, then polluters are caught in a "catch-22": the undertaking cannot be formulated until the extent of the damage is known, but the polluter does not want to incur the expenditure of assessing the damage unless it is clear that the agency is committed to considering an EU. In this instance, the agency gave a commitment that it would consider an EU based on a detailed damage assessment scope.

The right scope

Environ prepared a report detailing its findings alongside the various remedial options. It is important to note that, due to the nature of the fish kill, it was not possible to restock the affected tributary and therefore compensatory measures had to be considered.

Environ was able to characterise the harm to the affected watercourse by comparing the area and severity of damage with the pre-incident condition. Using tried and tested economics tools, the environmental damage could be quantified and valued to ensure the EU scope was appropriate.

The value of the damage was estimated, conservatively, at £5,000. A range of compensation offers was evaluated to reflect the cost of the damage to take account of the likely fine if the matter had gone before the courts and to reflect the level of culpability on the part of the offender. The cost-benefit analysis suggested the figure of £5,000 fitted well with a proposed sustainable drainage

system (SuDS) a local wildlife trust was looking to install to reduce agricultural impacts on the river water quality.

The compensatory offer was put into a report and submitted alongside the final EU offer form. The agency reviewed the offer before confirming that the EU was acceptable. The rural SuDS scheme has been designed and it is only bad weather that has prevented the works from going ahead. It is now expected these will be completed in early 2014.

There are several positives to come from this case. First is the use of an EU to benefit the local environment and community; the alternative route would have been a prosecution and a fine. Second, the polluter has been able to use the experience for the purposes of improving its environment management systems. Finally, it also demonstrates what can be achieved when civil sanctions are made available for water pollution offences.

We would encourage the agency to use EUs more widely for offences that involve environmental damage since the necessary tools exist and are used under the Environmental Damage (Prevention and Remediation) Regulations 2009, for example. However, the regulator will need to consider updating its guidance on EUs to accommodate the more nuanced approach that is required.

Civil sanctions

The Environment Agency has been able to issue civil sanctions in relation to certain environmental offences since 4 January 2011. Under the Environmental Civil Sanctions Order 2010, the agency has the power to issue compliance, restoration and stop notices; as well as impose fixed- and variable-monetary penalties and accept enforcement undertakings. Civil sanctions can be used as an alternative to criminal prosecution for a number of offences, including those related to: packaging; oil storage; water resources; dangerous substances; nitrate pollution; and hazardous waste.

Simon Colvin, partner and head of the environment team at Weightmans LLP, with assistance from Samantha Deacon, an ecotoxicologist at Environ.

Moving EMS forward

Following the publication of a second draft of the revised 14001 standard, **Martin Baxter** explains what the new proposals mean for practitioners

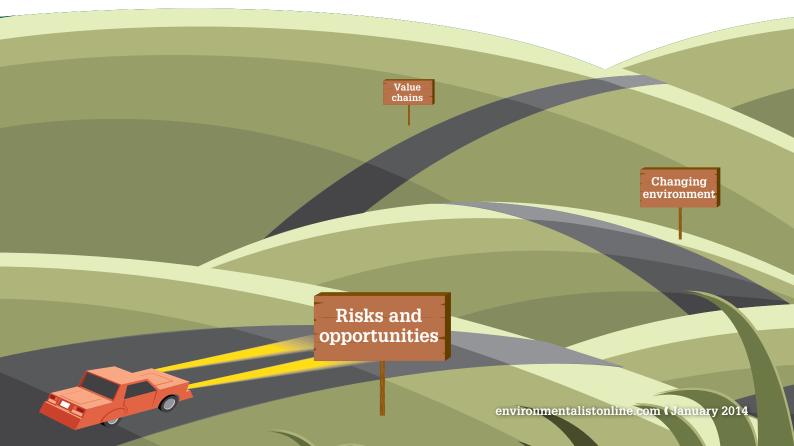
ignificant changes are proposed in the latest draft of ISO 14001, the international environment management systems (EMS) standard. Given that more than 285,000 organisations in 167 countries are certified against its requirements, and many others use 14001 without going for certification, the changes have the potential to make a positive difference on a global scale.

The big picture

The revision to 14001 needs to be considered in a broad economic and environmental context – particularly as the new standard will not be published until 2015 and will remain in use until the mid-2020s. The economic issues are pretty straightforward: 14001 has to help organisations cut costs, improve productivity, capitalise on business opportunities, maintain and enhance brand, and reduce risks. Of course, if it did not already support organisations to achieve this it wouldn't have achieved the take-up it has, but it must now help users to up the pace in all of these areas.

The environmental context is changing, particularly when considering how the environment can affect a company's ability to create value in the long term. More organisations are seeing the benefits of taking a longer-term view on the way that the environment will shape and influence their future. In revising 14001, the environment profession needs to ensure that, alongside "fixing" problems with the current standard, we also focus on the environmental issues that businesses will be facing in 2020 and beyond.

IEMA has been at the forefront of the revision, engaging members at all stages and reflecting their views and experiences in national and international meetings. It has been a real bottom-up process of listening to individual members about what works well and what needs to be improved; carrying out membership-wide surveys to get a broad perspective; and then clearly articulating that position. This level of interaction not only gives the ISO working group developing the revised standard a fantastic insight into practitioners' views, but also confidence that it is focusing on the key issues.



Strategic direction and leadership

To ensure the integration of environmental considerations into organisational decision-making, IEMA members were clear (95% support) that the revised standard must make stronger links between the EMS and an organisation's overall strategy. ISO's new high-level structure for management systems standards is being used as the basis for the revised 14001 and new sections on "context" and "leadership" provide the basis of achieving this. There are new requirements around "understanding the key internal and external drivers", for example, which will provide a high-level strategic understanding of important issues relating to managing environmental responsibilities.

Also, a new requirement to "understand the needs and expectations of interested parties" brings in the views of stakeholders, which are crucial in determining the scope of the EMS, particularly to develop criteria for evaluating environmental aspects and organisational risks and opportunities.

The revised draft's new section on leadership has been received positively by IEMA members. There are three key points to note with this section. First is the requirement that environment management is integrated into core organisational processes. This is vital to ensuring that environment management is not a marginalised activity, but sits at the heart of the organisation. Second is the requirement that environmental performance is considered in the organisation's strategic planning process. Finally, there are amendments to the requirement for top management involvement in the EMS.

authority, IEMA members concluded that it would be perverse for the standard to include requirements on top management only for them to be delegated. The latest draft of the standard closes this loophole by preventing top management delegating elements of the EMS, such as setting the environmental policy; allocating resources, roles and responsibilities; and undertaking the management review.

Risks and opportunities

In the past, the focus of 14001 has largely been on managing and improving the environmental impacts of an organisation. Increasingly, however, businesses are managing the impact of a changing environment on the organisation itself, such as through adapting to climate change and to issues around resource security and availability. IEMA members surveyed on whether 14001 should consider the environment's impacts on businesses voted 86% in favour. Such an approach has now been incorporated into the revised draft.

A core element of every EMS is the environment policy and the development of a system to implement the policy's commitments. While the current edition of 14001 requires users to commit to being legally compliant, to prevent pollution and to continually improve their EMS, the revised draft adopts a broader

New sections on 'context' and 'leadership' will ensure integration of environment management into business decision making



The section on external and internal communications has been amended in the latest draft, to include a new requirement for an organisation to ensure the quality and credibility of the information it communicates

approach. The commitment to prevent pollution, for example, is strengthened by another to protect the environment. The new draft suggests that organisations could do this by ensuring sustainable resource use, mitigating against climate change or protecting ecosystems. In addition, the draft standard states that environment protection commitments must be specific to the organisation's situation, which should mean that environmental policies that simply copy out the three core requirements from 14001 will be things of the past.

The most difficult and protracted issue in developing the revised draft has been the section on "risks and opportunities", particularly the relationship between generic business risks and opportunities and an organisation's environmental aspects and compliance obligations. It is not surprising that introducing the term "risk" into an EMS standard poses questions about the link between risk and environmental impact. The addition of the term "opportunities" also implies a certain expectation, or perception, of how people are expected to understand risk.

The definition of risk included the standard ("the effect of uncertainty") is mandated in the text of ISO's high-level structure, and includes a note that the outcome, consequence or effect of uncertainty can be negative or positive. Alongside the implication that a risk may be a threat or an opportunity, the revised 14001 highlights that the uncertainty associated with a potential consequence can vary between high ("unacceptable/critical") and low ("insignificant/ negligible"). Although this is understood by risk specialists, it is less recognised in environment management, where risk is more likely to be associated with negative implications, such as loss, damage or harm.

The risks and opportunities section in the second draft of 14001 has been completely reworked, reordering the text and setting out a more defined process. Feedback from IEMA members suggests that the requirements codify what some practitioners are already doing in a more prescriptive way, while for others the new approach will require additional work to relate environmental aspects to business risks and opportunities. It is clear, however, that the definition of risk needs more work.

Value chains and compliance

There is widespread recognition that taking a holistic perspective to environment management across the whole value chain helps to identify business and environmental improvements that might not otherwise be obvious. More than 80% of members who responded to an IEMA survey on 14001 stated that the revised edition should place greater emphasis on managing impacts across the lifecycle of products and services, as well as their supply chains.

Again, this section of the standard has been reworked since the first draft. Amendments have been made to simplify the text and provide greater clarity on what is required. The key change is the focus on significant environmental aspects, risks and opportunities that the organisation can control or influence. Under the new draft of the standard, where companies can exert such control or influence environmental requirements must be specified for the procurement of goods and services, and integrated into design and development/change programmes.

Another alteration in the second draft, has been the introduction of the term "compliance obligations" to replace "legal requirements and other requirements to which the organisation subscribes". Compliance obligations are those requirements with which an organisation has to, or chooses to, comply. These include environmental laws, regulations and permits, as well as contractual requirements, voluntary codes and industry standards. The requirements on the evaluation of compliance have also been extended in the revised draft when compared with the existing standard. An organisation must now specify the frequency under which it will evaluate compliance, as well as maintain knowledge and understanding of its compliance status.

Communications and capacity

External and internal communications is another area that has been amended in the latest draft. The most significant change is the requirement for an organisation to ensure the quality and credibility of environmental information it communicates. This internal assurance process should enhance the reliability and consistency of externally reported performance data, including that required for regulatory purposes.

Ensuring that the content of the revised 14001 captures the essential elements of an effective EMS for the 2020s is clearly important. The real challenge, however, will be in implementation, both within organisations and by third-party auditors.

