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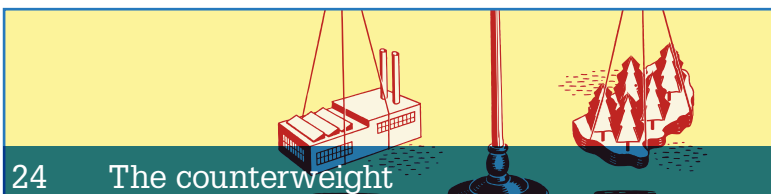
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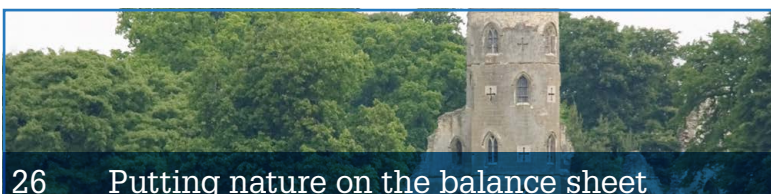
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 **ESP**

Meet the new boss, same as the old boss?

Whether Jeremy Corbyn's landslide victory in the Labour leadership election will be followed by similar success at the 2020 general election remains to be seen, but it is worth examining whether he is offering anything new or different in terms of environment and sustainability policy. An effective and coherent opposition is vital now that the government seems intent on ending all support for clean energy and measures to reduce energy consumption (p.20–23).

Corbyn's *Protecting our planet* manifesto contains eight priorities, including creating a green, resource-efficient economy; tackling poor air quality in UK cities and committing to a full independent public inquiry into levels of air pollution (p.4); and providing international leadership on climate change, socialising energy supply and ending an era of fossil fuels. He also talks about an environment, where people and nature thrive together and where ecosystems and wildlife habitats are protected. The new Labour leader promises a radical restructuring of what he describes as Britain's dated, inefficient and polluting energy market by encouraging more decentralised supply and greater choice. He pledges to take action to keep fossil fuels in the ground by ending subsidies (p.5), banning fracking and setting a target date to end new fossil fuel extraction. Electricity should be carbon-free by 2030 and a Labour government would create a National Investment Bank with borrowing powers to boost the green economy. Zero-carbon homes must become the norm, not the exception, Corbyn says, and all new buildings must comply with higher energy efficiency standards. He also wants to end the outsourcing of pollution and emissions to countries with less stringent environmental enforcement by introducing global standards.

Environmentalists will welcome many of these proposals, and should encourage Corbyn to make the case for them regularly over the next five years. Indeed, environmentalists could take advantage of Corbyn's willingness to pose questions submitted by the public to David Cameron to air their concerns about the direction of government policy.

The prime minister disclosed recently that one his favourite children's books is *The Lorax* by Dr Seuss because of its important message: "If we spoil the environment, through pointless consumption and a disregard for how we produce things, we not only damage other creatures, we wreck our own lives and prospects and those of our children." If his policy statement on the environment is anything to go by, Corbyn appears to largely get that message. Of course, Cameron professed a similar understanding in opposition of the importance of the environment, but seems to have mostly forgotten it in office.

Environmentalists will welcome many of Corbyn's proposals, and should encourage the new Labour leader to make the case for them regularly over the next five years



Paul Suff, editor

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Shortcuts

Energy tax breaks

The government should replace “green” taxes with tax incentives to encourage businesses to reduce their carbon emissions, says manufacturers’ organisation EEF. In a report, *The low carbon-economy – from stick to carrot*, EEF argues that the UK’s complex mix of energy efficiency schemes and taxes have increased red tape and pushed up energy costs higher than those faced by European competitors without reducing emissions significantly. The chancellor, George Osborne, announced a review of the business energy efficiency tax landscape in his July budget. EEF says the government should use the review to offer the “carrot” of tax breaks to invest in advanced low-carbon technologies instead of using a “big stick” of ever-higher carbon taxes and levies. EEF wants the government to scrap the carbon floor price (CFP) and the carbon reduction commitment (CRC) scheme and widen the scope of its review to reduce by the end of this parliament the overall burden of energy taxation.

NRW fees and charges

Natural Resources Wales is consulting on changes to its charges from 1 April 2016. The regulator is maintaining charges for 2016-17 at 2015-16 levels, and intends to deliver enough efficiency savings to absorb inflationary and other cost pressures. However, it is proposing some technical changes to its charges and fees. These include introducing a “second-tier” multiplier for poor performing waste sites covered by the environmental permitting charging scheme. It will apply to sites in compliance bands D, E and F for the previous two years. The multiplier of a site in the lowest band F for two full years, for example, would rise from 300% to 500%. NRW said the rise would pay for the additional regulatory effort undertaken at poor performing sites. The NRW is also planning to introduce a tiered scheme of application charges for bespoke flood risk activity permits and to charge for some of its development planning services. The consultation – bit.ly/1L2CeOc – closes on 26 November.

Defra consults on new air quality plans

Defra has issued a consultation on plans to improve air quality in each of the 38 zones exceeding the annual limits for nitrogen dioxide (NO₂) set by EU legislation.

The move comes after a Supreme Court ordered the environment department in April to produce a meaningful plan by the end of the year to ensure that the limits on NO₂ emissions are met as soon as possible. In 2013, 38 of the 43 air quality zones in the UK exceeded the annual 40 µg/m³ threshold for NO₂ set by the EU ambient air quality Directive, which came into force in 2010.

According to revised forecasts from Defra, up to 35 zones will be compliant by 2020 if no additional action is taken. The consultation, which applies to England, Northern Ireland and Wales, also sets out possible actions at local, regional and national levels to ensure the EU NO₂ limits are achieved in “the shortest possible time” in all areas, particularly in hotspots including London, Birmingham, Leeds, Nottingham, Southampton and Derby. The measures include a national framework of local clean air zones, possibly restricting access to some vehicles, and support to encourage the uptake and development of



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infrastructure for low emissions and electric vehicles. Defra says the additional measures will ensure all UK zones will be compliant by 2020, apart from Greater London, which is projected to meet the standard by 2025.

Launching the plans, environment secretary Liz Truss said tackling air pollution was a government priority. However, ClientEarth lawyer Alan Andrews described the proposals as a list of “meaningless assurances and half-measures”. “The plans contain only one new national measure, ‘clean air zones’, which would restrict older vehicles entering the most polluted city centres but leaving it to overstretched and underfunded local authorities to implement them,” he said. “We therefore don’t have any idea if or when these clean air zones will ever materialise.”

Support for climate change reports

Most public sector organisations have backed plans by the Scottish government to introduce mandatory reporting on climate change.

Consultation on the draft Climate Change (Reporting on Climate Change Duties) (Scotland) Order 2015 ended in May and the government says 47 of the 51 organisations responding expressed support for mandatory reporting. Thirty-five responses were from organisations defined as “major players”, such as councils and NHS bodies, which would be required to report.

Mandatory reporting rules will apply to around 150 organisations and replace existing voluntary measures. Other public bodies will be asked to continue to report voluntarily. The Scottish government hopes annual reporting will improve the quality and consistency of data, and, by making the information public, assist Scotland to get back on track to meeting its annual carbon reduction targets. The Scottish

Climate Change Act 2009 set a target to reduce Scotland’s emissions of greenhouse gases by 80% by 2050, and established an interim target for 2020 of at least a 42% reduction. Secondary legislation has set annual targets, but Scotland has failed to meet these for four years, with the most recent figures in June revealing that, in 2013, the country emitted 53 million tonnes of CO₂ equivalent (mtCO₂e) against a target of 48 mtCO₂e.

Although direct emissions from the public sector contribute a relatively low proportion of Scotland’s carbon emissions, many respondents agreed that the sector could influence indirect emissions through, for example, the use of regulatory functions.

Under the proposals, eligible bodies would have to produce an annual climate change report for the previous financial year. The deadline proposed for the first annual report (April 2015 to March 2016) is the end of October 2016.

Temperatures rising again

Global temperatures are rising again, with the Earth's average surface temperature running at or near record levels in 2015, according to research from the Met Office.

The study says the big changes in key patterns in the global climate system will affect regional temperature and rainfall worldwide, and have already weakened the Indian monsoon and caused fewer Atlantic hurricanes this year.

The shifts in key global climate patterns, the Pacific Decadal Oscillation (PDO), an El Niño in the tropical Pacific and the Atlantic Multi-decadal Oscillation (AMO) will also affect global temperature. El Niño and the PDO are entering a warming phase, while the AMO is moving into a cooling phase, says the research. The AMO will influence northern Europe, including the UK, and could result in cooler, drier summers.

The El Niño that is under way is expected to be the strongest since 1998 and will raise global mean surface temperatures, probably ending the relatively flat readings of the 15 years to 2013. Professor Adam Scaife, who led the study, said the changes suggest both 2015 and 2016 are likely to be very warm globally. "Although we can't say for sure that the slowdown in global warming



is over, global temperatures are now rising again," he said. The Met Office reports that global mean surface temperature for the first nine months of 2015 was between 0.38°C and 0.14°C above the average for the period between 1981–2010, which in turn was between 0.68°C and 0.14°C above the 1961–1990 average.

Professor Stephen Belcher, head of the Met Office Hadley Centre, said: "We know natural patterns contribute to global temperature in any given year, but the very warm temperatures so far this year indicate the continued impact of increasing greenhouse gases. With the potential that next year could be similarly warm, it's clear that our climate continues to change."

Time to stop subsidising fossil fuels

Continuing financial support by governments around the world for the production and consumption of fossil fuels is hampering global efforts to curb emissions and combat climate change, claims the OECD in a new report.

The Paris-based organisation discovered nearly 800 spending programmes and tax breaks used by governments in the 34 OECD countries and six emerging economies – Brazil, China, India, Indonesia, Russia and South Africa – to encourage the consumption or production of fossil fuels. It said the measures, which amounted to between \$160 and £200 billion a year, reduced prices for consumers and lowered exploration and exploitation costs for oil and gas companies.

OECD secretary-general Ángel Gurría said it was time to reform support for fossil fuels. "The time is ripe for countries to demonstrate they are serious about combating climate change, and

reforming harmful fossil fuel support is a good place to start," he said. Gurría added that governments were spending almost twice as much money supporting fossil fuels as was needed to meet the climate-finance objectives, which call for \$100 billion a year by 2020. "We must change the course. This new OECD [report] offers a roadmap to turn around harmful policies that are a relic of the past, when pollution was still seen as a tolerable side-effect of economic growth."

The OECD analysis revealed that most of the support mechanisms were put in place before 2000, but argued that policy priorities have changed and governments ought to rethink the relevance and effectiveness of policies that use taxpayers' money to sustain a reliance on fossil fuels. It said the relatively low oil price presented a unique opportunity for governments to phase out support for the consumption and production of fossil fuels.

Short cuts

Poll backs GHG action

Nearly 80% of the world's population is very concerned about the impacts of climate change, while two-thirds think climate action is an opportunity to improve their quality of life, according to a poll by UNEP. The survey received about 10,000 responses and is the largest citizen consultation on climate change. It was conducted to gauge public opinion ahead of the UN climate summit in Paris (COP21) at the end of the year. The findings show that 68% citizens think an agreement at COP21 should be legally binding for all countries and include a global long-term goal to reach zero greenhouse-gas (GHG) emissions by the end of the century. Fully 79% believe high-income countries should pay more than the agreed \$100 billion annually by 2020 for mitigation and adaptation in low-income economies. The same proportion wants their country to take measures to reduce GHG emissions, even if many others do not do so.

US and Chinese cities

US cities and states and Chinese cities have signed a declaration on climate change to cut greenhouse-gas emissions. Atlanta, Houston, New York, Washington DC and several other major US cities and metropolitan areas have now agreed to new emissions reduction targets, with California state pledging an 80% cut by 2050. Los Angeles, meanwhile, has signed a separate memorandum of understanding with the cities of Shenzhen and Guangdong to share best practice in reducing emissions, particularly from transport and buildings. Meanwhile, China has established an Alliance of Peaking Pioneer Cities (APPC). All 11 cities and provinces in the APPC, including Beijing, have agreed to cap their CO₂ emissions before 2030 when China's national target must be met. The combined annual emissions of the 11 cities are equal to those of Brazil or Japan. Two of China's most polluting provinces, Jiangsu and Hebei, which regularly exceed China's own emissions limits, are not included in the declaration, however.

In parliament



No weakening of biodiversity laws

As a “species champion” for the RSPB, I am an advocate and protector for the endangered turtle dove. I recently visited Kent to learn more about the species and the work of the RSPB. The turtle dove was common across much of England, but is now retreating into an ever shrinking patch of East Anglia and south east England. Its population in England has declined by 93% since 1970, and across Europe its status is now “near threatened”.

The plight of the migratory turtle dove symbolises the urgent need at European level to act on challenges facing ecosystems. The journeys all migratory birds take have no regard for national borders, and so our response to the turtle dove’s dwindling population must also be cross-border. Unless Europe works together to protect its habitat, the species will vanish, as will many others.

The Birds and Habitats directives form the cornerstone of Europe’s nature conservation policy, protecting important wildlife and habitats across the continent. The evidence that the legislation works is clear. Before the directives, the UK was losing protected sites at a rate of 15% a year. Now the figure is 1% – though this is still too high.

This year the directives have come under threat as the European commission seeks to overhaul much of the EU’s environment legislation. Seen by some as a way to make the law more sympathetic to business, the possible watering down of the directives should be regarded as one of the biggest threats to nature in Europe in decades.

In response to its review, I have been putting pressure on the commission to ensure Europe’s natural habitats are protected for future generations. I am co-authoring a review of the EU’s 2020 biodiversity strategy for the European parliament. This will highlight the need to do more to protect endangered species and habitats across the continent.

Catherine Bearder, Liberal Democrat MEP and a member of the European parliament’s environment committee

Universities off course on reducing CO₂

The UK higher education sector is reducing its carbon emissions too slowly and will miss its 2020 target, according to a progress report from sustainability consultancy Brite Green.

The report, which covers the 2013-14 academic year, reveals that several universities have achieved significant cuts since 2005, including London Metropolitan (pictured), whose absolute carbon equivalent emissions are down by 51%. However, total sector emissions were higher in 2013-14 than in the previous year, and Brite Green estimates that universities and colleges will achieve only a 12% reduction by 2020, well short the 43% sector target. The consultancy also says that 76% of universities are not on track to achieve their own carbon targets for 2020, even though 23% have reduced them.

Iain Patton, chief executive at the Environmental Association for Universities and Colleges, said: “The findings outline the dilemma the university sector faces in meeting its carbon reduction targets while driving commercial growth.”

According to the report, the top 10 ranked institutions have all reduced



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their carbon footprint by more than 40%. The bottom 10, which includes the University of Cambridge and University College London, all reported an increase, with emissions at the London School of Hygiene and Tropical Medicine rising by more than 66%. This year, the Brite Green assessment included emissions per square metre and emissions in relation to income. London Metropolitan was again ranked first, reducing its emissions by more than 54% on both measures since 2008. The London School of Hygiene and Tropical Medicine, by contrast, increased its emissions by 48% in both categories.

