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FOR ENVIRONMENT AND SUSTAINABILITY PROFESSIONALS

February 2020
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Enacting change
through the power
of positivity



PLUS

Just cause Farhana Yamin on civil disobedience and the limits of the law

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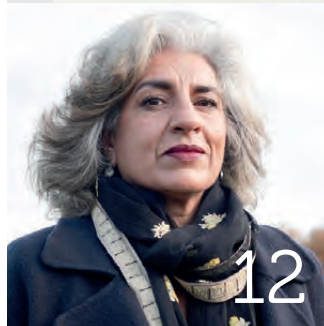
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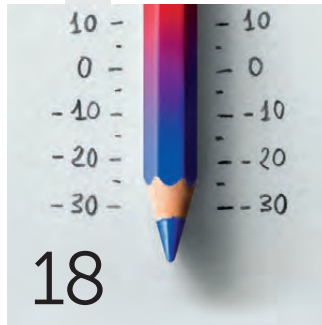
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TOBY ROBINS, INTERIM CEO OF IEMA

2020 vision: The year ahead

As a sustainability professional, I have been eagerly anticipating the arrival of 2020; there is so much happening this year and I can't recall our agenda ever having had such profile, impact or momentum. The political environment is moving apace, too. We have now left the EU, and to ensure continuity and an absence of any regulatory gap, Bills covering the environment and fisheries should have been enacted – see Martin Baxter's column on page 8 for further details. Additionally, Sajid Javid's budget promises infrastructure investment, which suggests a busy order book for our consultant and impact assessment community.

Furthermore, 2020 will see a series of events in the build-up to November's COP26 international climate negotiations in Glasgow, and supporting the transition to net-zero. Pressure to deliver substantive impact will be immense. Consider the public demand demonstrated by the likes of Extinction Rebellion, the school strikes, the scientific community, business and finance, for whom the argument has been so helpfully spearheaded by Mark Carney. The limited outcomes from Madrid add further motivation. Climate and environment emergencies have been declared and commitments made – and Glasgow needs to actively demonstrate the shift from rhetoric to action in order to support change.

Many of the events throughout the coming year are focused and themed around delivering net-zero and wider environmental net gain. Zero-carbon operations remain aspirational for most at present, so offsetting provides early action towards the global target required by the science. It's a complex area, so IEMA, led by policy lead Nick Blyth and supported by our Climate Change and Energy Network members, will be speaking at conferences and events throughout the year. It will also help members get up to speed on this critical issue through webinars and other resources.

Never has the demand for the knowledge and skills of our members been greater, and never has the knowledge that we have given greater cause for concern and anxiety. Please give a thought to your personal wellbeing and ensure that you are fit, well and able to take on the challenge – and enjoy making a difference throughout the year ahead.

*"Never has the demand
for the knowledge and
skills of our members
been greater"*



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to sustainability

IEMA is the professional body for everyone working in environment and sustainability. We provide resources and tools, research and knowledge sharing along with high quality formal training and qualifications to meet the real-world needs of our members. We believe that together we're positively changing attitudes to sustainability as a progressive force for good. Together we're transforming the world to sustainability.

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RISK

Climate change dominates top global risks in 2020

Climate change is linked to all of the most likely long-term risks facing humanity during the next decade, the World Economic Forum (WEF) has warned for the first time.

After gathering views from 750 decision-makers and experts across the world, the WEF found that extreme weather events are the most pressing risk in terms of likelihood. Failure of climate change mitigation and adaptation, major natural disasters, ecosystem collapse and manmade environmental catastrophes complete the top five.

In the 15 years that the WEF has published its annual risks report, this is the only time that all top five threats identified have been linked to the environment.

Economic confrontations and political polarisation are also expected to rise in 2020, which the researchers said would prove "catastrophic" for addressing climate change and biodiversity loss.

"The political landscape is polarised, sea levels are rising and climate fires are burning," said WEF president Borge Brende. "This is the year when world leaders must work with all sectors of society to repair and reinvigorate our systems of cooperation, not just for short-term benefit but for tackling our deep-rooted risks."

The WEF's Global Risks Report 2020 also lists ecosystem collapse and climate change mitigation and adaptation

failure among the top five risks in terms of severity during the next decade.

This comes as high-profile events such as the Australian wildfires increase public awareness around the interconnectedness of climate change and biodiversity loss.

Peter Giger, group chief risk officer at Zurich Insurance Group, warned that ecosystems provide environmental and economic benefits estimated at \$33trn – equivalent to the GDP of the US and China combined.

"We are already seeing companies destroyed by failing to align their strategies to shifts in policy and customer preferences," he continued. "It's critical that companies move faster to transition to a low-carbon economy."

Despite slow progress by some, the report highlights how scientific advances now allow climate risks to be modelled with greater accuracy and incorporated into business plans. It calls for holistic "systems-level thinking" to tackle rising inequality, gaps in technological governance, healthcare challenges and looming geopolitical and environmental risks.

"Transitionary risks are real, and everyone must play their part to mitigate them," Giger said. "It's not just an economic imperative, it is simply the right thing to do."

Read more of the Global Risks Report 2020 here: bit.ly/2uP0fHf

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BUSINESSWATCH



BlackRock joins Climate Action 100+

BlackRock – the world's largest asset manager – has joined the Climate

Action 100+ investor engagement scheme to help align investee companies' emissions with the Paris Agreement.

With more than \$6.8trn in assets under management, this boosts the total wealth managed by Climate Action 100+ backers to \$41trn.

In a letter to clients, BlackRock CEO Larry Fink said: "We are on the edge of fundamental reshaping of finance. Sooner than most anticipate, there will be a significant reallocation of capital."

➔ bit.ly/2RaQc6Y



Quorn introduces carbon labelling

Quorn has become the first global meat-free brand to introduce

carbon footprint labelling on its products to help customers understand the environmental impact of food.

The 'Farm to Shop' labelling will be independently certified by the Carbon Trust and appear on 30 of Quorn's best-selling products.

"This is about giving information about food and the effect it has on climate, in the same way that nutrition information is clearly labelled to help inform decisions on health," a Quorn spokesperson said.

➔ bit.ly/3014uWO



Colgate unveils recyclable toothpaste tube

Colgate-Palmolive has become the first toothpaste brand to

launch a recyclable tube, and has said it will share the innovative product design with competitors.

The Smile for Good toothpaste is made from high-density polyethylene and will be sold in whitening and protection varieties.

"We want all toothpaste tubes – and eventually all kinds of tubes – to meet the same third-party recycling standards we've achieved," said Colgate-Palmolive CEO Noel Wallace.

➔ bit.ly/38bsoXD



ECONOMY

Green stimulus needed to tackle next recession

The UK government should learn from past mistakes and invest heavily in the green economy when the next recession hits, the New Economics Foundation (NEF) has said.

The think tank urged ministers to funnel up to £50bn, or 3% of GDP, into a series of green stimulus packages spread over a three-year period during the next economic downturn. This would include the formation of national agencies responsible for retrofitting all homes, scaling up renewable energy investment and improving infrastructure for electric vehicles.

Although public borrowing would have to rise to fund the proposals, the analysis, published in a new report, shows that this would remain within historical norms.

It states that residential emissions would now be 30% lower if £10.5bn had been invested in a mass insulation project during the last financial crash, with energy bill savings being equal to the cost of insulation after just three years.

Meanwhile, separate research found that nearly half of UK firms expect the country to enter a recession this year, with more than a tenth predicting that the economy will contract by 1%-3%.

The report outlines a series of additional recommendations that the government could carry out to stabilise the economy while moving to net-zero emissions during the next recession. Read it at bit.ly/2QQTe13

FINANCE

Sustainable finance records smashed

According to data from BloombergNEF (BNEF), record levels of green bonds, loans and other forms of sustainable debt – \$465bn – were issued last year, up 78% from the \$261.4 recorded in 2018.

Last year also saw the cumulative issuance of sustainable debt smash through the £1trn barrier, reaching an all-time total of \$1.17trn by 31 December.

"The steep increase is fuelled by end-investors' concerns about the threat of climate change, and the desire of many big company, bank and government leaders to be seen as behaving responsibly," said BNEF lead sustainability analyst Jonas Rooze.

Green bonds – securities with proceeds used for environmentally friendly projects – accounted for more than half of the sustainable debt market in 2019 after \$271bn was issued, up from \$182bn in 2018.

Sustainability-linked loans based on the borrower's performance on environmental, social or governance criteria enjoyed a 168% jump in volumes to reach \$122bn.

Meanwhile, the value of sustainable bonds issued – which support both social and environmental activities – increased to a record \$46bn last year.

"Our data shows sustainable finance continuing to power ahead on a global basis," Rooze added.



MARTIN BAXTER

IEMA chief policy advisor

The 2020 agenda

The policy and legislative outlook for 2020 will see significant developments from a sustainability perspective.

The UK government's majority paves the way for a range of bills: environment, agriculture, fisheries and trade bills are all expected to receive Royal Assent in 2020. A new Office for Environmental Protection, legally binding environmental targets, environmental principles integrated into mainstream policy development, biodiversity net gain, extended producer responsibility for packaging, an environmental land management scheme for agriculture, local nature recovery strategies... once on the statute book, there will be a substantial number of regulations to put the primary legislation into effect.

The UK's negotiations with the EU will be important. Level playing field requirements, non-regression of environmental standards, mutual recognition of product standards and testing regimes will all be key issues. Negotiations will become more complex as the UK enters trade discussions with the rest of the world.

Discussions on the post-2020 framework for the International Convention on Biological Diversity (CBD) will come to a head in October with the CBD COP15 in China. This will be preceded by publication of the Dasgupta Review on the Economics of Biodiversity, led by the UK Treasury.

Climate change will be centre-stage at the end of the year with the UNFCCC COP26 in Glasgow, with significant work needed to finalise the Paris rulebook and for countries to raise their ambitions.

IEMA will continue to influence developments where we can to create the conditions for long-term improvement. We'll keep members updated with changes as they emerge.



PROFESSIONAL STANDARDS

PSC seeks new committee members

Following on from Professional Standards Committee (PSC) chair Shaun McCarthy article in November's *Transform* about the importance of rigorous standards and the role the committee plays, IEMA is delighted to confirm that it has two committee vacancies to fill, and is welcoming applicants from diverse backgrounds and with a broad range of skills.

IEMA is looking for committee members whose role will be to safeguard professional standards and provide expert advice, guidance and governance to the IEMA Board. The committee also ensures that the development and application of IEMA's professional standards, assessments and training are global, valid and fair.

IEMA's vision is to transform the world to sustainability, and it is particularly interested in applications from people from large businesses, government departments and other complex organisations. It particularly welcomes candidates from under-

represented groups such as BAME, LGBT and those with disabilities, as well as young professionals.

In addition, candidates who have knowledge and experience in the application of social value and audit, as well as social and environmental law, are of interest.

Individuals should be competent professionals, ideally with some experience of professional or academic standards, who are interested in innovation and want to be instrumental in developing IEMA's professional standards to the next level of development.

➤ **To find out more about the vacancies and how to apply, please download the Candidate Information Pack at www.iema.net/about-us/vacancies Alternatively, for a conversation with head of operations Sue Buxey regarding the vacancies, please contact her on 07934 349 679. The closing date for applications is 26 February 2020.**

EVENT

Sustainability Leaders Forum: 'What makes a sustainability leader?'