The proposed changes are significant, and will require a much broader application of environment management throughout an organisation as it becomes integrated into core business processes. Ensuring that those with EMS responsibilities have the skills and capabilities to implement the new requirements will become an increasing focus of IEMA's work. So too will be the support offered to ensure everyone in the organisation can play their part, as the Institute rolls out its "all jobs greener" qualifications with City & Guilds.

Martin Baxter is executive director of policy at IEMA and leads the UK's input on the working group revising ISO 14001. More information is available at iema.net/iso14001.

Communications



Looking ahead

the environmentalist highlights some of the major legal and policy changes due in 2014

ast year, the environmentalist published details of 140 new regulations and 69 policy consultations from across the UK and the European commission. Legislative and policy developments over the next 12 months promise to be equally extensive, with major changes planned in most areas affecting the work of environment professionals. With the help of EEF, the Environmental Services Association and consultancy WSP, the environmentalist has collated some of the most important regulatory and policy changes to look out for in 2014.



Defra would seek to introduce legislation in England on **biodiversity offsetting** in 2014, though a voluntary approach remains an option. A consultation on biodiversity offsetting, which was one of the priorities put forward last year by the taskforce on ecosystems markets, ended on 7 November. Defra is now analysing the feedback and evidence from pilots before deciding whether to pursue a mandatory approach.

A consultation by the Law Commission on establishing a system of **conservation covenants** in England and Wales ended in June 2013. Conservation covenants are voluntary agreements by landowners to do something, or to avoid a course of action, to achieve a conservation objective on their land. The commission reported in August that respondents to its consultation were in favour of introducing covenants, with the majority backing a statutory scheme. It plans to publish its final report together with a draft Bill and impact assessment in summer 2014.

The commission is also planning changes to **wildlife protection** laws, with draft legislation to be published by

the summer. Under its proposals, which will affect firms in England and Wales and aim to simplify existing laws, a new system of civil sanctions will operate.

Meanwhile, Defra is aiming to produce a strategy in spring 2014 to integrate **natural capital** into business accounting and reporting. The environment department is also supporting phase II of the UK **National Ecosystems Assessment** (NEA), which will further develop and communicate the evidence base of the NEA, and make it more relevant to decision making and policymaking across the UK. This work will be completed by March 2014.

The Water Bill, which was published in June 2013 and applies to England and Wales (and in part to Scotland by establishing a cross-border arrangement), is expected to receive royal assent in April 2014. Measures include: restoring the sustainable abstraction of water; improving the way water resources and drought planning are managed; providing powers to streamline the environmental permitting framework; encouraging the use of sustainable drainage systems; and transferring the responsibility of maintaining maps of the main rivers in England and Wales to the Environment Agency and Natural Resources Wales.

The UK is a signatory to the Convention on Biological Diversity (CBD) and is committed to the **Aichi targets**, international biodiversity goals agreed in 2010 and set out in the CBD. The fifth UK report to the CBD must be submitted by 31 March 2014.

Action 5 of the EU biodiversity strategy to 2020 requires member states to assess the state of ecosystems and their services in their national territory. This mapping and evaluation should be completed in 2014 and will contribute to the assessment of the economic value of ecosystems services, and promote their integration into accounting and reporting systems at the EU and national level by 2020.

from 1 April



Built environment and planning

Revision of the EU Directive on **environmental impact**

assessment (EIA (2011/92/EU)) is expected to be concluded early in 2014. The permanent representatives committee, which prepares decisions for the council, approved a draft of the Directive with the European parliament in December (see p.5). The text needs to be formally adopted by parliament in early 2014. The council will take its decision following the vote in parliament.

A key element of the government's plans to speed up the planning process and tackle delays to infrastructure is to reform the judicial review system.

This includes establishing, early in 2014, a **specialist planning court** to accelerate the handling of cases, as well as the introduction of legislation to ensure that minor procedural claims are dealt with proportionally and to allow appeals to move directly to the Supreme Court in a wider range of circumstances. The government has also launched a review of the planning regime for **nationally significant infrastructure** with the aim of shortening the pre-application phase and further streamlining the consenting process.

Revised energy efficiency standards for new non-domestic buildings come into force in April 2014 through changes to Part L of the **Building Regulations**. The changes, which include requirements for better fabric insulation and more efficient heating and lighting, implement the recast EU Directive on the energy performance of buildings (2010/31/EU) and are expected to reduce commercial buildings' carbon emissions by 9% on average.

The Energy Act 2011 requires all commercial buildings in England and Wales with energy ratings below E to be upgraded before they can be leased in 2018. A consultation on implementing the measure was scheduled for 2013, but it is now due in January 2014. Analysis by WSP in 2013 found that around 17% of energy performance certificates issued for commercial buildings since 2008 were rated as "F" or "G".

A consultation by the European commission on the possible introduction of EU-wide measures to improve the environmental performance of buildings ended in October 2013. The commission plans to publish a communication on **sustainable buildings** in 2014.

A revised version of the **BREEAM** "new construction UK" standard will be finalised in 2014. Publication of the new scheme document is due in January, followed by a peer-review process in early spring before it goes live.



Carbon and energy

Further changes to the **CRC** come into force with the start of phase II in April. A consultation ended in December 2013

on these alterations, which focus on how the CRC can incentivise the uptake of onsite renewable generation and the exclusion from the CRC of energy supplied to metallurgical and mineralogical processes following

changes to the climate change levy in the 2013 budget. The government also aims to clarify how participants can avoid the double counting of third-party energy supplies under the CRC, climate change agreements and the EU emissions trading scheme (ETS), and how organisations can disaggregate subsidiaries.

Organisations qualify for phase II if between 1 April 2012 and 31 March 2013 they had at least one settled half-hourly electricity meter and were supplied with more than 6,000 MWh of electricity. However, some public bodies qualify no matter how much electricity they consume. Qualifying organisations have until 31 January 2014 to register with the Environment Agency.

The chancellor confirmed in his autumn statement the cost of CRC allowances for 2014/15 - £15.60 per tonne of carbon dioxide in the forecast sale and £16.40 per tonne of carbon dioxide in the buy-to-comply sale.

Participants in phase I of the CRC have until 31 July to produce their annual report covering 1 April 2013 to 31 March 2014. Simplification measures already implemented for this reporting year include the scrapping of the annual performance league table. The agency plans to replace the table with published emissions data for participants, and will be developing the format over the next few months.

Several exemptions from the **climate change levy** start this year. In his 2013 budget, the chancellor announced that energy used by the ceramics industry and in other metallurgical and mineralogical processes would be exempt from 1 April 2014. Levy rates for 2014/15 are: 0.541p/kWh for electricity (a 3.24% increase) and 0.188p/kWh for gas (a 3.3% rise).

Member states have until 5 June 2014 to transpose EU Directive 2012/27/EU on **energy efficiency** into national legislation. Article 8 of the Directive requires the introduction of regular energy audits for enterprises with more than 250 employees and an annual turnover of €50 million. Decc consulted last autumn on its plans to implement art. 8 through an energy savings opportunity scheme (ESOS). Its response, as well as a second impact assessment, will be published in the spring. Under the proposals, data from the 2014/15 financial year will be used for the first round of ESOS assessments, which must be completed by December 2015.

Article 14 of the Energy Labelling Directive (2010/30/EU) requires the European commission to carry out a review of the effectiveness of labelling no later than 31 December 2014. Meanwhile, stage II of commission Regulation 1194/2012 on ecodesign requirements for directional lamps, LED lamps and related equipment comes into effect on 1 September 2014, and sets new energy efficiency criteria.

Plans by the government to **reform the wholesale electricity market** (EMR) have taken a step forward. After the Energy Bill's first reading in November 2012 it was expected to receive royal assent in spring 2013, but its progress was delayed, with assent finally secured on 18 December (Energy Act 2013). Decc is expected to publish regulations relating to the EMR in spring 2014.

Extended support for non-domestic technologies under the **renewable heat incentive** will be introduced in March 2014 enabling firms investing in air-water heat

pumps, commercial-scale energy-from-waste plants and large biogas burners to claim for payments. Support for combined heat and power, large biomass boilers (1MW), ground-source heat pumps and solar thermal installations is to be increased at the same time.



Climate change

The Climate Change Act 2008 set a target for the UK to reduce its emissions by at least 80% from 1990 levels by 2050 and

established a system of five-yearly **carbon budgets** – set by the independent committee on climate change (CCC) – to ensure the target is met. Under the fourth carbon budget, which runs from 2023 to 2027, the UK must cut GHG emissions to 1,950 million tonnes of CO2 equivalent (MtCO2e) – less than half of what the country emitted in 1990. When it agreed the fourth budget in 2011, the government stated it would review the reduction target in 2014 and scale back the cuts if other EU countries had not adopted similar goals. In December 2013, the CCC reported there was no need to alter the fourth budget, warning that the target might even have to be tightened if the EU's 2020 carbon reduction target rises to 30%, as the UK is advocating. The review will take place early in 2014.

To bridge the gap between the end of the first period of the **Kyoto protocol** in 2012 and the planned start of its successor in 2020, the 38 developed countries party to the protocol, including EU member states, have agreed to participate in a second period, running from 2013 to 2020. The parties are required to revisit their emissions target by 2014 with a view to considering making it more ambitious. The EU may raise its reduction target to 30% if the conditions are right.

Following the UN climate change conference in Warsaw (COP19) in November 2013, negotiations on delivering a new global climate change treaty are to continue in 2014. UN states have agreed for it to be finalised in 2015 and enforced in 2020. **COP20** takes place in Lima, Peru, in December 2014, while UNFCCC meetings continue throughout the year. The UN is also hosting a climate summit in New York in September.

The first of four reports from the fifth assessment by **intergovernmental panel on climate change** (IPCC) was published in September 2013, with the release of the findings by working group 1, which examines the physical science basis of climate change. The three remaining IPCC reports will be published in 2014.



Environment management

Progress on revising **ISO 14001** for a proposed launch in the first half of 2015 continues with a consultation on the

second committee draft closing this month (see pp.14–16). All comments received on the new draft will be discussed at the ISO working group's next meeting in Padua, Italy, at the end of February 2014.

Work on a revised version of **ISO 14004**, which outlines general guidelines on environment management principles, systems and support techniques, is also ongoing, running roughly six months behind the revision to 14001.



Hazardous substances

The European Chemicals Agency published proposals in November to update the **community rolling action**

plan (CoRAP) for 2014–16. The draft lists 125 substances for member states to review, consisting of 56 additional substances and 69 substances included in the March 2013 CoRAP. A decision on the draft is due in February, with the final CoRAP for 2014–16 adopted by the end of March. In 2011, the agency set so-called sunset dates for the first six **substances of very high concern**, after which a substance cannot be produced unless an authorisation has been granted for a specific use. The first sunset date is August 2014 and applies to 4,4'-Diaminodiphenylmethane and 5-tert-butyl-2,4,6-trinitro-m-xylene.