The Higher Education Funding Council for England developed a sector reduction strategy in 2011, which requires institutions to set carbon reduction targets for 2020 and implement carbon management plans.

Slow progress at climate talks

Less than half of business leaders see an international deal as the main driver for action on climate change in their sector. The poll, by PwC, found that chief executives were far more motivated to act by public awareness and national policy.

However, around three-quarters of respondents said their companies were developing products and services to respond to climate change, and more than half were changing strategic investments in response to green growth opportunities.

The findings emerged as international negotiators in Bonn were told to draw up a shorter draft agreement before the next meeting at the end of October. Discussions continued on whether countries would be required to revisit and consider upgrading national mitigation commitments at five-year intervals. There were also talks on establishing a common approach for transparent measurement and reporting of countries’ emissions.

Discussions on climate finance have been slow. Countries have already committed to provide \$100 billion a year by 2020 but so far only \$10.2 billion has been pledged. Another sticking point is how best to tackle climate impacts that are difficult or impossible to adapt to. This issue, known as “loss and damage”, includes sudden events, such as major storms or slower impacts, such as soil becoming too salty for agriculture. Observers to the talks, including WWF, reported some convergence on this issue but warned that it would be difficult to reach an agreement.

Tasneem Essop, WWF head of delegation to the UN climate negotiations, said: “We have seen a little progress in simplifying some of the options which should make negotiation and compromise on these issues easier at the next session.”

There are only five more official UNFCCC negotiating days before the Paris climate summit opens on 30 November.



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Business plans

Viridor has opened what the waste management company describes as the UK's most advanced glass recycling facility at Newhouse, North Lanarkshire. The £25 million plant consists of 15 optical sorters and x-ray sorters, as well as more than 0.5km of conveyer belts and 2.5km of electrical cabling over three floors of processing towers. It is one of only three such centres globally. Most of the recycled glass will be used to produce whisky and beverage bottles.

General Mills, the firm behind brands like Cheerios, Häagen-Dazs and Yoplait, has pledged a 28% reduction in absolute greenhouse-gas emissions across its full value chain – from farm to fork to landfill – over the next 10 years. The Minneapolis-based company has also announced a long-term aim to achieve sustainable emission levels in line with the scientific consensus outlined by the IPCC, which indicates a reduction of 50–70% in absolute emissions is needed by 2050. General Mills says it has reduced absolute emissions from its operations by 13% since 2005.

Train manufacturer **Bombardier** is to publish environmental product declarations (EPD) for all its new products by 2020. So far, the Canadian-owned firm has released 15 EPDs since the first, for the Stockholm Metro in 1999. Bombardier, which has a factory in Derby, also plans to reduce relative water consumption and waste by 1% and energy consumption and GHG emissions by 3% per 200,000 worked hours between 2014 and 2016 compared with 2013.

Blenheim Palace in Oxfordshire has installed 196 solar photovoltaic panels on the roofs of its bottling plant and rural offices. The panels will generate 50kW of electricity annually, saving the world heritage site £4,500 and reducing its carbon footprint by 20 tonnes each year.

Meanwhile, Devon beer producer **Hanlons** has installed a 30kW solar photovoltaic system on the roof of its brewery at Half Moon Village, near Exeter. Installer SunGift monitored the brewery's patterns of energy uses to develop the right system, which, as well as powering the site's machinery, provides electricity for Hanlons' bar and kitchen.

Revised ISO 14001 standard goes live

The revised standard for environmental management systems, ISO 14001: 2015, was published on 15 September.

The international standard was first published in 1996 and the latest version replaces the 2004 edition. About 300,000 organisations around the world are certified to 14001, including nearly 16,000 in the UK. ISO said the latest revisions aimed to ensure 14001 remained relevant and that the changes responded to the latest trends, such as an increasing recognition by companies of the need to factor in external and internal elements that influence their impact, including climate volatility.

Anne-Marie Warris (pictured), chair of ISO/TC 207/SC1, the technical committee that developed the standard and undertook the revision, said she was confident the 2015 version would continue to help organisations manage all their environmental issues holistically. “The new version will help with a stronger integration between environmental issues and an organisation's strategic action planning and thinking,” she said. “I foresee the lifecycle perspective and supply chain issues embedded in ISO 14001 becoming stronger in the future.”

Martin Baxter, chief policy advisor at IEMA and a member of the group that revised 14001, said: “The new standard significantly raises the bar on the expectations it sets for how organisations manage their environmental performance. It will deliver a step-change in business performance and deliver significant benefits to the environment.” Baxter added that the revised standard shifted business focus



on the environment from compliance with regulations and direct operations, to placing the environment at the heart of business thinking and strategy.

Nigel Marsh, global head of environment at Rolls-Royce, described the revised standard as a significant milestone in acknowledging that the environment and sustainability were among the most important issues facing businesses worldwide. “The revisions highlight the vital role that senior management can play to ensure their companies have a clear strategic approach to the environment and maximise the opportunities for their business,” he said.

The results of a recent survey by IEMA reveal the high regard businesses have for 14001. Some 40% reported annual savings of at least £10,000 from using 14001, with some saving more than £5 million. Most of the savings were delivered through energy efficiency measures (71% of those surveyed) and improved waste management (64%). Wider benefits included improved environmental performance (38%), meeting legislative requirements (39%), enhancing stakeholder relations, and generating new business opportunities (22%). More than 40% of survey respondents said they believed the revised standard would bring greater buy-in from senior management.

Northern Rail becomes one of first firms to achieve 14001: 2015

Northern Rail has become one of the first companies in the UK to secure 14001: 2015 certification. Confirmation of the train company's achievement came on the same day the revised standard was published. Managing director Alex Hynes said it was recognition for the firm's work on integrating good environmental practices across its entire business. “We've worked hard to embed a business-wide strategy for

environmental management, from managing our energy use to pollution prevention. Our approach enables us to address challenges collaboratively with our people, making sure we are all contributing to sustainable improvements in our environmental performance.” NQA carried out the assessment. Its managing director, Matt Gantley, said: “Northern Rail is the first in the world to achieve certification with NQA to the new standard.”

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In court

EU court adopts stricter interpretation of REACH

The Court of Justice of the EU (CJEU) has endorsed a stricter interpretation of the European REACH Regulation (1907/2006) on the concentrations in products – called “articles” in the legislation – of chemical substances that are likely to pose a high risk to human health or the environment.

Substances are classed as being of “very high concern” if they contain carcinogenic, mutagenic or toxic properties. REACH requires producers and importers of products containing such chemical substances in a concentration above 0.1% of its mass to notify the European Chemicals Agency (ECHA). Suppliers of such a substance must inform the recipient and, on request, the consumer. The European commission, in a 2011 note to member states, and the guidance from the ECHA state that if a substance of very high concern is incorporated in an article, the duty to notify applies only if the quantity exceeds 0.1% of the entire product.

Five member states and Norway disagreed with this interpretation, believing it did not provide enough protection for human health or the environment. France adopted a stricter view, requiring producers and importers to give notification if the substance threshold was reached for any articles in a product containing more than one element. The Fédération des entreprises du commerce et de la distribution and Fédération des magasins de bricolage et de l'aménagement de la maison argued against this requirement.

The French courts referred the case to the CJEU. In its judgment, the court noted that REACH defines an article as “an object, which during production is given a special shape, surface or design which determines its function to a greater degree than does its chemical composition”. It also said the regulation does not contain any provisions specifically governing complex products that contain several articles. As a result, the CJEU concluded that there was no need to distinguish between when articles are incorporated as a component of a product and when they are present but isolated. It ruled, therefore, that each of the articles incorporated as a component of a product is covered by the relevant duties to notify and provide information when they contain a substance of very high concern in a concentration above 0.1% of their mass.

Tess Crean, toxics expert at the NGO ClientEarth, said the judgment would protect people and the planet by improving information about the use of toxics in toys, bottles and bicycles, for example. “Until this ruling, dangerous chemicals could have been used in everyday products, and we may not have known,” she said.

South West Water fined £45,000

Breaching environmental controls at a sewage treatment plant in Devon has cost South West Water almost £51,000.

The company had pleaded guilty earlier at Exeter Crown Court to breaching discharge limits at its treatment plant at Dunkeswell, near Honiton, between May 2013 and May 2014. Taunton Crown Court fined the firm £45,000, with costs of £5,700 and a £240 victim surcharge. The court was told of five occasions when waste from the site exceeded its permit limits and entered a nearby stream. Environment Agency officer Mischka Hewins said: “There were ongoing problems with sludge rising in the settlement tank, which were specifically raised on over 19 occasions and led to knock-on problems with the filters. The inlet

screen, which is of fundamental importance to the site, was also not working.” The court took into account the frequent number of visits the company paid to the site, and the steps it had taken to rectify problems.

US court rules against pesticide

The US ninth circuit court of appeals has ruled that the Environmental Protection Agency violated federal law when it approved a pesticide that campaigners claim damages bees. The court ruled that the agency’s decision to unconditionally register sulfoxafloz was based on flawed and limited data. It said that annulling the agency’s unconditional registration was preferable to leaving it in place because of the risk of further environmental harm.

Case law

When two developments constitute a single project

In *Larkfleet v South Kesteven District Council*, the Court of Appeal dismissed a case relating to planning permission for a road that had been split into two sets of works. The court held that, just because two sets of proposed works may have a cumulative effect on the environment, this does not make them a single project for the purposes of the EIA Directive. Rather, the directive contemplates that where there are two interrelated projects, cumulative effects will need to be assessed for each project. In this case, the relief road was subject to EIA and had considered the impact of the residential development.

Construction company Larkfleet sought to quash planning permission for a relief road to the south of Grantham that, as well as alleviating traffic impact, would assist the development of residential land by another contractor. Larkfleet argued that the relief road and the residential development were interconnected and should be regarded as one project for EIA. However, the Court of Appeal upheld the High Court’s dismissal of the claim for judicial review. It confirmed that the decision of what amounted to a project for EIA purposes was for the planning authority to make. It agreed that the two developments, while connected, were sufficiently independent that they were not one project.







The court considered the principle established in *Ecologistas en Acción-CODA v Ayuntamiento de Madrid*: that a single project cannot be salami-sliced so that it falls below the EIA threshold. The court rejected the appellant’s argument that this principle meant that two interrelated developments could not be assessed separately.

Jen Hawkins

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New regulations



In force	Subject	Details
1 Jul 2015 	Waste	The Batteries and Accumulators (Placing on the Market) (Amendment) Regulations 2015 amend the 2008 Regulations. Exemptions on button cells containing mercury below 2% by weight and on the cadmium content of cordless power tool batteries come to an end on 1 October 2015 and 1 January 2017 respectively. From 1 July 2015 appliances must be designed so that waste batteries can be removed by the end-user, or by an independent qualified professional if ready removal is impossible. bit.ly/1QAcJ5E
6 Jul 2015 	Planning	The Planning (Wales) Act 2015 amends legislation in Wales to support the sustainable development goals in the Future Generations (Wales) Act 2015. The Act provides for the creation, approval and deployment of a national development framework and strategic development plans. Development plans for any area will consist of the national development framework, a local development plan and the strategic development plan. bit.ly/1Mmx1Rf
8 Jul 2015 	Energy	The Emissions Performance Standard (Enforcement) (Wales) Regulations 2015 establish a monitoring and enforcement regime for the emissions performance standard (EPS) in Wales. bit.ly/1iJ9Q7b
9 Jul 2015 	Natural environment	The Nagoya Protocol (Compliance) Regulations 2015 support the enforcement of the protocol and deliver compliance measures required under EU Regulation 511/2014, which implements the convention across the EU. bit.ly/1M6wHDe
19 Jul 2015   	Hazardous substances	The Merchant Shipping (Oil Pollution Preparedness, Response and Co-operation Convention) (Amendment) Regulations 2015 amend the 1998 Regulations, implementing revisions to the safety regime demanded by Directive 2013/30/EU on offshore oil and gas operations. The Offshore Petroleum Licensing (Offshore Safety Directive) Regulations 2015 update licensing requirements to reflect the implementation of the Directive. These regulations establish criteria to obtain an offshore licence and duties of licensees. Licensees are to be held financially liable for the remediation of environmental damage, and adequate financial provision must be in place to cover potential liabilities. bit.ly/1iaPt2f ; bit.ly/1OQ3kFS
19 Jul 2015    	Environment protection	Separate Environmental Liability (Prevention and Remediation) (Amendment) Regulations 2015 have been passed for England, Northern Ireland, Scotland and Wales, which amend the 2009 regulations by extending the areas to which the enforcement regime applies to. This includes damage to the environmental status of marine waters up to 12 nautical miles from the coastal low-water line. bit.ly/1UQRtsG ; bit.ly/1OQ31uH ; bit.ly/1eLhBHL ; bit.ly/1KhYYTC
19 Jul 2015 	Environment protection	The Environmental Damage (Prevention and Remediation) (England) Regulations 2015 consolidate the 11 amendments made to the 2009 Regulations. The secretary of state is now required to review the operation and effect of the regulations, and publish a report every five years. bit.ly/1Dn8kQS
20 Jul 2015 	Energy	The Contracts for Difference (Standard Terms) (Amendment) Regulations 2015 amend the 2014 Regulations to allow payments to generators under a contract for difference to be suspended when negative price conditions are present. bit.ly/1FI5u57
28 Aug 2015 	Planning	The Town and Country Planning (Local Development Plan) (Wales) (Amendment) Regulations 2015 change definitions in 2005 Regulations. There is also now no need to consult when preparing a community involvement scheme or set a timetable if those documents relate to a revision of a local development plan. Further requirements have been added for local planning authorities. bit.ly/1M6ujfY

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

Laying down the law

Coming to a court near you?

Two cases have raised the possibility that in future governments may face court proceedings for failing to tackle climate change effectively. Simon Colvin reports



Ahead of the climate change conference in Paris at the end of the year (COP21), there has been discussion on what targets to reduce greenhouse-gas emissions will actually mean if they are agreed. What happens if countries do not stick to their commitments? Other than political pressure from other signatories, what can be done?

Cause and effect

To answer these questions it helps to focus on the EU as an example. Depending on what is agreed at COP21, the EU and its member states can either commit to GHG reduction figures that are already present in law and policy or they can develop new policy and legislation to meet any new targets set at the summit. These laws and policies create rights and expectations for the citizens living in the EU and its member states.

Scientific knowledge and understanding of climate change and its causes, driven mainly by the work of the International Panel on Climate Change (IPCC) have brought us to a point where the causes and effects are generally accepted and understood. As a result, it is possible to argue that, if a member state does not commit to, honour and enforce a minimum GHG reduction figure, it is contributing to dangerous levels of global warming that could have an impact, not only its own citizens, but also those elsewhere, perhaps globally. Put simply there is a cause and effect.