On 12 December 2019, IEMA Fellows and full members, together with other experienced sustainability professionals, gathered for the biannual Sustainability Leaders Forum at AECOM headquarters, London. The session, 'What makes a sustainability leader', considered how, in the face of slower national engagement on sustainability, cross-sector alliances between cities, regions and businesses have become an opportunity to ramp up leadership for sustainability and promote more integrated sustainability values.

Marc Jourdan, IEMA policy and engagement lead, and host David Smith, AECOM's technical director in business sustainability, provided welcome remarks. Next, IEMA's interim chief executive Toby Robins celebrated IEMA's growth and stressed the need for leadership to support a sustainability profession that represents everybody.

Shirley Rodrigues, Deputy Mayor of London for the Environment, delivered the keynote remarks on the value of collaboration. She explained that "London is part of international initiatives such as C40 and the

"If you find an opportunity to intervene, stick with it and don't be diverted"

WeMeanBusiness coalition to show what is possible and gather momentum" so that it can achieve its plan to become a zero-carbon city by 2050.

IEMA chief policy advisor Martin Baxter then moderated a panel discussion. Jane Davidson, ex-minister for environment, sustainability and housing in the Welsh Assembly and introducer of Welsh Future Generations Act, stressed that "if you find an opportunity to intervene, stick with it and don't be diverted". In-session live polls revealed that most attendees (31%) agreed with her and believed that authenticity was a key attribute, followed by personal resilience (21%) and the development of partnerships (17%). Other panellists included Tom Knowland, head of sustainable energy and climate change at

Leeds City Council, and Louise Nicholls, vice chair of the IEMA Board. Tom stated: "you need stealth and a lot of persistence to know your way around your organisation and obtain results", while Louise spoke about the need to "make science simple for others to understand and engage their hearts and minds".

When asked which attributes they would identify as the highest priority for improving personal leadership capabilities, most audience members (26%) said that emotional intelligence was a key parameter, followed by great communication (19%) and strategic thinking (19%).

The next IEMA Fellows roundtable discussion, to be hosted by WSP in Manchester on 25 March, will seek to build on the outcomes of this session and work towards an insight briefing for IEMA members on the importance of collaboration for sustainability leadership, due for release later in the year. More information has been included in the IEMA Fellows newsletter; in the meantime, IEMA Fellows with an interest in participating in the session should email Marc Jourdan at m.jourdan@iema.net

NEW REGULATIONS

THE LATEST

■ LEGISLATION ■ GUIDANCE ■ CONSULTATION

**PENDING**

General environment

The government has published a revised version of its Withdrawal Agreement Bill to ensure the UK will leave the EU on 31 January 2019. It seeks to implement Prime Minister Boris Johnson's Withdrawal Agreement (a draft International Treaty) with the EU into UK law.

cedr.ec/6js
**4 DECEMBER 2019**

Water

The Department of Agriculture, Environment and Rural Affairs has issued guidance in relation to the Water Supply (Water Quality) Regulations (Northern Ireland) SR 2017/212. It specifically addresses the sampling of new or emergency sources as an additional monitoring provision.

cedr.ec/6jr
**PENDING**

Climate change

The Transport (Scotland) Act 2019 requires the Scottish ministers to produce a national transport strategy that makes provisions for the creation, modification and operation of low emission zones.

cedr.ec/6jo
**11 DECEMBER 2019**

General environment, climate change

The European Commission has published a communication on the European Green Deal. This sets out the framework for a major re-evaluation of the European economy and policies, to cut emissions in the continent by 50% by 2030 and net-zero carbon by 2050.

cedr.ec/6jt
**15 NOVEMBER 2019**

Waste

The Environment Agency has updated its guidance on registering or renewing waste exemptions in order to clarify the waste storage exemptions that do not require registration. It also explains the restrictions on registering multiple exemptions.

cedr.ec/6jy
**13 DECEMBER 2019**

Climate change

The Scottish government has launched a consultation on the operation and delivery of Low Emission Zones (LEZs), including the substantive issues of emission standards, exemptions and penalty charges.

cedr.ec/6ju
**29 NOVEMBER 2019**

Waste

The Scottish Environment Protection Agency is seeking opinions on its permit reform for non-hazardous landfills. It is proposing a new, simple, outcome-based permit for non-hazardous landfills.

cedr.ec/6jw
**19 DECEMBER 2019**

Energy efficiency

The Scottish government has launched a consultation on proposals to set a standard for energy efficiency in owner-occupier homes and to make it mandatory for homeowners from 2024 onwards.

cedr.ec/6jv

▶ A discharge of sewage in Leicestershire caused the death of more than 2,000 fish

INCOURT

WATER POLLUTION

Severn Trent donates to charity following sewage discharge

Severn Trent Water Ltd has paid £226,000 to the Trent Rivers Trust following a sewage pollution incident.

In August 2016, two blockages in the Severn Trent foul sewer caused a discharge of sewage into the Thurcaston Brook, a tributary of Rothley Brook in Leicestershire, causing the death of more than 2,000 fish in the area. Severn Trent admitted its error in causing the incident and made the donation to Trent Rivers Trust as part of an enforcement undertaking.

Enforcement undertakings are a form of civil sanction that enables businesses to propose actions to make amends rather than waiting for sanctions. The use of these is on the increase: the Environment Agency says that more than £3.7m has been given in charitable payments over 44 separate enforcement undertakings, in lieu of prosecutions for environmental offences.

Environment Agency officer Lee Whitehouse commented: "Enforcement undertakings allow polluters to positively address and restore the harm caused to the environment and prevent

repeat incidents. The Agency is increasingly using this method of enforcement for suitable cases to restore the environment, improve practices of the offending company and avoid longer criminal court cases. However, we will prosecute in appropriate cases."

The charity will use the money to improve water quality in the Thurcaston/Rothley Brook catchments and associated restoration projects.

Trent Rivers Trust catchment manager Kim Jennings said: "The funds received from this enforcement undertaking have provided valuable financial support to enable many of our partners to deliver work in the catchment that would otherwise have not been possible. Our planned work will increase the number and range of habitats and its overall value for wildlife."

Severn Trent paid the Environment Agency's costs for incident response and enforcement. The company agreed to take action at the site to improve infrastructure, inspection regimes and raise awareness of pollution prevention and control among employees and contractors.



OTHER NEWS

Deadline extended for Northern Ireland's first environment strategy

Northern Ireland's Department of Agriculture, Environment and Rural Affairs (DAERA) has extended the deadline for views on its first environment strategy, to allow the public more time to give feedback. The deadline was originally set for 23 December 2019, but this has been pushed back to 5 February 2020.

The environment strategy will form the basis for a set of interventions to deliver real improvements in environmental quality. It aims to improve the health and wellbeing of citizens, create opportunities and develop the economy, as well as protecting the global environment.

David Small from the Northern Ireland Environment Agency said that "ambitious, inspiring and targeted actions" were needed to properly protect Northern Ireland's environment.

The strategy will seek to address wide-ranging and complex issues including climate action, plastic pollution and the drive to zero waste.

In deciding to extend the deadline, Dave Foster, director of regulatory and natural resources policy, commented: "Detailed responses are coming in on a daily basis so, given the considerable level of interest, we wanted to extend the public discussion period to ensure as many people as possible have the opportunity to take part."

A summary of the consultation findings will be published by DAERA in spring 2020, before the new environment strategy is drafted.



CASE LAW

Appeal dismissed against environmental permit decision

A local action group appealed to the Crown Court after its claim for judicial review was dismissed when it challenged the validity of an environmental permit granted by the Environment Agency.

The permit had been granted for the operation of a waste incineration plant, but there was a scientific error in the application submitted by the operator. The appellant challenged the lawfulness of the permit as a result of the error. The appeal was dismissed, as the judge ruled that the error did not affect the lawfulness of the Agency's decision.

The judge considered four key

issues – firstly, whether the permit incorporated the error. Including an incorrect statement in an application document was not evidence of the same error being made by the Agency in making its decision. Secondly, the appellant argued that the judge had relied on the Agency's retrospective explanation after the fact. As a regulator, the Agency used its own scientific and technical expertise to inform its decisions, and there was no failure of its expertise in this case.

Thirdly, they considered whether the judge had failed to investigate the need for a dust management plan.

It was ruled that it was not for the court to ask why a plan was required. The final ground of appeal was based on the margin of appreciation. The judge ruled that the Agency had lawfully exercised its judgement and that the judge did not have to rely on establishing an enhanced margin of error for such regulators.

There was no evidence that the Agency itself made a mistake or was influenced by the mistake, or had failed to exercise its knowledge and expertise. The appeal was dismissed, as it was not for the court to explore the scientific integrity of the Agency's assessment.

Interview

ROAD TO Rebellion

Environmental lawyer-turned-activist **Farhana Yamin** talks to Chris Seekings about her journey from drafting international climate treaties to breaking the law

IMAGES: GETTY/FARHANA YAMIN

Bound in handcuffs and facing jail, Farhana Yamin was in unfamiliar territory after being arrested for her role in the Extinction Rebellion (XR) protests that brought London to a standstill last year. Rewind 30 years, and the environmental lawyer was embarking on a career that would help to deliver both the Kyoto Protocol and Paris Agreement. What led this law-abiding citizen to join, and help to coordinate, an international movement that is notorious for its disregard for authority?

Hitting a wall

In the 1990s, Yamin was negotiating on behalf of the Alliance of Small Island States to help deliver the UN's Kyoto Protocol rulebook, known as the Marrakech Accord. Her work was focused on the environmental integrity of carbon markets, establishing the Clean Development Mechanism (CDM). "All of that took about a decade, but I am not particularly proud of that work, since the carbon markets have failed to deliver."

She went on to become director of the project that created the EU's Emissions Trading Scheme (ETS), and drafted the very first directive for the European Commission.

"But industry scuppered the ETS by insisting that governments give them too many free allowances, rendering the market worthless," she explains. "It's the same story with the CDM: industries and countries colluded, resulting in too many permits being issued and low-quality carbon credits. It's not surprising people have turned against these mechanisms as they smack of greenwashing."

Fast forward to last year's COP25 climate summit in Madrid, and this is an all-too familiar story. Nations failed to agree carbon market rules under Article 6 of the Paris Agreement, with the US, China, India, Japan and Saudi Arabia reportedly blocking progress. Countries were accused of wanting to double-count emission reductions, undermining the system. "It is a free-for-all, with no stringency," Yamin says. "Countries fail to accept that current regulations are not working."

She was present at the COP25 talks, and says that little has changed since the early days of her career. "We are still having these same basic disputes around reducing emissions at source versus offsetting abroad. For quite different reasons, countries such as Japan, Korea, China, Brazil and Saudi Arabia are conspiring to have their cake and eat it with poor carbon markets, and there is a very entrenched and deliberate attempt now to unravel Paris."

Breaking point

Yamin describes the outcome of her endeavours as a "big disappointment", and says that vested interests are to blame.

It was the constant undermining of her work by various countries and corporates that finally led her to activism.

"I knew that the fossil fuel companies understood the reality of climate change, but had taken a very deliberate and coordinated effort to obfuscate and confuse the science for decades, just as the tobacco industry had done," she explains. "At the same time, an incremental approach to policymaking was failing to recognise the urgency of the situation, and I felt someone needed to say that."

