

 bright blue

Centre Write

Winter 2022

Favourable climate?

Grant Shapps MP | Tony Juniper CBE | Ellie Mae O'Hagan | Sir Robert Buckland QC MP



NET ZERO NORTH WEST

NET ZERO NORTH WEST IS LEADING THE WAY ON INDUSTRIAL DECARBONISATION AND CLEAN GROWTH.

Net Zero North West is an industry-led cluster acting as a public and private sector investment accelerator for industrial decarbonisation and clean growth projects in the North West. We unite business, regional leaders and academia, and are committed to delivering a co-ordinated net zero vision for the region.

As the region with the largest concentration of advanced manufacturing and chemical production in the UK – currently producing around 40 million tonnes of CO₂ annually – we have a core mission to become the UK's first low carbon industrial cluster by 2030 and world's first net zero industrial cluster by 2040.

Our Economic Investment Prospectus showcases the North West as the UK's leading region for green and sustainable investment. Setting out a £206bn investment case for a pipeline of long-term and shovel ready green investment projects, the prospectus demonstrates how the North West can lead the green industrial revolution and create the UK's first net zero region by 2040.

This bold vision for the North West will save 38.5 mega-tonnes of carbon dioxide emissions, turbocharge the UK economy by £285bn GVA and safeguard or create over 660,000 jobs.

£206.9 billion
investment in the
North West



providing social uplift
and benefit of over

£285 billion GVA



Develop a total workforce of

660,000

new and existing jobs across
the North West with over

½ million

in our industrial cluster



Save 38.5 mega-tonnes
of greenhouse gas
emissions (CO₂ equivalent)
and deliver the UK's first net
zero region by

2040

**Find out more about the NZNW Manifesto and
Investment Prospectus online:**

**netzeronw.co.uk
nwblt.com**

Strategic Partner and Founder

**NORTH WEST
BUSINESS
LEADERSHIP
TEAM**

Contents



Bright Blue is the independent think tank and pressure group for liberal conservatism.

Chief Executive: Ryan Shorthouse
Chair: Sarah Sands
Board of Directors: Alexandra Jezeph, Diane Banks, Phil Clarke & Richard Mabey

Editor: Joseph Silke
Design: Joseph Silke
Cover design: Chris Solomons
brightblue.org.uk

EDITORIAL

- 4 | Editor's letter
Joseph Silke
- 5 | Director's note
Ryan Shorthouse
- 6 | Letters to the Editor

A JUST TRANSITION

- 8 | Greening capitalism
John Godfrey
- 10 | Uniting for the future
Frances O'Grady
- 12 | Preaching to the converted?
Kelly Beaver
- 13 | Making greenwashing history
Ted Christie-Miller
- 14 | Citizens reign?
Professor Rebecca Willis
- 15 | Grassroots gumption
Ben Margolis
- 16 | Leaving nobody behind
Ellie Mae O'Hagan
- 17 | Helping hand
Alastair Russell
- 19 | Are capitalism and climate action compatible?
Lord Deben and Baroness Bennett

INTERVIEW

- 22 | Grant Shapps MP
Joseph Silke

OPPORTUNITY COST?

- 29 | Painting the Red Wall green
Jonathan Gullis MP
- 30 | Securing the supply
Professor Jim Watson

- 31 | The price is right?

Eamonn Ives

- 33 | How savings can save the world

Frank Carson

- 34 | A blueprint for phasing out coal

Liana Downey

BETTER LIVES

- 37 | Back to life
Tony Juniper CBE
- 38 | Gentle greening
Ben Southwood
- 39 | Food, glorious food?
Dr Rosemary Green
- 40 | On your bike
Dr Suzanne Bartington
- 41 | Reconnecting with nature
Patrick Begg
- 43 | Raising our resilience
Mary Friel

POLITICS

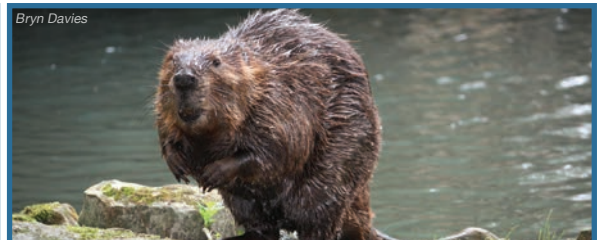
- 45 | Why I'm a Bright Blue MP
Sir Robert Buckland QC MP
- 46 | Research update
Max Anderson
- 47 | Tamworth Prize 2021 winner
Tom Spencer

REVIEWS

- 49 | Music: Let there be nothing
Sam Robinson
- 50 | Film: Limbo
Ioana Diac
- 51 | Film: Last night in Soho
Max Anderson
- 52 | TV: Impeachment
Joseph Silke



Interview: Grant Shapps MP (p.22)



Back to life: Tony Juniper CBE (p.37)

Editor's letter

Editor **Joseph Silke** introduces this edition



Puppies aren't just for Christmas, and net zero isn't just for COP. In November, delegates from across the globe descended on Glasgow, one of the great engines of the Industrial Revolution. The UN Climate Change Conference (COP26), hosted by the United Kingdom, was much anticipated, both at home and abroad.

The emphasis was on cash, coal, cars, and trees. COP President Alok Sharma and his team stressed the vital need to "keep 1.5 alive" – keeping global warming to no more than 1.5°C above pre-industrial temperatures.

We aren't quite there yet, but the many commitments made at COP26 were undoubtedly a strong step in the right direction, with new pledges made by major polluters like India to achieve net zero carbon emissions later this century.

Making commitments is, however, the easy part. Delivery must follow, and delivery can be controversial. The purpose of this magazine is to explore how we get there, and the impact that the transition will have on individuals and communities.

Opening *Centre Write* this edition is an essay by Legal & General's **John Godfrey** (p.8) on greening capitalism, explaining how we can harness innovation and investment to both unlock opportunities for growth and decarbonise.

The Secretary General of the Trades Union Congress, **Frances O'Grady** (p.10), argues that strong trade unions must be allies in the net zero transition to create high-quality green jobs.

The Chief Executive of Ipsos MORI, **Kelly Beaver** (p.12), explores how to sell net zero to the public; are we just preaching to the converted?

Ted Christie-Miller (p.13) from

BeZero Carbon sets out how reforming the voluntary carbon market is crucial for ending 'greenwashing'.

Lancaster University's **Professor Rebecca Willis** (p.14) argues that citizens' assemblies provide a critical way to involve ordinary people in climate policy.

Director of the Climate Coalition, **Ben Margolis** (p.15) emphasises that tackling climate change will have to be a community-wide effort.

Ellie Mae O'Hagan (p.16), Director of CLASS, makes the case for a 'Green New Deal' to address burning inequalities and ensure nobody is left behind.

Save the Children UK's **Alastair Russell** (p.17) stresses the duty we have to support the developing world to go green.

The Chair of the Climate Change Committee, **Lord Deben**, and the former Leader of the Green Party of England and Wales, **Baroness Bennett** (p.19), clash over whether capitalism and climate action are compatible.

Our interview is with the Secretary of State for Transport, **Grant Shapps MP** (p.22). We discuss the revival of Britain's railways, how he feels about "anarchist" climate protesters, the post-pandemic future of international travel, and how he approaches media appearances.

The Red Wall's **Jonathan Gullis MP** (p.29), explains why the transition to net zero and levelling up 'left behind' communities are a perfect match.

UCL's **Professor Jim Watson** (p.30) warns that the UK's national resilience as we transition away from fossil fuels will rely on protecting our energy security and supply chains.

Eamonn Ives (p.31) from the Centre for Policy Studies stresses the need to reform the UK's muddled carbon pricing regime to

hasten decarbonisation.

Aviva's **Frank Carson** (p.33) explains how savings can save the world and calls on pension funds to seize the opportunities of net zero.

Liana Downey (p.34) from the Blueprint Institute in Australia presents three guiding principles for the phasing out of coal down under.

The Chair of Natural England, **Tony Juniper CBE** (p.37), underlines the vital link between restoring nature and net zero.

Ben Southwood (p.38) from Create Streets explains how gentle density in urban areas can make for more sustainable places.

Dr Rosemary Green (p.39) from the London School of Hygiene and Tropical Medicine examines how to navigate the politics on our dinner plates.

The University of Birmingham's **Dr Suzanne Bartington** (p.40) writes how switching to more active travel can both benefit your physical and mental health and help protect the environment.

The National Trust's **Patrick Begg** (p.41) recalls how the pandemic has taught us the value of connecting with the outdoors.

Mary Friel (p.43) from the British Red Cross cautions that climate-related disasters are here to stay and we need to be prepared for them.

Finally, **Sir Robert Buckland QC MP** (p.45) shares why he is a Bright Blue MP, and the winner of the Tamworth Prize 2021, **Tom Spencer** (p.47), answers how the Government can revive so-called 'left behind' areas.