It is currently impossible to apportion indisputable blame to any country and also to identify specific harm caused. However, it is possible to say that, if a country is not doing enough to

reduce its emissions, it is contributing to the problem of global warming in contravention of the accepted scientific knowledge. It should, therefore, be possible to hold that country to account; to get it to do more.

The August issue of the *environmentalist* reported a recent Dutch case – *Urgenda Foundation v The State of the Netherlands* (Ministry of Infrastructure and the Environment) – brought by an NGO. It highlights the way in which the legal framework in the EU and its member states can be used to hold governments to account in relation to their international and European obligations to combat climate change and reduce greenhouse-gas emissions.

The principles from *Urgenda* are not directly applicable in the UK. But when considered alongside a recent domestic case – *R (ClientEarth) v Secretary of State for the Environment, Food and Rural Affairs* – in which the UK government was held to account in relation to its obligations under the EU ambient air quality Directive (2008/50/EC), they provide an interesting insight into what the future could hold in terms of climate change litigation, particularly in the UK.

The Dutch case

The Dutch case was brought by the Urgenda Foundation, a climate change NGO in the Netherlands. The NGO argued that the Dutch government's commitment to reduce GHG emissions by 17% by 2020 was inadequate and would result in the Netherlands contributing to dangerous levels of climate change.

Urgenda said the commitment was in breach of duties in Dutch law and also contravened the European Convention on Human Rights (ECHR) and argued that the target needed to be higher – either a 25%–40% reduction by 2020, or 40% by 2030 – and sought an order from the district court in The Hague.

Despite counter arguments from the Dutch authorities, the court decided the government did have a duty in Dutch law, though not the ECHR, in relation to climate change and the mitigation of its effects. On the basis of current scientific knowledge and wider EU law and policy, the court decided that a target less than 25% was in breach of this duty and ordered the government to ensure Dutch GHG emissions are reduced by that amount by 2020 against a 1990 baseline.

This is the first time a court has ordered a government to strengthen its climate change policy. The Dutch government has stated that it will appeal the ruling. A similar case is pending in Belgium suggesting that there is a growing appetite among NGOs to compel governments to do more. Are these cases just the first among many?

Air quality

The long-running ClientEarth case concluded in the Supreme Court in April this year (see the *environmentalist*, June 2015). It concerned a judicial review application by the NGO against Defra for the failure of the UK government to properly implement the EU Air Quality Directive. The UK had failed to meet particular limits for nitrogen dioxide by 1 January 2010 and thereafter had failed to properly follow the process in the directive to enable it to postpone the compliance deadline until 2015.

In May 2013, the Supreme Court issued its first judgment, declaring that the government was in breach of its obligations under 2008/50/EC. At the same time, it referred some questions to the Court of Justice for the European Union (CJEU). The European court responded in November 2014 and the Supreme Court's final decision followed on 29 April 2015.

The Supreme Court reaffirmed its first judgment and the government's breach of the directive. It ordered the government to prepare new air quality plans to ensure the UK complied with the limits on nitrogen dioxide. The plans have to be submitted to the commission by 21 December 2015.

It is interesting to contrast the Urgenda and ClientEarth cases. The court in The Hague appears to have crossed a line, separating the powers of government



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from those of the courts in supplementing Dutch government policy. In the ClientEarth case the UK government was being held to account by the court for failing to meet a specific limit by a specific deadline. There was no demand from the court for a change in government policy, only an order to correct the failure.

What if the UK government failed to meet its obligations to reduce GHG emissions by 20% by 2020 and 80% by 2050, which are legal targets in the Climate Change Act 2008? Or if the UK appeared to be on track to miss them? Would it be possible for legal action to be taken against the UK government to force it to take further action to meet the targets? The answer has to be yes.

The ClientEarth case already indicates the willingness of the UK courts to hold the government to account to meet any missed targets or deadlines. In relation to the need to do more to achieve targets, the scientific evidence on the link between GHG emissions and climate change is strong.

If the evidence to demonstrate that the government was going to miss the targets was also robust, again the courts might require the government to confirm what it intended to do to bridge the gap.

It would not specify what needed to be done, however; that would be a question for the government.

Although that sounds promising, other than the public pressure that would follow such a direction from the courts and possibly some embarrassment at an international level, it is unlikely any other steps would be available to the courts to compel the government to take action, leaving the victory a bit hollow for those who brought the case.

Citizen rights

It would be impossible for a UK citizen to bring a negligence claim against the government for harm arising from climate change because of the difficulties in proving a causal link between the failings of the authorities and any harm suffered. In the UK, there are also other significant legal hurdles to such claims against the government.

If the duty on which any legal action was based was derived from European law and the UK had failed to meet a specific compliance target it would be open to the European commission to bring infringement proceedings against the UK government. It is likely that the result of such action would be a financial penalty

for non-compliance, but such proceedings are notoriously slow and political.

So, while it may be possible to challenge any failure by the UK government in relation to its climate change policy and obligations, the outcome might not be the solution that those pursuing the case would have hoped for.

Despite the difficulties in the UK, it does seem the legal landscape is changing and that the prospect of climate change litigation is growing.

The scientific evidence and understanding exists, NGOs have a growing appetite, the legal duties exist and the courts seem to be prepared to consider such claims. If the outcome of COP21 in Paris does not live up to the expectations of many observers, one outcome could be legal action to compel governments to do more.

More information

Urgenda Foundation v Dutch government case: edigest.elaw.org/node/42; ClientEarth v Defra case: bit.ly/1Lq1FmX.

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



Conflict free

Alex Martin offers advice on how businesses can eradicate conflict minerals from the supply chain

It is a sad fact, but precious metals and minerals used in products from jewellery to laptops can be traced back to mines controlled by armed groups in the Democratic Republic of the Congo (DRC) during the country's civil wars and turbulent aftermath. Trade in these resources perpetuated the conflicts, as the sale of the metals and minerals from the mines funded the purchase of weapons.

However, with a US law now in place and EU regulation forthcoming, conflict minerals are in the legislative spotlight and companies are embarking on the transition to conflict-free supply.

Human cost

Conflict minerals are derived under duress and traded to keep armed groups funded. To date, conflict minerals have been most closely associated with the DRC and neighbouring countries where the extraction of wolframite (for tungsten), cassiterite (for tin), coltan (for tantalum) and gold is a key economic activity. These are known collectively as the "3TGs" – tungsten, tin and tantalum plus gold – and the metals and minerals have many uses (see panel, p.16).

During the Congo wars both the Congolese national army and rebel groups sought control over mining. Conditions in artisanal-type or small-scale mining, which persist today, are harsh, with miners working up to 48 hours at a time and risking life and limb in an environment of mudslides and tunnel collapses. As well as the human cost associated with this type of mining, the wars in the DRC region have caused the deaths of more than five million people, many due to disease and starvation. Although progress has been made towards a lasting peace since the wars ended, armed groups retain control over some mines, and the trade in conflict minerals persists.

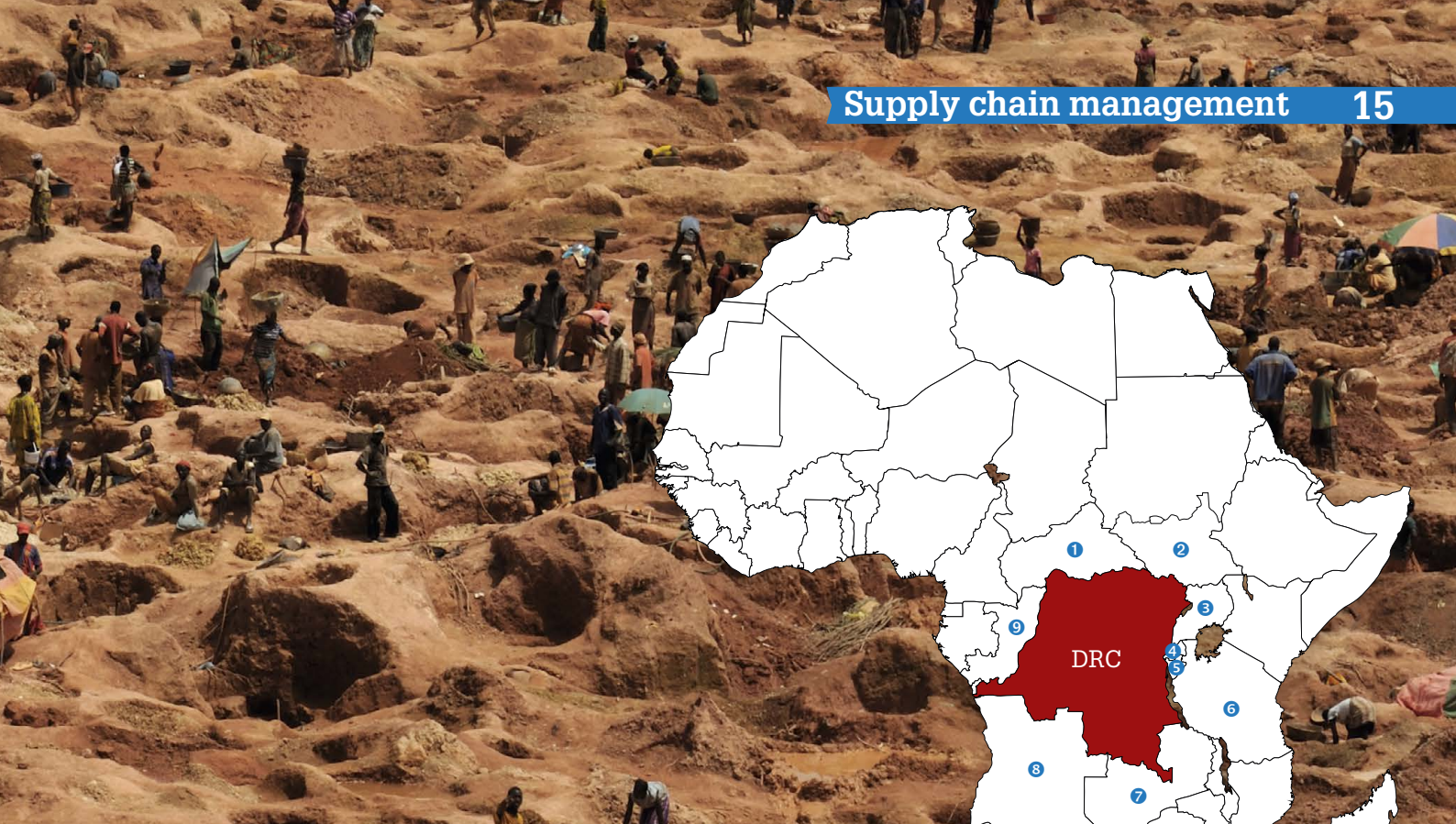
Legal remedies?

Governments have increasingly recognised and highlighted concerns to industry over the use of conflict minerals in the manufacture of products. In 2010, the US congress passed the Dodd-Frank Act (DFA), in which section 1502 sets requirements for companies whose products incorporate 3TGs derived from the DRC and neighbouring countries (see map, right).

The DFA was implemented in a rule passed by the US Securities and Exchange Commission (SEC) in August 2012. This requires "issuers" – major US stock market-listed companies required to make regular SEC filings under existing law – to report on efforts to eliminate conflict-implicated 3TGs from supply chains if they are used in their products. Companies covered by the rule must take these steps:

- determine applicability;
- conduct country of origin inquiry;
- establish a due diligence process;
- determine status; and
- file a report.

The legislation does not prescribe a due diligence process, but the OECD's *Due diligence guidance for responsible supply chains* is cited as a suitable framework (see panel, p.16). It is also referred to in the draft EU regulation on conflict minerals published in March 2014. The draft European legislation is similar to the DFA in so far as it focuses on the 3TGs. However, to address the problem of companies potentially withdrawing from the DRC and its neighbours and moving elsewhere, its geographical scope is not limited to this region but the more widespread "conflict-affected and high-risk areas". Another crucial difference is that the European commission has not



Conflict regions in Africa

proposed any mandatory requirements. Instead it is targeting EU importers of the 3TGs rather than manufacturers of finished products. The rationale for focusing on importers was that they were, in supply terms, the ones in closest contact with the few hundred 3TG smelters and refiners and were seen as best placed to effect change as a supply chain “pinch point”.

In the commission’s proposal, importers of the 3TGs into the EU would be encouraged to self-certify against the OECD guidance, provide information to downstream users, and report yearly to their relevant national market surveillance authority. The commission, meanwhile, would maintain an approved list of smelters and refiners. The proposal has since been considered by the European parliament, but opinions are divided. Parliament’s foreign affairs committee declined to give a view, but the development committee suggested more than 500 amendments. In May 2015, a plenary vote on amendments to the commission-proposed legal text was held in parliament. MEPs rejected the voluntary approach favoured by the commission, preferring mandatory compliance by all importers of 3TGs into the EU, including independent third-party audits. They want to make it mandatory for importers to provide information to the estimated 880,000 downstream users of 3TGs in Europe so that they can identify and address risks of using conflict-implicated metals and minerals. These requirements are more onerous than the SEC rule.

Industrial practice

Whether or not the EU introduces requirements on importers and downstream companies, there is an expectation that firms should stop using conflict minerals. The DFA is already driving this, particularly among large, consumer-facing companies whose products incorporate the 3TGs. Among them are Ford, General Motors, Apple, Dell, and Hewlett-Packard.

The way these companies have responded provides an insight into how to manage and report conflict mineral uses in supply chains. There is definite overlap

in practice: establishing policies; setting goals; surveying suppliers; determining smelters in use; comparing smelters with those on approved lists; arranging smelter audits; and running awareness-raising training events.

Ford outlines its position and lists goals on its corporate website. These include the statement: “To the extent tin, tungsten, tantalum and gold are contained in products, it is Ford’s intention to use DRC conflict-free minerals, while continuing to support responsible in-region mineral sourcing from the DRC.” Targets include:

- achieving a 100% response rate from in-scope suppliers for annual reporting;
- obtaining year-on-year improvements in the proportion of suppliers providing smelter lists;
- obtaining year-on-year improvements in using conflict-free smelter programme (CFSI) compliant smelters; and
- participation in CFSI smelter outreach efforts to identify “true” smelters and encourage smelters to participate in the CFSI audit process.

These goals reveal a further practice common among companies: participation in the CFSI cross-industry group and, in particular, using its conflict minerals reporting template in supplier surveys.