Yamin is a trustee of Greenpeace UK and founder of Track 0, but has also worked with various other NGOs and saw that they had collectively failed to galvanise an adequate response to climate change and biodiversity loss.

XR came along at a time when Greta Thunberg was just starting to make headlines with her school climate strikes in 2018. These were among the first movements in developed countries to really bring public attention to the scale of the climate crisis, and were instrumental in the UK government declaring a climate and environmental emergency.

Yamin was one of six others to draft XR's political strategy for the first half of 2019, coordinating the processes, writing briefings and taking part in numerous political meetings.

"Fossil fuel companies had taken a very deliberate and coordinated effort to obfuscate and confuse the science for decades"

"Without XR and the school strikes, we would still be bumbling along thinking we can fix things incrementally without recognising that we are now in a worldwide emergency," Yamin says. "We have alerted the public and put climate change right at the centre of political attention."

Civil disobedience

Late 2018 saw XR activists blockade five bridges over the Thames before taking part in 10 days of protests in April last year. Protestors chained themselves to vehicles, blocked roads and glued themselves to buildings, causing widespread disruption across London. Yamin was one of thousands arrested, which she admits was nerve-racking. "I had actually tried getting arrested a couple of times before but failed! It can be harder than you think. My first attempt involved lying down outside Downing Street but the police basically ignored us for hours and we moved on."

She decided to target the oil companies, who she says have been "totally complicit in ecocide" for decades, supergluing herself to oil giant Shell's headquarters in central London before spending the evening in a jail cell. "I feel very



Interview

➤ Yamin speaking at an XR protest event

pleased to draw attention to Shell's part in environmental destruction. I wanted to honour lawyer and campaigner Polly Higgins, who was dying of cancer and only had days to live."

Yamin follows in the footsteps of many lawyers who have turned to activism and peaceful, non-violent civil disobedience in the pursuit of greater goals, including Mahatma Gandhi and Nelson Mandela. "I draw comfort and inspiration from the lawyers before me who understood that when the law is oppressive and political systems fail, you have to break the law," she explains. "Lawyers have a special responsibility, whether they are a judge, in-house counsel or litigator. I don't go around breaking the law all the time, but I am willing to go to prison to highlight climate injustice. I feel I have a duty to stand up in solidarity with frontline communities and indigenous peoples who are fighting injustice every day and facing real threats to their lives, with many being killed for defending nature."

Learning lessons

The reaction from her lawyer colleagues, she says, has been "generally positive", which came as a "good surprise". More than 1,500 scientists have supported the XR protest, and Thunberg has also given the group her endorsement. However, many have been critical of XR's tactics. It has been labelled "alarmist" by some sections of the media, and many thousands were affected by last year's disruption. It was also criticised for threatening to use drones to ground planes at Heathrow Airport, while protests at Canning Town underground station were slammed for preventing commuters from using a relatively clean mode of transport.

"XR has rubbed some people up the wrong way, and at times we have not been as tactical or strategic as we probably should have been," Yamin says. "Some of our actions were not smart, such as what happened at Heathrow, and I have definitely felt some frustration because of that."

Frustration about strategy and the lack of accountability of some of XR's co-founders has led Yamin to reevaluate her role. She has taken a step back, and was not part of the planning for the October Rebellion. "The disputes and tensions left me quite bruised and upset," she says. "As a lawyer, I didn't volunteer to become fodder for a nonsensical strategy. Listening to diverse communities and learning lessons is what this year is about."



Another criticism levelled at XR is that some of its demands, such as 'tell the truth', are too vague. It is due to publish a new 'People's Demand', voted on by XR members, and Yamin believes decentralisation and strengthening accountability is crucial. "The hard graft of building a global movement is still at the early stages, XR has made a great start but I am not sure we yet have all the tools to do that. Having been part of the environmental community since 1992, I know it takes a long time to build the



"Breaking the law is a really important and established tool for when laws are unjust and the political system is unresponsive"



DNA of a new movement that is flexible and at the same time links social justice and climate justice."

There are now numerous strands to XR, trying to do just that and create a 'movement of movements'. Yamin devotes much of her time to this in Camden, because "choices and solutions must come from resilient communities". She has recently helped Camden Council launch the Camden Climate 'Think and Do' Pop-Up, a six-week prototype involving more than a dozen local community groups.

This saw a disused shop being converted into an eco-space, giving local people a platform to be involved in co-creating climate solutions.

"I think a lot of the work that XR does locally, which isn't reported as much, is perhaps healthier – creating a vibrant, regenerative culture that engenders radical behaviour change and new community bonds," she explains. "Decentralisation has benefits, with all the strands having different strategies so they are based in real communities."

Rebel for life

Yamin has put her career on the line with her role in XR, and admits she may have burned bridges. "I might not be able to work with certain clients again, but I am cool with that," she says. "Some people have looked at me with raised eyebrows, asking how I can associate myself with a group like that."

She describes her move to XR as part of "relearning the history of fundamental social change", and says that this always comes "from the bottom up", whether it be the suffragettes, civil rights, anti-apartheid, gay rights or trade union movements. She warns that real change can take decades, if not centuries. "I realised I had overly focused on my professional background, forgetting that the change I was seeking was part of a restructuring to the socioeconomic and financial system," she says. "I had stopped saying things like

'the system is broken' because it sounds too political, but us professionals need to do more than write nice recommendations in reports talking about solutions such as carbon markets."

Although she has been critical of some XR actions, she is convinced that more disruption is needed, and is deciding what direct non-violent action to take next. Her role as an environmental lawyer and activist highlights the part that all stakeholders will play in tackling the climate crisis. "It can't be one without the other," she says. "We can't have direct action and protests without proper policy frameworks that can transform society."

This year will see more direct action across the UK and beyond, and the protestors will not back down until they see real change. "Breaking the law is a really important and established tool for when laws are unjust and the political system is so unresponsive," Yamin says. "We still have time to avoid the worst of the injustices, and I am optimistic that we will fundamentally move away from fossil fuels and the destruction of nature in the next few years. The message that social justice and climate justice go hand in hand is spreading throughout the world, and XR has played a big part in galvanising us all to act." 🌱

Protest and professionalism

- 1986: Graduates from Oxford University with a master's degree in politics, philosophy and economics
- 1992: Becomes director at the Foundation for International Environmental Law and Development, works as a lawyer for vulnerable island states for 30 years
- 1993: Graduates from King's College London with Master of Laws (LL.M)
- 2003: Becomes Fellow at the Institute of Development Studies
- 2012: Joins European Commission as special advisor
- 2013: Becomes visiting professor at University College London and associate research fellow at Chatham House
- 2014: Founds the Track 0 not-for-profit initiative to get a net-zero by 2050 goal into the Paris Agreement
- 2018: Joins Extinction Rebellion



Yamin glued herself to the pavement outside Shell's headquarters during the April 2019 XR protests



COP25: the outcomes

Nick Blyth reports back from COP25, including headline outcomes and updates on IEMA's contributions

The executive secretary of UN Climate Change, Patricia Espinosa, has called for an honest assessment of what COP25 achieved, so that the international community can take appropriate measures to guide the multilateral climate process in 2020.

The conference did not result in agreement on guidelines for a carbon market – essential for raising the ambition that could harness the potential of the private sector and generate finance for adaptation. Developed countries are yet to fully address developing countries' calls for enhanced support in finance, technology and capacity building, without which they cannot green their economies and build adequate resilience to climate change. High-emitting countries did not send a clear enough signal that they are ready to improve their climate strategies and ramp up ambition through Nationally Determined Contributions.

Urgency and ambition

Many have commented on the discrepancy between the slow pace of the talks and the urgency that the science suggests we need. The UN Environment Programme's emissions gap report showed that the stretch 1.5°C goal is 'slipping out of reach'. Under the Climate Ambition Alliance, 114 nations have indicated their intention to submit an enhanced climate action plan next year, showing that many are ready to move the needle on climate ambition.

In the final-decision texts, governments did express the need for more ambition by parties and non-state actors alike, and agreed to improve the ability of the most vulnerable to adapt to climate change. Many decisions that emerged at least

acknowledge the essential role of climate finance. Detailed analysis can be found from sources such as Carbon Brief (bit.ly/cop25KeyOutcomes) and the United Nations Framework Convention on Climate Change (UNFCCC) website (unfccc.int/cop25).

IEMA at COP25

Away from the negotiations, important developments took place in events and meetings held by a range of 'non-party' stakeholders. IEMA is actively engaged, feeding in evidence and thought leadership from our membership. The UNFCCC webpage lists all the sessions.

There is a clear case for organisations

"IEMA's presentation included survey outcomes on the challenge of 'net-zero'"

to consider becoming carbon neutral now and then to transition towards 'net-zero'. IEMA's GHG Management Hierarchy is not sequential, and in a climate emergency context we will be amending the transition infographic to remove the phrase 'long-term'. At COP25, I found great interest in our work as I helped organise and present at an event on carbon neutral transitions and international standards (an ISO, IAF and IEMA COP25 event including guest presentations from UNFCCC and Costa Rica). IEMA's presentation included survey outcomes on the challenge of 'net-zero', with professional member insights ranging from Scope 2 GHG accounting practice to the effective use of carbon offsetting. IEMA members John Dora, FIEMA and Kit England, MIEMA were also in action, presenting in the EU and UK Pavilions on climate change adaptation developments.

The 'transition landscape' is diverse, with confusion around terms and many different approaches. A planned new ISO on carbon neutrality, starting in 2020, could help to clarify terms, support progress on transitions and improve practice. IEMA will feed evidence into these developments, contributing to the 'international action toolkit' called for by Patricia Espinosa and the 2016 Paris Agreement. ¹

NICK BLYTH, FIEMA is an IEMA policy lead.

Small steps

COP25 saw nations moving towards more ambitious approaches to climate change



1.5°C

The stretch 1.5°C goal is 'slipping out of reach'

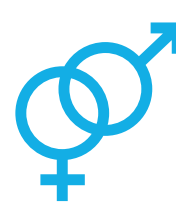


114

nations will submit an enhanced climate action plan next year



Many COP25 decisions acknowledge the role of climate finance



Decisions were taken in areas such as technology and gender

The New Year Diaries

The start of a new decade has us flicking through our personal archives. What were we doing in 2010? Who were we working for? What were our resolutions?

I was working for WWF-UK. Part of the job was to provide the whole organisation with a summary of the news each day. Looking back through them recently, I found myself reflecting on a painful period for those of us covering environmental issues. There was Climategate – the release of hacked emails from the Climate Research Unit at the University of East Anglia – and Glaciergate – a high-profile mistake in an IPCC report. The two scandals fuelled the fire in sceptics' bellies.

Indeed, this was a time when the *Daily Express* was publishing front-page headlines such as '100 reasons why global warming is natural'. The public was also increasingly baffled – not only about what action they should be taking, but also about how on earth the planet could be warming, given all the snow (winter 2009-10 was the coldest winter since 1979, according to the Royal Meteorological Society). As one letter to a national paper put it: those scientists "really don't know what they are talking about".