Enjoy the edition! 📖

Joseph Silke is the Communications Manager at Bright Blue

Director's note

Luck might have finally run out for Boris the great gambler, argues **Ryan Shorthouse**



The Prime Minister is in the most precarious position of his premiership. His reputation among Conservative colleagues rests with Sue Gray, who has now referred information about parties inside Number 10 during Covid-19 lockdowns to the Metropolitan Police.

"Who the hell is Sue Gray?", cry normal people across the country. For those of us who have worked in and around Westminster for some time, we know full well. She is the senior civil servant who has become the ultimate arbiter of standards in public life, her inquiries into ministerial conduct legendary. Now Boris' knowledge of and behaviour at parties inside Number 10 during Covid-19 lockdowns will be revealed and judged by her and the Metropolitan Police, ascertaining whether he or others in Downing Street broke the law.

It is quite believable that this PM didn't think through that the worst incidents we know about – a gathering in his garden which he attended with his wife in the late Spring of 2020, with about 30 staff chatting and drinking, as well as a birthday get together with cake and singing for him inside the Cabinet Office in the early Summer of 2020 – were against the rules he had just signed off on.

Firstly, during that first lockdown, staff in Number 10 regularly met in the garden while working, since the risk of transmission is much lower outside. Secondly, the Prime Minister will most days go from event to event, and from meeting to meeting, on autopilot, believing all the logistics have been sorted by his staff, leaving him to think about different and difficult matters.

But, thirdly, this is a man not known for a desire to grasp dry details. When I worked as an adviser in the Shadow Education team in the late noughties, when Boris was

Shadow Higher Education Minister, he not only frequently turned up late, if at all, to the weekly team meeting – usually in an ill-fitting, stain-ridden suit when he did – but had clearly not engaged at all with the Government papers and announcements released that week.

We all make mistakes and that should be considered when we judge anyone. However, if he consistently and knowingly – or, at least, it is reasonable to assume he should have known that he had – broke and allowed the breaking of Covid-19 lockdown rules inside Number 10 Downing Street, and either investigation conducted by Sue Gray or the Metropolitan Police concludes this, then the proper thing for the Prime Minister to do would be to resign, whatever his merits and achievements.

He won't resign, however, unless there is an unforgivable bombshell. That's not his style. This is somewhat strategic: survive by never really admitting fault and saying sorry, however brazen the behaviour.

But it's partly philosophical too. Boris is broadly liberal, if you are looking for some kind of intellectual guide to his thinking. His writing reveals, deep down, an aversion to nannying and finger-wagging, to a Fabianistic society of Byzantine rules, petty policing, and curtain-twitching. The waggish might observe that such anti-judgmentalism might be a convenient shield to stop the tutting at his own well-documented personal misdemeanours.


The Conservative Party has long pitched itself as representing and rewarding people who work hard, follow rules, and defer gratification in life. Tory parliamentarians will no doubt now be under no illusion just how deeply the Number 10 parties that took place during critical times in the pandemic undermine this reputation. The public seem

to be rightly very livid about those in power ignoring rules that were set by them, whether it is the letter or the spirit of them.

Conservatives face a critical choice in the weeks and months ahead. MPs and advisers are mulling over the ethical, but also strategic, implications of all this.

The anger could stick in public consciousness. So, the longer Boris stays, the more the association between the Tories and bad behaviour strengthens, undermining its principles and reputation and risking long-term respect and power. Leave it too long without a new leader, then the Conservatives won't have the time before the next election to convey a fresh Government with new priorities.

However, the great gambler has led the Conservative Party to historic victories: in London, a city that has long leaned left; and, the whole of the country in 2019, a stonking majority won on the back of traditional Labour seats in northern England and Wales. A proven winner, it is unsurprising that the Conservative Party are reluctant to let him go.

Few of us can be lucky for so long. You have to gamble for glory, especially in politics. But it's certainly a high risk. The losses can be earth-shattering. As Red Wall seats have narrow majorities, and recent by-elections show the Conservatives cannot take their affluent southern heartlands for granted. There is a real risk that the Tories will have taken one step forward only to then take two steps back. 

Ryan Shorthouse is the Founder and Chief Executive of Bright Blue

Letters to the Editor

Submit your letters to joseph@brightblue.org.uk

Lauren Protentis's piece ('Disrupting disinformation', Autumn 2021), offers an extensive evaluation of the threats posed by disinformation. Protentis correctly identifies that it is no lesser threat than radicalisation, and that counter-terrorism and counter-disinformation efforts overlap. She recommends borrowing practices to curb disinformation, such as identifying 'push' and 'pull' factors. This approach may not be as successful in combatting disinformation as it is in countering terrorism. Disinformation tends to be shared by unsuspecting users who inadvertently contribute to propagating it. While Protentis rightly highlighted the concern of AI-enabled disinformation, it should also be mentioned that AI-powered counter-disinformation efforts can prove to be extremely useful, as shown in previous research and experiments, such as MIT's RIO software. As Protentis suggests, Western Governments must act quickly and address the disinformation efforts to defend democratic values.

Shota Shiukashvili | Bright Blue member

Luke de Pulford's article ('A shameful record', Autumn 2021) makes the case for recognising the Uyghur genocide officially and presumably to make a difference whilst doing so. Such aims may have the best intentions, yet de Pulford is misguided. When essentially comparing the United Kingdom to prevalent Holocaust deniers, he argues that the "opinion of the UK actually matters" – he could not be more wrong. By condemning the People's Republic of China, the UK will do precisely nothing in the alleviation of the suffering of the Uyghur people. Instead, we will likely see a deterioration in the economic relationship between Britain and China, causing unnecessary hardship to many. There is nothing admirable about following dogmatic principle over pragmatic reality and, whilst I truly hope that the UK will be able to halt genocide, for now such efforts are unfortunately both ineffective and counterproductive.

Oliver Law | Bright Blue member



Thom Milosovic

Michael Stephens' article ('Britain entangled?', Autumn 2021) argues that the UK must muddle through the Middle East's unstable politics, and ensure healthy returns are made on military and financial investment. This is a valid argument. However, the article underplays the importance of a British military presence within the Middle East to assist the region in establishing peace and security, instead of simply seeking economic benefit for the UK. It should be emphasised that some basic form of military presence should be available to provide humanitarian support to such conflicted areas.

Tom Mephram | Bright Blue member



What value do you place on nature?

Nature can help us tackle some of the greatest challenges we face. From climate change to air quality, and well-being to biodiversity. We work with clients to protect and maximise the benefits of the natural environment, and deliver net zero.

Discover more
wsp.com/gb-nature-positive





ESSAY

Greening capitalism

Business has to lead on climate action. Capitalists need to keep articulating the huge investment opportunities for all parts of the UK, argues **John Godfrey**

An ironic graffiti from Glasgow during COP26 read: “Cannae afford a carbon footprint”.

As energy prices and the cost of living soar this spring, there is a risk that consumers will be more worried about paying for the carbon footprint they already have, than about reducing it. Already last autumn, our own polling suggested consumer support in principle for decarbonisation fades away as the costs rise much beyond a solar panel or two, and while a record 300,000 electric vehicles are expected to be bought in the UK this year, that still leaves 32 million internal combustion engine cars on the road. Globally, energy and especially gas price volatility is driving emerging markets like China and India towards more, not less coal.

As a country or individual, you shouldn’t have to be rich to be green. A narrative where economic and environmental successes offset each other will never deliver success at scale, as it demands financial sacrifices which, even if they

wanted to, most ordinary people can’t afford to make. Governments answerable to taxpayers know this. Carbon taxes are a good example: governments apply them sporadically under different names and at different prices – think of Vehicle Tax and Air Passenger Duty. They also know that a comprehensive, transparently-priced, and explicit Carbon Tax would work better, but they don’t know how to apply it and get re-elected.

“ **Consumer support in principle for decarbonisation fades away as the costs rise much beyond a solar panel or two**

This is where greener capitalism comes in. For the first time in Glasgow, business and finance were front and centre. No-growth ecological fundamentalists might not like it, but Mark Carney’s achievement in aligning \$130 trillion to the slowing of

global warming was a huge achievement. Just as important was the announcement that International Sustainability Reporting Standards (ISRS) will place climate reporting on a par with IFRS financial reporting and make sure greenwashing becomes as difficult and as consequential for a company as misstating its balance sheet.

Business has to lead on climate action. Governments relying on constrained taxpayers can’t foot the bill for climate change alone. There is a huge cost to climate change, but the global financial system boosted by all that quantitative easing contains more money than ever before; defined contribution and defined benefit pensions in the UK amount to around £3 trillion. The good news is that addressing climate change is not just the biggest challenge, but also the greatest investment opportunity of our lifetimes, and consumers can share in those returns.