The template serves to identify whether a supplier’s operations contain any conflict minerals. In Ford’s case, if any conflict minerals are contained in a product supplied to it, the vehicle manufacturer requires the supplier to report the names of the smelters or refiners used to process the minerals. Ford assesses the status of the smelters and refiners in the supply chain using audit information available through CFSI. The scale of such surveying is not to be overlooked. Kelly Katynski, Ford’s supply chain sustainability manager for conflict minerals compliance, says: “It’s hard to express what an enormous undertaking this is for a company with a supply chain as broad, as deep and as complex as ours. We are layers

Key

- 1 Central Africa Republic
- 2 South Sudan
- 3 Uganda
- 4 Rwanda
- 5 Burundi
- 6 Tanzania
- 7 Zambia
- 8 Angola
- 9 Congo Republic

Conflict metals and minerals

Tungsten	Tin
Used in metal wires, electrodes, contacts in lighting, and electronic, electrical and heating applications. Tools may incorporate tungsten, often when alloyed with steel.	Used in alloys, tin plating and solders for electronic circuits. Used as solder in buttons, zippers and other fasteners as well as in jewellery. Composite material in rivets and eyes. Used in car parts ranging from engine components through to gears, pumps, joints and windshields.
Tantalum	Gold
Used mainly to produce tantalum capacitors, particularly for applications requiring high performance, small format and high reliability, such as hearing aids, pacemakers, global positioning systems (GPS), laptops, mobile phones and games consoles.	Composite metal in or on jewellery and watches. Present in some chemical compounds used in semiconductor and manufacturing processes. Used as plating to produce the shine on zippers, fasteners and other metal components.

OECD framework

Step	Activity	Practice
1	Establish strong management systems	Adopt and commit to a supply chain policy for conflict minerals. Establish a system that allows the identification of the smelters in the company's mineral supply chain. Maintain records (preferably electronic) for at least five years. Incorporate policies and traceability into supplier agreements and contracts. Establish mechanisms for grievances and whistleblowers.
2	Identify and assess risks	Identify smelters/refiners in supply chain. Assess due diligence practice of smelters.
3	Respond to risks	Report findings to senior management. Exercise leverage over suppliers that can work most effectively to mitigate risks further back in the chain. Monitor, track, adapt and adjust risk mitigation efforts.
4	Audit	Carry out an independent third-party audit of smelter's/refiner's due diligence programme.
5	Publicly report	Report – preferably in annual sustainability or corporate social responsibility reports – on the due diligence programme, such as: the company policy, responsible management, steps taken to identify and assess smelters/refiners.

removed from the smelters and refiners in our supply chain; therefore, we must survey our direct suppliers and request our suppliers, in turn, to survey their suppliers until the point many layers down in the supply chain where the smelter or refiner of the 3TG is known."

Challenging issues

Mapping and documenting supplier adherence in complex supply chains is demanding, while incomplete, missing or otherwise questionable supplier responses present further challenges. How companies best address these is difficult, although one solution could be to outsource surveying and data verification activities. In this way, services and comparisons can be drawn with existing traceability platforms to support company compliance with other legislation such as the EU timber regulation.

Practitioners might wish to take the following steps if tasked with managing conflict minerals:

- Understand and scale the challenge facing your company. This is likely to include determining possible 3TG uses in products and identifying the suppliers and determining how to engage them – for example, by creating an in-house survey or using the CFSI conflict minerals reporting template.
- Frame the company response, either with a new programme of work or by expanding existing ones – for example, programmes for managing substance restrictions found in legislation, such as the RoHS Directive and REACH Regulation. This will require senior management support, a budget, policies and procedures, and deciding who has responsibility for contacting suppliers and collecting and analysing data. Cross-functional work is expected so, even if the programme is owned and led by an environment or CSR manager, they will require support from colleagues in procurement, finance and IT.
- Consider the best IT solution. This will depend on how many products and suppliers the organisation is dealing with. If it is a large number, it will generate a lot of data, so an automated solution is desirable.
- Document actions as you go. This is good practice for due diligence because it constitutes a record of key decision-making and reasoning.
- Phase in the programme, monitoring as you proceed. This will help identify any problems.

Adopting an approach that goes beyond compliance is beneficial. To see conflict minerals as something to be complied with is to miss potential opportunities, such as reducing risk in the supply chain and enhancing relationships with preferred suppliers and customers. Conflict minerals is something on which the investment world is also likely to assess company performance in future, so getting ahead on practice and disclosure may offer competitive advantage.

Dr Alex Martin is a senior consultant in regulatory compliance at Edif ERA.

Alan Knight's recent IEMA webinar on conflict materials and human rights can be accessed at bit.ly/1LOPEds.

Capturing all emissions



Robin Lancaster finds out how large companies are helping suppliers to manage GHG emissions

A lot of companies around the world have become adept at measuring, reporting and reducing greenhouse-gas (GHG) emissions, be it for corporate social responsibility reasons or because they are covered by mandatory carbon pricing mechanisms. For most, this involves assessing direct emissions from sources that they own or control – so-called scope one emissions.

However, increasingly enterprises are looking at their wider carbon footprint to also incorporate indirect sources of GHG emissions. Scope two emissions come from the consumption of purchased electricity, heat or steam, while scope three covers all other indirect sources of emissions, particularly those from the supply chain.

Challenging environment

Tackling supply chain emissions, which for some companies form the bulk of their carbon footprint, poses big challenges given the numerous sources of supply, drawn from different geographies and various industry sectors. “Quantifying GHG emissions in the supply chain is considered one of the most resource-intensive, time-consuming and uncertain part of a GHG inventory,” says Tiffany Day, director of sustainability at US-based FirstCarbon Solutions (FCS), which provides consultancy, data management and software solutions for companies looking to deal with their environmental risks.


“[We] find that many organisations struggle with coordinating the information-gathering across their supply chain, verifying the accuracy of the data, collating it with their own and continually managing it in one place.”

According to Day, companies can estimate supply chain emissions by analysing the data found in their financial general ledger or they can request that information directly from the firms in their supply chains. “These can be tier one suppliers, which directly provide goods and services; tier two suppliers, which provide goods and services to the tier one suppliers; and companies even further down the supply chain.”

Although Day says tracking supply chain emissions data beyond tier two can be daunting, it has not stopped companies addressing the issue. Some firms, such as beverages company Diageo, have even set reduction targets for supply chain emissions.

The UK based company has focused on its scope one and two emissions for more than 10 years. In July, it embarked on plans to cut its supply chain emissions by 30% from their fiscal 2015 levels, seeking to meet this target by 2020. Diageo’s two main sources of emissions in the supply chain are upstream processes, such as packaging and bottle manufacture, which account for about 35%; and logistics and transport, which constitute a further 25%.

Michael Alexander, the company’s head of water, environment, agriculture and sustainability, says: “The



difficulty is that our operating model is decentralised across 21 markets, which are all autonomous business units that make their own decisions. We have to work with them from the global centre ... [as] decentralised small local teams are limited in driving global perspectives.”

The company also prioritises the sectors in which it thinks most impact can be made. “We can’t engage with every supplier,” says Alexander. “A big part of our footprint is agriculture, but that might mean dealing with hundreds of smallholders in Africa. We are not going to be able to visit hundreds of smallholders, but we can go to a glass manufacturer. It is easier to start with companies that have the bigger impact.”

A programme of support

Diageo is a long-standing member of the non-profit organisation CDP (formerly the Carbon Disclosure Project), which has been working for more than 10 years on improving companies’ disclosure of their environmental impacts. CDP has also become the fulcrum of many firms’ efforts to deal with supply chain emissions through its supply chain programme.

The programme, which currently has 66 members, aims to help member companies and organisations engage with their suppliers and try to ensure that they are effectively managing the risks posed by climate change as well as water shortages. It has just completed its third year and is headed by Dexter Galvin.

“My team are basically account managers and relationship managers,” says Galvin. “Member companies select suppliers themselves and we support them on best practice. The vast majority are looking at a spend proxy covering about 80% of their spend. They don’t want to cover all bases, just the most critical.”

One way in which CDP has helped to improve suppliers’ engagement with supply chain emissions management has been its collaborative approach. Instead of responding to requests for information from 30 or 40 companies, each asking different questions and using varying methodologies, suppliers can follow a single, standardised procedure. “It is a collaborative approach that drives a more effective

response,” says Galvin. “Direct engagement with suppliers is vital ... [because it] effects actual change. The process of getting a company to disclose makes it more likely to report, reduce or set an emissions target.”

There are still challenges, however, particularly when dealing with small and medium-sized enterprises in the supply chain. “Large corporations, particularly listed ones, have a lot of reporting requirements beyond the environment. So they are used to reporting data to customer and have a regulatory team in place,” explains Galvin.

“For smaller organisations, this is not the case. It is a bit more of a challenge. But it is also an opportunity because many have not thought of [GHG emissions] as a business issue ... to create a strategy to identify millions of dollars of savings.”

Data gathering

Although suppliers may struggle to find the resources to deal with a request about their carbon footprint, they may be reluctant to respond for other reasons. “One of the biggest is that they don’t know where to find the data, much less how to best collect and analyse it,” says Day at FCS.

Information solutions provider RELX Group has set up what it calls a “supplier academy” to help companies in its supply chain to measure GHG emissions and also find energy efficiency opportunities. “Our suppliers have different levels of maturity in managing carbon emissions,” says Márcia Balisciano, director of corporate responsibility at the company. “For those in industries with historically low environmental impact, where carbon management has not traditionally been a priority, we provide guidance through our supplier academy.”

RELX uses what it calls “comprehensive environmental data archive emission factors”, which are applied to “procurement spend categories to approximate total supply chain emissions and to identify significant sources”, says Balisciano. “We also conduct an annual survey to garner additional information, including whether suppliers set carbon

reduction targets and engage in public reporting on their environmental performance.” The company also requires information on GHG emissions when seeking new suppliers. “We embed environmental questions into our e-sourcing tool in order to select suppliers that are most effectively managing their environmental impact,” Balisciano says. “We are finding that our requests for information are mirrored by other supplier customers, helping to advance awareness and responsiveness.”

Demand driven

Customer pressure on suppliers to take action on climate change is a growing feature of corporate social responsibility (CSR).

Unilever expects all its third-party manufacturers and suppliers to report emissions and energy data for its products to the CDP, says John Maguire, group manufacturing sustainability director at fast moving consumer goods company.

It is a similar story at French cosmetics business L'Oréal, which since 2014 has compelled strategic suppliers to take part in the CDP supply chain programme. “We actively involve our suppliers in our CSR commitments,” says Miguel Castellanos, global environment, health & safety director at L'Oréal. “We evaluate their CSR performance and offer tools and guidance to help them improve in that area.”

L'Oréal has piloted what it describes as a “wall-to-wall” component supply model at its Rambouillet plant in France, where the company's shampoo bottle supplier, Alpla, has integrated its production with L'Oréal's shampoo and conditioner manufacture. “Bottles are now produced and filled onsite, which allows us to reduce carbon dioxide emissions, waste and costs related to transport, as well as to significantly limit the stocking of bottles in the plant,” says Castellanos.

“In addition to eliminating deliveries by truck and related fuel consumption, the in-house production of bottles also eliminates the use of corrugated transport packaging and wooden pallets.” L'Oréal has extended the model to facilities in Belgium, Italy and the US.

The company also performs lifecycle analysis of its products, which has shown that 58% come from the use of its range by consumers. “An important focus of our work is to inform and encourage consumers in regard of more sustainable lifestyles,” says Castellanos. “We are working now on a product assessment tool that will make it possible to evaluate and improve products. It will be able to empower consumers to make more informed choices by giving them the [environmental] information they need.” The tool is expected to be available in 2018 at the latest.

Other companies' carbon footprints are dominated by supply chain emissions. These include Imperial Tobacco Group. The process of curing tobacco accounts for more GHG emissions than the company's combined scope one and two emissions. In addition, there are also scope three emissions from tobacco growing, and from paper, filter acetate and packaging production.

The company has set up a programme focusing on emissions from tobacco curing. “We incentivise farmers to use fuel-efficient curing barns and plant trees to

become self-sufficient for fuel wood in Africa,” says Chris Wickenden, group occupational health, safety and environment manager at Imperial Tobacco. “Farmers reduce input costs and improve yield, making this a win-win, with payments linked to the survival and growth of the trees,” he says.

The company also works with CDP to identify suppliers that could benefit most from emissions reduction opportunities. “Suppliers can sign up for free, and they get a two-page analysis of their emissions and suggestions for making reductions they could implement that have a short payback period,” says Wickenden. “We can also put them in touch with organisations that can deliver the projects for them.”

Driving forward

CDP also offers Action Exchange, which aims to provide responding companies with access to technology, intelligence and solutions that will help them reduce GHG emissions within “good” payback periods. “There are massive opportunities ... that often have payback periods of less than a year,” says Galvin. “For example, changing to LED light bulbs offers a significant return on investment.”

Companies looking to improve the assessment of supply chain emissions need to acquire the right systems, according Day: “By putting the processes, technologies and information management systems in place, companies will begin to automate the process as much as possible, determine areas of operational efficiencies in the overall management of the data, and identify the trends and best practices by benchmarking internally and externally.”

Further collaboration between companies, as well as industry sectors, will also be required. “Greater collaboration across industry sectors would help raise standards and ensure wider availability of data,” says Balisciano. “We have seen the benefit first hand, as a founding member of the publishers' database for Responsible Environmental Paper Sourcing. Alongside peers, we have gained a better understanding of the sustainability of the papers we buy.”

Having more companies requesting information about supply chain emissions will also prompt more action from suppliers, according to commentators. “If a supplier is asked by one company, there is a 30% chance a response; if two companies ask the same supplier, there is a 60% chance of a response; but if three ask, it shoots up to 90%,” says Gary Hanifan, supply chain lead at Accenture Global Sustainability, which helps CDP with its supply chain programme.

For Wickenden at Imperial Tobacco, the price of carbon will be an important factor in improving how supply chain emissions are dealt with in the future. “We need sustainable supplies of input materials at the right price, but there is a danger that short-term commercial realities might work against us,” he says. “There is still a low price for carbon. Business and governments need to work out a fair mechanism to factor in the external cost of carbon emissions.”

“Action Exchange provides firms with access to technology and solutions that will help them reduce GHG emissions within ‘good’ payback periods”

Robin Lancaster is a freelance writer on sustainability.

Going backwards?

Recent announcements have put at risk investment in technologies to green the UK economy, finds **Paul Suff**



Among President Barack Obama's latest measures to support the expansion of clean energy and energy efficiency in the US is an additional \$1 billion of federal government guarantees for renewables. The White House said the package, announced on 24 August, was intended to accelerate America's transition to cleaner sources of energy and support ways to cut waste. Three days later in the UK, energy and climate change secretary Amber Rudd published a consultation on proposals to slash the financial support for renewables through the feed-in tariff scheme. It followed announcements from the government on ending funding for onshore wind, removing the renewables exemption from the climate change levy and the axing of measures to improve the energy efficiency of buildings. The contrast between the approaches of the two countries could not have been starker. So, what are the details of the UK government's measures and what impact will they have?

Feed-in tariffs

The feed-in tariff (FIT) scheme was introduced in 2010 to encourage deployment of low-carbon electricity generation up to and including 5 MW. The proposed changes include reducing tariff rates from January 2016 for:

- domestic solar PV installations of up to 10kW from 12.9p to 1.63p/kWh and for commercial rooftops from 3.69p/kWh to 2.28p/kWh;
- wind projects of up to 50kWh from 13.73p to 8.61p and those between 50kWh and 1,500kWh from 10.85p and 5.89p respectively to 4.52p; and
- hydro generation from 15.45p and 14.43p to 10.66p for schemes up to 100kWh, and from 11.40p to 9.78p for installations with a capacity of between 100 and 500kWh.