It was also snowing in Copenhagen, the city hosting COP15 in December 2009 – hyped by many as the 'last chance saloon' to strike a deal that would prevent the world warming up. Keeping up with the coverage was a Sisyphean task, and having felt so involved, the failure was hard to take. I can only imagine how the negotiators felt.

A period of reflection followed. How could public opinion be rescued from the nets the climate sceptics were casting far and wide? That was the question I threw out to colleagues in a summary dated 6 January 2010, which cited a comment piece in *The Times* by Alice Thomson, exploring how James Cameron's film *Avatar* could be an unlikely hero in changing public opinion on climate change. The piece argued that people don't want to be lectured on green issues by politicians, and that "going green is just another luxury that we have learnt to do without in the recession". Films, Thomson said, have a genuine power to change opinion and engender commitment in the young (Greta Thunberg would have been seven at the time *Avatar* came out).

For those who missed it, *Avatar* was about

"DAVID CAMERON DECLARED HE WOULD LEAD 'THE GREENEST GOVERNMENT EVER'. IT DIDN'T QUITE TURN OUT THAT WAY"

blue people saving the world, created by a man called Cameron. "Of course we've seen it," said a wag in the shadow cabinet. A few months later, after some husky-hugging, David Cameron entered Downing Street declaring he would lead "the greenest government ever". It didn't quite turn out that way, his environmental legacy summed up in four words: "cut the green crap". That comment, reportedly in relation to rising energy bills, was made in 2013.

The environment was falling down the political pecking order – and fast. By September 2014, even Ed Miliband – who, as climate secretary, had been one of very few politicians to come out of COP15 with his reputation enhanced – was forced to admit that "the environment isn't that fashionable any more in politics, as you may have noticed with David Cameron. But it matters." Then came the winter floods here in 2014, which refocused minds. The noise from sceptics was washed away: an Ipsos Mori poll in January 2015 showed that nearly nine in 10 Britons said climate change is happening. Less than a year later, the Paris Agreement at COP21 proved the political mood had shifted. But not far enough.

Public concern about the climate emergency has surged; in March last year it was higher than at any point since at least 2008. However, in a survey just before the world's biggest climate demonstrations in September 2019, only 23% of people in the UK felt the government was doing enough. Since June 2016, Brexit has sucked the life out of everything. Theresa May, succeeding David Cameron, showed a fleeting interest in climate change before falling on her sword, while Boris Johnson continues to offer mixed messages. With just nine months until COP26 in Glasgow – which has to kick off this decade better than COP15 did the last – the new prime minister needs to deliver on his promises. Why not make it the government's new year's resolution? 🍷

DAVID BURROWS is a freelance writer and researcher.



A different class

We need to radically change the way we teach sustainability in schools, says **Ann Finlayson**, in conversation with Huw Morris

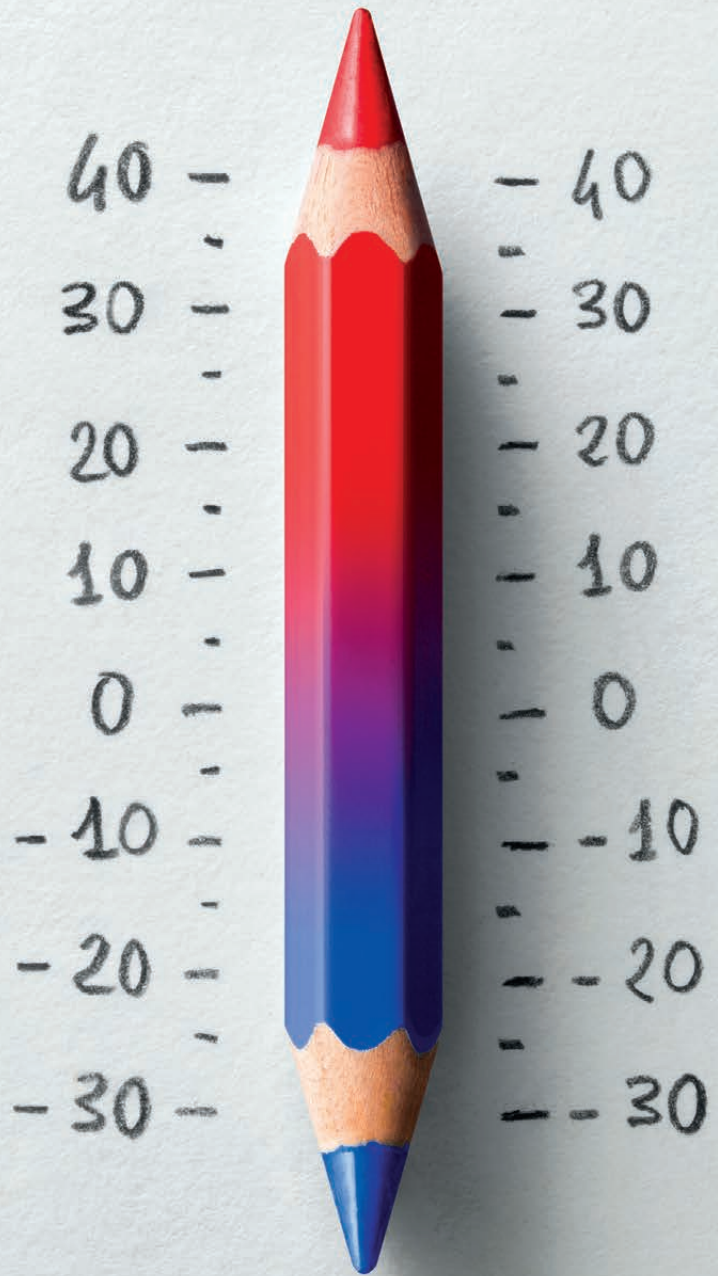
Ann Finlayson was training to be a ranger with Scottish Natural Heritage when she had an 'aha' moment about how people learn. Her formal education had included a PhD in afforestation and ecology at the University of Strathclyde – but the revelation did not involve lectures, textbooks or PowerPoint presentations.

"You learned heuristically and developed your own understanding of being a ranger, what the issues were and how to deal with them," she says. "I had been successful in formal education but had never felt my brain be so open and learn so much. That set me on the journey of how we learn."

It turned out to be an odyssey. The next 16 years involved training teachers, museum staff, park interpreters and even white-water rafters in Papua New Guinea, Australia and Canada, before joining WWF-UK in 2002 as head of education and, later, social change. In 2005, Finlayson became the commissioner for education and capability building at the Sustainable Development Commission (SDC), before restarting the Council for Environmental Education in 2008. This morphed into Sustainability and Environmental Education (SEEd) in 2009, where she is still chief executive.

Understanding behaviour

"The one thing I've learned is that people don't understand change, they don't understand human beings or how individuals and groups change or think differently," Finlayson says. "I've spent the past 20 years trying to battle this myth that all you have to do is give people the right information and they will then do the right thing. That is completely untrue and has never been proved."



Her roles at WWF-UK and the SDC offered an eye-opener on how government works. One bugbear was the ending of the Sustainable School Initiative in 2010, which she describes as a "big blow". Her impression of Whitehall is "a lot of talk about evidence-based policy when so little of that happens".

"People respond to different motivations," she says. "If the evidence fits what they want, they'll use it, but if it doesn't fit what they want, they don't. That's all of us – not just politicians."

"We are complex beings. We don't understand very much of our cognitive processes and therefore we do have to consider how the brain works. So many people want things to change with the environment, but have no idea how to go about doing it. We are not as rational as we think we are."

"As a Western culture we believe the front logic of our brains is the only bit working, when 75% of the work happens at the back of the brain – and often we're not aware of it. When people say they had an instinct or *déjà vu*, it's the back of the brain working really well, processing much faster than the front of the brain."

Empowering change

Finlayson admits some frustration at having to explain "for what seems like the millionth time what education for sustainability is". She wants to see the plethora of organisations in the field develop a common narrative that works towards the UN Sustainable Development Goals for 2030. The starting point is UNESCO's definition of education for sustainable development – empower people to change the way they think and work towards a sustainable future.

She fears that the next decade will see valuable time and money squandered on awareness-raising and communication campaigns if the teaching of sustainable development is not transformed. Such campaigns do not lead to action, she argues. "The educational and societal culture has embedded this myth that you raise awareness and change will happen."

This is demonstrated in SEEd's annual surveys of teachers and students on their understanding and attitudes towards sustainability. The latest found 64% of pupils citing recycling, ocean or single-use plastic and deforestation as the big three environmental issues.

"They talk about an issue as a separate idea, rather than the system that has created that problem.

The adults understand the system, so there is a disjoint between what they know and what they are prepared to teach young people – and that's fundamentally because they don't feel comfortable with it. They worry about Ofsted and what the government thinks, with education being in a political dangerous area."

The answer, Finlayson says, is to encourage critical thinking. One example would be asking who decides to wrap a head of broccoli in clingfilm. Key to this is thinking about how the myriad systems that impact the environment function, and how they can be changed in the future by effective action.

"You don't want it to be doom and gloom for young people, but get them to ask: 'what if we did things

differently, what could it look like, what else could we do?' That's a very different way of thinking."

This is reinforced by the SEEd's accompanying survey of teachers. Most still think they have to teach about climate change, not a sustainable way to live in the future. "Part of me worries that schools and teachers are not trained for this," Finlayson says. "Pupils are not really being taught. We have a teacher training system that doesn't train teachers in these things either, so there's a gap."

The purpose of education

One of SEEd's *raison d'être* is for sustainability to be included in section 78 of the Education Act 2002 – a move supported by the Sustainable Schools Alliance, of which it is a founder member and lead organisation. This would legally "instil an ethos and ability to care for oneself, others and the natural environment, now and in the future". Other countries, including Malta, Italy, Cyprus, Wales and Scotland, have taken big steps to embed sustainability within their education systems – but not England.

"Fundamentally, we should be asking: 'what is the purpose of our education system?' People go on about the national curriculum as though that changes what schools do, when it doesn't. It's not even compulsory, it's not statutory, and academies don't have to do it. Sex education is statutory, unless the parent wants to remove the child, but we don't have learning about the environment as statutory. That's outrageous."

She admires the Swedish activist Greta Thunberg and the recent wave of school strikes in the UK and abroad. This has not just given teachers and parents pause for thought – it is forcing them to rethink everything.

"They suddenly understood that young people are very worried and have been for some time. Young people want to know how to live sustainably and want to know what to do. "It is still going to be an uphill struggle. We still have a very top-down school system which thinks children are empty vessels that need to be filled up with stuff to be ready for the world. But I wouldn't keep doing this if I wasn't hopeful." ¹⁷

HUW MORRIS is a freelance journalist.

"The educational and societal culture has embedded this myth that you raise awareness and change will happen"



➤ Finlayson argues that children should be taught about the systems creating environmental problems, not just the problems themselves



The Greta effect

A new generation of environmental journalists is emerging inspired by Greta Thunberg to bring change to their communities and beyond. Coordinating this movement is the Young Reporters for the Environment (YRE) initiative, which provides a platform for youngsters to research environmental issues and promote solutions through investigative reporting, photography and video.

With member organisations in 45 countries (and counting), the UN-backed educational programme enables 11-25-year-olds to tell stories about the natural world and environment, teaching critical thinking at a time when journalism has become synonymous with fake news.