Capitalism is driven by risk and reward – colloquially by fear and greed. The lesson of the increasingly mainstream environmental,

>> social, and governance (ESG) investment framework is that ever more sophisticated climate risk management frameworks and metrics are influencing where capital is invested. Nobody wants to end up owning a stranded asset. This is, however, a debate with an important nuance. Achieving a just and effective climate transition requires investors to steward and support responsible companies on their journeys to net zero.

“ When it comes to research and development, we are great at the ‘R’ and poor at the ‘D’ – we need real focus on commercialising technology

Engagement – particularly ‘engagement with consequences’ – achieves better outcomes than knee-jerk disinvestment which can result in assets being owned by less environmentally responsible, more short-term players. Divesting is the polar opposite of stewardship, and examples are not hard to find.

Capital allocation frameworks are catching up – in part thanks to earlier government nudges, there is a healthy market for renewable power generation

assets, and we have seen dramatic falls in the price of solar energy as markets have worked their magic. But there is more to do, and this is where our focus needs to be if we are to achieve not just ‘the greening of finance’ but also ‘the financing of green’, and hence better planetary outcomes. This requires government and business alignment: government’s role is setting policy and providing nudges, while the private sector can play to its strengths in delivery.

There are three broad areas where capitalism can, and should, step up – and each requires political nudges and a stable policy framework.

Firstly, identifying the right climate technologies to back, and where they need it, engaging them with government to make them investable. One prime candidate is nuclear, both large-scale replacements of the existing nuclear fleet and small nuclear plants of the sort being pioneered by Rolls-Royce. Renewable generation is relatively straightforwardly financeable and the issue of intermittency is one which nuclear could solve. Safety arguments are proven, but politics gets in the way, driving climatically perverse outcomes, particularly notably in Germany – this is difficult for investors.

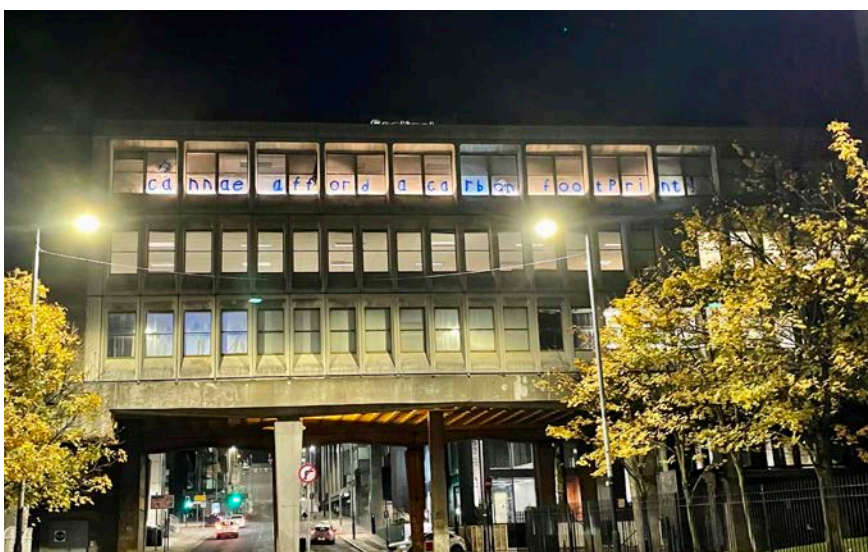
For the UK, with its outstanding

universities and science, developing new climate-friendly technologies is a natural fit. However, when it comes to research and development, we are great at the ‘R’ and poor at the ‘D’ – we need real focus on commercialising technology and scaling it up, especially outside the ‘Golden Triangle’ of Oxford, Cambridge, and London. University spin-outs are generally sub-scale, VC is too concentrated in the South East, and regulation gets in the way of investing more institutional money in venture capital. These problems need to be addressed.

Secondly, the innovative strengths of capitalism, in particular in the UK, have to be harnessed in the interests of global climate transition. The City of London played a pioneering role in the Eurobond market 50 years ago, and the same qualities need to emerge to provide leadership in the green finance space. Investment managers looking to decarbonise portfolios need to look to London for their ‘how to’ guide, and our skills in structuring project finance, our legal system, and regulatory systems should make us the natural centre for structuring deals to finance green projects and insurance against catastrophic climate risks in emerging markets.

We can go further though. Most commentators believe that achieving net zero will require not just cutting carbon emissions to address flow, but also using both technological and nature-based solutions to sequester carbon to reduce stock of carbon dioxide. This will become increasingly important in the second half of the transition as residual emissions from hard-to-abate sectors become increasingly difficult to cut.

This explains the pivot to nature and deforestation at COP26 and is closely related to the issue of carbon trading and offsets. The UK can lead on carbon capture and storage under the North Sea, on developing viable financing mechanisms for natural solutions like peat bogs, mangrove swamps, and kelp farms, and in developing a respectable, regulated, and verifiable



>> market in offsetting, based in London. The last of these could be the 21st Century's equivalent of the City's London Metal Exchange.

“Tackling climate change has huge attractions, including the potential to earn good returns while helping deliver levelling up and regional growth


Thirdly, capitalism must work with government to support consumer engagement in climate, in such a way that all benefit economically as well as environmentally. Business finances electric vehicle charging systems, but investment is underpinned by the existence of a hard expiry date for new petrol and diesel cars. Investment in heat pumps is similarly backed up by deadlines for new gas boiler

installation. The confidence that a market will exist in both cases makes it reasonable to expect that costs will come down as technology improves and production scales up, as it has for photovoltaic panels.

Housing retrofit is much more difficult than cars or new-build homes, but it is hugely important. Warming our homes contributes 20-25% of emissions – and most of the homes we will be living in by net zero 2050 have already been built. The Green Deal and other policy initiatives to date have not been effective: there are no nudges to tie the value of a home to its environmental performance, so large capital expenditures are linked to very long paybacks which are of limited practical use and are avoided by most home-owners. A radical solution would be to extend the nudge: tools could include differential rates of Council Tax, or given housing is taxed when it changes hands, in Stamp Duty or

Inheritance Tax. These could turn it to the homeowner's advantage to take the right steps, environmentally: a nudge which is more carrot than stick, prompting the creation of a retrofitting industry.

The 'Can't afford Green' meme will grow in volume over the next few months, but as an investment theme, tackling climate change has huge attractions, including the potential to earn good returns while helping deliver levelling up and regional growth.

Capitalists are good at articulating an investment case – they need to keep doing so around climate and its ability to benefit all parts of the UK as well as investors, companies they invest in, their customers, and employees. 

John Godfrey is the Corporate Affairs Director at Legal & General. He was the Director of the Number 10 Policy Unit under the then Prime Minister Theresa May

Uniting for the future

Strong trade unions are allies in the green transition, argues **Frances O'Grady**

The climate emergency is already transforming the jobs millions of us do. Trade unions are leading the call for a just transition to net zero, so we avoid the devastating deindustrialisation of the past and deliver good, green jobs in the communities that need them most. For us, just transition must be more than just a slogan: it demands bold policies backed with investment. Our guiding principle is clear: change must be done with, by and for working people, not to them.

Trade unions want just transition to be included in national climate action plans, and in the legally-binding UNFCCC agreements. With the right approach, we believe it is possible to square the circle between net zero, growth, and jobs. So what

can we do to make just transition a reality – and deliver those green skills and jobs of the future?

Firstly, we must invest big. Workers know change is coming – and we need to be ready. Exploiting super-low interest rates, the TUC is calling for an £85 billion investment in green tech, transport, and energy. From building insulation projects to a world-class network of charging points for EVs, from rail electrification to offshore power, this would create well over a million good jobs. By targeting investment effectively, we can regenerate held-back regions and make levelling up a reality.

Alas the UK is playing catch up. President Biden is spending almost £3,000 per head on the green jobs of the future – here, the

equivalent figure is just £180. The UK risks losing 660,000 manufacturing and supply chain jobs if we fall further behind our competitors on net zero. Many of the industries on the frontline – from steel to chemicals – are in so-called 'Red Wall' seats.

Secondly, we must ensure we create good, skilled jobs. This is a tremendous opportunity to tackle insecurity and low pay, and deliver the kind of jobs people really want. From power network engineers to building retrofit coordinators, many of the jobs we need to get to net zero are highly-skilled positions. With the Green Jobs



>> Taskforce calculating that over six million jobs require upskilling, we must spend more on the National Skills Fund, reverse years of cuts to FE and staff pay, and provide new rights to retrain and to paid time off work to undertake retraining. This is particularly important for workers in high-carbon industries on the climate frontline.

“ President Biden is spending almost £3,000 per head on the green jobs of the future – here, the equivalent figure is just £180

Unions can play a key role delivering green skills. The Green Jobs Taskforce calls for more employers to recognise union learning representatives “in order to increase access to training for hard-to-reach employees”. Stronger rights for unions to bargain collectively on skills would also make a huge difference.