Restrictions on **mercury** in measuring devices apply from 10 April 2014 with the implementation of European commission Regulation 847/2012, which amends annex VII of the REACH Regulation (1907/2006). Similarly, commission Regulation 649/2012 on the **export and import of hazardous chemicals** comes into force on 1 March 2014. The Regulation applies to: certain hazardous chemicals that are subject to the prior informed consent procedure under the Rotterdam Convention (the "PIC procedure"); certain hazardous chemicals that are banned or severely restricted in the EU or a member state; and the classification, labelling and packaging of exported chemicals.

An EU regulation to "phase down" the use of **fluorinated gases** (f-gases) across the bloc is expected to be finalised in early 2014. In December 2013, the European council and representatives of the parliament agreed an amended version of the commission's proposal to replace Regulation 842/2006, under which the use of f-gases in products, such as fridges, freezers and air conditioners, would be phased out between 2015 and 2025. The new regulation will apply from 1 January 2015.

Concerns have been raised about the potential effects on the environment and human health of materials that contain particles of a size that falls outside the scope of the existing EU definition of **nanomaterials**. In response, EU policymakers will review how the bloc defines such materials in 2014.

Member states have until 31 January and 30 April 2014 to transpose into domestic law EU directives 2013/44/EU and 2013/27/EU, which amend Directive 98/8/EC on biocidal products by including powdered corn cob and chlorfenapyr as active substances in annex 1. Under Regulation 3(d) of the Biocidal Products (Amendment) Regulations 2007 any amendments to Directive 98/8/EC are automatically implemented into UK law.

Defra announced in December 2013 that, from April 2014, it would no longer fund local authorities in England to investigate and remediate **contaminated** sites. In 2010, the environment department

Progress on revising ISO 14001 continues with a consultation on the second committee draft closing this month. All comments will be discussed at the ISO working group meeting in Italy at the end of February

provided £17.5 million in grants to councils towards the cost of measures such as soil sampling and laboratory tests, as well as treating or replacing soils affected by chemical spills and waste deposits.



Industrial emissions

The Industrial Emissions Directive (IED) (2010/75/EU) came into force on 6 January 2011 – transposed by

the Environmental Permitting (England and Wales) Regulations 2013; Pollution Prevention and Control (Scotland) Regulations 2012; and the Pollution Prevention and Control (Industrial Emissions) Regulations (Northern Ireland) 2013 - and initially applied to new installations from 7 January 2013. As of 7 January 2014, the Directive applies to existing installations previously subject to the directives that IED replaces – such as those on integrated pollution prevention and control, waste incineration and solvent emissions. The first key deadline is 1 September 2014, when operators of sites involved in the gasification of fuels other than coal, the biological processing of chemicals and waste recovery must submit applications. Under the IED, there is greater emphasis on compliance with best available techniques (BATs) for new plant and derogation from BATs is more tightly controlled.

The European commission's long-delayed plan to raise the price of **EU carbon allowances** under the emissions trading scheme by "backloading" 900 million allowances in the ETS will soon come into force after member states voted in favour of detailed proposals on 8 January. Backloading had originally been scheduled to start on 1 January, so the commission will have to set a new timetable for temporarily withholding the allowances, which policymakers hope will lead to a rise in carbon prices. Meanwhile, Decc expects to submit its vision for phase IV of the ETS, beyond 2020, by July.

The revised ETS Directive (2009/29/EC) requires the commission to draw up a list every five years of sectors and subsectors that face competition from industries outside the bloc that are not subject to comparable GHG restrictions. Sectors on the list receive a higher share of free ETS allowances. A new "carbon leakage" list is due by the end of 2014, and will apply from 2015 to 2019.

An emissions performance standard (EPS) limiting carbon emissions from new fossil-fuelled power stations was included in the Energy Act 2013 (see p.18) and should be in place by April 2014. The EPS is to be set at 450g/kWh and will apply to all new fossil fuel burning power plants generating 50MW of electricity a year.



Regulation and inspection

The Regulatory Reform (Scotland) Bill was

introduced in the Scottish parliament in March 2013 and will change how the **Scottish Environment Protection**

Agency (Sepa) will operate from April 2014. The Bill supports Sepa's transformation

programme to follow a more "risk-based, proportionate, targeted and outcome-based" approach to regulatory compliance, and aims to improve the way environmental regulations are applied across Scotland. The Bill will introduce: a new statutory purpose for Sepa; a simplified and integrated framework for environmental regulation; and a new enforcement framework.

National Resources Wales (NRW) will publish its corporate plan in March, setting out its strategic direction for the next three years. A consultation to inform the plan ended on 10 January.

The Welsh government is planning on introducing an Environment Bill, which will include measures to provide NRW with new statutory functions and duties that will support its core purpose and enable it to trial new approaches and ways of working. A consultation on the white paper outlining the proposed Bill ended on 15 January. Also, a Future Generations Bill is to be introduced to the assembly in summer 2014. It will set out the role that public services in Wales, including the NRW, play in helping the country tackle key challenges, such as climate change.

Meanwhile in England, further budget cuts will see the **Environment Agency's** workforce shrink by 1,700 by the end of October 2014.

Some fees charged by regulators will change in April 2014. The **Environment Agency** recently consulted on its charging plans for:

- installations requiring environmental permits to rise in line with inflation;
- water abstraction either a new application charge of £1,500 for those permits where there is no requirement to pay ongoing subsistence charges, or to charge subsistence for licences in addition to the current application charge of £135; and
- the EU emissions trading scheme align charges with rest of Europe.

Sepa has reviewed all its charging schemes with a view to implementing a significantly different charging framework from 2015. It is consulting on increases for 2014/15. These include a 7.7% rise in waste charges and a 2.7% increase in charges for controlled activities, such as pollution prevention and control, from April 2014, followed by similar increases in April 2015.

Defra is due to complete its reform of **guidance on environmental legislation** by March 2014. As part of the process, the environment department is simplifying 6,000 guidance documents and revisiting 250 requirements on businesses to report environment information to see whether they are necessary. The websites of Defra agencies, such as the Environment Agency, are expected to migrate to the main gov.uk website in March. Defra has also been working with the government digital service to test a simplified way to collect and manage information, with it potentially being used more widely.

The Environment Agency will increase the number and availability of **standard rules permits** next year, reducing the documentation required. It is developing

Defra is due to complete its reform of guidance on environmental legislation by March 2014. As a part of the process, the department is simplifying 6,000 guidance documents and 250 requirements on business

electronic application forms, which should be available sometime in 2014. The regulator will also publish an updated version of its 2005 publication *Delivering for the environment*, which describes its vision for regulation.

New sentencing guidelines for environmental offences should come into effect in spring 2014. A consultation on the new guidelines ended in June 2013 and outlined a framework for magistrates in England and Wales to determine sentences for waste disposal, environmental permitting and statutory nuisance offences under the Environmental Protection Act 1990; the Environmental Permitting Regulations (England and Wales) 2010; and the Control of Pollution (Amendment) Act 1989. Under the proposals, magistrates would impose fines based on the level of harm caused, the level of culpability – whether the offence was committed deliberately, recklessly or negligently – and the size of the organisation.

The European commission published a communication in October 2013 on the next steps in its **regulatory fitness and performance** programme ("Refit"). To prepare for future legislative initiatives aimed at reducing the "burden" of regulatory compliance on businesses, a number of evaluations, fitness checks and other studies will start in 2014. Areas to be assessed include legislation relating to chemicals not covered by **REACH**, the **Natura 2000** protection areas, the EU **ecolabel** and **EMAS** (the eco-management and audit scheme). The commission says that, by the end of 2014, it will have carried out or launched 47 assessments to lighten the regulatory burden. Twelve of them will focus on environmental regulation.



Waste and resources

The European commission is developing EU waste legislation and targets beyond 2020, and is expected to publish

a report and legislative proposals in spring 2014. The commission is expected to propose higher EU recycling targets, a progressive phasing out of landfill, and possibly one or more targets for waste prevention. The proposals are likely to be the subject of lengthy negotiations with member states and the European parliament before they are agreed. The eventual outcome will be of major significance for the future of the waste and resource management industry. In its response to the 2013 consultation on the review of EU waste management targets, which was published last December, the government said it would not support changing the definitions or targets for 2020 set out in the Waste Framework Directive (2008/98/EC), nor would it back the introduction of new environmental targets. It also refused to back proposals to extend landfill bans and to impose restrictions on specific materials at an EU level.

Under the EU's 7th Environment Action Programme, which was formally agreed in November 2013, the commission is preparing to set an EU reduction target for **marine litter**. A consultation on how best to formulate the target ended in December, and the commission aims to include a reduction goal in a wider communication on waste to be adopted in 2014.

Commission Regulation 715/2013 set new criteria from 1 January 2014 for when **copper** scrap ceases to be waste. From the beginning of the year, scrap copper can be classified as a product if it meets the requirements set out in 715/2013 before being remelted.

Revised legislation on waste electrical and electronic equipment (WEEE) applied from 1 January, implementing the recast WEEE Directive (2012/19/EU) and changes to the UK WEEE system. A consultation by UK administrations on clarifying the definition of "portable" waste batteries will be launched in spring 2014.

Defra is expected soon to publish new regulations on materials recovery facilities (MRF). It consulted in spring 2013 on draft MRF regulations for insertion into Environmental Permitting (England and Wales) (Amendment) Regulations 2013. The new regulations will enter into force in June or July.

The chancellor confirmed in his 2013 budget that the standard rate of **landfill tax** will increase by £8 a tonne to £80 from 1 April 2014, while the lower rate will remain at £2.50 a tonne in 2014/15.

At the start of 2014, the Environment Agency launched edoc (electronic duty of care), an online waste transfer information system. The aim of edoc, which places waste transfer notes online, is to make recording waste movements quicker, easier and cheaper for businesses. It also provides a transparent system for firms to demonstrate that they have met their legal duty of care and evidence of environmental responsibility and accountability. Defra estimates the business community will save between £7.8 million and £13.4 million every year by using edoc. Prior to the launch, the environment department issued a six-week consultation at the start of December 2013 on introducing greater flexibility over the use of waste transfer notes by small businesses in England and Wales. Changes include clarifying the use of alternative documentation and revising the information that comprises the written description of waste. In Scotland, the Waste (Scotland) Regulations **2012** came into force on 1 January. These establish a legal duty on every business, regardless of size, to separate metal, plastic, paper, card and glass for recycling, as well as banning these separated materials from being sent to landfill or incinerators. The devolved government is also introducing a charge for **single use** carrier bags from October 2014.