Decc says a consultation on tariff rates for anaerobic digestion (AD) projects will take place before the end of the year. In July, Decc consulted on removing pre-accreditation under the FIT scheme, which gave generators a guaranteed tariff level in advance of commissioning their installation. It had been available to solar PV and wind projects above 50kW as well as to all hydro and AD projects, but ended on 1 October.

Decc justifies its planned changes to the FIT regime by claiming the cost of subsidies is higher than intended. Total FIT payments, which are added to consumer bills, are exceeding the cap under the Levy Control Framework (LCF), says the department. It notes that the annual LCF ceiling for 2020/21 is £7.6 billion but forecasts by the Office for Budget Responsibility suggest expenditure will reach £9.1 billion – a 20% overspend.

The department also says that it has met the projections for deployment of anaerobic digestion (AD), wind, and hydropower (including projections currently pre-accredited but not generating) set out in the 2012 FIT review, and that it expects to be within the projected deployment ranges for solar photovoltaics (solar PV) by the end of the 2015/16 financial year. It points out that,

at the end of July, the scheme had supported 730,000 installations, just 20,000 short of that forecast by the 2010 impact assessment. Rudd said the future and size of the FIT scheme would be determined by affordability criteria. "If following the consultation we consider that the scheme is unaffordable in light of these [new tariffs], we propose ending generation tariffs for new applicants from January 2016 or, alternatively, further reducing the size of the scheme's remaining budget available for the cap."

The renewables industry argues that lower subsidies will cost jobs and postpone the date at which solar PV, for example, reaches "grid parity" – when the cost of solar-generated electricity falls below that of alternative means of supply – and subsidies are no longer needed. The industry in the UK has already reduced its costs by almost 70% in the past five years, with a further projected 35% decrease by 2020 in levelised costs (the average cost over the lifetime of the plant per MWh of electricity). A report in July from KPMG concluded that solar PV is likely to be the first renewable energy technology to achieve parity.

James Court, head of policy and external affairs at the Renewable Energy Association (REA), says the changes will add years to the date when solar reaches parity: "It was looking like 2020 for some installations, but that is unlikely to happen now. Solar has come down in cost so dramatically in the past five years and has grid parity in its sights. But the industry feels like it's having its legs cut away metres from the finishing line."

Mike Landy, head of policy at the Solar Trade Association, describes the FIT proposals as self-defeating. "It will create a huge boom and bust that is not only damaging to solar businesses and jobs but does nothing to help budget constraints. We are astonished at how self-defeating these proposals are."

The AD industry is in a particularly awkward position, given that it has yet to discover the level of future FIT subsidies the government will offer it. Nonetheless, the consultation proposes capping new FIT expenditure at between £75 million and £100 million in 2018/19. The Anaerobic Digestion and Bioresources Association (ADBA) says this will seriously damage investor certainty and therefore further deployment. ADBA chief executive Charlotte Morton says: "The FIT consultation proposes restricting support for anaerobic digestion to just 17 new plants next year – which would mean in effect an 80% cut in investment for an industry that deployed 89 clean baseload power plants in 2014."

She says further growth in capacity will be hindered by the government's decisions to remove levy exemption certificates (see climate change levy, p.22), which the ADBA estimates will cost the AD industry £11 million.

Scottish Renewables, which represents the industry north of the border, predicts that the proposed changes to the FIT regime will severely curtail solar and could also spell the end for much of Scotland's hydro sector, which it describes as already fragile. Joss Blamire, senior policy manager, said: "The cuts could also spell the end for much of the hydro industry, which has enjoyed a recent renaissance but relies more heavily on government support because of the length of time taken to develop projects and the sector's high capital costs."

Wind energy

The Conservative party included in its 2015 general election manifesto a pledge to end subsidies for new onshore wind projects. In June, energy and climate change secretary Amber Rudd confirmed that the government would close the Renewables Obligation (RO) across Great Britain to new onshore wind generating stations from 1 April 2016, a year early. However, a grace period is planned for projects with planning consent and an offer of grid connection. The RO was introduced in 2002 (2005 in Northern Ireland) and placed an obligation on electricity generators to produce more from renewable sources. It supports the majority of existing and planned onshore wind capacity. The government has also proposed changes to the planning system to give communities the final say on developments and transfer decision-making from the Planning Inspectorate to local authorities for schemes of 50MW or larger.

According to Decc, when the projects with planning permission are factored in, the UK is on course to meet its 2020 renewable electricity objective. "We expect around 12.3GW of onshore wind to be operating in the UK by 2020," Rudd said. This is above the middle of the deployment range set out in the 2013 electricity market review delivery plan, which was for onshore wind to provide between 11GW and 13GW of electricity by the end of the decade. "We want to help technologies stand on their own two feet, not encourage a reliance on public subsidies," Rudd said. Decc says subsidies to the onshore wind industry in 2014 totalled more than £800 million. The Renewables Obligation (RO) is being replaced by contract for differences (CfDs), which, the department argues, will introduce competition for subsidy and drive costs down more quickly.

Removing financial support will scupper hopes for the construction of around 2,500 turbines, which together would produce 7GW of onshore wind capacity, according to professional services firm EY. With the cost of onshore wind set to fall further, EY says the government's decision to withdraw support contradicts its pledge to reduce emissions at least cost. Energy prices could then rise as more expensive sources, such as offshore wind, are used to fill the capacity gap while onshore wind projects fall away, it warns.

Powering up, a new report from the Policy Exchange think tank, concludes: "A moratorium on onshore wind is likely to lead to a higher cost to consumers of meeting decarbonisation objectives. For example, replacing 1GW of onshore wind with the equivalent amount of power from offshore wind would increase the cost to consumers by £75–90 million each year."

The report also assesses the impact of any decision by the government to exclude onshore wind from future CfD auctions – something that has been mooted. It says this would be a mistake, arguing that onshore wind could approach the cost of new-build gas generation by 2020 or soon after, at which point a CfD contract should no longer be seen as a subsidy.

It predicts that the CfD process will deliver almost no new onshore wind in England because it would favour lower-cost projects in Scotland and Wales.

The intended changes to the planning system are also likely to curtail onshore projects in England. Under the proposals, permission can be granted only if the site is in an area "identified as suitable for wind energy development in a local or neighbourhood plan" and "planning impacts identified by affected local communities have been fully addressed and the proposal has their backing". As the Policy Exchange report points out: "This effectively halts all new onshore wind applications in England, at least in the short term, since almost 40% of LPAs do not have a local plan." It adds: "Even those that do have a plan are unlikely to have identified sites suitable for onshore wind development."

Climate change levy

The chancellor, George Osborne, announced in his summer budget the removal of the exemption from the climate change levy (CCL) for renewable source energy (RES) supplied to businesses and public sector organisations. The CCL is a UK-wide tax on the supply of energy to businesses and the public sector. Electricity, gas, solid fuels and liquefied gases have separate rates depending on their energy content. The levy was introduced in 2001 to improve industrial and commercial energy efficiency, and help reduce greenhouse-gas emissions. Renewable electricity has been exempt from the CCL since its introduction. Energy regulator Ofgem issues levy exemption certificates (LECs) to demonstrate to the HMRC that the supply is CCL-exempt. The exemption was removed on 31 July 2015.

The government says that, since the CCL and the exemption was introduced in 2001, more effective policies have been put in place to support renewable electricity generation. These target support directly at renewable generators, while the CCL exemption seeks to support renewable generation indirectly through stimulating demand. It claims that without action the exemption would cost £3.9 billion over this parliament and one-third of this value would go to supporting renewable electricity generated overseas.

Decc acknowledges that renewable generators in the UK could be affected by the change in the short term, but the value they receive from the exemption is expected to be negligible by the early 2020s. It says the measure will have no direct impact on the achievement of UK carbon budgets because emissions from electricity generation are capped through the EU emissions trading system.

However, the impact on UK companies could be significant, says Ian Holyoak at Michelmoores LLP, because around 70% of the income generated by LECs goes to UK-based energy producers rather than overseas generators. "The removal of relief represents the loss of a significant incentive for investment in renewable source energy and will, for example, have an impact on schemes that included LEC revenues in the financial modelling for their CfD bids," he says.

Image: iStock.com/Michael Westhoff

Renewables company Infinis said the industry understood the phase-out would not start until 2020. "Based on our initial assessment of this measure, Infinis expects a reduction in earnings before interest, tax, depreciation and amortisation of approximately £7 million in the year ending 31 March 2016 and approximately £10–11 million in the year ending 31 March 2017," it said.

At the start of September, Infinis and Drax, the operator the UK's largest power station, which has been switching from coal to biomass, initiated proceedings for a judicial review of the notice period given by the Treasury when removing the exemption from the CCL.

Energy efficiency

The coalition's flagship energy efficiency scheme was the green deal. It became operational on 28 January 2013. Under the scheme, finance was available to install a range of energy-saving measures in domestic properties. The Green Deal Finance Company (GDFC) was set up to fund providers. In July, environment and climate change secretary Amber Rudd announced that the government would stop funding the GDFC, in effect closing it. She said support for the home improvement fund cashback scheme, which has provided £114 million for 27,000 energy-efficiency measures, would also end.

The government has also abandoned its target for all new homes to be "zero-carbon" by 2016. Under this, announced in 2006, new dwellings would generate as much energy onsite as they consumed. It required developers to meet a minimum energy standard in new homes or invest in carbon reduction projects offsite under a scheme known as allowable solutions, introduced by the coalition government only last year.

When the green deal was introduced in 2012, the coalition government described it as a market solution to a market failure: the reluctance of householders and businesses to invest in energy efficiency because of the initial costs. The commercial green deal scheme never materialised, however. When further funds were released in March 2015, Decs described the green deal as a "popular scheme". But, in July, Rudd said it would no longer provide the GDFC with money because of low take-up and concerns about the quality of installations. Decs had made it clear after May's general election that curtailing its energy efficiency programmes would provide £40 million of the £70 million departmental savings it was proposing for 2015–16.

The scrapping of the zero-carbon homes policy was included in the *Fixing the foundations* report from the Treasury, published in July. It said: "The government does not intend to proceed with the zero carbon Allowable Solutions carbon offsetting scheme, or the proposed 2016 increase in on-site energy efficiency standards, but will keep energy efficiency standards under review."

The green building industry believes both measures will lead to uncertainty and put investment in jeopardy. John Alker, director of policy and communications at the UK Green Building Council (UKGBC), describes as frustrating the decision on the green deal and says the

industry is waiting to find out what will replace it. Daisy Sands, head of energy at Greenpeace UK, says: "The green deal was far from being a success but, coming right after the scrapping of the zero-carbon homes target, this latest move suggests ministers are giving up on efficiency."

In a letter to the chancellor, business leaders from 246 organisations warn that the u-turn on zero-carbon homes had "undermined industry confidence in government" and would "curtail investment in British innovation and manufacturing". Rob Lambe, managing director of Willmott Dixon energy services, says: "This announcement seriously undermines industry confidence in government policy and will diminish future investment." IEMA is also warning that the decision not to proceed with the zero-carbon allowable solutions carbon offsetting scheme or the proposed 2016 increase in onsite energy efficiency standards would put at risk sustained progress on implementing low-carbon initiatives.

It's the economy, stupid

A study from the business department, *The size and performance of the UK low-carbon economy*, published in March, found that the UK low-carbon electricity sector, which includes onshore and offshore wind and solar PV, employed 140,800 people in 2013, a 7.8% increase on 2010. It had a turnover of £33.3 billion (up 6.5%) and contributed £10.4 billion (up 5.8%) in gross value to the economy. Solar employed 34,400 people, onshore wind 19,000, and offshore wind 13,700. It also reported that the energy efficiency products sector employed 94,200 and had a turnover of £16.4 billion.

The REA says employment in the renewables sector has been increasing nearly nine times as fast as in the economy as a whole. The consultation on the FIT scheme was accompanied by a separate report by Dr Colin Nolden at University of Sussex. He concluded that the FIT scheme was still creating jobs.

That is now unlikely to continue and may go into reverse. After Decs published its proposals for the FIT scheme, entu (UK) announced it would close its solar division. In a statement, the company said: "The board expects the market environment for solar to become increasingly difficult as a result of speculation about a possible increase in VAT for its solar products from 5% to 20% and uncertainties about future feed-in tariffs." It pointed in particular to a government proposal for a substantial reduction in feed-in tariffs from January 2016.

A survey by business services company EY of 10 major lenders, which over the past two years had provided about 90% of finance for onshore wind in the UK, found that half would not lend money for future projects at least until the Energy Act came into force, which is not expected until next year. The finance companies said their reluctance to fund onshore wind in the meantime is due largely to the current political and regulatory risk to the RO. If investors take their money elsewhere because the government is scrapping its support for clean energy technologies and improving the energy efficiency of buildings, jobs will not be the only casualty. It will also make it harder for the UK to achieve its carbon budgets and to establish a cost-effective pathway to reducing emissions by 80% by 2050.

The counterweight

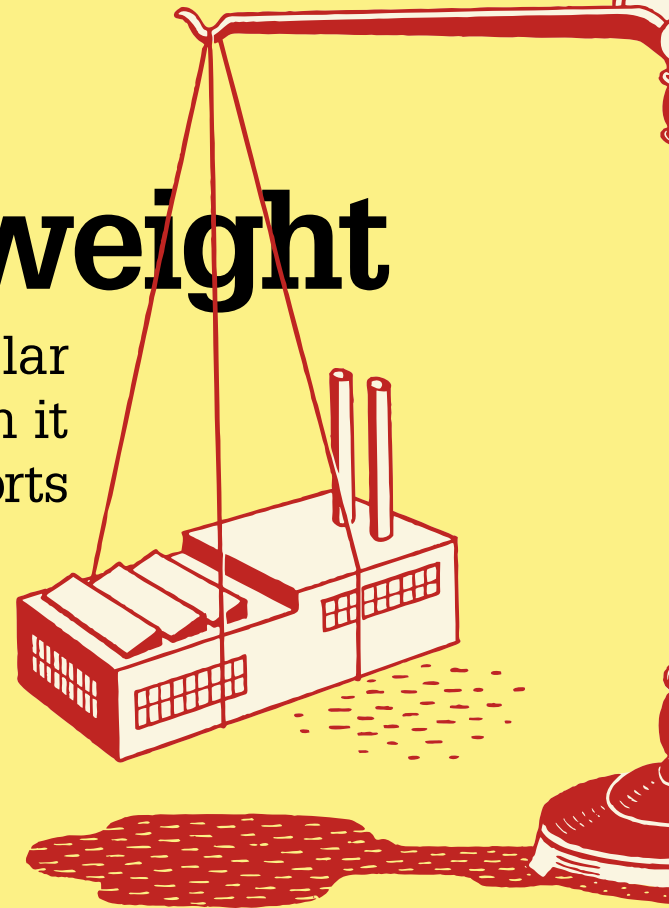
Carbon offsetting remains popular among some companies, though it is changing. **Wendy Buckley** reports

Carbon offsetting has divided opinion on its merits to combat climate change because it does not necessarily require offsetters to reduce their own emissions. However, significant changes in recent years in terms of carbon measurement and offsetting have made the process more robust. These include improved regulation and standards, such as mandatory greenhouse-gas reporting and the introduction of PAS 2060, the specification to demonstrate carbon neutrality. At the same time, the market price of carbon offsets has fallen significantly.