"We hear from young people who feel they can do something to help protect the environment – our initiative gives them the opportunity to do that," explains YRE director Gosia Luszczyk.

Young Reporters for the Environment is helping to create the next generation of sustainability journalists. **Chris Seekings** reports

Humble beginnings

YRE started when an enthusiastic young Frenchman, Philippe Saugier, founded the Ozone Project, sending three youth missions to monitor and report on scientific Arctic expeditions in the early 1990s. The project was absorbed by the Foundation for Environmental Education (FEE), which coordinates it, before it was rebranded as YRE. Last year, it celebrated its 25th anniversary.

Luxembourg was the first country to officially implement the programme, in 1994, and more than 360,000 young journalists across four continents have taken part. Their stories have had a major impact, from helping to boost local recycling rates to covering

international events such as COP climate summits and World Environmental Education Congress conferences.

"For one of the students, the experience changed his life so much that he became a professional documentary movie producer," Luczczyk says. "He is now in Canada making movies and telling people 'once a YRE, always a YRE'."

Taking the plunge

The FEE distributes learning materials for YRE to students and schoolteachers in member countries free of charge, giving guidance on how to harness the media. Students gather for a meeting on a topic such as climate change, before having a workshop with journalists. They are then put in groups and sent to municipalities and other locations to investigate that issue, before presenting an idea for a news story, photo, video or podcast.

"A few years ago we had a student from Israel who went to the local playground,



but there were no facilities for garbage, so children were drinking water and throwing plastic bottles everywhere,” Luczczek says. “The student wrote a story about it, and immediately the municipality provided facilities to help.”

YRE is looking to work with universities to develop courses so that students can gain qualifications, and has also started a monthly webinar series. In addition, it holds an annual competition judged by UNESCO experts, who select the most impactful stories or photographs submitted by YRE students.

“Our programme is not just for students who want to write – we want to educate them on environmental issues, investigation and interview skills, critical thinking and social media,” Luczczek explains. “We send them to conferences and meetings like COP so they can share their experiences with others – we are building an international network.”

Leading the way

YRE is looking to reach more countries and potential reporters, particularly in Africa, Asia and Latin America. The ambition is to create as many environmentally-aware leaders as possible. “We want people who can drive real change, and believe journalists have the power to do it,” says Luczczek.

Looking back at the past few decades, it is easy to see why journalists look set to play a bigger role in environmental protection. Public interest is at an all-time high, and the subject has shot to the top of the news agenda. “There are more opportunities now, because 25 years ago it was mostly printed media and not digital,” explains Luczczek. “We now have social media, but the challenge is about being more selective about what is right and wrong. Reporters need to be responsible and know how to react without being accused of fake news.

“We are working on fundraising and looking for sponsors that can help us run more programmes and create more learning materials with members. Young people need to feel they have power and are not being ignored. We have 10 years to find a solution, and with this programme we are making a difference.”

Leaders of tomorrow

Three Young Reporters for the Environment participants share their experiences with the initiative



FRANCIS AMETEPEY

Speaker of Municipal Youth Parliament – Nsawam and communications officer at Youth Advocates Ghana

YRE has positioned my mind towards addressing environmental challenges. It developed my critical thinking skills and knowledge around environmental issues, and taught me how to investigate and research solutions before reporting. One highlight of my engagement with YRE has been the acquisition of leadership skills. I participated in UNESCO’s Education for Sustainable Development (ESD) youth leadership training in Portugal in 2018, and with the skills acquired, I have established the first YRE club at Knutsford University in Ghana to educate students on sustainable development and environment-related issues. Today I am a student journalist as a result of my participation in the UNESCO ESD training, which influenced my decision to pursue a degree in journalism and communication studies at Knutsford University, and to communicate and report on environmental issues. I highly recommend YRE to any student or young person who seriously wants to transform, improve and support the attainment of the SDGs by 2030.



LAUREN RICARD

International news reporter at City Press agency (France)

YRE gave me a global perspective on climate change, environmental and sustainable development issues. Meeting with other YREs from all over the world and exchanging concerns on local issues shed light on those aspects and emphasised the interconnectedness of environmental issues. My best memories from the experience are from the workshop in Lisbon, the Youths save the Planet conference organised by UNESCO, and COP25 in Madrid. I find it so motivational to be with people who are involved in environmental protection and sustainable development; I’ve gained a lot of knowledge, but also new friendships with like-minded people. Winning the national YRE competition when I was completing my journalism masters was a great accomplishment, and I now work as a reporter. I have a better understanding of issues and an amazing network of scientists, officials and activists working in this field. Being a YRE inspires me to do more to help preserve our planet. It has been one of my best experiences and I would recommend it to any young person who is interested in journalism and the environment.



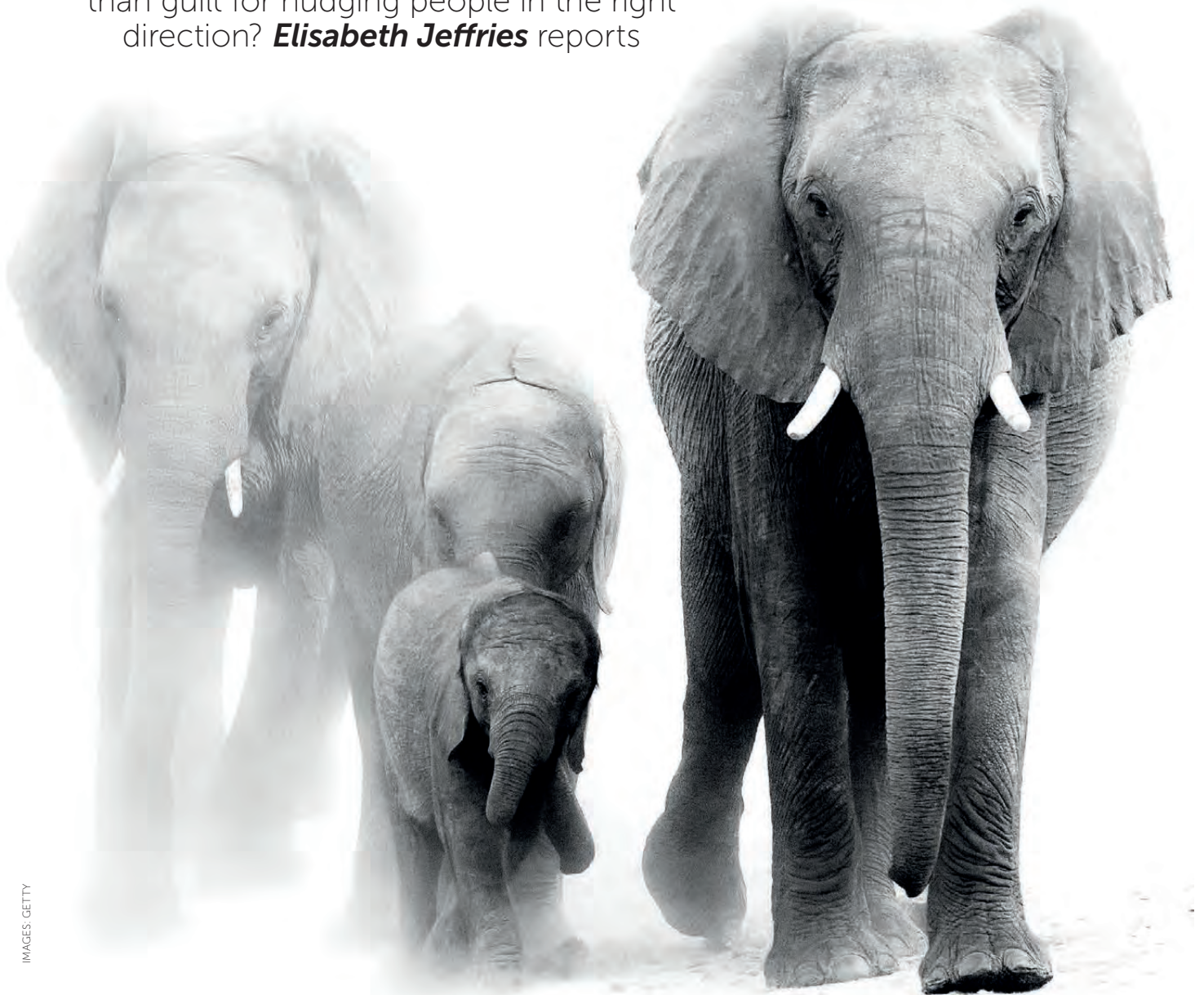
VINH LE

Creative director and partner at Level Studio (Canada)

I joined YRE in 2013 by submitting photos in a competition about solving environmental issues in Toronto. I ended up winning a DSLR camera – and my passion for photojournalism took off. I use my photography throughout my travels and curate a web gallery called Sustain-Able, highlighting how countries are coping and battling with global warming and climate change (bit.ly/2NaLkNW). My goal for the gallery is to showcase my experiences and document environmental issues from all around the world. I’ve become a Canadian ambassador for YRE, and in 2020 I will be involved in promoting the programme with Eco-School Canada to encourage students to submit to the Canadian YRE competition. I highly recommend getting involved. It empowers young people to take a stand on environmental issues, and provides a platform to articulate these issues through writing, photography and video. As a working photographer and designer, I can say that YRE fuelled my passion to be a young change-maker focused on creative design, photography and environmental issues. I believe others can share their passion to make a change and show that through YRE, you can make a difference.

POWER OF

Is positivity and community more effective than guilt for nudging people in the right direction? **Elisabeth Jeffries** reports



IMAGES: GETTY

Swedish activist Greta Thunberg's widely reported speeches to the UN in 2019 have not yet prompted a mass switch to greener products. That is probably because, according to research from Warwick Business School, communication based on guilt or fear does not in itself stimulate change. While the language of campaigners has its place in politics, the school's studies reveal that consumers need to be reached differently.

"Making people feel guilty does not encourage them to 'buy green' in future," says Hugh Wilson, professor of marketing, discussing a study using consumer recall.

During the project conducted by the school, researchers emphasised the scale of the environmental problem to one group of participants and made them feel guilty about their contribution to it. Another group was asked to remember something they had done that was good for the planet, however small. Both groups were then asked what kind of car they were going to buy next.

The business school noted a big difference. Those that had been encouraged to feel guilty did not really change their car preferences in comparison with members of a control group, who had only been asked about their next car. However, those who had been encouraged to feel proud of the steps they had already taken were far more likely to commit to buying a green car next time. "Remembering the pride we feel after making environmentally friendly decisions is more likely than guilt to motivate us to make green choices in future," says Wilson.

Another study by the school examined pride within the family and community. It found that individual women washing clothes in countries experiencing water stress ignored Unilever's efforts to sell them washing powder that cut water use by two-thirds – saving the planet did not interest them.

"For them, using plenty of water demonstrated that they were good, diligent home-makers", explains Wilson. This self-image was reflected not only in their own home but also within their neighbourhood. When the company encouraged them to feel that water efficiency would mean

they were viewed more positively in the community, though, the women switched.

Carrot and stick

Communications based on penalties are also only partially effective. "Government initiatives tell the public what not to do, which often serves only to emphasise how many other people engage in that behaviour in the first place. That can trigger what psychologists call a 'descriptive norm' – if everyone is doing it, it must be acceptable", explains Wilson.