The Producer Responsibility Obligations (Packaging Waste) (Amendment) Regulations 2012, which came into force on 11 December 2012, imposed new waste **packaging recovery and recycling targets** until 2017. The aluminium-recycling target for 2014, for example, rises to 46% from 43% in 2013, while the target for plastics increases to 42% from 37%.

From spring 2014, Defra will withdraw from some areas where it now does proactive policy work, including energy-from-waste, commercial and industrial waste, and construction and demolition waste.

New sentencing guidelines for environmental offences should come into effect in the spring. Under the proposed changes, magistrates would impose fines based on level of harm, culpability and the size of the organisation

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environmentalist

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y any standards, 2013 was a good year for Vegware. Following a 15-fold growth in turnover and staff numbers over the past five years, the Edinburgh-based pioneer of completely compostable food packaging last year won a mantelpiece full of green gongs, from first prize in the Scottish Green Awards to best business in Scotland in the Federation of Small Businesses Streamline Awards.

But for Lucy Frankel, Vegware's communications director, a Queen's Award for Enterprise was the crowning glory. "Two of us went to Buckingham Palace – myself and the sales director Dominic Marjoram – on the hottest day in July and met the Queen," she recalls. "But the best part was when the entire team went along to the city council in Edinburgh to be presented with the certificate and crystal bowl from the Lord Provost, and we could celebrate as a team."

In times of austerity, it is easy to forget to celebrate success; but winning an award is about more than a good night out. "It's been a fantastic boost for morale," says Frankel. "We're a close, hardworking team, all collaborating, so it's fantastic as a group to be recognised. It's all positive reinforcement for what we're doing."

In the spotlight

For staff at Bluestone National Park Resort in Pembrokeshire, environmental awards have been a big boost too. Sustainability is central to the operation of the resort, which opened at the height of the recession. Its Blue Lagoon waterpark, for example, is heated by two 28-tonne boilers fuelled by biomass grown on local farms. The biomass boilers reduce annual carbon dioxide emissions by 3,000 tonnes compared with conventional oil-fired boilers and ensures that the heating bill of the waterpark is half what it would be if powered by oil. It was this initiative that won Bluestone the resource management category in the 2012 Business Commitment to the Environment (BCE) Leadership Awards.

According to Richard Harris, Bluestone's quality control and resource efficiency manager: "When we went to the BCE Awards at the Royal Albert Hall - a very glitzy affair with lots of big companies – and they announced we'd won, it meant so much to my chief executive and commercial director. They've sweated

blood for this company and to have that validation, that moment in the spotlight, was really rewarding."

As well as celebrating the work of senior managers, winning awards can also help make a sustainability team more visible in their own organisation, says Andy Cutts, waste minimisation and recycling manager at Warrington Borough Council. His team won a Green Apple Award in 2012 for a project that improved recycling rates in the most deprived areas of the borough by up to 65%. "In local authorities at the moment there's lots of pressure to save money, make efficiencies, and we struggled to take the time to raise awareness of the good work we're doing. We felt that applying for awards raised the profile of the team," he says. "Internally people are more aware of what we do, especially at senior level and among councillors, who have such a wide range of other issues to keep up with."

Kathy Hilton, building facilities manager at the Gurdon Institute at the University of Cambridge, agrees. The Gurdon also won a Green Apple Award in 2012 for a successful behaviour change campaign that significantly reduced electricity consumption. Hilton says: "Winning Green Apple and University Green Impact awards in 2013 led to a visit by the university's chancellor, which provided a platform to show off both our science and our commitment to sustainability."

Badge of approval

Externally too, awards can help organisations build their reputation, particularly if they are new businesses, such as Vegware and Bluestone.

Although winning an award will not necessarily result in acres of press coverage, validation from a third party is invaluable. "We've looked at awards as a means of raising our profile. We're a young business, we don't have an unlimited marketing budget and it's a way to get our name more widely known," says Harris. "The key was independent, external verification of what we're doing. We can trumpet our green credentials, but without external agreement it doesn't mean much."

The same is true for companies involved in the food industry, where consumer confidence is crucial, says Frankel at Vegware. "We work with the UK's largest contract caterers and distributors, government departments and NHS trusts, so we're not niche,



Why enter green awards?

- By recognising hardworking staff, awards can boost morale.
- Awards can raise an individual's or a team's profile inside and outside your organisation.
- Winning can help build your organisation's reputation.
- Being judged by external experts is useful third-party validation.
- Applying is a good opportunity to take stock of sustainability in your business.
- Measuring yourself against others can help improve the performance of every participant.
- Award schemes help to share best practice.
- Awards are a chance to network and feel part of a wider movement.
- Entering can help change behaviour in your own organisation.
- Winning an environmental award is a good reason to celebrate.

we're mainstream and entering and winning awards demonstrates that they can trust us as a supplier," she says. "It takes work, but third-party approval – where assessors come in, talk to us and get the measure of what we do – is incredibly useful as a badge of approval for customers," she adds. "There's lots of greenwash out there and, by winning awards, we're setting our company apart from the white noise of dubious green claims in the marketplace."

According to the RSA (Royal Society of Arts), there are around 400 environmental award schemes in the UK. So, which awards are worth applying for? The RSA accreditation scheme helps simplify the choice by guaranteeing that awards meet its quality and validity criteria. Moreover, winners of its accredited awards are the only UK businesses able to enter the biennial European Business Awards for the Environment, which have been run by the European commission since 1987.

"Accreditation is important," says Dr Malcolm Aickin of the RSA environment awards forum. "To gain it, awards must have robustness and transparency, a credible set of judges, a credible set of entry criteria and a set of judging criteria to match."

Accredited awards

Together with the Green Apple, the Low Carbon Vehicle Partnership (LowCVP) and Guardian Sustainable Business awards, the RSA has accredited the City of London's Sustainable City Awards (SCAs) – which this year merged with the BCE Awards.

The SCAs were established in 2000 and attract some 250 entrants a year across 12 categories, which between them represent the three pillars of sustainable development – the economy, society and the environment. The continued success of the awards is, in part, down to them being regularly refreshed, according to Simon Mills, head of sustainable development at the City of London: "We try to keep a fresh approach by focusing on a theme. For our 2012/13 awards it was fashion, and the year before it was food. For the 2013/14 awards the focus is entrepreneurship: we were inspired by the fact that so many superb startups apply, so we wanted to focus on the buzz in this sector."

As well as rewarding hardworking staff and raising the profile of their work, Mills believes awards like the SCAs have a larger role to play, showcasing UK talent and using the City of London's influence to promote sustainability among business leaders. "The first Lord Mayor was appointed in 1189 and there's been a centre of government at the Guildhall site going back to the Romans. We take a long-term view, which is why we're very interested in sustainability," he says. "A word in the ear in the City of London carries around the world – the City has huge influence. Demonstrating that we consider the sustainability of leading firms important can influence attitudes in boardrooms around the world."

And sustainability is intimately linked with cities, because by 2050 about 6.4 billion people – 70% of the world's population – will be city dwellers. "That presents immense challenges," says Mills. "As a city we need to face up to these, but for our stakeholders it's a huge opportunity. The UK has a huge contribution to make; from our academic base in engineering and planning to our financial, legal and insurance services. The awards provide a showcase for the breadth of talent the UK has."

Top tips for impressing the judges



Make sure a good communicator writes the entry so that judges know exactly what you mean



Awards often ask for supporting data, so bring your entry to life through a pdf scrapbook of pictures of customers and their testimonials



Look for the magic ingredient, the thing that makes your organisation special. Even small things done with commitment to detail and put at the heart of an organisation can impress judges



It sounds obvious, but most awards have clear criteria so it's important to read and understand them. Approach your entry like an exam; answer the question you've been asked, not the one you want to answer

Sharing best practice

Because achieving major improvements in sustainability requires raising environmental standards across sectors and learning from the best, schemes such as the Ashden Awards and the Guardian Sustainable Business Awards are heavily focused on sharing best practice.

Now in their fourth year, the Guardian Sustainable Business Awards attract around 300 entries and allow the *Guardian* to showcase the most successful approaches to corporate sustainability, says Caroline Holtum, head of content for Guardian Sustainable Business.

"When we launched Guardian Sustainable Business our aim was to support people in their professional lives, to provide a platform for people in sustainability to do their jobs better," she explains. "We wanted to start a conversation about best practice, how you define it, how you exchange it. For us, being the *Guardian*, we felt we needed a robust process to define best practice."

Meanwhile, the Ashden Awards – launched by Sarah Butler-Sloss in 2001 – take things a step further, using the annual awards process to select the most promising sustainable energy projects to support in the long term.

Dr Mike Pepler, Ashden's UK awards manager, says: "Lots of people make grants in the environment sector, and there's definitely a place for that, but what makes the Ashden Awards different is that we get people who already have a track record; their idea works.

"We want things we can grow or replicate, so we're always looking for best practice in a given sector or technology, not just to hold up as a good example, but to help the winner make a bigger difference by leveraging our expertise and networks."

Since 2001, more than 140 sustainable energy pioneers have been recognised for their work.

Raising the bar

Petrol and diesel supplier Greenergy agrees that awards can play an important role in raising sustainability standards. In 2012, Greenergy won the low-carbon fuel initiative of the year at the LowCVP

Awards for its new biodiesel pre-processing plant at North Cave, Yorkshire. The only facility of its kind and scale in Britain, the plant will increase the range of waste feed stocks that can be used in Greenergy's Immingham biodiesel plant.

Greenergy enters few awards, but does participate in the Forest Footprint Disclosure Project (FFDP), a finance sector initiative encouraging the disclosure of sustainability data now merged with the CDP. According to Patrick Lynch, Greenergy's biofuels sustainability manager: "We entered the FFDP as a validation of our ethos that disclosure is good and because it creates competition in sustainability, which is good for internal practice and for the industry as a whole. It brings the base up." Unlike other awards, Lynch believes the wideranging scrutiny involved in the FFDP provides vital feedback. "The process demands you stop what you're doing and take stock of your whole sustainability practice everything you do – not just the areas you want to talk about. It goes through the whole business, no stone is left unturned," he says. "And you get good feedback. Each area is scored and that keeps us submitting because it's extremely useful for the business."