Finally, workers must shape the change ahead. Working people are climate leaders who will help us get to net zero, whether it's the postal worker managing the switch to an electric fleet at Royal Mail; the car engineer at GKN fighting for their factory

to make electric drive systems; the council worker dealing with the aftermath of extreme weather; the teacher inspiring the next generation of activists; or the steelworker making the world's first batch of zero carbon steel, soon to be used by Volvo. All the above are real workers – and union reps to boot.


I've met inspirational workers who are leading the fight for just transition, including Unite convenors negotiating a net zero Centre of Excellence at aerospace giant Rolls-Royce, shop floor staff at the Cummins diesel engine factory now making hydrogen power plants for trucks, and striking recycling workers in Glasgow fighting for fair pay. Workers like them must have a say about how net zero happens. As the voice of working people across the economy – from scientists and academics to transport, manufacturing and energy workers – unions have a unique role to play. Government and business should work with us to harness this collective experience and expertise.

Just transition won't happen by accident. The Stern Report famously described climate change as the worst case of market failure in human history – and that's why the TUC is calling for fundamental change. We believe net zero demands a new economic

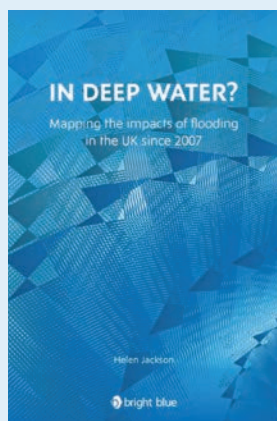
model: more sustainable, more equal, and more interventionist.

There is a strong Conservative tradition of intervention in the economy. Winston Churchill established wage councils to raise pay and standards. Edward Heath saved Rolls-Royce by nationalising it. Michael Heseltine has long championed industrial activism, promising to “intervene before breakfast, lunch, tea, and dinner” to help businesses.

“ The Stern Report famously described climate change as the worst case of market failure in human history

It's time to write a new chapter in that story. Progressive Conservatives should see strong trade unions as allies in a shared endeavour to tackle the climate emergency. With the right approach, we can secure those good green jobs and deliver a just transition to net zero. Let's seize the moment. 

Frances O'Grady is the General Secretary of the Trades Union Congress



Recent report

In deep water? Mapping the impacts of flooding in the UK since 2007

Helen Jackson

Flooding is one of the most serious climate-related risks that the UK faces. A clear understanding of how it is affecting or could affect specific key public services, critical infrastructure and key businesses is fundamental to improving national resilience.

Using a unique methodology based on artificial intelligence called Natural Language Processing, this innovative report assesses the impacts of flooding and related hazards in the UK since 2007. It puts forward a range of policy recommendations to bolster the UK's resilience towards flooding in the decades ahead.

Preaching to the converted?

Kelly Beaver sets out how to sell net zero to the public



Given the increasing lived experience of climate change and the focus on the scale of what we need to do to combat it, it's not surprising that November 2021 saw the third time that the environment topped the list of national concerns in Ipsos MORI's monthly Issues Index, reaching its highest ever score since 1988 when the index started including the environment.

The environment was seen as the top issue facing the country, ahead of the economy, the pandemic, healthcare, and education, as well as any other issue raised by Brits. Partly this reflects the media interest in COP26 hosted here in the UK, but it also reflects a trend we saw before the pandemic, where we saw rising concern about the environment before it was interrupted by the pandemic drawing attention away from all other issues.

These levels of concern are not completely unprecedented. We saw similar levels in our polling back in 2005 too, but what happened then was a narrowing of concern about climate change during the Great Recession and its aftermath.

So, what does this tell us?

It suggests that concerns about other issues can temper concern about climate change, including, of course, the economy. Is this time different? Here we are approaching two years of a global pandemic, and we're again at that high level of concern about climate change, so could this herald a new and consistent high level of concern about the environment and climate change?

If we take as a working assumption that concern about the environment is here to stay, but can be affected by other issues, what does that mean for political support for action addressing environmental and climate change issues?

“High levels of concern shows there is a bedrock of support for action, but the Government will also need to engage the public with the implications

In work done by Ipsos MORI as part of the Climate Engagement Partnership just before COP26, we explored support for some key net zero policies. We found that there was majority support across seven of the eight policies we asked about, and even the final one, higher taxes on red meat and dairy products, had 47% support, with only 32% opposed. This fits the pattern of high levels of public concern about the environment.


But it isn't quite as simple as that. We then asked people if they would still support that policy in the face of various lifestyle and financial trade-offs, and it often had a marked effect. Taking one policy as an example, 62% of Brits support electric vehicle subsidies initially, but support falls to 42% if the policy meant that they themselves had less choice when buying a new car. So support falls by around a third once people think about the personal impact, even though they don't all switch into outright opposition.

That effect is compounded once people

have to think about the financial implications. If you tell people that they will have to pay more to drive their car, then support for electric vehicle subsidies falls further to 34%, and this time there is a bigger impact on opposition, up to 38% compared with 24% when personal trade-offs were all people were being asked to consider.

This highlights the need for proper understanding of what the public needs to convince them to take the essential steps to achieve net zero. On the one hand, the high levels of concern shows there is a bedrock of support for action, but the Government will also need to engage the public with the implications of actual policies for individuals, and their finances, as well as the potential benefits of a green strategy, and costs of inaction. Otherwise, public support should not be taken for granted.

Addressing the climate emergency will be a huge global challenge which will cut across many facets of our everyday life both personally and professionally. It's only by understanding that and addressing the consequent concerns that people have that we'll begin to make progress on this critical issue. This is why Ipsos MORI's work as part of the Climate Engagement Partnership is so important.

So, while the public may have been converted to the need for concern when it comes to the environment and tackling climate change, they still need to be taken on a journey before they are ready to join the choir. 

Kelly Beaver is the Chief Executive of Ipsos MORI



Making greenwashing history

A robust and credible voluntary carbon market is crucial, says **Ted Christie-Miller**



Everyone should know what 'greenwashing' means by now. It is when a company or organisation is focused more on how they market themselves as environmentally friendly, rather than actually minimising their environmental impact.

Often, this can take the form of buying cheap and poor quality offsets while saying that you are going for net zero emissions, when in fact you are doing nothing of the sort. We urgently need to boost quality and credibility in the carbon offsetting market.

“ Some businesses are ploughing millions of pounds into poor quality carbon offsets, which have marginal, if any, climate impact

Carbon offsets are here to stay. Last year, the market for carbon offsets, the voluntary carbon market, hit the \$1 billion mark and will continue to boom as net zero commitments become ever more prominent for governments and the private sector. On top of this, the Article Six agreement at COP26 was a landmark moment. It made sure that countries are able to use carbon credits to help meet their Nationally Determined Contributions and acted as a strong market signal that carbon credits will play a major role in the pursuit of net zero emissions.

Offsetting is a matter of necessity as some industries will be unable to successfully decarbonise due to technological barriers over the next three years. An obvious example of this is aviation. Even under a best case scenario, sustainable aviation fuels will only be able to reduce emissions by 70%. Electric planes will never

be a viable option for medium and long-haul flights, even with advances in battery technology. Alongside less carbon intensive means of transportation, carbon offsetting is a major way for the aviation industry to improve its environmental impact in the short and medium term.

At present, however, the voluntary carbon market is opaque and untrusted. This is understandable, given that analysis by BeZero Carbon finds there is just a 27% correlation between price and quality currently in the voluntary carbon market. The 'quality' of a carbon credit means the likelihood that a credit actually avoids or removes a tonne of carbon from the atmosphere. Our analysis uncovered two projects which exemplified this problem: the poorer quality offset was six times the price of the better quality credit. No market should work like this.

This means that some businesses are ploughing millions of pounds into poor quality carbon offsets, which have marginal, if any, climate impact. Alongside this colossal waste of capital, these companies are undertaking huge communications campaigns telling their customers that they are carbon neutral, when they are far from it.


Businesses and policymakers need to step up to ensure transparency and quality in the market. If this doesn't happen, this Wild West style offset market will continue to be used as a way for companies to greenwash their activity.

That is where the BeZero Carbon Market comes in. At BeZero Carbon we have created a rating methodology to rate every single carbon credit in the world using six risk factors: additionality, permanence, over-crediting, leakage, perverse incentives, and policy environment. This ratings system adds a layer of transparency to the

voluntary carbon market, going beyond the binary system of credited or non-credited and creating a way to define quality.

If we can rewire the voluntary carbon market so that price and quality correlate – like any functioning marketplace – it can be a highly effective tool to catalyse capital for carbon removal, be it through planting trees or carbon removal technologies. As recent polling by BeZero Carbon and Stack Strategy found, the UK public are overwhelmingly in favour of this; 86% of people support Government investment in carbon removal and 87% are in favour of business investment in carbon removal. Instead of being a front for greenwashing, the market can become an accelerator of climate change reversal, but companies need to start taking responsibility for their actions and ensure that their offsets are of good quality.