The charity Climate Outreach has signalled the value of both unpleasant and positive emotions. The Oxford-based NGO campaigns for better communications about climate change that can reach different types of audiences effectively. In its first set of awards in November 2019, it conferred its Climate Visuals Photography Award on documentary

"Remembering the pride we feel after making environmentally friendly decisions is more likely than guilt to motivate us to make green choices in future"

photographer Ann Johansson, for her hopeful image of a woman standing in her home in Uttar Pradesh, India, which is lit by a solar-powered lantern that functions off the grid.

In contrast, the organisation's Climate Change Communicator of the year award went to Marshall Islander Kathy Jetñil-Kijiner and Greenlandic Aka Niviåna, poets and activists from communities that are thousands of miles apart but are both experiencing the impacts of climate change. In a vivid and moving, but frightening, video, they describe through poetry how they feel and what could happen to their homelands. Could this negativity be giving people a reason to switch off?

A survey by the Centre for Climate and Social Transformations (CAST) shows that fear-based communication does have its place and has helped to raise awareness. CAST is a joint initiative by Climate Outreach and the



Consumer behaviour

universities of Cardiff, East Anglia, Manchester and York. The poll revealed that almost half the UK public has become more worried about climate change during the past year. Two-thirds feel that we should, for example, limit air travel to address climate change.

However, stalling consumer action on climate change during the past 20 years seems to confirm the idea that awareness-raising is not enough, and that fear and alarm alone do not provoke action. Dr Stuart Capstick, research fellow at CAST partner the Cardiff School of Psychology, takes a more nuanced view. "Where you draw attention to the worrying consequences of climate change and do provide evidence of contributing something meaningful to solutions, fear and anxiety can be effective," he says.

A collective approach

One specific problem is the fact that many advertising and marketing channels avoid generating a sense of mutual wellbeing, instead focusing on the wellbeing of individual consumers. "Many of us want to feel we are contributing, and we can get a 'warm glow' from, for example, buying an electric vehicle," says Capstick. "At a deeper level, though, we view it as a drop in the ocean." This factor holds back progress on environmental issues, which are communal in character.

Sustainability marketing agency Futerra suggests that change is in the air. Co-founder Solitaire Townsend confirms that individual targeting is still commonplace in, for example, sectors such as beauty and dietary products, which thrive on consumers' feelings of personal inadequacy and anxiety – but she has also observed a growth in marketing to micro-groups such as vegetarians.

"Movement marketing, based on targeting groups who share strongly held values, has been increasing during the past five years in the US and the past 18 months in the UK," she says. This approach differs from traditional segmentation marketing in that the groups have already formed themselves and are not identified or shaped by the brand marketers. "These are not brand-led movements – they are consumer-led," she continues. Many companies are now interested in accessing these markets.

Futerra aims to help businesses develop marketing that is based on social and environmental incentives, rather than financial incentives alone. In the US, for example, major outdoor apparel retailer REI discourages consumption by shutting its stores on Black Friday, the Friday following Thanksgiving in the US – traditionally a day for shopping. Instead, it urges


customers and employees to go for a hike, promoting the appreciation of nature as well as the use of its clothes. The company is a consumer co-operative, so its outlook may differ from that of many other businesses – but numerous other retailers in the US have followed its lead.

Companies that focus on social benefits are still unusual, but leading examples could prefigure further change. HSBC's

'We are not an island' advertisements are a case in point, focusing on community identification within cities while drawing attention to the power of global communication.

To inspire further change, we need to communicate the community and environmental benefits of acting on climate change – not simply follow the media's lead, which largely focuses on apocalyptic scenarios.

Behaviour change will require more participation from the corporate sector as well as government, and

must urge a sense of pride and achievement. "We need to give people encouragement from time to time, and the media isn't likely to do that," says Wilson. "So it's important that companies do." 

ELISABETH JEFFRIES is a freelance journalist.

"To inspire further change, we need to communicate the community and environment benefits of acting on climate change"

The bright side

Positive messaging could help to improve consumer buy-in when it comes to the environment



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Recycling

Most recycling in the UK is 'mechanical'. The material is collected, cleaned and then chopped, shredded or melted into recyclates that can be turned into new products. The process is great for 'pure' plastic packaging such as PET and HDPE. It's also surprisingly low tech. However, it comes unstuck when there is contamination, or if there's a complex mix of different materials – and the problem is, it's composite packaging that has flooded the market during the past few years. More than two thirds of plastic waste generated in the UK is 'difficult to recycle', and of the third collected for recycling, only 9% is recycled domestically, according to the think-tank Green Alliance.

The easiest and cheapest way to deal with hard-to-recycle stuff is to bale it up and ship it abroad – or simply bury or burn it. The door to the first option is closing fast thanks to import bans in places such as China and Malaysia, while the other two are a waste of resources. "We recycle less plastic than any other commodity material – scarcely 7% overall," notes Susan Freinkel in her book *Plastic: A Toxic Love Story*. "We're burying the same kinds of energy-dense molecules we spend a fortune to pump from the ground."

What if we could process this mixed or contaminated plastic waste – break it down into building blocks for new products, including plastics? What if we could do this over and over again so that virtually no plastic ends up in landfill or incinerators?

Game changer

This is the potential being touted by supporters of chemical or 'non-mechanical' recycling, a technology that Daniele Ferrari, president at the European Chemical Industry Council, calls a "game changer". "Scaling up this technology will make Europe a global leader in circular economy solutions," he says. Sarah Bradbury, director of quality at Tesco, said in April this year that chemical recycling could be "the final piece of the jigsaw for the UK plastic recycling industry". The supermarket had just launched a trial at 10 stores to collect unrecyclable plastic, which would be chemically recycled back into Plaxx, a low-sulphur hydrocarbon that can be used to produce new plastics.

The same technology is being used at a site in Perth, Scotland that will run mechanical and chemical recycling side by side to capture and process all plastic – not just packaging, but broken bikes, mistreated toys and even traffic cones. "You name it, and if it's plastic we'll be able to take it," John Ferguson, director of Eco ideaM and head of strategy at the Binn Ecopark, told me during a visit last year.

The technology being used at the Binn Ecopark is pyrolysis, the thermal breakdown of plastic. This is just one of the technologies that fall under the umbrella of chemical recycling technologies. Others include: gasification, which involves partial combustion to produce synthesis gas; chemical depolymerisation, using chemicals to break a polymer down into

→ The
chemical
cure?

The final piece of the recycling jigsaw, or a toxic pseudo-solution?
David Burrows reports on chemical recycling



its monomers or intermediate units; and dissolution, in which polymers are dissolved in a solvent so they can be separated from any contamination before being precipitated back out and re-used. Each of these technologies involves varying degrees of potential, cost and environmental impact – which means we can't talk about all of them in the same breath.

Serious concerns

Depolymerisation, for example, can have high energy demands, while the solvents used can be “damaging to the environment if not managed properly”, according to a report published by Wrap in October ('Non-mechanical recycling of plastics'). Some NGOs have claimed that gasification and pyrolysis have a failed track record due to inefficiency, emissions pollution and environmental impact. Greenpeace has “serious concerns about emissions of hazardous chemicals and their intensive use of energy”.

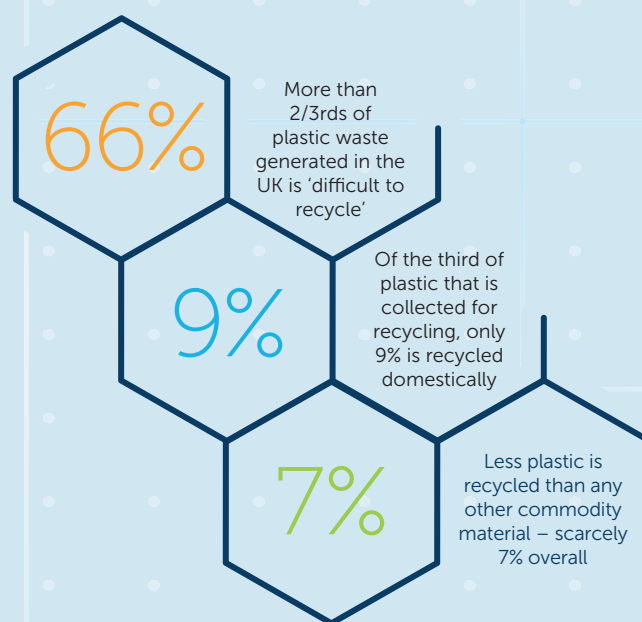
There is not much information regarding chemical recycling's environmental performance. Defra has said very little, with its 146-page resources and waste strategy simply noting that “it is important to consider the overall sustainability of the proposed process”. But we don't know if chemical recycling in its different guises will offer a lower environmental footprint than producing virgin polymer from crude oil. As Wrap's report put it, there is “a real possibility that from [a lifecycle assessment] perspective, an approach of making packaging from virgin polymer and mechanically recycling waste polymers into both packaging and non-packaging applications has a lower impact than non-mechanical recycling”. It's worth noting that the report was written by a firm with a vested interest in mechanical recycling. Nonetheless, it's pretty clear that more research is needed.

The other area of ambiguity is whether these technologies are really 'recycling'. The EU doesn't currently have agreed definitions for these technologies as a group. This has already led to greenwashing, according to Greenpeace, and “invites confusion” according to Zero Waste Europe. Some companies are said to be deliberately conflating plastic-to-plastic technology with plastic-to-fuel approaches. Surely a process that turns plastic into fuel can't be called 'recycling'? “Turning plastic into fuel does not reduce the demand for virgin plastic, meaning that new plastic needs to be produced out of fossil sources,” said Zero Waste Europe in its August report 'El Dorado of chemical recycling'.

Grey areas

The technology could well live or die by its outputs: that is, whether they are new polymers for plastic or have other uses, such as fuel or wax. Wrap's report offered this simple takeaway: “Without producing new polymer, the outputs should be considered recovery, and there is effectively little benefit over

“We don't know if chemical recycling will offer a lower environmental footprint than producing virgin polymer”



incineration of the plastic.” But there are grey areas.

What about processes that produce plastic and fuel? Wrap's report suggests solvent recycling and depolymerisation then re-polymerisation of PET are 'recycling', but pyrolysis could be a harder sell given that the process also produces gas that is burned to provide energy to the process (which could be defined as recovery, not recycling). Until this is cleared up, we don't know if chemical recycling facilities will

benefit from any new packaging recovery note schemes, or if their output will qualify as 'recycled'. Some of the tech is only at pilot stage, but the next five to 10 years are critical.

Won't these miracle processes just perpetuate demand for single-use, hard-to-recycle plastic? Greenpeace thinks so, stating that they are “undermining plastic reduction, the development of sustainable alternatives or innovations, and the incentives to phase out non-recyclable plastics”. It's a fair point: a technology that simply takes unrecyclable plastic and turns it into fuel undermines the circular economy and decarbonisation agendas. However, one that turns plastic back into plastic could be valuable.

The aim should be to keep the carbon in the plastic, rather than release it into the environment. Some of the new tech might just be able to do that, and the businesses built on hard-to-recycle plastics are excited by the idea – chemical recycling could help them deal with poor-quality plastic waste that can't be mechanically recycled. It's also a distraction from the tougher nut to crack: reduction of single-use packaging and rollout of reuse and refill schemes. Indeed, if hard-to-recycle plastic can be chemically recycled, demand for it remains locked in. 📌

DAVID BURROWS is a freelance journalist



Unpalatable prospects?