By sharing best practice and encouraging better performance, many awards help build a community around sustainability that can be especially useful to sole traders like Emily Reid who runs Eco-Drama, the small Scottish business that uses drama to take sustainability issues into schools. According to Reid, who last year won a Scottish Green Award: "The awards ceremony was a nice way to link up the green sector in Scotland. There's a thriving community out there all pushing on the same social issue, so it's nice to feel part of something bigger."

For those still sitting on the fence on whether to apply for an award, Hilton advises: "Go for it. It brings you into contact with many people from different fields, with fantastic ideas on being green, and it's infectious. The more you talk and read about what other people are doing, the more you to want to do!"

 $\boldsymbol{Becky\ Allen}$ is a health, safety and environment journalist.

Small steps

Paul Suff discovers how a pioneering EU project is taking environmentalists out of their comfort zone

limate KIC is Europe's largest public-private partnership on climate change. It links research, technology and business to find ways of mitigating or adapting to a changing climate and involves students, entrepreneurs, companies and public bodies.

The KIC – "knowledge and innovation community" – initiative is run by the European Institute of Innovation and Technology, which, in 2010, launched three programmes under the KIC banner (see panel, right). The climate-focused element is based in six European

regional areas – the UK's West Midlands, central Hungary, Emilia Romagna in Italy, Hessen in Germany, Lower Silesia in Poland, and Valencia, Spain – and there are five national centres, including sites in Berlin, London and Paris. The aim of the Climate KIC project is to provide the expert guidance needed to shape Europe's climate change agenda. Its vision focuses on:

- helping innovators capitalise on new business opportunities driven by Europe's "first mover" response to climate change;
- forging alliances among existing and new businesses with the aim of creating partnerships that jointly cover all elements of emerging value chains and help to build critical mass; and
- supporting European governments and public agencies to develop effective policy frameworks and to pioneer early introduction of climate change products and services in collaboration with the private sector.

Achieving the vision is dependent on three strands of activity: innovation, entrepreneurship and education. In terms of innovation, Climate KIC seeks to identify and develop the market potential of emerging technologies, catalysing the creation of new products and services in Europe. Meanwhile, its work on entrepreneurship provides practical tools

for small businesses working in climate innovation to turn their ideas

into commercial success. The education element involves nurturing and developing people to become agents for change through courses and a practical programme of learning by doing. Climate KIC operates its own doctoral programme to support researchers in innovation and offers work placements of between four and six months for MSc students. Summer schools also operate for postgraduate students to encourage entrepreneurial and innovative

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thinking around climate change.

for Europe

In addition, Climate KIC runs professional development courses and training for low-carbon specialists. One of these, "pioneers in practice" (PiP), brings together sustainability professionals from the private sector, public bodies and voluntary organisations. Since 2010, about 200 people have participated in PiP and the 2014 intake will be recruited over the next three months.

New environments

PiP offers experienced professionals a grant of up to €8,000 to undertake two four-week placements: one in the West Midlands and the other in one of the five European partner regions. Throughout the programme, participants also take part in a series of workshops and mentoring, enabling them to both share their experiences and to better understand the theory that underpins PiP.

The course is based on the transition management model of environmental governance pioneered by Dutch government in the early 2000s to manage the transformation of its energy systems. Transitions thinking focuses on incremental change and addressing complex societal problems at various levels to steer society away from unsustainable systems.

Jon Bloomfield, who helped develop PiP and oversees the UK regional KIC in the West Midlands, describes the course as a "novel, structured, mobility" programme. "Pioneers come from a mix of age and work backgrounds, and we introduce them to transition thinking as a way of encouraging a shared vision and goals, with the aim of developing multiskilled practitioners steeped in the low-carbon agenda," he says

"The crucial thing about moving to a low-carbon economy is not to focus on a magic widget to get us there, but to discover how society can change in a systemic way ... so, how we will in the future construct buildings, use and conserve energy, and move around."

Bloomfield highlights a key feature of PiP, which is to take participants out their comfort zones and expose them to new thinking and experiences. "It's deliberate and we do this in two ways," he explains. "We put them in an environment they've never been before. Someone with practical, hands-on experience will be placed in an academic environment, for example, while a committed activist might go to work in a public authority or private company. This means they have to understand different ways of working and operating.

"Second, we move them to another country, though usually to a type of workplace they are familiar with. That's also about learning a new way of working, but also about dealing with another language and culture."

Kate Martin, PiP coordinator, who manages the scheme, comments: "Taking people out of their comfort zones gives them a fresh perspective to create innovative solutions."

She explains that participants attend a preparation event prior to their first placement and a number of other workshops throughout the programme on innovation studies and transitions management. In addition to sharing experiences and learning from each other, the follow-up workshops also revisit the theory. Participants attend the annual innovation festival, which in 2013 was in Wroclaw, Poland, and brings together Climate-KIC partners, students and entrepreneurs to showcase how the initiative is helping them to develop and commercialise innovative climate change products and services.

Martin says PiP is designed for people from different backgrounds and varying work commitments, and that recent pioneers have included employed and self-employed professionals as well as students on master's and PhD programmes.

Pioneers know what to expect from their placements as they agree a work plan with the host organisation before taking up their role, she explains. Although

Knowledge and innovation communities

The European Institute of Innovation and Technology (EIT) is a key driver for sustainable economic growth and competitiveness across the bloc. It integrates, at the EU level, education and entrepreneurship with research and innovation. From 2014 to 2020, the EIT will receive €2.7 billion to continue promoting innovation across Europe. Through its knowledge and innovation communities (KICs), the EIT aims to develop and test a new model of how innovation is approached, managed, financed and delivered.

The EIT's three initial KICs were established in 2010 to address:

- climate change;
- sustainable energy; and
- information and communications technology.

A new KIC on raw materials – examining sustainable exploration, extraction, processing and recycling – will launch later this year. In 2016, a KIC examining sustainable supply chains, from resources to consumers, will be established, meanwhile a mobility KIC will be introduced in 2018.

The KICs aim to achieve the critical mass necessary to achieve a systemic impact, such as the creation of new businesses and jobs, as well as the promotion of new skills and entrepreneurial talent in the economy. The Climate-KIC, for example, aims to significantly accelerate the innovation required for a transformation to a low-carbon economy, and to ensure Europe benefits from new technologies.

paperwork is deliberately kept to a minimum, Martin says that PiP participants have to submit an activity report after completing each placement, detailing what they did and what they learned during their four-week deployment.

Pioneers in practice

Pioneers say that the experiences from their placements have been mostly beneficial. Bloomfield reports feedback indicating that nearly two-thirds (63%) of participants in the first two years of the scheme say they gained specific insights from their placements.

"Taking yourself out of your normal context on both a professional and personal level means you to meet people you would not usually meet, but who have a common goal. You learn new things from them and you then bring that knowledge back. It enabled me to push forward my professional development in many different ways," says 2013 pioneer Özlem Ögtem-Young.

Ögtem-Young was a research assistant at the University of Birmingham before participating in PiP. Her domestic placement was with Sustainability West Midlands, a not-for-profit enterprise that works with member businesses, public bodies and voluntary organisations to develop practical solutions to sustainability issues. Ögtem-Young's international placement was at Ingenio, the innovation and knowledge management school at the University of Valencia.

The latter involved her examining the concept of "green jobs" and whether labelling roles in this way has positive or negative implications. The university is now seeking funding under Horizon 2020 – the EU's research and innovation programme, which is offering €79 billion of finance for projects up to the end of the decade – to take forward Ögtem-Young's work on green jobs.

Richard Bubb, an experienced environment consultant and energy auditor from Shropshire, describes his international placement at Moholy-Nagy University of Art and Design in Budapest, Hungary, as a challenge, though ultimately very worthwhile. "Being away from home for four weeks in a foreign country without knowing the language can be hard, but my experience was very positive ...

I'd do it again.'

While Bubb feels he personally gained from his placements, he also believes both host

organisations benefited. His domestic placement with Carillion involved helping the construction and business services firm develop its processes for quantifying the carbon savings from its work on the Energy Company Obligation (ECO). "Carillion needed the data, so they needed someone to perform this role," says Bubb. He continues to work with the company as a consultant on its internal auditing of ECO processes.

In Hungary, Bubb used his expertise in environment management systems (EMS) and energy auditing to assist the institute. It is a role that continues long after the 2013 PiP ended. "The university wants to put in place an EMS, so I'm helping to develop the framework," he says. But, in a unique approach, Bubb is working to create an EMS for the organisation that also makes use of the creativity of the academics and students.

"They are architects and designers and they want a more creative system than the standard plan, do, check, act [PDCA] model. So, developing a system that is based on ISO 14001, but combines PDCA and the creativity of staff, is now my goal," he says.

Lydia Pickering, a PhD student examining hydrogen fuel at the University of Birmingham, is another recent pioneer. She describes her domestic and international placements as wonderful experiences. Pickering worked first at Solihull-based Energy and Utility Skills, the former sector skills council for the utilities industry, helping to develop a website for young people on green technologies and jobs.

"It took me out of my research and laboratory environment and put me into a business one," says Pickering. As with Bubb, she has continued to work with Energy and Utility Skills, having been employed by the organisation during summer 2013.

Her assignment in Italy was with the research division of a technology company, which is experimenting with a hydrogen-fuelled bicycle. "It was great being able to put my research into practice," says Pickering. She explains that by the end of her four-week stint with the firm, she and her Italian colleagues were riding a cycle round the car park that was powered by a hydrogen cylinder feeding a fuel cell.

"It was an invaluable experience and showed me that there is more to working life than academia, which is where I thought my career was heading," she says.

This year and beyond

Bloomfield explains that Climate-KIC in the West Midlands aims to recruit an additional 20 pioneers for the 2014 programme, bringing this year's total to 65. He also says that the continuing positive feedback from PiP participants demonstrates that there is a strong case for replicating the model in the other KIC regions and elsewhere.

"There is clear demand for this type of programme," says Bloomfield. "After all, it's not just our six regions that need multiskilled practitioners equipped in the thinking and practice of low-carbon transition."

^{*} Anyone wishing to apply to join the 2014 "pioneers in practice" (PiP) programme should contact Kate Martin at katem@innovationbham.com. Martin is also keen to hear from organisations wishing to host pioneers.



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Path to success

the environmentalist investigates how the Local Enterprise Partnership covering Norfolk and Suffolk is blazing a trail in developing a green economy

n June 2012, the New Anglia Local Enterprise
Partnership (LEP), which operates across Norfolk
and Suffolk, became the first LEP to launch
a green economy pathfinder (GEP) project.
This means that New Anglia is taking the lead on
showcasing the work under way in its region to build
a green economy and recommending actions to
government and businesses. The aim is for the lessons
learned by New Anglia to be implemented across the
rest of the UK and its successes emulated.