Change of focus

Carbon offsetting is far from a new concept and, over the past 10 years, more businesses have claimed they are carbon-neutral. The process of buying carbon credits either at home or overseas to compensate for an organisation's emissions from its own operations (see panel, below) has come far since the activity was regarded as "pseudo-charitable".

Recently, a more sober and – literally – measured approach has been adopted, while high-profile companies such as Microsoft, Aviva, Jaguar Land Rover, Marks & Spencer and Sky have been offsetting their emissions for years. The UK government also uses



the mechanism to offset its travel emissions under its "greening government" commitments.

Broadcaster Sky has been offsetting its entire carbon emissions since 2006. Fiona Ball, head of responsible business, says few organisations were committed to offsetting then and Sky wanted to show leadership on climate change. "We had already been through a process of measurement and internal carbon reduction – we wouldn't have done the offsetting without these elements firmly in place," she says.

Initially, Sky's offsetting focused on supporting renewable energy projects, but its choice has moved to ventures with high levels of social benefits, including a rainforest protection project in Brazil.

Deutsche Post DHL Group, the world's biggest logistics company, has also been a major offsetter since 2006. Daniela Spiessmann, senior expert, GoGreen, at the group, says DHL developed its climate-neutral product offering in 2005, initially for parcels. This enables customers to participate in the company's voluntary emissions trading scheme to offset emissions that cannot be avoided. DHL purchases carbon credits from specialist providers which spend the revenue on climate protection projects. So, for DHL carbon offsetting provides a market opportunity and helps clients to fulfil their own commitments. The scheme also complements the company's GoGreen environmental protection programme to improve carbon efficiency.

Like Sky, offsetting at DHL focuses on supporting projects with considerable social impact, with the firm favouring projects that have achieved a gold standard rating in south and central America, Africa, the Middle East and Asia. To attain this standard a project must meet strict criteria, among them contributing evidence of reductions in carbon and local participation. They must also be verified by the UN.

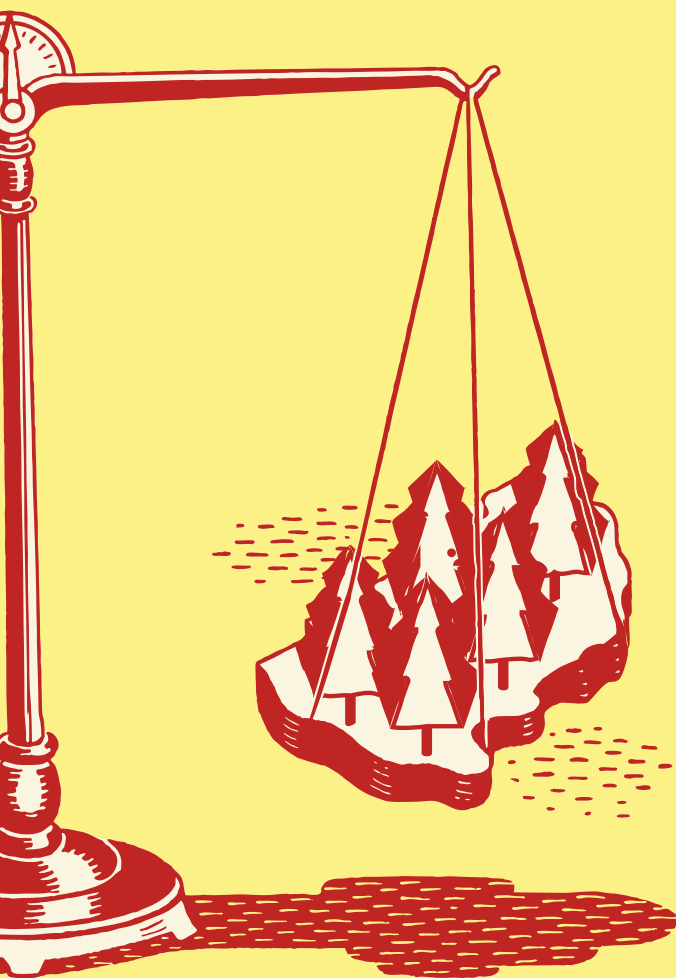
How carbon offsetting works

- Project in a non-Kyoto country applies to generate offsets.
- Validation of project – accepted only if there is no other source of funding.
- Carbon credits issued after the project delivers carbon reductions.
- Carbon credits are sold on regulated international markets.
- Offsetters purchase the offsets and have them "retired" in their organisation's name.

To offset, an organisation must first know what its carbon footprint is. Fortunately, organisations have become more experienced and confident in measuring emissions, partly due to compliance processes such as the UK's carbon reduction commitment energy efficiency scheme and mandatory greenhouse-gas reporting.

Carbon conversion factors are updated and published annually by Defra. So, as long as an organisation has quality data, it should be able to assess its footprint accurately.

Carbon offsetting organisations, such as broadcaster Sky, have their emissions verified frequently and independently. This not only provides confidence for its compliance reporting, but adds credibility to its carbon offsetting claims. To cover the margin of error, many offsetters include a "buffer" of an extra 5–10% on top of their carbon footprint.



PAS2060

In 2008, BSI launched the publicly available specification (PAS2060) to provide an understanding of what “carbon neutral” means. It requires organisations to:

- Measure their annual footprint to recognised methodology.
- Produce a carbon management plan – including a set of target metrics.
- Offset emissions using internationally recognised standard projects, such as certified emission reductions (CERs), gold standard verified emission reductions (VERs) or verified carbon standard (VCS).
- Complete a qualifying explanatory statement (QES) and make it publicly available.

joint implementation (JI) carbon credits. JI allows annex B parties under the protocol, such as the pre-enlargement EU-15, to earn emission reduction units (ERUs) from a project in another annex B country. However, JIs are rare because they tend to be costly.

Some organisations are taking an alternative approach and investing in more locally based community energy projects. They either source the projects themselves or use an intermediary. Renewables projects, such as solar panels or small-scale wind power, are popular. This approach has been used by British Airways. Jonathon Counsell, group head of sustainability, says: “We chose to support community energy-based projects in the UK, which is funded on an opt-in basis by our customers when they book their flights. We had previously done traditional offsetting, but we responded to customer feedback and currently the UK is a better fit with our clients.”

Value for money?

Most organisations using offsetting would say it helps raise brand recognition, but does it also provide a good return on investment?

Greenhouse Graphics, a Hampshire-based graphics and printing business, offsets emissions from its paper products and understands the value of it. “Offsetting is synergistic with what we do and our impact,” says managing director Ian Crossley. “We assess the carbon content of our individual projects, which we report to our customers. As a carbon-neutral offering is central to our values, we provide the offsetting at no additional charge, choosing UK tree-planting projects.

“We only do this after we have a thorough internal process in place for measurement and reduction.”

Offsetting works for companies like Greenhouse Graphics because there is a robust quantitative understanding of the carbon saved and a full audit trail. The downside is cost, given the layer of administration needed to develop a project and audit it.

As environmental management merges into sustainability, the demand for carbon offset projects with higher social benefits seems set to increase. Will businesses favour social quality over quantity and buy less offsets or increase their budget to buy the same quantity of offsets? Time will tell.

The focus on social projects is relatively new. In the past, and particularly when the price of carbon was high, offsetters such as Sky favoured cost-effective renewable energy projects. But as an organisation’s understanding of offsetting increased, a trend has emerged to select projects to which the business has a connection. This may be a region of the world or it may be related to the subject matter. For example, waste management companies have a natural synergy with projects in developing countries to reclaim landfill gas; and an IT and telecommunications company in the UK with subsidiaries in India has selected rural community projects, such as rolling out energy-efficient cookstoves.

Portman Travel offers its clients carbon offsetting on the emissions caused by their journeys. Adrian Parkes, chief commercial officer, says: “Our offsetting is part of our integrated ‘Responsibly Portman’ corporate social responsibility programme. We choose projects in developing regions that benefit communities and resonate with our customers.”

He advises businesses considering offsetting to avoid doing it on a whim. “First, decide on your business’s objectives and drivers. Is the organisation planning to offset for legislative reasons or as part of its marketing strategy? Or is it to reduce costs? Then build a long-term sustainability programme around it.”

Own backyard

A frequent complaint among offsetters is the inability to select projects in countries that are party to the Kyoto protocol. Under carbon offsetting rules, credits from the voluntary market are generated only from countries that do not have commitments in place to reduce their emissions under the international climate agreement. In theory, it is possible to generate

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Putting nature on the balance sheet

Experts at eftec outline the benefits of the new Corporate Natural Capital Accounting framework

Corporate Natural Capital Accounting (CNCA) is a framework for organisations to account for the natural capital that they own and depend on, or for which they may be responsible. Developed for the Natural Capital Committee (NCC) by a consortium led by the environmental economics consultancy eftec, the framework collates natural capital information. It accounts for these assets in a similar way to that in which other capital assets are accounted for.

The importance of natural resources is often overlooked in decision making, typically because the full range of their benefits and value (or the costs of their decline) are not as visible as their financially recognised and accounted-for costs and benefits. Accounting for natural capital in a proper manner is a vital step towards addressing this imbalance.

Natural capital and financial accounting

The NCC defines natural capital as “the elements of nature that directly and indirectly produce value or benefits to people, including ecosystems, species, freshwater, land, minerals, the air and oceans, as well as natural processes and functions”.

This definition represents the natural environment as a capital asset that has the productive capacity to generate value, in terms of goods and services and the benefits that society derives from them. Some of these, such as the value of timber from a forest, are already included in financial accounts; others, however, are not – for example, the informal recreational opportunities, amenity benefits and flood prevention functions of a woodland. CNCA recognises that inputs from other forms of capital are often needed to realise these benefits. The water filtration benefits of upland bog, for example, can be realised only if there is a substantial human made infrastructure for water collection and distribution.

Organisations assess the value of their assets through conventional financial accounting processes. This includes balance sheets summarising the assets and liabilities the company holds, and profit and loss accounts that record flows of values in an accounting period. This basic information underpins multiple decisions in an organisation, such as when funds will be required for maintenance and improvement, and how to capitalise on the increasing value of assets.

Financial accounting is not enough to make good decisions about natural capital though, as most of the benefits it generates do not appear in financial accounts. The shortcomings of financial accounting are demonstrated clearly in the way parks are treated in local authority accounts. The park is a physical asset. It gives rise to a liability due to the cost of maintaining it for public use, which is shown in the financial accounts as a cost. The park also generates recreational value but, because entry is free the financial accounts register nothing for this asset value. To the extent that an asset value is recognised at all for the park, it will be limited to some nominal value. The actual value to the users and wider society may be much higher but is not visible in the financial accounts.

What is needed is an accounting perspective that is more sympathetic to natural capital assets. It must recognise the full value that can be derived from natural capital assets, and assist in making decisions aimed at preserving that value over the long term. CNCA is designed to address this need.

What the CNCA does

CNCA gathers natural capital information and presents it in a coherent and comparable format to bring the full benefits and costs of natural assets into business decision-making. It records the benefit to both the owner and society. It does this by answering four key questions:

- What natural capital assets does the organisation own, manage or take responsibility for?
- What benefits do those assets produce for the organisation and wider society?
- What is the value of those benefits?
- What does it cost to maintain the natural assets and benefits?

The asset register is a key part of the framework. This is a catalogue of the significant assets owned by the organisation, and holds data on their extent, condition, services and benefits delivered. This information is the basis for the evaluation of natural capital values for each asset. Once evaluated, these values can be consolidated and presented in formats similar to financial reporting statements. The similarity of presentation to conventional accounting is important because it enables an understanding of natural capital that is familiar and compatible with capital concepts.

The National Trust – Wimpole Estate

Wimpole is a 1,200 hectare historic estate and visitor attraction in Cambridgeshire, consisting of parkland, farmland and semi-ancient woodland of special scientific interest. Due to poor soil quality, the National Trust changed from conventional arable farming to organic cropping and Higher Level Stewardship (HLS). The CNCA framework was used to measure and report the overall change in natural capital value arising from this move. The National Trust piloted CNCA to investigate a new way of recording the natural assets owned by the trust and the relative costs and benefits that flow to the business from their management. This exploration provided three benefits:

- a new way of communicating with trustees, staff and supporters about what the National Trust is doing to conserve assets;
- reviewing whether money is being invested in the right places; and
- exploring whether there are sustainable ways to capitalise on the costs of some of that investment.

The range of estate benefits included farm income, visitor revenue, recreation, wildlife and carbon sequestration. Given the multiple benefits of natural capital, the challenge for CNCA was to identify value and present it in a format that provided an overall understanding of the state of natural capital for Wimpole Estate.

Comparing the current organic regime with the previous intensive arable practice showed that, despite the reduction in crop yields, overall income was about the same. This was due to a combination of lower fertiliser costs, higher HLS grant income and a slight price premium for organic produce. More importantly, there were significant benefits through increases in soil carbon sequestration, higher recreational benefits and improvements to biodiversity. Taking these additional benefits into account produced a higher overall return on investment than had been recognised in the conventional financial accounts.

The example below is a simplified version of the natural capital balance sheet produced for Wimpole Estate.

Wimpole Estate	Balance sheet – year end 2013		
	Renewables Private	External	Total Value
Assets			
Baseline value (2008)	£14m	£12m	£26m
Cumulative gains/(losses)	£2m	£4m	£6m
Additions/(disposals)	£2m	£2m	£4m
Gross asset value	£18m	£18m	£36m
Liabilities			
Maintenance provisions	(£4m)	(£2m)	(£6m)
Total net natural capital			£30m

The purpose of the balance sheet is to disclose natural capital assets and liabilities. Assets are valued as the expected flow of future benefits based on the existing condition of the natural capital. Liabilities are evaluated as the expected flow of future costs of maintaining the condition and benefits of the natural capital in perpetuity. All values are discounted to bring the expected costs and benefits into present value terms. In this way, the overall asset values and their associated maintenance costs can be presented to highlight the net natural capital of the organisation. The format separately discloses private value (to the organisation) and external value (to all external beneficiaries). This reveals the pattern of flow of natural capital benefits to the business. This example provides further asset detail in terms of the original baseline value in 2008, plus increases in asset value due to improved natural capital condition and some additions (the acquisition of more farmland into the estate).