Sally Best investigates whether a post-Brexit relaxation on the use of bovine hormones could affect public health in the UK

Following the UK's withdrawal from the EU Customs Union, the UK will be able to negotiate trade deals with countries that currently have limited trade agreements with the EU, such as the US. This may allow access to goods at lower tariffs than the EU imposes, as well as goods that it bans.

There may, however, be health consequences to these post-Brexit food standards, along with threats to animal welfare. At present, the UK complies with EU law, which is informed by the European Food Safety Authority (EFSA). New negotiations may result in the import of produce that does not comply with EFSA laws – including milk from cattle treated with recombinant bovine somatotropin (rBST). Food safety standards may become a bargaining chip in trade negotiations, for example with the US.

In 1993, the Food and Drug Administration (FDA) approved rBST in the US for use in increasing milk production in cows. The FDA's reports concluded that milk and meat from rBST-injected cows was 'safe and wholesome', and appropriate for use in the commercial food supply chain. Conversely, a report commissioned by the EU in 1999 suggested that consumption

of milk from cows treated with rBST had possible detrimental effects on human health (bit.ly/EUbovinereport). This led to the ban on rBST use within the EU – begging the question: is this hormone safe for use in the UK's commercial food chain?

rBST: the facts

rBST is developed using recombinant DNA technology, which produces synthetic versions of the hormone bovine somatotropin (BST). It is injected into cattle in order to enhance milk production by promoting growth and cell replication. BST stimulates milk production by increasing levels of insulin-like growth factor (IGF-1). Its aim is to increase profit margins.

BST is synthesised in the US by Monsanto, under the name Posilac. Administered at the 'optimal quantity', rBST is said to stimulate an increase in milk production by 10-15% per cow. By 2007, rBST injections were administered to 17% of US cows.

Although rBST is sufficiently chemically dissimilar from human growth hormone somatotropin that it does not have any direct effects in humans, Bovine IGF-1 – which is increased upon administration of rBST – is chemically similar to human

IGF-1, so is biologically active in humans. Consequently, consumption of milk from rBST cattle could conceivably increase the levels of biologically active IGF-1 within the consumer's bloodstream. Epidemiological studies reveal that high levels of circulating IGF-1 in humans is associated with an increased risk of numerous common cancers, including breast, lung, colon-rectum and prostate (bit.ly/sciencepii).

In 1998, Michelle Limoli, who worked for the FDA as the associate director for the EU at the time, stated: "The FDA firmly maintains that [rBST] is a safe and beneficial product for humans and animals alike." She insisted that there was "no significant risk to human safety through ingestion of products from rBST-injected animals" and that this had been proven through "countless studies [that] found insignificant risks of cancer, antibiotic resistance, and allergic reactions". This stance is still held by the FDA. Furthermore, the World Health Organization and the Food and Agriculture Organization of the UN found that rBST can be used without any detrimental health effects for consumers. It has been noted by commentators that the FDA conducted one of the most rigorous "post-approval monitoring programmes" on rBST; furthermore, the FDA suggests that any apparent increase in IGF-1 in milk from rBST-treated cows that could be linked to a significant risk of cancer was only 'slightly' higher than that in untreated milk. They suggested this increase was less than that found in the normal variation of IGF-1 in untreated milk due to natural factors (bit.ly/cancerrBGH).

Statistically significant effects

However, any food with a possible health risk should be subject to extensive scrutiny. As recognised by TB Mepham in two co-authored papers, "the possibility of deleterious effects [caused by rBST injected milk] was dismissed by the FDA", despite the statistically significant effects produced in rats following orally administered IGF-1. These were deemed "sporadic results". Further, Mepham highlighted that IGF-1 is not destroyed during

the pasteurisation process and indicated that, due to the similarity between bovine and human IGF-1, the bovine IGF-1 increase caused by rBST injection would have a negative biological effect on the human gut. Moreover, FDA tests on effects of the hormone were deemed "inadequate". This potential lack of oversight and scientific integrity raises concerns.

Additionally, The American Cancer Society has stated that "more research is needed" to determine the levels of IGF-1 increase in rBST-treated milk, adding: "The extent to which intact, active IGF-1 is absorbed through the human digestive tract remains uncertain." Studies at Harvard Medical School (bit.ly/341QF0B) found that women and men with higher levels of IGF-1 were at greater risk of developing colorectal and prostate cancer respectively. The studies suggested the most common sources of IGF-1 were milk, fish and poultry.

"High levels of circulating IGF-1 in humans is associated with an increased risk of numerous common cancers"

The products on our shelves should have undergone comprehensive scientific scrutiny to prove that they are safe for human consumption – and rBST is arguably not. How will the UK avoid pressure to adversely modify current food standards in order to secure future trade deals?

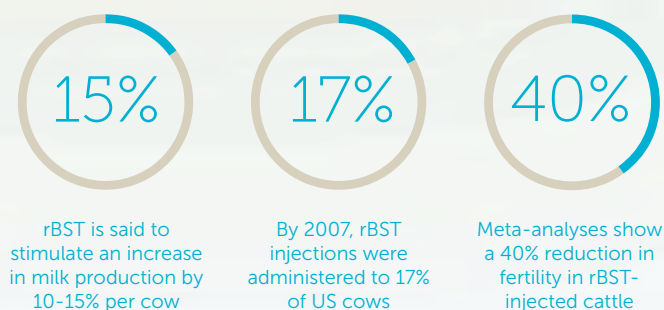
There is also the animal welfare issue. Recent meta-analyses show a 25% increase in mastitis, a 55% increase in risk of lameness and a 40% reduction in fertility in rBST-injected cattle. Manufacturers claim these side-effects are all treatable with "careful management". The current rBST packet label indicates that there are 21 side effects for cows administered with this hormone, including "injection site lesions which may remain permanent". The European Commission recognises the stress induced in the cow upon administration of rBST. These side-effects compromise the animal's autonomy, using them as a machine to generate maximal yield. Furthermore, illness in cows caused by rBST administration is typically treated using antibiotics; there is fear that these could form residues in milk, leading to antibiotic resistance in consumers.

It is imperative that post-Brexit animal welfare is maintained to the highest possible standard. Complying with US farming methods could see unnecessary harm caused to animals through the use of such synthetic hormones. These threats should be considered when making future trade deals, to ensure that food safety does not become a bargaining chip during trade negotiations and fall below our current EFSA standards. [i](#)

SALLY BEST is an environmental biologist and scientific journalist

Milking it

Could synthetic hormones put human and animal wellbeing at risk?



Gas leaks

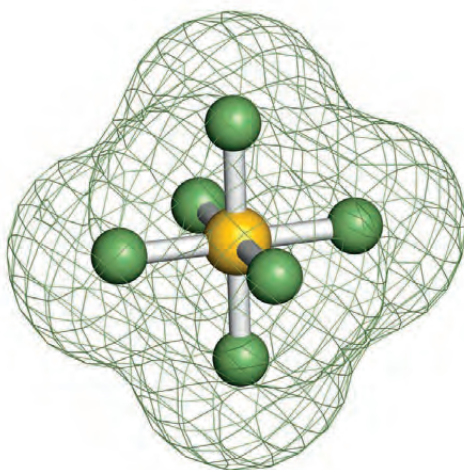
Paul Reeve considers the compelling arguments for and against banning sulphur hexafluoride

It's understood that more renewable energy and a decarbonised electricity grid will play a vital role in tackling carbon emissions. These 'low to no-carbon' energy solutions, however, may rely on a man-made substance with an environmental sting in the tail.

Sulphur hexafluoride (SF₆) is a colourless, odourless, non-toxic and non-flammable gas, five times denser than air. It is believed to be the world's most potent greenhouse gas, with a global warming potential 23,500 times greater than CO₂, molecule per molecule. So why is it so vital to the development of a decarbonised electrical industry?

SF₆ is an excellent electrical insulator, great at preventing short circuits in medium and high-voltage electrical installations. SF₆ has been deployed in circuit breakers and switchgear in power stations, wind turbines and electrical sub-stations, to quench arcs and stop short circuits. Often, it replaces oil-filled circuit breakers that contained harmful polychlorinated biphenyls.

Pressurised high-density SF₆ enables compact gas-insulated switchgear, ideal for space-constrained applications. It also has a reliable track record, and maintenance requirements are low –



"SF₆ can still be deployed in switchgear to ensure electrical safety"

handy if your equipment is, for example, part of a wind turbine in the North Sea.

SF₆ is a fluorinated gas, or F-gas. The EU has prohibited many F-gases, and SF₆ is already banned from many applications. Even so, it can still be deployed in switchgear to ensure

electrical safety and reliability. Despite its massive global warming potential, the airborne concentration of SF₆ is only a tiny fraction of atmospheric CO₂, currently only contributing 0.2% to overall global warming. However, there has been a near doubling of the atmospheric concentration of SF₆ during the past two decades.

The Environment Agency oversees UK rules on recovery of the gas, which is necessary when switchgear fails or degrades – but leaks and accidental releases do occur. In 2016, Schneider Electric was fined £21,000 for failing to recover 15kg of SF₆ while switchgear was being installed. As the gas does not break down easily, the lost SF₆, along with other operational losses around the world, could exert a greenhouse effect well into the next millennium.

All this means that the European Commission is set to revisit the situation during the first half of 2020 and investigate whether suitable alternatives could enable further restrictions on SF₆ in electrical switchgear. Various companies have stepped up with cost-effective alternatives for use in medium voltage (MV) equipment, notably using vacuum or solid insulation technology – but proven alternatives for high voltage (HV) switchgear may take longer to deploy.

While it's impossible to predict what the Commission will do in 2020, it might, for example, ban new usage of SF₆ in MV switchgear, while examining alternatives for HV. Even then, it may have to allow time for market and operational adaptation. There also seems little sense in removing SF₆ from existing switchgear – certainly not at speed. Instead, it's vital that ongoing electrical equipment operation and decommissioning does not let the gas escape.

While the days of SF₆ in global electrical switchgear are not over, 2020 may be the year when those days become numbered – at least in Europe.●

A double-edged sword

Do the benefits of SF₆ outweigh the dangers?

£21,000

In 2016, Schneider Electric was fined £21,000 for failing to recover 15kg of SF₆

23,500

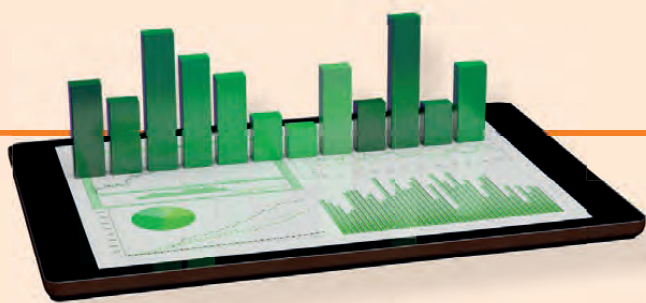
SF₆ has a global warming potential 23,500 times greater than CO₂



x2

SF₆'s atmospheric concentration has nearly doubled in the past 20 years

PAUL REEVE, CEnv FIEMA is a Fellow of the Royal Society of Chemistry and director of CSR at electrical trade body ECA.