In the manifesto outlining how it will carry out the GEP (lexisurl.com/iema17103), New Anglia defines the green economy as one in which "economic growth is combined with continued reductions of greenhousegas emissions and other environmental impacts are reduced". The definition makes clear that, the "green" element is not an add-on, but defines the whole economy.

"Through effective demand management and efficiency measures, energy, water and other natural resources will be used efficiently and the level of waste to landfill will decrease or be eliminated completely," says Aled Jones, GEP board member and director of the Global Sustainability Institute at Anglia Ruskin University.

A pioneering approach

One of 39 LEPs in the country, New Anglia was established in 2011. The government believes that the New Anglia LEP is uniquely placed to capitalise on local strengths and fast-track the UK's transition to a green economy.

"The region is ideally suited to leading across three focus areas: low carbon, natural capital and social capital," comments
Jones. "In low-carbon developments, for example, New Anglia has a wealth of world-class innovation and thinking through its universities, research centres and science parks. The region also has a

well established energy sector – embracing oil, gas and nuclear technologies – which is evolving into onshore and offshore renewables." A recent study found the East of England is the most diverse energy region in the UK, with about 6,200 businesses actively operating in the sector. Between them these firms have an annual turnover of £12.9 billion and employ 103,400 people.

One recent addition to the energy landscape in the region is the Adnams Bio Energy plant (see panel, right), which turns the brewery's waste, and local food waste, into a form of biogas. The gas is upgraded to biomethane and feeds into the national grid.

In terms of natural capital, tourism is one of the East of England's major sectors and the abundance of agricultural land means that the region is also home to many food and drink producers.



To achieve sustainable growth, skills development and employment in the region, the New Anglia LEP has developed a route map. This involves a number of stretching objectives and actions to support ongoing efforts by local people and organisations to drive the transition to a green economy. As a result of its GEP work, the LEP aims to account for at least 25% of the growth in the national low-carbon and environmental goods and services (LCEGS) sector by 2015, and create more than 1,000 new LCEGS jobs by 2017.

Mapping the future

The route map for New Anglia's GEP sets out five priority objectives:

- for Norfolk and Suffolk to lead the green economy;
- maximise funding and investment opportunities;
- enable innovative, entrepreneurial and radical solutions to business challenges and opportunities;
- drive down costs and improve resource and energy efficiency across all sectors; and
- communicate effectively and share information to drive sustainable growth regionally and nationally.

Across these priority areas, there are 25 goals to fasttrack green growth in New Anglia and beyond. For example, under the objective of Norfolk and Suffolk

Adnams Bio Energy – exporting green gas



Adnams Bio Energy is a partnership between anaerobic digestion (AD) experts Bio Group and Suffolk-based brewery Adnams. It is the first bioenergy plant of its kind in the UK and was built to inject green gas (biomethane) into the national grid.

Bio Group aims to reduce greenhouse-gas emissions through a network of facilities that turn organic waste into renewable energy, while Adnams, based in Southwold, has a long tradition of incorporating sustainability into its business practices and has won numerous awards for its environmental performance. Built and operated by Bio Group, Adnams Bio Energy is an energy park and AD centre that breaks down the brewery's waste, and local food waste, to generate energy in the form of biogas, which is upgraded to biomethane. The site delivered its first biogas to the grid in October 2010.

AD is a process whereby microbes break down biodegradable materials, producing biogas which can be used to generate electricity and heat. By diverting food waste from landfill where it breaks down and releases methane, a potent greenhouse gas, AD helps to tackle climate change. Once the biogas is upgraded to 97% biomethane, it can then be injected into the grid. At Adnams Bio Energy, the AD process converts up to 25,000 tonnes of waste into 1.2 million cubic metres of biomethane a year. This generates 9.6 million kWh of energy, enough to run an average family car for nearly nine million miles. The digestate left over from the process is a rich bio-fertiliser that can be put back on the land. The process is completely organic and nothing is wasted. The Adnams Bio Energy operation will remove 120,000 tonnes of CO₂ equivalent from landfill every year and will help Adnams to reduce its carbon footprint by up to 50% over five years. In July 2013, the operation also absorbed all the food waste generated from the Latitude music festival in Suffolk. Numerous other local companies have already agreed to have their food waste taken away by Bio Group, including Waitrose stores in Suffolk and Norfolk, and St Felix School in Southwold.

The Adnams Bio Energy initiative is a clear example of how a commercial production operation can be linked to other local resources – in this case waste. "Future developments like this one will be central to sustainable growth," says Aled Jones, board member of the New Anglia green economy pathfinder (GEP) project. Steve Sharratt, chief executive at Bio Group, believes the creation of the GEP is a game changer for the region. "Norfolk and Suffolk have some of the UK's most dynamic, innovative and ideas-driven businesses and academics, and the GEP project means we can lead the way in helping to transition the green economy of the UK," he commented.

Anglian Water – 'love every drop'

Close to one-third of the land area served by Anglian Water is below sea level, and the Environment Agency has assessed the East of England as being a region of "serious water stress". Meanwhile, as the population of the region has increased by 20% over the past 20 years, Anglian Water provides the same amount of water as it did in 1990: nearly 1.1 billion litres a day.

The company's campaign on water efficiency is spearheaded by its "love every drop" initiative. Its strategy for long-term water stewardship involves working with everyone who influences water use in the region, including housing developers, retailers, government, employees and customers. It collaborates with academics and other water companies on how best to protect and share water, and its employee and supplier engagement strategy incorporates the training of more than 250 "love every drop" champions.

Anglian Water is also one of the largest energy users in the East of England because it has to treat and pump huge volumes of water. The "love every drop" goals also include halving its overall greenhouse-gas emissions by 2035 (against 2010 levels). Its "drop CO2" energy action plan, which involves employees finding new ways to cut energy use, has resulted in electricity consumption falling four years running.

Seven of Anglian Water's sewage treatment sites already run on renewable energy sourced from the gas emitted as a by-product from sewage treatment, with five more sites expected to make the switch by 2015. Another 2015 goal is to halve the embodied carbon in new assets built by the company against a 2010 baseline. To achieve this target, the firm has developed carbon-modelling software to estimate and reduce the carbon in new treatment facilities or upgrades of existing plants.

Trinity Close – measuring embodied carbon

In October 2011, 12 affordable homes, built to Level 6 of the Code for Sustainable Homes (CSH), were completed at Trinity Close in Rackheath, Norfolk, for Wherry Housing Association. The embodied carbon of the properties was recorded in detail during construction, and operational emissions have been analysed since the homes were first occupied, providing a unique insight into the relationship between embodied CO2 and lifecycle emissions.

The New Anglia Local Enterprise Partnership (LEP) says that the Trinity Close study is the only analysis of embodied carbon undertaken for a CSH Level 6 development in the UK. The embodied emissions are higher than the average UK home due to additional materials and technologies, such as insulation and solar panels, which are being installed to minimise operational emissions from heating and lighting.

The Centre for the Built Environment at East Anglia University worked closely with other stakeholders, including Broadland District Council, Wherry Housing Association and Dove Jeffrey Homes, to develop and implement a carbon monitoring programme that would evaluate all emissions associated with Trinity Close.

The outcome of the study shows that, despite an increase in embodied emissions, investment in high levels of fabric efficiency in small housing developments greatly reduces total lifecycle carbon emissions. Embodied emissions for the 12 homes are 595 tonnes of CO2 equivalent (tCO2e) compared with 417 tCO2e for 12 average UK homes. However, estimated operational emissions for a Trinity Close home in the first year are close to zero, while the average UK home produces 48 tCO2e.

leading the green economy, there are 11 goals. Three of the main objectives are:

- Emissions targets drive the reduction of carbon and greenhouse-gas emissions ahead of national and European targets by proactively lobbying all relevant bodies in the New Anglia LEP to adopt Suffolk's "creating the greenest county" target of a 60% reduction in emissions by 2025 (against a 2004 baseline).
- Sustainable homes and buildings require all new-build houses to meet Level 4 of the Code for Sustainable Homes one year ahead of current central government targets, using s.106 planning agreements to incentivise significant improvements to the thermal efficiency of buildings.
- Enhancing renewables work with local authorities and businesses to ensure that organisations looking to invest in manufacturing for the offshore renewables industry receive the most comprehensive support possible, and work with other locations classed as centres for offshore renewable engineering (CORE) and government departments to raise the profile of the CORE offer.

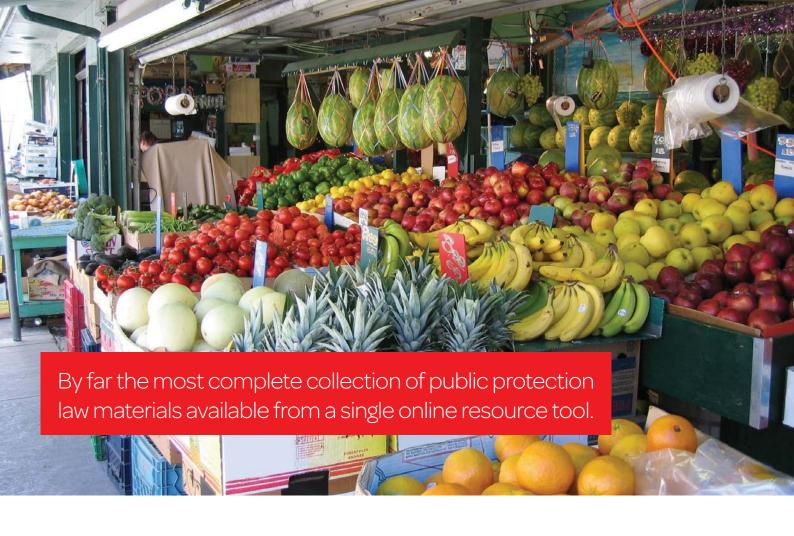
Putting policy into practice

Within these overarching objectives and goals, New Anglia supports and directs a plethora of projects and initiatives to build a green economy. Some were already on track before the launch of the GEP, and are now benefiting from greater coordination, while others are new or still in the pipeline.

The GEP is led by a board of more than 20 leaders and experts from business, government, academia and other bodies with a special interest in sustainability. As well as encouraging organisations and businesses in Norfolk and Suffolk to develop more sustainable working practices, the results of the GEP's work will be shared with other LEPs to help them develop green economies locally. Jones says that New Anglia is engaging with organisations of all sizes - from international energy suppliers and nationally renowned universities to rural small businesses (SMEs), start-ups and social enterprises – to exploit the opportunities covered by the GEP. Although it is early days in the project, there are already an impressive number of achievements on which to build. For example, close to 20GW of offshore wind energy developments are planned and, if planning consent is achieved for Sizewell C, the plant will generate a further 3.2GW of low-carbon electricity for the region.