It is important to appreciate that there are some significant differences in treatment between the CNCA framework and conventional accounts, however. These arise from the key principles that guided the development of the framework. They are:

- **Type of value:** The accounts must capture the full value of natural capital; therefore, the asset value includes both the private values accruing to the organisation and the external values accruing to society. These are reported separately in CNCA.
- **The relevant time period:** CNCA is forward looking, so the asset value is the sum of all (forecast) future benefits from the natural capital asset, based on its existing condition. Similarly, the liabilities are the sum of future maintenance costs. In contrast to conventional accounting, CNCA is not concerned with historic benefits or costs.
- **Notes to accounts:** CNCA should disclose the changes in value by cause – that is by quantity, quality or for other external reasons. The notes to the accounts should also describe the benefits that cannot be adequately expressed in monetary terms.

Testing the framework

The CNCA framework was piloted with four organisations, including National Trust (panel, p.27), the Crown Estate and United Utilities – to test and develop the approach. The organisations found the

accounts useful. For example, the Crown Estate realised CNCA was a simple way of demonstrating to regulators and stakeholders the considerable value of maintaining Windsor Great Park.

CNCA adds value to existing environmental and financial information and provides powerful insights into the decisions an organisation makes on the natural capital it owns. Benefits include:

- Highlighting opportunities to generate new revenues from natural capital – for example, new products and services, and payments for ecosystem services; and the risks to revenues, liabilities and damage to reputation of not maintaining natural capital.
- Improving decision-making – for example, by investing in natural versus physical infrastructure, assessing the impacts of changes to natural assets, or prioritising the allocation of limited budgets.
- Communicating the value and importance of natural assets to stakeholders, including senior managers, investors, regulators, staff and customers.
- Monitoring the health, condition and value of natural capital, thereby improving sustainability.

CNCA is an important new tool that creates a register of natural capital and provides vital information to properly sustain and increase its value.

Allan Provins, Duncan Royle and Ece Ozdemiroglu work for eftec.

Making smart investments into the UK's electricity grid

Over the last 50 years, electricity consumption in the UK has increased around 180 %. If this growing demand didn't already put enough stress on our electricity systems, a fifth of the UK's ageing power stations are due to close by 2020. In addition, electricity generation alone accounts for around a third of the UK's CO₂ emissions, a figure the government is keen to reduce, in order to ensure it meets its carbon reduction targets (80 % by 2050) as set out in the Climate Change Act 2008.

The Energy Bill aims to provide the reforms needed to attract the £110bn investment that will deliver a secure, affordable and decarbonised electricity system. However, with recent policies being cut left, right and centre, investors need innovative and proactive solutions they can rely on.

Smart infrastructure and smart technology can and will help. A smart grid can manage supply and demand helping to address a shrinking capacity margin, but also allows for more carbon neutral renewable electricity supply, minimising carbon emissions. But significant investment is needed to get a smart grid in place, making it essential that there is a fair assessment of which approaches have the best return on investment in terms of the emissions reduction.

In other words, a cost-benefit model on how much carbon could potentially be saved through innovations would allow investments to be made effectively and efficiently. But with variable demand and a constantly changing energy mix, a 'one size fits all' model isn't going to give us a fair answer.

The National Physical Laboratory's methodology to model the amount of carbon savings in electricity generation, consumption and other smart infrastructure takes into account the generation methods and consumption patterns that vary depending on conditions and demand. For the maths enthusiasts amongst you: it is based on Ensemble Kalman Filter (EnKF) forecast and optimisation (EnOpt) routines, and uses real-world electricity generation and consumption data, to tune, test and refine the output, next to quantifying relevant associated uncertainties. This makes comparing different methodologies and assessing the best return on investment both easier and more accurate.

Standardising our approach to calculating carbon savings from smart interventions on the grid, will provide investors with confidence and assurance that the resultant technologies will deliver the maximum reduction in carbon, and help the UK meet its emissions reduction targets.

For further information visit www.npl.co.uk



Managing biodiversity risks and opportunities

Richard Campen and **Alex Saponja** argue that a new standard is good news for the natural environment

Given that biodiversity supports the vital benefits we derive from the natural environment, a new BSI standard on this is timely, particularly in the context of recent, less encouraging announcements.

Reports of falling wild bird populations and a continuing decrease in already-threatened animal species and plants serve only to support Defra's declaration in 2011 that 30% of the services we secure from the UK's ecosystems are in decline.

Introducing BS 8583

BSI hopes that the new standard will help to reverse this seemingly unremitting tide of bad news. *BS 8583 – biodiversity: guidance for businesses on managing the risks and opportunities* is a tool that a business can use to manage premises, supply chains and day-to-day operations in ways that are mutually beneficial to biodiversity and the organisation itself. In addressing the specific problem of biodiversity and ecological conservation, society also has to deal with the

BS 8583 – the benefits

The standard:

- Explains what biodiversity is and why it is relevant to businesses and other organisations.
- Describes how to assess biodiversity impact.
- Explores ways to manage biodiversity, for example through supply-chain and land management.
- Provides advice on planning for biodiversity protection and enhancement.

global financial crisis and its impacts nationally. The conventional approach is to see economic growth as more important than managing habitats and wildlife. In this context, expenditure on UK biodiversity declined between 2007 and 2013.

Any discussion about biodiversity, the economy and meeting the needs of people is in essence about sustainability. The Brundtland Report (1987) defined sustainable development as that which “meets the needs of the present without compromising the ability of future generations to meet their own needs”. This definition puts people at the centre of sustainable development and, when creating a framework for sustainability, we tend to aim to address the three pillars of people, economy and environment. These are usually represented as three overlapping ellipses, with sustainability at the centre.

Cajoling small businesses to use BS 8583 may require demonstrating its benefits and helping them understand what actions will be required

In her 2009 book *Green economics*, academic and Green MEP Molly Scott Cato took this model and put society in the ellipse of environment and economy in the ellipse of society. This particular approach helps reinforce the fact that there are environmental limits, and without the environment there would be no functioning society. With the term “limits” comes the concept of risk, which is included in the title of 8583.

In light of the above, it could be argued that most environmental problems are social ones. So the loss of biodiversity is as much a social problem as an intrinsic one. At the extreme, there would be no environmental problems if humans were not here to perceive them. However, people are part of nature so the issues of resource exploitation, species extinction and habitat losses are all connected to human activities and wellbeing.

Evidence is growing that exposure to the natural environment can produce mental health benefits. It follows that a thriving natural environment and access to it have knock-on benefits for the health system and the economy – hence the importance of involving the business community.

Corporate response

Many large businesses and corporations address sustainability and biodiversity through environment management systems and specific programmes.

Utility companies might embark on water catchment management programmes, for instance.

Some organisations produce corporate social responsibility reports detailing their activities. However, according to the Federation of Small Businesses, in 2014 small and medium-sized enterprises (SMEs) accounted for 99.9% of the 4.9 million private sector businesses in the UK and employed 24.3 million people. But SMEs are less likely to be engaged in sustainability because they lack the economies of scale that large businesses can exploit.

The 8583 guidance standard is a response to this disparity and is intended to give business of all sizes and types the means to understand biodiversity in clear, easy steps. Its use would be particularly beneficial if current strategies and action plans do not exist or lack traction. Using a simple flow chart, businesses are given the means to understand biodiversity in the context of their own sector and organisation, with the expected outcome that action is taken to enhance the natural resources on which they rely.

By making the small changes and taking the steps highlighted in the guidance, businesses can follow a route of maturation that goes beyond what is specified and apply ecosystem service and natural capital principles. An example of such a step is Puma’s environmental profit and loss (EP&L) balance sheet. It revealed the true costs to the sportswear business of its use of, and impact on, the natural environment, and helped it to better understand risk and identify where to coordinate its sustainability effort. Although EP&L controversially puts a cost value on environmental impacts, it does highlight how much the business depends on the natural world. The Corporate Natural Capital Accounting (CNCA) framework, which and is reported on pp.26–28 of this issue, also helps organisations account for their natural capital.

A guide to action

BS 8583 is for guidance only, and its success will be contingent on take-up. Those responsible for business operations, especially in SMEs, are often under pressure in terms of time and resources. Although the standard aims to provide some support with concepts and theory relating to biodiversity, in some instances inputs from an ecologist or environmentalist may be required. So cajoling small businesses in particular to use 8583 may require demonstrating its benefits and helping them to understand what specific actions might be involved and what they might cost.

If 8583 is adopted by a large number of SMEs, it could be an important sustainability tool. The standard could provide the basis for nature or biodiversity management plans, and would dovetail smoothly to support corporate social responsibility reporting and sustainability strategies. In future, 8583 could be used to support the revised ISO 14001 standard, helping an organisation to better understand its context, and risks and opportunities – both clauses in the revised international standard for environment management systems.

Richard Campen, FIEMA, is lecturer at the Open University and Sheffield Hallam University. **Alex Saponja**, MIEMA, is a senior consultant at Interserve.

Institute appoints new commercial director to its leadership team

IEMA is working constantly to fulfil one of the main objectives of its Vision 2020 strategy: to increase its influence and reach. This is an all-encompassing exercise, consisting of top-level policy engagement, media activity, member consultations, international development, and requires strong leadership.

We are already seeing a definite shift in the way IEMA is recognised and its wide scale of influence

A new addition to the leadership team is commercial director Tom Taylor (pictured). He is taking strategic responsibility for increasing IEMA's influence, an objective set by members during the consultation in 2013 on the future of the institute and the development of Vision 2020.

Taylor has previously held executive and non-executive roles in the environment,

health, agriculture and accountancy fields. He brings this wealth of experience to IEMA, where he now leads the development of the institute's brand, media, communications and commercial products.

Taylor said he aimed to ensure IEMA members get the best possible experience, value and recognition from their membership through an unrivalled range of benefits they receive and from the satisfaction of being a part of a growing, dynamic and highly influential professional body.

"IEMA has enormous potential to be a real game-changer. Given the critical need for every member of every workforce in the world to have the right sustainability skills, the time has come for IEMA to have a much bigger influence," Taylor said. "We are already seeing a definite shift in the way IEMA is recognised and its wide scale of influence; I aim to increase that momentum so that IEMA membership grows in number, influence and reach."



Further to his role at IEMA, Taylor has just started working with the Consumer Council for Water (CCWater), becoming the organisation's committee chair at the beginning of October. As the organisation's "consumer champion" in Wales, Taylor represents the views and interests of water customers in the country. He was appointed by Carl Sargeant, minister for natural resources in the Welsh government, and was welcomed by Alan Lovell, chair of CCWater, who said: "We're looking forward to Tom playing a leading role in championing the interests of water customers across Wales."

#NoCopOut on climate change is message from IEMA members

In the lead-up to the UN climate change conference in Paris (COP21), IEMA's burgeoning Climate Change Network has been conducting a webinars campaign to support the learning of other members on climate issues. The programme aims to mobilise professionals to get involved in action on climate change.

The first webinar was hosted by sustainability practitioner Jae Mather. He gave an overview of global macro trends, looking at how they relate to climate risk and need for action. It also provided members with an opportunity to debate priorities and opportunities for the profession. Two other webinars were held. They were: Addressing climate change through ISO14001 – presented by Lucy Candlin of the UK emissions trading group and Planet & Prosperity Limited;

and Climate science: risk, reality and the change imperative – presented by Anna-Lisa Mills, group sustainability manager at Innovation Group.

You can catch up at iema.net/event-reports and search #IEMANoCopOut on Twitter for comments. Forthcoming webinars in the series in October are:

- **19 October:** Making the business case for climate change – Jonathan Foot and Colin Robertson.
- **22 October:** Behaviour change as part of a strategy – Global Action Plan and Rebecca Vowles.
- **28 October:** Planning a strategy on energy and carbon reduction – Bekir Andrews.

Visit events.iema.net to book your free place at the next webinar. If you are



LIVE EARTH
ROAD TO PARIS

interested in joining IEMA's Climate Change Network, contact Peter Jones at p.jones@iema.net.

The campaign also encourages members to take action on climate change by adding their name to Live Earth's drive to get one billion voices to deliver a single message to global leaders at COP21. To find out more and to sign up, go to goo.gl/jSkqFi.



Corporates enjoy the benefits of joining IEMA

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Institute of Environmental
Management & Assessment

IEMA's *Perfect storm* report revealed a widespread lack of the skills organisations will need to meet the challenges arising from rapid population growth, volatility of materials supply, a changing climate and more frequent extreme weather. To help organisations of all types and sizes prepare for these challenges and equip their staff and the future workforce with the environmental and sustainability skills needed to survive and thrive in the new economy, IEMA has a suite of products comprising IEMA for business, education and consultancy.

Network Rail, Skanska UK and Willmott Dixon are three companies IEMA is assisting to be sustainability leaders, and increase their resilience against coming uncertainty and continue to be successful. Through the partnerships, the three businesses are working with IEMA to share best practice, build their reputations and raise the competence of in-house environment and sustainability professionals as well as the wider workforce, including senior teams.

Adding value

Nigel Sagar, senior environmental compliance manager at Skanska UK, says the partnership between the construction company and IEMA is producing some very tangible business benefits. The Swedish-owned firm has a clear vision for sustainability and a long tradition of "greening" its construction projects. Deep green is the destination for a journey to a more sustainable future. IEMA has helped Skanska to add to its comprehensive portfolio of training to support its journey to Deep green including approving three training courses delivered by the construction company.

Skanska has used IEMA's leading with environmental sustainability course to support its clients to better understand the strategic implications of a changing environment on their ability to do business. Sagar, who is a MIEMA and a chartered environmentalist, says this has been of real value for both Skanska and its clients. "Embedding this knowledge among our senior managers, clients and designers helps deliver more sustainable buildings

and infrastructure," he says. IEMA is also helping to spread environment and sustainability knowledge throughout the business. The institute has assured the firm's "lifecycle-costing" course. It is an entry-level course on costing what the company does in terms of sustainability. It was developed with Skanska's estimating teams and is delivered by them.

IEMA and Skanska have developed a structured programme of professional development for the firm's 60-strong environment team. This includes IEMA providing support, through workshops and mentoring, to assist those who are ready to achieve full and chartered environmentalist status. Colin Moorcroft, environmental training manager at Skanska, reports that 10 are now MIEMA and CEnvts, and 13 others are going through the process. The framework also supports practitioners at the start of their careers to gain the knowledge to achieve associate status. The support provided by IEMA includes monthly webinars and workbooks geared towards helping individuals taking the associate exam.

“The partnership with IEMA has helped our environment professionals achieve and demonstrate even higher levels of competence and to be influential in change,” says Moorcroft, who fully understands the membership process, as he is one of the 10 Skanska employees to achieve MIEMA and chartered status this year.

Away from assisting in spreading knowledge and building competence, corporate membership has generated financial savings and supported Skanska to showcase its leadership on sustainability at IEMA events and in publications, such as *the environmentalist*. From the start of 2016, Skanska will pay for the annual IEMA memberships of all its environment team in one payment, rather than individuals having to claim back the payment from the company, often at different times in the year. This will greatly reduce the administrative burden on Skanska of dealing with professional membership renewals and is more cost-efficient for both organisations, says Moorcroft.