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Awards spotlight



WHEB Asset Management

Seb Beloe, head of research and partner at the company, talks about the investment industry's future and winning IEMA's Sustainable Finance Award

What differentiates WHEB from other asset managers?

There has been a huge swell in ESG investing, targeting companies according to governance, how they manage health and safety and so on. However, we focus on impact investing, looking at how companies' products enable and benefit from a shift to a more sustainable economy. There are still very few investment managers that focus exclusively on this area. An oil and gas company, for example, could have great ESG, but could never say its products are enabling a low-carbon economy.

Why are there not more investors like WHEB?

The received wisdom from fund managers is to invest across the whole market in order to diversify your sources of growth. That is held as a self-evident truth, but we disagree. The transition to a zero-carbon economy will have to happen at some point, and if you take that view, then there are parts of the economy that you don't want exposure to because they have no future. Most of the market doesn't want to move away from the ability to invest in everything, but for us, investing in some parts of the economy is not attractive at all.

What can be done to discourage short-term thinking?

Investors like to think they are very independent and objective, but there is

definitely an echo chamber in different parts of the investment world, and attitudes to the fossil fuel industry. The threat from electric vehicles or renewables is downplayed routinely, but it is a matter of time before investors see the impact these technologies are having. The problem is that we don't have time, and we need policymakers, pension funds and individuals to push this agenda as quickly as possible. I also think it's important to get a positive message across. Some companies will suffer in this transition, but others will do well. There are a huge amount of jobs to be had, and it is a massive investment opportunity.

"It's really important to get a positive message across"

Should governments force asset managers to make sustainable investments?

Five years ago I would have said yes, now I am not sure. It depends on how regulators define sustainability, and in our view they have got a lot of those definitions wrong. It's better for policymakers to change the underlying market – so get a carbon price in place that drives progress in terms of the technology and buildings people use. Governments should focus on a carbon

WHEB HIGHLIGHTS

- WHEB's current investment strategy, launched in April 2012, had outperformed the MSCI World benchmark on a gross basis by five percentage points at the end of February 2019
- During that time, the fund has grown from £30m to £300m. The fund is invested in companies that annually help to avoid more than 200,000 tonnes of CO₂e, generating 133,000 MWh of renewable energy, treating 18,000 tonnes of waste and 3bn litres of waste water, and providing 11,000 people with healthcare treatment and 22,000 days of tertiary education
- WHEB has also published an 'impact calculator' that enables clients to calculate the impact associated with their own investment in the fund – a world first.

price, and shifting markets, products and services; investors will follow the money.

Will there be more asset managers like WHEB in the next decade?

If there aren't, we are all toast! We have five years to get this right. If we haven't got the policies in place, and are on a trajectory towards net zero-carbon by 2050 at the latest, and don't have those foundations in place, I think it is unlikely we will achieve that. We will be heading towards 3°C of warming or more, and that would be catastrophic. If the asset management industry doesn't look more like WHEB within the next five years we will be in trouble – but there has been progress, even during the past two years.

What did you think of IEMA's awards ceremony?

I have been a member of IEMA for 15 years, and when I joined it felt like a small community fighting this battle. I was expecting 100 people at most, sandwiches and a cup of tea, but it was one of the most glam, high-energy conference awards I have been to – a fantastic experience. We win a lot of awards in the finance world from people who are not necessarily sustainability experts, so it was a real accolade to win an award from people who are the experts. 🏆

CONNECT

SOCIAL AND COMMUNITY NEWS FROM IEMA



Birmingham: Christmas social and festive air quality presentation

Amid the Christmas festivities, Birmingham social network was joined by Satty Jandu from DustScan, a local air quality consultant, who gave a short, festive-themed presentation on what we can all be doing to promote a move towards improved air quality, and the key

higher-level drivers required. As well as sparking some debate among the group, the presentation left everyone feeling highly motivated; attendees also enjoyed the chance to network with their peers and develop their professional circle.

The growing environmental and sustainability network in Birmingham is great to see and is encouraged by a real appetite for more events and networking opportunities across the wider region. Keep your eyes peeled for more events coming up in 2020.

➤ For more information, contact the Birmingham Hub group lead Leah Bargota at leah.bargota@hs2.org.uk, or contact regions@iema.net



QUOTE
UNQUOTE

What inspires & mobilises faith communities around the world towards **#ClimateAction**? This month's feature article in **@IEMA_Transform** by our sustainability lead Kamran Shezad, writing about faith-inspired people who are tackling the environmental crisis. **@BAHUTRUSTUK**



Great to see IEMA's **@TobyRobins** speak at the Clean City Awards Scheme **#EnvironmentalBestPractice** meeting this

morning. With a theme focused around **#circulareconomy** Toby spoke on the latest in the **#environmental** **#sustainability** sector and upcoming **#policy** changes. **@IEMANET**



Today we were invited to attend the Closed Loop Systems **@iemanet** regional workshop. **@RollsRoyce** talked about their Revert programme. Revert has a **#CircularEconomy** character and helps the company to use **#manufacturing** waste back in the production of new engines. **@CARBONDERBY**



"London is part of **#C40cities** and **#WeMeanBusiness** to show what is possible and gather momentum" Shirley Rodrigues, Deputy Mayor of

London for the Environment speaking to IEMA on the value of collaboration for **#sustainabilityleadership** **@iemanet** **@MARCJOURDAN**



DATES FOR YOUR DIARY

iema.net/events

13 FEBRUARY

How will the environment act impact the third sector?

A webinar looking at the Fit for Future network and the potential impact of the Environment Act for charities and heritage organisations. We will cover the Environment Act and how third sector organisations will need to adapt. Fit for the Future is an environmental sustainability network with more than 100 charities, heritage organisations, cultural venues and public sector organisations among its membership.

➤ To register, go to bit.ly/2u3qg5h

20 FEBRUARY

New Zealand: Auckland networking event

IEMA New Zealand is hosting the first of its new yearly networking events, inviting all regional members to enjoy a social event with like-minded individuals and share workplace challenges and ideas, as well as build their professional network. This event is open to all working within the environmental or sustainability sectors.

➤ To register, go to bit.ly/2u7QHac

27 FEBRUARY

IEMA Futures – introduction to biodiversity and net gain

During the past 50 years, humans have dramatically altered ecosystems. These changes have contributed to substantial net gains in human wellbeing and economic development, but have been achieved at the cost of biodiversity. In this webinar, we take a closer look at biodiversity and how, through concepts such as net gain, we can protect and enhance it.

➤ To register, go to bit.ly/2tn5Dkz

28 FEBRUARY

Digital impact assessment primer

In this webinar, the new IEMA primer on Digital Impact Assessment is discussed by its authors, members of the Impact Assessment Network. The group has drawn on a range of experience to provide a practitioner's overview of Digital IA. The primer aims to outline the current situation, the opportunities presented and the challenges faced.

The webinar is aimed at EIA practitioners, reviewers and stakeholders.

➤ To register, go to bit.ly/2QZmD9F



EVENT

Futures vs Fellows

The IEMA Futures Network is a network of students, graduates and young professionals who are passionate about environment and sustainability issues. They are hosting an exciting evening of lively discussion and debate between their members and IEMA Fellows on 18 February at Arcadis House, London.

Two separate panels of Fellows and Futures will discuss the issues and challenges facing environment and sustainability professionals today. The aim is to create a thoughtful and engaging conversation between those at the start of their career and those leading the way in the profession.

➤ Register at bit.ly/2FYmsF5. More information around the discussion topics will be provided in due course. If you are interested in being on the Fellows panel and debating on a theme, please contact futures@iema.net

INTERNATIONAL

Middle East members



Notice to IEMA members resident in the Middle East & North Africa Region. Your regional Steering Group is in close liaison with IEMA

HQ with a view towards building closer local connections with members in 2020. Please log into the IEMA website to ensure your address and contact details are up to date. Meanwhile, for information on IEMA presence in the Middle East, feel free to email myself, your regional chair, at mena@iema.net

Harry Sealy FIEMA CEnv

Environmental and sustainability manager – Qatar at Jacobs



Why did you become an environment/sustainability professional?

We owe it to ourselves, future generations and the other forms of life we share the planet with to look after what we have, and I wanted to be part of the change.

What was your first job in this field?
Recycling officer, Dundee City Council in 1993 – the UK recycling rate was 2%!

How did you get your first role?

As soon as I completed my masters, I was lucky enough for the role at Dundee to become vacant.

What does your current role involve?

I am senior lead for advising the university on what it means to be socially responsible and sustainable. We advise on climate change and sustainable operations, what it means to be a responsible investor, human rights in our supply chains, relations with the city, community engagement and more.

How has your role changed/progressed over the past few years?

We are increasingly taking a 'whole institution' approach, embedding social responsibility and sustainability into core processes and strategy, rather than just thinking about operations. We see ourselves as key players in educating our students so that they can tackle the key challenges of the future and work with the sustainable development goals.

What's the best part of your work?

Working with a great team and colleagues, constantly addressing new challenges and opportunities, seeing the impact our work has on nature or people's lives, and feeling



CAREER PROFILE

Dave Gorman

FIEMA

Director of social responsibility and sustainability, University of Edinburgh

we are making a difference and 'raising the bar'. The added bonus is being surrounded by thousands of young people, who are full of energy, ambition and new ideas!

What's the hardest part of your job?

Making change is tough, especially in large organisations, and there are so many challenges to address. It's important for a leader and their team to look after their own wellbeing and take time to celebrate success.

What was the last development event you attended?

The EAUC sustainability leaders' programme at Cambridge University in January 2019.

What did you bring back to your job?

A greater understanding of various theories of leadership – in particular why sustainability leadership requires different approaches.

What is/are the most important skill(s) for your job?

Technical expertise, resilience, communication



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and influencing skills, the ability to translate evidence into viable future opportunities for **Edinburgh University**.

Where do you see the profession going?

We have come a long way since I started, but we need to make sure we can talk the language of leaders and changemakers, keep stretching our ambitions to match the size of the challenge, and bring people and social justice more into our thinking. We must also improve diversity.

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

In the same job, but with even more ambition!

What advice would you give to someone entering the profession?

Don't get lost in the technicalities. Learn early on how to communicate, persuade, make change and influence. Also learn some history, to give you context! And don't forget about social justice and inequality.

How do you use the IEMA Skills Map?

It's a great way to identify skills we can improve, and to track progress.

If you had to describe yourself in three words, what would they be?

Strategic, focused and future-oriented.

What motivates you?

Protecting the planet, tackling injustice, and widening opportunity for all.


What would be your personal motto?

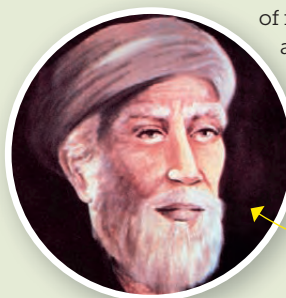
Something like 'We can always do better working together, respecting the planet and each other'.

Greatest risk you have ever taken?

Persuading the university to divert some of its £1bn of investments towards social and responsible investments.

If you could go back in history, who would you like to meet?

Abu Rayhan Al-Biruni (a brilliant polymath from Khwarazm). 



"We need to talk the language of leaders and changemakers"

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to sustainability



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