The potential climate-positive impact of the market is seen in tech-based removals. The Swiss company Climeworks has just opened a plant in Iceland solely funded through the voluntary carbon market which sucks in 4,000 tonnes of carbon a year. Even though these credits are very expensive at over \$600 a tonne, the company has experienced huge amounts of demand and they are rumoured to be sold out for many years to come.

If we pull this off, we can help reverse climate change and keep company's feet to the fire on their net zero commitments. 

Ted Christie-Miller is the Head of Carbon Removals at BeZero Carbon and a Policy Fellow at Onward

Citizens reign?

Involve ordinary people in the climate debate, urges **Professor Rebecca Willis**



A comment from a participant in the Net Zero Diaries initiative sums up the mood of many: “Debating and making pledges is one thing. Are they going to act?” Net Zero Diaries, which we set up with the research agency Britain Thinks last year, brings together a diverse and representative group of UK citizens to debate climate issues as they arise. It provides a perspective which, until recently, has been missing from the climate debate: the voice of ordinary people.

Levels of concern about climate change are very high, and consistent across different socioeconomic groups. Contrary to media portrayals, research by Climate Outreach shows that there is no left-right split, and certainly no culture war, over climate issues in the UK. These high levels of concern are, however, accompanied by a sense of confusion about what should happen next, and frustration about perceived government inaction.

This confusion and frustration shouldn't come as a surprise. Over the past decades, governments in the UK and elsewhere have done very little to reach out to people, and to involve them in vital decisions about the

future of our planet. As a result, people are worried. They see mounting climate impacts like wildfires and floods, they hear David Attenborough's pleas, and yet they don't see government leading a confident response. Boris Johnson has championed climate on the global stage, but has not initiated a public debate about what this means for our lives.

It's not just government that's reluctant to talk to people. I've worked in this area for many years, and I've seen first-hand the tendency for climate experts to draw up what they see as the perfect roadmap or strategy for action. They often forget something crucial: in a democracy, quite rightly, experts don't get the final say. An issue as crucial and far-reaching as climate needs the consent, and active participation, of citizens.

This is the urgent task for government now: to articulate a positive, practical agenda which sets out how government and citizens can work together to tackle the climate crisis. A task given more urgency by energy price rises, which elements of the Conservative Party are wrongly blaming on green levies. Climate policies aren't to blame

for sky-high prices, which are actually caused by global market pressures, but they could be a big part of the solution, in the medium-term. Well-insulated houses cost less to heat; home-grown renewables shelter us from global energy price volatility. Yet the Government is currently on the back foot, reeling from the blows of the so-called Net Zero Scrutiny Group, because it hasn't articulated a positive vision.

“ People trust decisions if it can be demonstrated that they are supported by ‘people like them’ – much in the same way that we trust juries

Climate Assembly UK, which I advised, was commissioned by six select committees in Parliament, and brought together a representative group of 108 citizens. Over a series of weekends, they listened to expert evidence, discussed their own views and experience, and then developed a set of recommendations. Many local areas, too, including Leeds, Oxford, and Devon, have now run similar processes. They have shown that, when asked to contribute to decision-making, and when provided with evidence and the time to talk through with their peers, people devise sensible ideas, informed by their own lived experience – a far cry from the Punch and Judy politics of the culture wars.

Citizens' assemblies and juries can justifiably be criticised because they involve relatively small numbers of people. Those involved may develop a better




European Climate Foundation

>> understanding, but millions remain untouched. This can be overcome, though, if politicians champion the process. Imagine if ministers set out their proposals, and then said that they were acting on the advice, not just of scientists and experts, but ordinary people too. Research has shown that people trust decisions if it can be demonstrated that they are supported by 'people like them' – much in the same way that we trust juries in law courts.

Making decisions in this way is not an alternative to representative democracy. It is an enhancement of it. It provides

politicians with the information they need to govern in the best interests of their electorate. It is a way of managing the social contract between citizens and state, allowing citizens to articulate what they need from government, and vice versa. A proper response to the Net Zero Scrutiny Group would be to lean into exactly that role: scrutiny.

We should encourage a broad societal debate about the ways in which climate impacts and solutions will affect our lives and futures. To be clear what opportunities there are in this agenda, including better

homes, cleaner air and jobs in green industries; and also to be honest about the changes we'll need to make, as a country and as individuals. The message from citizens, that they want to see action on climate, is coming through loud and clear. It's a shame that the Government's response, so far, has been quiet and confused. 

Professor Rebecca Willis is a Professor in Energy and Climate Governance at Lancaster University and was an Expert Lead for Climate Assembly UK

Grassroots gumption

Tackling climate change will be a community-wide effort, argues **Ben Margolis**

Stopping catastrophic climate change is the greatest political, social, and economic ambition humanity has ever put its mind to. The UK's role in this is huge: it's not just the emissions from our roads, homes, and factories to deal with, but also the emissions that we can change with our finances and global influence. It will make or break the legacy of every Prime Minister and Chancellor – including Boris Johnson and Rishi Sunak.

The transition we need to make isn't a one-term project.

While the action we take in this decisive decade will depend, in part, on our current Cabinet, climate change will require steady action from government after government. For that to be possible, that requires every one of us, from the smallest hamlet to every department of Whitehall, to pull together in the same

direction.

We're already on our way. Public concern about climate change has never been higher. Though it's sometimes typecast as a left wing concern, environmentalism is embedded into Conservative values: after all, despite later backtracking, it was Margaret Thatcher that addressed the UN in 1989 on the "prospect of irretrievable damage to the atmosphere, to the oceans, to Earth itself". The evidence shows that public concern is broad-based and defies party allegiances.

Across the board, the UK public is urging the Government to take the decisive action needed to bring down emissions and create the resilient, green economy of the future. For instance, a recent Ipsos MORI poll shows an overwhelming majority of the public thinks the UK should do more to tackle

climate change. Meanwhile, the public strongly supports a range of policy measures to reach net zero, including better integrated public transport by local government (93%), grants for heat pumps and home insulation for the least well off (77%) and raising flying costs, particularly on frequent fliers (89%).

There's growing evidence that the public are willing to play their part in the adaptations needed to make the changes we need as a society, with almost 7 in 10 confident they will be able to make the changes in their own lives to help combat climate change.

Climate change and nature are at the heart of the things the public really care about: economic strength in a changing world; safety from extreme weather events; keeping living costs down and homes efficient; stopping future deadly pandemic viruses jumping from animals to humans;



>> and protecting green spaces and natural beauty.

This is why people from all walks of life, teachers, nurses, pensioners, schoolchildren, and everyone in between are connecting the dots and bringing the issue of climate change to life in communities across the UK.

There's a spirit that resonates with the UK public: rolling up our sleeves, getting our hands dirty, and putting in the hard graft to make progress and tackle the challenges before us. That is exactly what we must continue to do, to ensure that reaching net zero isn't just something we look back on as a change we had to make, but one that we were proud to do.

There's no better recent example than the Great Big Green Week. The Climate Coalition, the largest group of organisations

and people working on climate and nature, convened a massive national event to celebrate action on climate and nature right across the UK. Over 5,000 events took place throughout a seven day period. The events drew in people from all walks of life, with almost half having never been involved in this type of activity beforehand.

This was only possible because people in the UK, no matter their political stripes, are putting their differences aside to champion a greater good. There's been more engagement with local MPs, translating concern from the community up to the halls of Westminster. As MPs have listened to their constituents, we've seen a deluge of policy announcements. While they need to go further and faster, they have begun to transform the political landscape.

Following the Glasgow UN Climate Conference, it's incumbent upon all of us to work with our neighbours, our places of worship, community halls, conservationists, teachers, gardeners, and campaigners to stop catastrophe. This is the greatest political challenge we will face in our lifetimes. Our success or failure will determine nothing less than how long and fulfilling the lives of our children, grandchildren, and future generations will be. For exactly this reason, communities across the UK will be joining together once again for the Great Big Green week in 2022, to ensure action to achieve net zero is front and centre. 

Ben Margolis is the Director of the Climate Coalition

Leaving nobody behind

Ellie Mae O'Hagan writes that the green transition must address burning inequalities

Whatever our politics, there is one thing most of us can agree on: this century will be a period of immense economic and social change. Most of us acknowledge that a major contributor, perhaps the major contributor, to that change is the potential for climate breakdown if serious action isn't urgently taken to keep global heating below 1.5°C. As UN Secretary-General António Guterres put it, we are at "code red for humanity. The alarm bells are deafening, and the evidence is irrefutable: greenhouse gas emissions from fossil fuel burning and deforestation are choking our planet and putting billions of people at immediate risk."

It's important to spell this out so we understand what the terms of the debate on climate change are. We are not arguing over whether we should change society or not – that is inevitable. What we are arguing

over is how society will change. The do-nothing scenario virtually guarantees that future generations will grow up in a brown, overheated wasteland defined by scarce resources and authoritarian politics.