Willmott Dixon is also benefiting from its corporate membership with IEMA. The company is building IEMA's qualifications into those available through its training academy with a view to supporting its customers to understand the importance of environmental sustainability. The construction company, which became a corporate member in 2012, has also developed self-development competence matrices to ensure employees have the technical skills to deliver sustainable buildings.

This work has included taking the IEMA skills map to construct a programme of environmental and sustainability skills for the whole workforce of more than 3,000. “When I first saw the map, I could see its potential to be translated at an organisational level,” says Ballard. The map has been translated into four levels, induction, operations, management and leadership, which mirror the skills map's entry, operational, managerial and leadership levels. Environment managers at Willmott Dixon are expected to attain full IEMA membership and/or chartered environmentalist status. “IEMA corporate membership is very valuable to Willmott Dixon. It has helped us on our long-term journey to gain recognition for the training we have been doing as well as assisting us to move forward and implement it across our entire business,” says group environment manager Martin Ballard.

Aside from helping Willmott Dixon to raise the competence of its environment

practitioners, other members of staff and clients, Ballard says the value of corporate membership is in the discussions he and his colleagues can have with experts at the institute and its other members. “As a company, we're involved in lots of industry groups, but being able through IEMA to talk about the environmental and sustainability challenges all businesses face and the implications of new legislation, as well as to share best practice and ideas at events like the institute's employer forum, is extremely valuable,” he says.

Rhodri Davies, environment manager at Network Rail Infrastructure Projects (NRIP) southern division, reports that the owner and operator of Britain's railway infrastructure became a corporate member at the start of 2014.

The initial focus of the partnership was training. At the time, NRIP was developing a programme to embed environmental knowledge across the division with the view to roll it out to Network Rail's 35,000 employees. NRIP used the IEMA skills map as the basis to identify the skills and knowledge required by staff at all levels, creating a process to identify the environmental responsibilities for each role and to determine whether each employee had the sufficient competence to exercise that responsibility effectively. Training was provided to raise competence where necessary, with NRIP and IEMA working together to design the courses.

The relationship between the two organisations has since broadened. NRIP operates a Principal Contractor Licensing Standard, which sets out the requirements for principal contractors on the level of competence and skills their environment managers and specialists are expected to have based on project value and risk. One specification is for such personnel to be full members of IEMA or an equivalent. “But we found that quite a few of our own staff were not at the correct membership level,” says Davies. “So we have worked with IEMA to get more people to achieve MIEMA and chartered environmentalist status.” This has consisted of workshops run by IEMA assessors to prepare individuals for the process. So far 10 people have had interviews to become full members and chartered environmentalists. “This has been fantastic in raising the profile of the profession in the industry,” says Davies.

The next step for IEMA is to present to Network Rail's senior leadership teams on the sustainability challenges highlighted by the institute's *Perfect storm* report.

Supporting organisations on their sustainability journeys

IEMA for business

The institute offers two levels of corporate membership based on organisational size – for enterprises with fewer than 250 employees and for those with more than 250 staff. As the experiences of Network Rail, Skanska UK and Willmott Dixon demonstrate, partnering with IEMA is about developing the environmental and sustainability skills, competence and knowledge, and the sharing of best practice and ideas to ensure they are prepared for the challenges of a changing economy and can make the most of the opportunities that will emerge.

IEMA for consultancy

IEMA has a specific membership scheme for consultancies with less than 50 employees, which is designed to help them grow their business by demonstrating their environment and sustainability credentials. By partnering with the institute, consultancies can ensure staff have the skills and competence to support clients to become more sustainability.

IEMA for education

IEMA is working with a growing number of higher education establishments to ensure all students, not just those studying environmental topics, are equipped with sustainability knowledge when they graduate so they can help to build a more sustainable economy. Benefits of IEMA membership include: support for the employability of graduates through course accreditation, careers events and student memberships; access to leading employers offering student placements; and access to environmental professionals to help manage the impacts of university facilities.

Full details are at newmembers.iema.net/corporate-members. To speak to IEMA about partnering your organisation with the institute call Sarah-Jane Oates on +44 (0)1522 540069 or email sj.oates@iema.net.

More successful IEMA members

IEMA would like to congratulate the following members on recently upgrading their membership.

Associate

Magdalena Bilinska, Sustainable Homes
Hannah Clement, Berkeley Homes Eastern Counties
Hannah Cooper
Nick Dry, Guardian Industries

Nefertari Egara, WSP
Jonathan Howe, Celtic Technologies
Daniel Ibrahim-Webster, BFK Joint Venture
Matthew Izzo, Magnox
Mai Jarvis, Oxford City Council
David Jones, Royal Air Force
Robert Jones, Resource and Environmental Consultants
Clara Sofia Bravo Llobera, Cleshar Services

Victoria Nesbitt, Nuvia
Francesca Pacifico, Bechtel
Colin Price, Andrew James Associates
Willem Willemse, Toureen Contractors
Tom Wray, EPIC

Full and Chartered environmentalist

Richard Anderson, Rio Tinto
Alexander Hemming, J Murphy & Sons

Paul Stephen Jarvis, SMS
Rachel Sharp, Aberdeen City Council
Eleanor Stewart, Skanska
Lucy Wiltshire, Honeywell
Martyn Youell

Upgrading your membership is key to you gaining professional recognition. Learn more at iema.net/membership-upgrade or call +44 (0)1522 540069.

IEMA events

Date	Region/time (BST)	Topic
7 Oct	Yorkshire and Humber	Air quality – small solutions to a big problem
15 Oct	Yorkshire and Humber	District heating
21 Oct	East of England	Denny Bros Limited: business resource efficiency case study
22 Oct	South East	Breakfast discussion series: Taking business beyond compliance – the Modern Slavery Act
5 Nov	South East	Social (London)
11 Nov	Wales	Full member and CEnv mentor forum
11 Nov	Wales	Wales IEMA network meeting and social (Cardiff)
Conferences		
13 Oct	London	Sustainability in Practice
3 Nov	London	EIA & ESIA Master Class Conference
Webinars		
13 Oct	12:30–13:30	Introducing the Environment Agency's new IEM strategy
19 Oct	12:30–13:30	Making the business case for climate change
28 Oct	12:30–13:30	Planning a strategy on energy and carbon reduction
29 Oct	12:30–13:30	Cumulative effects assessment part 1
3 Nov	12:30–13:30	The power of the common purpose
9 Nov	12:30–13:30	Cumulative effects assessment part 2

Autumn Conference Programme: EMS Forum

Tuesday 1st December | Manchester Central M2 3GX

Enhancing performance through the revised ISO 14001: Strategy, Risk, Resilience and Improvement

Book now! newmembers.iema.net/autumn-conference.html



CONFERENCES 2015





EIA update

Wind farms rejected by Decc



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Decc has refused consent for the proposed Navitus Bay offshore wind park, citing its visual impact as one of the main reasons, even though it rejected some of the claims made by campaigners against the scheme.

The Navitus wind park, 14.3km off the Dorset coast at its nearest point, would have comprised up to 194 turbines and had a maximum generating capacity of 970MW. The developers Navitus Bay Limited (NBL), claimed the project would save 1.29 million tonnes of CO₂ each year and supply 700,000 average UK households with electricity each year.

A report in June from the examining authority had recommended rejection of the scheme. It concluded: "The scale and location of the project would affect important special qualities of areas of outstanding natural beauty [AONB] over a widespread area of coastline and that this carried significant weight against the grant of consent."

In his letter to the developer setting out the reasons for refusing planning permission, Decc minister Lord Bourne said the secretary of state agreed with this conclusion. "It is undoubtedly the case that the wind turbines would be visible when

looking out to sea from large stretches of the coast, in particular from Dorset and the Isle of Wight, where AONB and heritage coast designations are prevalent," it states. However, the letter refutes claims that the turbines would obscure sightlines between the Dorset coastline and the Isle of Wight.

The letter also referred to the Dorset coast's designation by Unesco as a world heritage site (WHS). The environmental statement accompanying the planning application acknowledges that the wind farm would be visible from points along a 30km section of coast. The examining authority report concluded that the farm would change the way the site would be "experienced or enjoyed" and would have adverse implications for its "outstanding universal value", which is the test for "exceptionality" for world heritage sites. The secretary of state agreed with this assessment, saying that, although the farm would not damage the protected feature of the WHS, it would adversely affect the use and enjoyment of the site.

NBL said it had yet decide on whether to appeal against the decision to reject its application, but would discuss the options with its shareholders.

Decc has turned down plans for four onshore wind schemes in Powys, Mid-Wales, because of concerns over the farms' impact on local landscape, biodiversity, heritage and local traffic. The four schemes are at: Llanbadarn Fynydd – maximum installed capacity of 59.5MW; Llaithddu – capacity of 62.1MW; Llanbrynmair – generating station of up to 90 MW; and Carnedd Wen – generating station of 130–150MW. Decc did, however, approve the

Llandinam repowering scheme, which involves decommissioning and replacing an existing wind farm. However, the Llandinam project is unlikely to go ahead after Decc also rejected planning permission for a 132kV overhead electric line connection between the proposed wind farm and Welshpool substation. All six projects were considered by Wales's longest-ever planning inquiry, which started on 4 June 2013 and closed on May 2014.

EIA research

Simplifying statements

In a new QMark paper, Nathan Matta, associate director at Nathaniel Lichfield & Partners, discusses the consultant EIA briefing packs and suite of Word document templates his organisation have developed to ensure consistency in the content and layout of chapters in the environmental statement (ES). The briefing pack is issued on or before the EIA start-up meeting and includes: an assessment of key issues relevant to the EIA, such as other relevant schemes; a description of the development as well as the site and its surroundings; and the scope of the ES, highlighting chapter titles and responsibilities. To reduce the need for editing and formatting before submission, each consultant is provided with an individual template for each chapter of the ES. These are already formatted with standard section headings. The templates ensure consistency over details such as font size, use of headings, and the approach to be taken to plans, figures, tables and appendices. Matta also says the EIA co-ordinator should keep the team updated with regular briefing notes to highlight ongoing issues.



EIA and heritage sites

How the EIA process helped find a solution to a heritage issue on a complex urban site is the topic of a QMark paper by Oliver Bell, principal planner at Nexus Planning. It relates to one of the largest regeneration projects in the London Borough of Haringey, at St Ann's Hospital. Heritage constraints, including the preservation of a Victorian wall, had a significant impact on the proposals and were a key consideration during the EIA process. The ES identified a moderate adverse impact on the wall. The local planning authority concluded that the other considerations, particularly improved access for residents, outweighed the identified harm, however.

Both papers are available at environmentalstonline.com/type/qmark



James Clayton

Director, Clayton EHS Services
and founder of EHSRated.com



Career file

Qualifications:

BEng, MSc, CMIOH, CEnv, MIEMA

Career history:

2014 – present Director,
Clayton EHS Services and
EHSRated.com

2006 – 2014 Principal consultant/
technical director, Environmental
Resources Management

2006 Health and safety manager,
Bovis Lend Lease

1998 – 2006 Consultant/senior
consultant, Environmental
Resources Management

1996 – 1998 Environmental
adviser, Amec Process and Energy

has relevance and value, either in the context of risk management or business efficiency. Those of us who can make those connections will be the most successful in the future.

Where would you like to be in five years' time?

I'd like EHSRated.com to be making a real contribution to helping business find high-quality environmental, health and safety support.

What advice would you give to someone entering the profession?

There are a lot of areas or industries you can specialise in; take your time and get involved in as many different things as possible (consultancy is a great way to do this). Be realistic about your strengths and weaknesses, and pick something that suits you best.

How do you use IEMA's environmental skills map?

I think it's a great tool. Although I don't use it personally, I have made a number of colleagues and clients aware of it. It's great that simple, clear, high-quality resources like this are publicly available.

Why did you become an environment/sustainability professional?

I've always enjoyed the outdoors and when I was a student began volunteering for several nature and heritage conservation charities, eventually leading teams of volunteers. That started my interest and, after my first degree in engineering, I decided to do a masters in environmental management. It covered a range of topics and I realised a career in industrial environmental management was a good way to use my engineering knowledge.

What was your first environment/sustainability job?

Nothing to do with engineering, ironically! I worked as a projects officer for the Groundwork Trust. I had great fun teaching primary age kids about waste recycling.

How did you get your first role?

The Groundwork Trust was relatively small and new at that time and I saw the job advertised locally. The educational aspect of the job was not something I had planned but I learned some useful skills.

How did you progress your environment/sustainability career?

As part of my MSc I did a three-month placement with process engineering firm Amec. About six months after I finished my degree, the company offered me the sort of role I was really looking for so I spent around two years developing its environmental management system. After that I moved into consultancy to broaden my experience and that's what I've been doing since.

What does your current role involve?

I left my consultancy job in April 2014 to start EHSRated.com, a website providing a new way for businesses that need environmental, health and safety (EHS) support to connect with consultants and other service providers.

How has your role changed over the past few years?

Starting my own business has been the biggest change by far. Consultancy taught me some skills that have proved very useful in the process, such as patience and attention to detail.

What's the best part of your work?

I still undertake a range of consultancy, training and auditing work. Working with people to help them address the challenges they are facing and maybe see things in a different way can be very satisfying and rewarding.

What's the hardest part of your job?

I have always travelled a lot for work and having a young family makes it hard being away from home. But coming back is always something to look forward to!

What was the last development/training course/event you attended?

It was two days training on the revised ISO 14001 environmental management system standard.

What did you bring back to your job?

It was interesting to find out how seemingly minor changes to the wording of the standard are likely to have significant implications to businesses and will hopefully act as further drivers for improvement.

What is/are the most important skill(s) for your role and why?

When starting any new venture you have to be willing to take a risk but you also need to plan ahead. It teaches you great self-discipline too: you're on your own; if you don't do it, no one else will.

Where do you see the environment/sustainability profession going?

I've seen a lot of environmental professionals/specialists who are too isolated from the business agenda. We need to make sure everything we do

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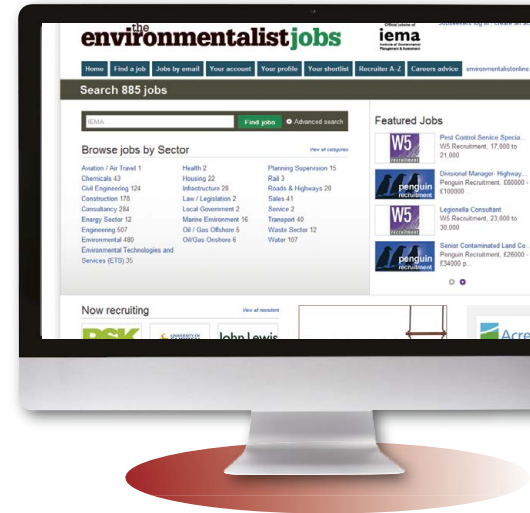
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