Other initiatives helping New Anglia to achieve its aim of a low-carbon economy include a number of new low-carbon housing developments and a scheme that has conducted 300 resource-efficiency audits with SMEs and identified potential carbon savings of 7,200 tonnes.

The GEP's support for initiatives, from Adnams on bioenergy, Anglian Water on water efficiency and the Centre for the Built Environment on low-carbon homes at Trinity Close (see panels) demonstrate how the project is already making a tangible difference to the region's environmental performance and how it can inspire change across the rest of the UK.



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2014 pay survey results coming soon

More than 1,500 members had already participated in IEMA's latest practitioners' survey as *the environmentalist* went to press. The survey was launched on 16 December and closed on Friday 10 January.

All Graduate, Affiliate, Associate, Full and Fellow members were invited to share their experiences of pay and working conditions during 2013.

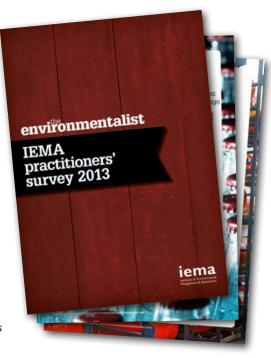
IEMA's survey, which was last carried out in December 2012 and January 2013, provides the Institute with vital data to track employment trends, monitor the state of the profession and demonstrate members' successes. The information generated also enables IEMA to inform business, industry, government and the media about the value of members' contributions and achievements.

The 2014 survey asked members to provide details of their qualifications, position, sector, level of responsibility,

key areas of work and salary to establish overall averages by membership level.

Participants were also asked to identify any changes to their role over the past year, and let IEMA know how they have added considerable value through their work during 2013. In previous years, many members have taken this opportunity to reveal how they have generated cost and carbon savings for their organisation and instigated cultural shifts, for example. This year's responses are proving to be even more inspiring.

Check iema.net/news, @iemanet on Twitter and IEMA's LinkedIn group for the very latest results. A further update will be available in the February issue of *the environmentalist* and a full report and analysis will feature in the pay and benefits supplement which accompanies the March issue of the magazine.



Update on changes to Full membership



In preparation for the introduction of IEMA's new Full membership standard at the end of March, professional standards manager Zebrina Hanly offers some advice to potential candidates.

She starts by advising anyone thinking of progressing their membership to MIEMA to first read the article outlining the new Full standard, published in the Training focus supplement with December's issue of the environmentalist (available at environmentalistonline. com/Full). The article explains all the forthcoming alterations, which include a switch to online interviews from face-to-face meetings, and how the changes will ensure that the Full standard continues to reflect the profession. "This article gives complete clarification about what is changing and when, but most importantly,

why," says Hanly. "The changes are about making sure that our standards, particularly for those at the senior end of our membership, fairly reflect the work our members do and the influence they have in their workplace."

The article in *the environmentalist* also contains a list of the revised Full member competencies that apply from March, which potential MIEMA applicants should familiarise themselves with.

Meanwhile, for anyone who is about to begin or is thinking about upgrading to Full membership, Hanly advises them to hold off applying for a few more weeks. "I'd urge you to wait until after 31 March when the new standard is implemented," she says. Waiting will enable members to proceed with their application unhindered by any changes and ensure that the

Institute can handle the anticipated high number of applications.

Further information detailing the changes are available online at iema. net/membership-dual-support and will be updated over the coming weeks to include support materials. An email update service is also available for any members interested in achieving Full status, says Hanly.

To be kept up to date with the changes as they come into force email your details to full.membership@iema.net. The updates will include details of key dates when the current standard is phased out, and those who sign up will also benefit from guidance documents and receive invites to future events and webinars supporting applicants through the revised MIEMA process.

IEMA responds to waste strategy and CCC report

In December, the government launched its strategy for reducing and managing waste in England, with the aim of achieving a "zero waste economy" (see p.6). The waste prevention programme for England seeks to improve the environment and protect human health by supporting a resource-efficient economy, reducing the quantity and impact of waste being produced, while promoting sustainable economic growth.

Commenting on the launch of the programme, Martin Baxter, executive director of policy at IEMA, welcomed the government's recognition of the benefits of moving to a more resourceefficient, circular economy. He warned, however, that unlocking the prize of more sustainable growth with lower environmental impacts would require a concerted effort by organisations to embed resource efficiency and recovery across the whole value chain. "Failure to recognise the importance of environment and sustainability skills to enable businesses to deliver this agenda is a missed opportunity," he said.

Meanwhile, Nick Blyth, policy and practice lead at IEMA, has responded to the report from the committee on climate change (CCC), which concludes that the UK's fourth carbon budget, covering 2023–27, does not need amending (see p.4). "We welcome the unequivocal statement from the CCC that there are no changes in circumstances that would



warrant any lowering of the target set in the fourth carbon budget," he said. Blyth also called on the government to confirm the budget as soon as possible to provide long-term certainty needed for investment in low-carbon energy infrastructure.

The fourth carbon budget was legislated in June 2011 and commits the UK to reduce greenhouse-gas emissions by 50% against 1990 levels. It reflects the best estimate of the most cost-effective path to meeting the 2050 target in the 2008 Climate Change Act – that is, to reduce emissions by at least 80% on 1990 figures. As part of the agreement to set the budget, the government scheduled a review for 2014. The Act sets out the basis for the review: it must be based on advice from the CCC and the budget can only be changed if "there have been significant changes affecting the basis on which the previous decision was made".

Visit IEMA's policy hub at iema.net/policy-climate-change-and-energy to read the Institute's position statement on climate change.

Changes to member fees

As of 1 January 2014, all payments for new members joining IEMA have been aligned with annual renewal fees. The change does not affect anyone who is already a member, only those joining at Affiliate level. Joining fees for Affiliate (the standard introductory membership level) had been held at the 2010 rate of £99 to stimulate member recruitment, but have now increased to £110 to match annual renewal fees for this level.

Due to changes imposed by the Society for the Environment, application and renewal charges for Chartered environmentalist (CEnv) status also changed at the beginning of 2014. The registration fee for all new CEnv applications is now £75. This fee will apply to any members upgrading to dual membership (MIEMA and CEnv) or existing Full or Fellow members who apply for chartered status in 2014.

IEMA members who have already achieved CEnv will be subject to a 50p increase in their annual renewal fee (now £38). The Institute's CEnv administration fee of £12 (£10 administration plus VAT) remains unchanged.

For details about all IEMA's joining and renewal rates, visit: iema.net/membership.

Policy update



Guidance on green power

Accounting and reporting greenhousegas (GHG) emissions is an increasingly mainstream activity for organisations and is helping stakeholders to better understand corporate performance on climate change. Over the past two years, the World Resources Institute (WRI) has been developing new guidance on accounting for scope 2 emissions, primarily concerning grid supplied electricity, which is often the largest category of emissions for companies (lexisurl.com/iema17223). Internationally, the WRI guidance could be important in addressing a need for consistent and transparent reporting practices. In 2010, an IEMA survey of 272 practitioners, working in firms purchasing green electricity, revealed that two-thirds reported GHGs in line with grid averages, while the remaining third reported their net or gross emissions as zero. Although Defra issued new guidance on GHG reporting in 2013, it has not finalised its approach to scope 2 emissions. The working group developing the WRI's guidance has proposed a dual-reporting approach, requiring firms to disclose both emissions calculated against a contractual factor (this could be zero for green power) and emissions based on a grid average factor. Many have seen this as a transparent solution enabling stakeholders to clearly see emissions against each methodology. IEMA, however, has some concerns that companies may place greater emphasis on contractual emissions than grid average emissions. An open letter circulated to the WRI working group has also fundamentally challenged contractual emissions reporting (lexisurl.com/iema17224). This year should see both draft guidance from WRI and final guidance from Defra published. IEMA will push for these approaches to be fair, transparent and credible, and will engage and consult members on developments.

Nick Blyth is policy and practice lead on climate change at IEMA.

More successful IEMA members

Associate

Mohamed Al-Boinin, Bunduq Oil Company

Zhazira Baisautova, NCOC BV John Blaikie, North Star Shipping

John Bowers, Vinci Ken Carley, Totton College Janice Carruthers, DS Smith Lee Clarkson, Envases (UK) Ian Clynes, Celtic Recycling Gary Cooper, CHC Scotia Richard Cowie, SRUC

Rachael Davidson, International

Paints

Victoria Denner, Thales UK Keith Driver, SKF (UK)

Colin Fair **David Fullbrook**

Mark Fulwell, Hayley Group Stephen Giles, Pall Manufacturing UK

Kevin Glancey, Mabey Hire Carlos Griffiths, Bouygues UK

Robert Gunter, Celtic Recycling Michael Harris, CGG Veritas (US)

Mark Harvey, Mondelez International **Paul Horton**

Donna Hulme, Homeserve

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Group

David Jarvis, Cranswick Graham Jones, BAE Systems Samat Kairambayev, Katco Kazakh-

French Joint Venture Iain Kerr, Celtic Recycling Nurgul Kuzembayeva, KPO BV

Alan Libby, Carillion

Asif Malik, Delma Engineering

Christopher McKay, Norbord

Elizabeth Mellett, Nathaniel Lichfield

and Partners

Marcus Normanton, R&D

Construction

Yerbol Orazbekov, NCOC BV

Mark Ottewell, LRQA

Stephen Overfield, Wales and West

Utilities

Andy Parkins, Academies Enterprise

Trust

Neil Parsons, Logoplaste Gigi Picazo, Dubai Airports

Ahmed Roble, Bunduq Oil Company Richard Rolfe, MSS Industrial Group Carolyn Simpson, Groundwork North

East

Bayan Tlesheva, Wagenborg

Kazakhstan BV Stuart Tweedy Robert Webb, Carillion

Chris Wilde, Morrison Utility Services

Kate Williams, Plandescil Virginia Woolley, Cummins Full

John Binns, EHS Response Jessica Cranthorne, Lotus Cars David Fitzgerald, Diageo James Lemon, St Edmundsbury

Borough Council

Robert Price, Environment Agency Melanie Weaver, Birmingham City

David Williams, SRCL

Full and CEnv

Jennifer Allen, Peter Brett Associates Adam Charles Freeman, Manchester

James Dunham, Mott MacDonald Laura Frost, Ove Arup and Partners Eva Gkenakou, Brookfield Multiplex **Construction Europe**

Alice Golightly, Cranfield University

Alison Fanshawe, ECUS

Stacev Medar

Okey Ngoka, London Borough of **Tower Hamlets**

Tania Smith, Ove Arup and Partners **Sharon Wheeler**

If this has inspired you to progress your membership, then visit iema.net/ upgrading-your-membership for more information or call +44 (0)1522 540069.