A Green New Deal offers us a chance to create something good from a reckoning with climate breakdown. It gives us an opportunity to rewild our spectacular natural world, create good, well-paid jobs for people currently working in fossil fuels, as well as our children and grandchildren, and make life more affordable and enjoyable for working people with free or low-cost public transport, cheap energy, clean air, and more green spaces.

There is another option: we could leave the transition to green energy to the free market. In some ways, that is what we are doing. As Dr Nicholas Beuret at Essex University puts it: "While campaigners

will be focused on trying to close the [emissions gap], business has already stepped in to fill it." As the hard right mediasphere of GB News, talkRADIO, and so on ridicules the net zero emissions target as a pipedream, many companies are using it as a business plan. Action – albeit vastly insufficient action – is being taken by the UK's business community. So what's the problem with just facilitating that? Why do we need a Green New Deal at all if the markets can do the work for us?

At CLASS we've been looking at what happens when there are massive changes to the economy and industry which are not organised in a way to prioritise working people. Our report *Work in 2021: A Tale*



>> of Two Economies examines the impact of the Covid-19 pandemic on the labour market and the experiences of the ordinary people that comprise it. We found that the pandemic has exacerbated a set of existing inequalities that had reached crisis point, even before those first pneumonia cases were identified in Wuhan.

“ We already know what happens when a fossil fuel industry closes without planning for the future of the people working within it

One desk-based, middle class section of society – working predominantly in industries like finance and real estate – has sailed through the pandemic relatively financially unscathed, and even enlarging their personal savings in some cases. Another section – working in sectors like retail and hospitality – have become more


precarious and more underpaid, and have been invariably forced to go to work during the height of the pandemic at great risk to their personal safety. The lives of these two groups of people have become so contrasting, that it is like they exist in different countries.

We already know what happens when a fossil fuel industry closes without planning for the future of the people working within it. Britain's coal mining communities suffered mass unemployment and immiseration after the pits were closed. In 2019, Sheffield Hallam University found that many coal mining towns hadn't recovered from pit closures a generation later. As more fossil fuel jobs become obsolete, we risk going through this process all over again.

Supporters of Bright Blue will have different ideas about how to organise the economy to CLASS, but what both can surely agree on is that there is a point where vast inequality becomes corrosive to politics, democracy, and the economy. In

2017, Forbes magazine published an article arguing that rising income inequality was a threat to capitalism itself.

In 2019, the Institute for Fiscal Studies released a major report arguing that rising inequality was “a threat not just to capitalism but also to our democratic system.” We've certainly seen this at CLASS, in the many conversations we've had with working class people. People express alarming resentment towards politics and political leaders, which ultimately fosters a culture of “anti-politics” – fertile ground for charlatans like Donald Trump to win elections.

What's needed is action to transition to green energy in a planned way that prioritises resolving massive income inequality, so that our democracies, politics, and economies can remain intact. We need a Green New Deal. 

Ellie Mae O'Hagan is the Director of the Centre for Labour and Social Studies (CLASS)

Helping hand

We have to assist developing countries to go green, stresses **Alastair Russell**

There is no bigger issue facing the developing world than climate change. It's existential for all of us, but people in the poorest countries are on the front line far more frequently than those of us in the Global North, with disasters, famine, and conflict significantly more likely to afflict poor countries than rich ones.

Development has historically gone hand-in-hand with increased use of fossil fuels – it only takes a passing understanding of Britain's Industrial Revolution to understand this. Our advanced economy is built on our carbon emissions, and as we strive for net zero we must be realistic about the fact that the development of poorer countries

will have an impact on the climate and environment in the same way as our own.

However, we should remain conscious of the fact that we remain greater contributors – 2016 research found that the New York State's 19.5 million people had the same annual electricity consumption as the 791 million people in all of Sub-Saharan Africa, except South Africa. To put it on a bigger scale, the poorest 50% of countries are responsible for 14% of carbon emissions, while the richest half contribute 86%. Richer countries have contributed more to climate change, and poorer countries are bearing the brunt of it.

We need to do three things to help

developing countries to tackle climate change.

The first is to redouble our own efforts to reduce emissions and encourage the world's biggest emitters to follow suit. The second is to help address the effects of climate change that developing countries are already seeing, and for which we are disproportionately responsible. The third is to support developing countries to build green economies, and to weaken the link between development and carbon emissions.



>> On the second point, we must acknowledge the debt owed by rich countries to poor ones. COP26 did not do enough to address the 'loss and damage' that climate change is inflicting on the poorest countries, and while it has moved up the agenda, the leaders of vulnerable countries left Glasgow without an answer to the question of how they will deal with the devastation that climate change is already causing them. At COP27, the issue will need to be much more prominent, and the UK must make a meaningful commitment.

“ To put it on a bigger scale, the poorest 50% of countries are responsible for 14% of carbon emissions, while the richest half contribute 86%

In the effort to help build green economies, the Government's Clean Green Initiative (CGI), announced at COP26, is an important start. Foreign Secretary Liz Truss has identified green infrastructure as a priority, and it seems likely that this initiative will be the primary channel for achieving that objective. It will fund green initiatives in developing countries, and provide guarantees to development banks

to encourage them to do the same.

It's important to note the initiative's context – a significantly reduced aid budget, scaling down Britain's role in supporting developing countries by a third over two years. The Government's U-turn on its commitment that climate financing will be additional to aid spending means that cuts to other aid programmes are being made to create room for the CGI within the budget, so the UK faces accusations that it is taking with one hand while it gives with the other.


Professor Stefan Dercon, who advised Dominic Raab as Foreign Secretary, has highlighted the delicate challenge of balancing green growth with the interests of the poorest people in the shorter term. He notes that many measures aimed at green growth can cause

harm to the poorest people. For example, agricultural restrictions disproportionately impact the poor, whose reliance on the land for livelihoods is most acute, and energy system reforms that result in a higher consumer cost hit them hardest too.

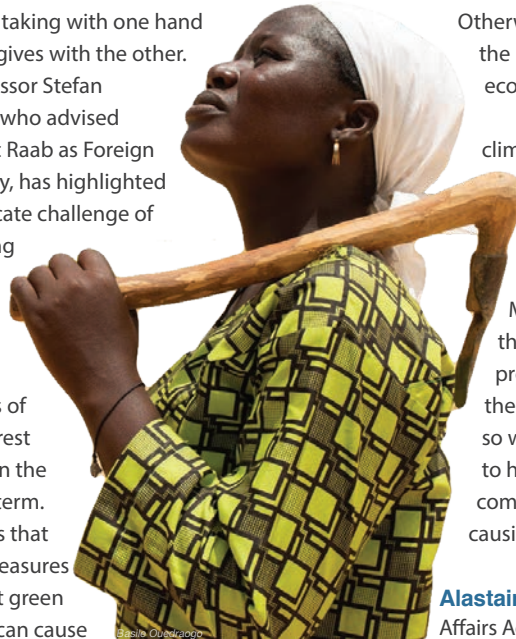
If they are to be sustainable, consensual, and effective, initiatives such as the CGI must be poverty-sensitive and seek to improve the lives of the poorest people, as well as tackling climate change.

Otherwise, we risk excluding the poorest from the green economies we seek to build.

Development comes with climate costs, but we can help developing countries to reduce them if we are thoughtful about the support we offer.

Moreover, we must accept that climate change is a problem of our creation, and the poorest are the worst hit, so we have a duty not only to help them emit less, but to compensate for the damage it is causing. 

Alastair Russell is a Senior Public Affairs Adviser at Save the Children UK



Recent report

No place like home: The benefits and challenges of home working during the pandemic

Phoebe Arslanagić-Wakefield, Anvar Sarygulov and Ryan Shorthouse

The Covid-19 pandemic has normalised home working among UK workers. This report provides a unique and detailed examination of the home working experiment of the past two years.

The report unearths the trends in and experiences of home working during the pandemic among, revealing the leading non-financial benefits and challenges experienced by individuals. It concludes by recommending new policies that aim to primarily mitigate the impacts of the challenges of home working, but also widen the benefits of it, especially among vulnerable groups.



EXCHANGE

Are capitalism and climate action compatible?

Lord Deben, Chair of the Climate Change Committee, and
Baroness Bennett, former Leader of the Green Party, exchange letters

Dear Lord Deben,

A sledgehammer used to smash down a wall is no use in building it back up again; you need an entirely different set of tools.

The pursuit of profit at the expense of all else – climate and nature, human health and wellbeing – has delivered the world we have today, with its nature in collapse and society in ferment.

Those profits today are built on massive externalised costs, from the bill for local authorities to dispose of the huge mass of Amazon packaging, to the dried-up river and trashed soil that helped produce a ‘cheap’ cotton T-shirt on the high street.

It is possible to imagine – and we need to bring in one fast – a system that ensures the real cost of the product is reflected on the price tag, but in a system where companies are legally required to put the pursuit of profit above all else, that’s tackling the symptoms of the problem, rather than its causes.

At the centre of the capitalist system is inequality. In the period known to economists as the Great Levelling, post-Second World War, the Global North saw modest declines in inequality, but since Margaret Thatcher and Ronald Reagan, that’s gone into screaming reverse. The offering to ‘the 99%’, who haven’t got funds stashed in tax havens and can’t suck dividends from companies while loading them with debt, is that if the pie keeps getting bigger, they’ll get more crumbs, but you can’t have infinite growth on a finite planet. That’s not a statement of politics or economics, it is physics.

“ The offering to ‘the 99%’, who haven’t got funds stashed in tax havens and can’t suck dividends from companies while loading them with debt, is that if the pie keeps getting bigger, they’ll get more crumbs

A system in a rich country like the UK that leaves millions dependent on food banks shows that crumbs are inadequate, even at our current planet-devouring levels of consumption. This when millions are trapped in the insecurity of zero-hours contracts, insecure employment, and wages that have to be topped up by the state to meet even the most basic level of subsistence.

To tackle these multiple issues, we need human creativity, knowledge, skills, time, and energy. That’s something capitalism has been squandering at a level of profligacy close to matching our treatment of the natural world.

From schools and universities designed to produce, first factory fodder, then office drones, people have been forced into hideous working conditions, from the inhuman horror of abattoirs processing the flood of misery from factory farms, to the misery of call centres, where people are treated like robots, with which we all dread having to deal.

That model relies on 'the boss' deciding how people spend their time, energy, and talents. It is profoundly undemocratic, and destroys human initiative, creativity, and capacities. We need a universal basic income, that frees individuals to choose how to direct their own efforts.

As we're seeing with the increasing use of citizens' assemblies – like the Climate Assembly, direct, deliberative democracy delivers good decision-making. As the foundation of our economic system, that can start to deliver the kind of world we need – one where the economy serves people and the planet, instead of people serving the economy.

Yours,
Baroness Bennett

Dear Baroness Bennett,

When I watched the wonderful sight of 100,000 people marching through the streets of Glasgow at COP26, I longed for the different denominations of Marxists sprinkled among them to remember the ecological wilderness left by the socialist regimes that have ruled from the East German border to the South China Seas.

Nowhere has the environment been trashed as thoroughly as by the committed Left. No one understood that more clearly than Margaret Thatcher. As, following the science, she rallied fellow leaders at Rio de Janeiro to begin the fight against climate change, she also warned them that the revolutionary Left would seek to capture the cause and subvert it for their own political ends.

So it is that, despite the stark reality of their record, the misery Marxists maintain their discredited solutions as necessary to combat global heating.

Capitalism has brought out both the best and the worst in men and women. Nevertheless its towering successes in science and medicine; in the arts and architecture; and in broadening the horizons of millions upon millions of people contrasts with the bleak emptiness of the legacy of the revolutionary Left.

“

Capitalism does need management – not the stifling of socialist control, but the rules and regulations that make sure that we do not reinforce occupancy or allow powerful companies to protect their position

Here, in the United Kingdom, the political tradition that produced William Wilberforce and the Earl of Shaftesbury also introduced almost every major improvement in environmental legislation. It was that same faction that framed the Climate Change Act, and now has set in statute the most ambitious course to net zero carbon emissions in the entire world.

Of course there is much more to be done and no one will be more determined to ensure that ministers deliver on their commitments than me. I know too, though, that however disappointing this Government can be in so many ways, only through the power of the market can we deliver the huge economic and societal changes necessary to combat climate change.

The conversion of the financial system to accepting environmental, social, and governance criteria and sustainable development as the essence of investing has been the dramatic change of the last two years. The only thing that would stop that green investment is the extremist state control policies of the Left.

That doesn't mean that this Government has just to sit back and let it happen. Capitalism does need management – not the stifling of socialist control, but the rules and regulations that make sure that we do not reinforce occupancy or allow powerful companies to protect their position by using their power to restrict competition or inhibit innovation.

We need tough regulation to curb the excesses of monopolies – and that means Amazon, Apple, and Facebook, as well the homegrown variety. Government has to create the conditions for green investment and sustainable growth.

The market will deliver, and it is its power alone that has the strength to bring to about the greener, cleaner, kinder world that we want.

Yours,
Lord Deben



More than 8 million households will have felt the impact of 50 energy supply company failures over the past five years. Over half of those failures happened in the last few months as global gas prices spiked, highlighting the fragility in our market, especially for those unprepared for sudden shocks.

Over the last ten years, policy and regulation has sought to increase the number of energy suppliers in the market as rapidly as possible. But this 'competition at all costs' approach failed to implement the prudential regulation needed to ensure all new suppliers operate responsibly. With no capital of their own and without the expertise needed to weather challenging times, many newer suppliers were able to cut corners to undercut their rivals and grow by gambling with customers' – rather than investors' – money, knowing that if their gamble failed the rest of the market would be forced to pick up the bill via the Supplier of Last Resort process.

Citizens Advice's recent report was damning of regulation in the sector: *"Ofgem allowed unfit and unsustainable energy companies to trade with little penalty. Despite knowing about widespread problems in the market, it failed to take meaningful action."*

The failure of suppliers, both old and new and small and large, comes with a substantial cost. The clean-up bill for this winter's crisis in energy retail could easily exceed £5 billion and add more than £100 to household energy bills at a time when global energy prices are already expected to push energy bills up by as much as 50% this spring when the price cap is next recalculated by Ofgem.

There are also worrying signs that policymakers may have lost sight of critical policy needs elsewhere in the energy value chain. Wholesale and network costs make up over 50% of electricity bills. Delivering a zero-carbon electricity system by 2035 at lowest cost will require major reform. E.ON's Carbon Countdown report has more to say on this.

Repairing the damage done in the energy retail market – and restoring consumer trust that suppliers are here for the long term – must be the priority. We need to create a sustainable retail energy market that can unlock essential net zero investment. We know what needs to happen, but it will take political will to deliver:

- 1. No more cowboys gambling with other people's money** – Use the lessons learned from the banking crisis and implement true prudential style regulation for energy retail. Customer credit balances should be ring-fenced and industry costs paid more frequently. The supplier failure process – the Supplier of Last Resort – needs reform to ensure customers are not left to pick up the unpaid bills of failed companies and instead investors bear some risks similar to other company administration processes.
- 2. Truly reliable support for low-income families** – The Warm Home Discount works well but the pot remains too small to support all vulnerable households. Improved funding via the Government's balance sheet or creating a subsidised social tariff needs urgent consideration.
- 3. Protection through a relative price cap** – enduring price protection would provide confidence this market will deliver for all customers. A relative price cap (championed by various groups and Parliamentarians) offers the most practical way forward.
- 4. Invest in home energy efficiency** – The majority of homes are still not covered by policies to improve energy efficiency, yet we know this is the single most impactful action to permanently reduce living costs. Without the energy efficiency measures installed over the last two decades, homes across Britain would, on average, be using 46% more energy than they do today. Government should commit further funds to improving the UK's worst-performing homes. The UK Investment Bank should back low-cost green finance to support a national retrofit strategy.

Michael Lewis

Chief Executive Officer, E.ON UK plc

A professional headshot of Grant Shapps, a man with short brown hair and a friendly smile, wearing a dark blue suit, light blue shirt, and a dark purple tie. The background is a plain, light grey.

THE INTERVIEW

The Rt Hon Grant Shapps MP

Joseph Silke speaks with the Secretary of State for Transport about the Beeching Axe, taking on the anarchists, and why the British are better than the French

Who has most influenced your political philosophy, and why?

It was probably Tristan Garel-Jones, who is not a household name, but he was the Member of Parliament for Watford. I called his constituency office when I was 13 or 14 years old, and decided I wanted to become an MP, a decision that I had made by watching television. To my surprise, his office called back. They suggested that I come and meet him in the House of Commons, and we went for a cup of tea. He said something which has stuck with me. I was a young teenager and he asked “which party?” I had an idea, but he said: “If you like to debate politics, write philosophical papers, and argue about that kind of detail, you’re probably a socialist, and you can join Labour. If you are more practical, business-oriented, and want to do what works you’re probably a Conservative.” That was it. I think he has a big claim to that. It’d be wrong to say that Margaret Thatcher wasn’t also involved in the mix, as I was growing up during her premiership. I like giving people opportunities, and she really opened the door to a lot of opportunities for a lot of people.

Thatcher we’ve had before, but Garel-Jones is a new one so that’s good.

No one has ever gone for him! He was an incredibly strong Europhile ironically, given what has happened. He died two months after we left the European Union, so he had seen it all.

That’s almost sad! Turning to the environment, when did you become ‘switched on’ to the scale of the climate crisis? Some politicians describe a eureka moment - do you have one of those?