IEMA events

Date	Region/Time	Topic			
30 Jan	Yorkshire and Humberside	Social (Leeds)			
5 Feb	Midlands	Exploratory workshop – eco-efficiency in production			
5 Feb	North West	Membership upgrade workshop			
6 Feb	Scotland Central	Membership upgrade workshop			
6 Feb	East of England	British Sugar – Bury St Edmunds site visit			
21 Feb	East of England	Great Blakenham energy-from-waste site visit			
27 Feb	Scotland West	Dust in the environment and at work			
Webinars					
30 Jan	12.30-1.30pm	Adapting EIA to work with the complexity of the planning system			

External professional events

Date	Region	Topic	Further information
6 Feb	Nottingham	Best practice in odour control management	lexisurl.com/iema17026
25 Feb	London	Smarter sustainability reporting	sb-reporting.net
2–3 Apr	Manchester	Activated sludge: past, present and future	lexisurl.com/iema17027
8 Apr	London	Climate change adaptation	lexisurl.com/iema17025



ADANIANI RECYCLING REUSE AND RECYCLING INTIATIVES WHICH DELIVERED SAVINGS OF FIOU,000 TO THE BUSINESS



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 $\pm 30,000$ 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.

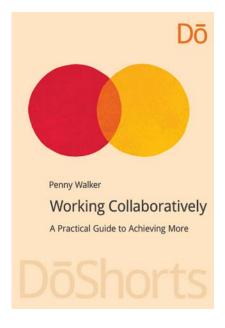
It's also worth remembering that in a competitive and fast moving industry like construction, a good reputation is priceless.

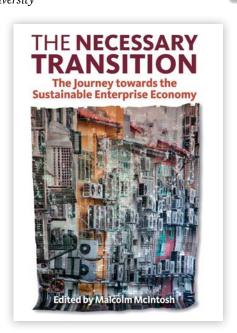
Join IEMA at www.iema.net/mystory and change your world

tochallengethethinking.co.uk

While there has been a proliferation of websites on sustainability in recent years, tochallengethethinking offers some valuable insights into the concept. The site is targeted at chief executives, managers and environment practitioners, and the homepage is so packed with content that I almost missed its real gem: the video link. The introductory video and the relaxed presentation style of the website's creator, Dave Stanley, is engaging and naturally leads you to other videos. The website contains several video briefings to help viewers build a business case for sustainability. It considers conventional lines, such as energy savings, resource efficiency, future security and environmental security, and there is some emphasis on the more social aspects of sustainability. The site's blog posts also provide a sustainability perspective on government policies. The challenge with this site is that many of videos are only accessible directly through an alternative YouTube page, if this was resolved its content would go a long way to improve thinking on sustainability. Lowellyne James, AIEMA, Robert Gordon University







Working collaboratively

Penny Walker / Do Sustainability / ebook / £30 / ISBN: 978-1-909293-79-3

This ebook is one of the "Do shorts" series, which outlines the principles and best practices required to work effectively in sustainability. It aims to identify and summarise the methods through which organisations collaborate. The ebook is presented in an attractive and easy-to-read style by an author who has taken great care to ensure her writing works in such an extremely concise format. Helpful tables and matrices are displayed throughout the book to help the reader understand the challenges associated with collaboration systems and, most importantly, potential solutions. Particularly effective is the use of real-life situations and collaborative initiatives from industry to explain the process from start to finish and to highlight the obstacles that were faced. The book outlines, for example, the most successful face-to-face techniques used during workshops and in meetings to create a unified goal among diverse parties. This Do short is extremely comprehensive and I thoroughly recommend it for anyone considering taking part or leading a collaborative initiative at any level of an organisation. David Dowson, AIEMA, sustainability adviser at Skanska

The necessary transition

Malcolm McIntosh / Greenleaf / £22.95 / ISBN: 978-1-906093-89-1

This interesting and timely book consists of 14 articles and papers covering a range of sustainability and transition related subjects, from long-term innovation cycles to sustainable entrepreneurship. The necessary transition addresses its subject from a variety of angles giving the reader insights into several crucial, and often under explored areas of the transition debate. The overarching theme is of the current and future transition of society resulting from issues such as climate change, resource depletion, the financial crisis and social justice. The end point envisaged by many of these thinkers is of a socially-just sustainable enterprise economy. Although these are enormous challenges, the tenor of the book is fundamentally positive, with a sense that, through a process of learning, adaptation and change, these challenges can be surmounted. The book is roughly split into three sections. The first four chapters cover history and transition theory, while chapters five, six and seven focus primarily on activism. The final section concentrates on business and sustainable development, including a discussion of the role of policymaking institutions in shaping the transition debate and limiting potential outcomes. This book gives an interesting overview of cutting edge thinking in the field and an outline of some of the potential pathways that transition may take.

Alex James, MIEMA, director at Brite Green

Sandra Norval

Environment manager, Southern Railway

Why did you become an environment professional?

I'm passionate about wildlife and I have worked as a volunteer on conservation projects. Moving into the sustainability profession was the best way I could see do something about the way we are impacting on the natural environment.

What was your first sustainability

job? At DORMA UK I ran a project to investigate what we could do for the environment, while saving money. We almost halved our head office's energy bills; reduced fuel consumption in our fleet by nearly 25%; and achieved ISO 14001 certification of our environment management system. And we achieved all of this while I was still doing my day job as an accountant.

How did you get your first role?

After starting my degree in environmental studies, I spoke to the finance director at DORMA and suggested we looked at environmental issues to find cost savings. I'd done my homework and took a full presentation to the board to explain the business case and got approval to get started.

How did you progress your sustainability career? After

completing my degree, I became an Associate member of IEMA. At the same time, DORMA created the role of health, safety, quality and environment supervisor and I moved out of finance.

What does your current role

involve? My role is very broad, covering the entire Southern Railway network. I lead a team of volunteer area champions for the environment (ACEs) who are focused on reducing non-traction energy by 25%, diverting waste from landfill, managing water and biodiversity. I also chair a business group for the West Sussex environment and climate change board. I recently chaired an event entitled "Your business. Your environment. Your future", and talked to local businesses about how they could work together to achieve more in greening their operations.

How has your role changed over the past few years? I'm now part of Southern's senior leadership team. I contribute to our business strategy and work across the organisation looking at the challenges we face from climate change and resource scarcity. This means I'm part of the decision-making process, and have a real opportunity to put forward the case for responsible business.

What's the best part of your work?

The variety of opportunities to drive change. I can be ripping open waste bags one day and speaking at events the next!

What's the hardest part of your job? Demonstrating that it is possible to consider things outside the normal life of a train-operating company franchise. Fortunately, the board is behind the environment strategy to "think beyond the franchise", both in terms of time and physical boundaries.

What was the last training course you attended? I'm currently studying the University of Exeter's One Planet MBA, which covers topics including economics, leadership, human factors, collaboration, finance, strategic operations and biomimicry.

What are you bringing back to your job? Most recently, I've been looking at the way we piece together our business cases and how we could look at the value chain in different ways.

What are the most important skills for your role and why?

My influencing skills. Whether coaching ACEs, engaging with tenants or discussing strategy with directors, to truly embed sustainability into the business I need to convey messages in a positive way. This isn't easy in a heavily governed industry with demands from many interested parties.

Where would like to be in five years' time? Working with engaged directors who are keen to be a part of the sustainability shift that is coming.



Career file

Qualifications:

AIEMA, Environmental Studies BA (Hons)

Career history:
July 2012 to now Environment
manager, Southern Railway
2011–2012 Environment
management system manager,
Southern Railway
2010–2011 HSQE supervisor,
DORMA UK
2004–2010 Financial accountant

and environment project leader, DORMA UK 2002–2004 Financial accountant,

Arrow Generics
1998–2002 Assistant factory

accountant, Yoplait Dairy Crest 1995–1998 Area administrator, Shell Gas

1994–1995 Office manager, Concorde Chemicals 1990–1993 Legal supervisor, Pickfords Travel Services 1987–1990 Housing repairs assistant, London Borough of Enfield

Where do you see the profession going? It will expand, with senior roles becoming more common as we become more strategic in our thinking.

What advice would you give someone entering the profession?

Be keen, embrace every learning opportunity, find your unique selling point and never give up.

How do you use IEMA's environmental skills map?

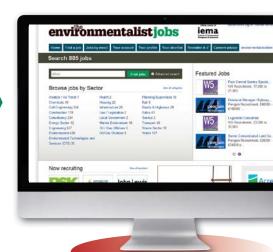
As well as for my own development, I am using the map to help some of our ACEs build their understanding and plan their path to IEMA membership.

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Senior Ecologist

Cardiff/Bristol

Excellent Salary & Benefits

As part of our ecology team, you will have the opportunity to work in a highly stimulating environment to deliver projects to best practice industry standards.

We work collectively on projects in the UK with an emphasis on the infrastructure and residential sectors. We also pro-actively support developers and Local Planning Authorities on smaller scale development initiatives and work with our clients to incorporate real biodiversity benefit into development schemes. Combined with our work across a wide range of other sectors, we have a strong, diverse and sustainable ecology business, with room to build a long-term career at the forefront of ecological consulting and conservation.

Our team has thrived in recent years based on its ethos in providing innovative approaches to projects through applying our practical consenting experience to support all our clients, whether developers, local authorities or regulatory bodies.

Currently we are looking to appoint a Senior Ecologist. The ideal candidate will have sound field skills as well as solid report writing skills and the ability to apply ecological principles to a range of projects. We are looking for an ecologist who is enthusiastic and able to work in a team as well as being able to manage and deliver their own work.

In return, we provide an excellent opportunity to develop as an ecologist along with strong commitments to support with continuing professional development and a highly competitive salary and benefits package.

To apply, or for more information, contact our Recruitment Manager, Geoff Thorpe via e-mail at geoff.thorpe@rpsgroup.com

No Agencies Please

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THE FUTURE OF ISO 14001

In this NQA e-movie briefing, Martin Baxter (Executive Director of Policy, IEMA) reveals his thoughts on the upcoming changes to ISO 14001.







Watch the briefing here: www.nqa.com/revisions-14001