I started from the very basic principle that if you live somewhere, like your house, your bedroom, or your kitchen, you don’t let it get progressively messier and messier. You want to keep it straight and tidy. With the environment, you want to be able to pass on something which is no worse than the thing that you received from the previous generation. For years, I have thought that you don’t want to mess things up for the people to come. I feel that way about my constituency, about the country, and the world. You don’t have to believe in climate change, or have witnessed the evidence of climate change, to see that, but I once went to Somaliland and there were plastic bags strewn everywhere. Clearly, the lack of care for the environment was having a big impact on people’s lives. It was literally killing the capital. It’s common sense to keep the world around you tidy. Even before it was generally accepted by Conservatives, I switched to a zero-carbon tariff. Eleven years ago, I put solar panels on the roof. I ordered my electric car before I became Transport Secretary. I’m not an eco-warrior either and I do my fair share of things which don’t help, but where you can, it’s a good thing to do, and the evidence has continued to stack up in that direction. The science around climate change has become stronger and stronger, and that has had the biggest longer-term impact.

Climate action is less of a partisan issue here compared to some other countries – there is a consensus that action must be taken between Conservatives and Labour – why do you think this is, and how can it be maintained?

One of the things we do pretty well in the UK is actually following the scientific evidence!

>> I don't know if this is because we're perhaps the most pluralist country in the world or, because we've always had a very strong science base since the Enlightenment. If you look at acceptance of vaccines, to take a topical example, what we see is that this country has lapped them up more than any other country. You only have to go to our neighbours in France to see the higher levels of vaccine scepticism there. Even for many of the people here who haven't been vaccinated yet, it's probably just because they haven't gotten around to it, rather than them being vaccine sceptics. As the science on climate change has stacked up, showing that it is very real, and it is having a big impact, it could get to the point where we're unable to reverse the changes that will happen to our weather patterns, and therefore our crops and so much else. We've just been more willing to accept the scientific evidence than other countries that are less science-oriented. Extraordinary numbers of Americans believe that there's mystical power in crystals, or trees, or those kinds of things. There are genuine powers in trees, of course: they suck up carbon dioxide. British people might read their horoscopes, but they understand that there isn't actually a connection between the horoscope and what happens in your real life.

Even Mrs Thatcher spoke about the climate when she was in office and that was decades ago...

Absolutely! I know she visited Israel and the day she came back, she said, "I noticed how clean it was and we want to do the same thing here." I remember the stunt: they went out to Parliament Square, littered it, and then she did the pickup. More famously and probably more helpful than that was addressing the issue of chlorofluorocarbons (CFCs). She was a chemist, she was a scientist, she understood the science, and she led the world on successfully getting rid of the CFCs that were damaging the Ozone Layer, which was a massive achievement.

What would you say to some Conservative colleagues who are more sceptical about net zero, particularly as we face energy supply difficulties and household bills go up over the coming months? Some of them might claim that net zero is part of the problem.

People who are sceptical about net zero worry that it's going to add to, as you say, the cost of energy bills. They also worry that the transition will in some way disadvantage us, that we'll be doing it, but maybe the Chinese will just carry on pumping out carbon. I don't think you even need to get into the arguments concerning our responsibility as the home of the Industrial Revolution, that we've done our fair share of emissions. This is all about taking a lead, jobs, and exports. Using things like our new regulatory freedoms thanks to Brexit, we can steal a march on the world by learning how to

decarbonise. For decarbonisation, we want to be the pilots, not the passengers. We want to literally decarbonise air transport, passenger planes, so you can have guilt-free flying, and you don't have to be feeling bad about going on holiday. After all, you're supposed to go on holiday to feel better. We want Britain to lead the way. If we do that right, we get the highly paid jobs, and we get the technology, which we then export, and everybody wins. I don't believe that China and other countries are going to sit on their hands. China is going great guns with the electrification of cars, because they never led in internal combustion engine vehicles, they jumped at it and they're starting to export. There's a Chinese model coming here, called the Ora Cat. It looks a bit like a MINI, or like a small Porsche. My point is the batteries come from there, and they are going to be doing their bit on this faster than most people appreciate. We want Britain to lead in the West and the Americans have given us an opportunity to lead because Trump was so disinterested, and even took things in the wrong direction. When I look at, for example, our approach to decarbonising vehicles, in less than eight years time, you won't be able to buy pure diesel or petrol cars in this country. America is way behind. This gives us a chance, this gives us an opportunity. Let's make sure we take it.

“ You want to be able to pass on something which is no worse than the thing that you received from the previous generation. For years, I have thought that you don't want to mess things up for the people to come

You talk about the UK leading internationally. Do you think that MPs and ministers need to be leading by example at home? Do you encourage your colleagues to drive EVs?

As we're not Labour or socialists, we don't feel there has to be a purist approach to everything, in which you're either in this camp or you're not. What we want to do is set up the regulatory framework, with the right incentives in place, and let the market flourish. That's what's happening. Last month in December, one in four cars sold in this country had a plug on the end of it. I don't have to go lecture my colleagues about switching over to EVs, they're going to end up in them anyway. I didn't buy my own electric car because I was Transport Secretary and thought I needed to be driving one, I bought it because I thought it'd be a terrific way to get around. Once you have bought them, they are much cheaper to run, therefore the overall costs level out, and you're doing a bit for the environment as

>> well. People will do it for the right reasons. You don't have to bash them over the head.

The public is generally very supportive of climate action, but polling shows that many are worried about how much it will cost them personally. Do you expect this support could become strained as personal financial costs for the public, especially those on lower incomes, go up?

We have to ensure that people don't end up thinking that way. I'll give you a very simple example. There's a lot of pressure at the moment on energy bills and we know they're very high. When you shift your tariffs to a zero-carbon tariff, you might think it is going to cost you more. In fact, it's very easy to find some of the best and cheapest tariffs on the market which happen to be the ones that come from renewables and nuclear, not from fossil fuels. Similarly, I just touched on cars. Yes, they are still a bit more expensive to buy, but I was out looking at cars the other weekend with my wife, and the price differential is really coming close. Once you factor in relatively little servicing as well, EVs compete. I've had my car for two and a half years, it's never been in for service. I've had no engine oil changes, no petrol, far fewer parts to go wrong, no road tax, no Ultra Low Emission Zone charges in London, or wherever else new schemes are coming into place. We need to combat the idea that it costs you money to go green. It doesn't need to, and in fact, it can actually be good value for money as well.

You've had to deal with major disruption due to climate activists, including the polarising Insulate Britain protests on our roads last year. Such protests will likely return this year. How should we deal with any rise in belligerent activism?

Unsurprisingly there's a little loophole in the law that makes it difficult to directly prosecute people glueing themselves to the road. That is being fixed through the Police, Crime, Sentencing and Courts Bill. In the meantime, we will continue to take injunctions, and I have asked National Highways to do that. I know that at least nine people spent Christmas and New Year at Her Majesty's pleasure. At the beginning of February, there's another crop of activists coming to the courts for contempt. The courts don't take kindly to it. I noticed that there hasn't been any action through November and December, and I hope that's the way it continues. We will always look to take action to protect hardworking Brits who want to get around. It's inexcusable, as there are perfectly legitimate legal routes you can follow to protest or to make change happen, but glueing yourself to a road isn't one of them, and doesn't even really stack up because they're actually going on about insulating houses.

There's even been so-called climate activists and environmentalists in the political sphere who have criticised things like the construction of High Speed 2, despite the fact that it's a big, greener public transport system, which will encourage more people to take the train, rather than being on the road. Does that frustrate you?

A lot of these people are basically just anarchists who just want to find a basis upon which to take extremist action. This is why glueing yourself to a road when you're actually talking about insulating homes, or complaining about HS2 when you claim to want to allow people to travel in a more environmentally friendly way, doesn't make sense. We shouldn't try to understand it. If what you want to do is dig a tunnel and live in it to protest, the pretext is not what's important to them. Clearly HS2 is a massive project, it's the biggest building construction project in Europe. It's also the most environmentally-friendly large building project there has ever been. The later sections of it, in particular, are designed even in their build to be net positive on the environment, let alone all the cars and the trucks HS2 will take off the roads, and therefore save carbon in the future.

“ A lot of these [protesters] are basically just anarchists ... complaining about HS2 when you claim to want to allow people to travel in a more environmentally friendly way doesn't make sense

During your time at the department, you have overseen massive changes to transport in the UK, not least the decision to create Great British Railways and the Integrated Rail Plan. Improved transport is a key part of levelling up, but it takes time to deliver, so what can be achieved before the next general election?

Great British Railways will be a good example, as we will have legislated for it by the time of the election. A lot of work has been going into the transition to it. There's no doubt people think that privatisation massively added to the number of people using railways. We had twice as many people using the railways travelling twice as far as before the pandemic, but it also got quite disparate and difficult to understand the at least 150 different moving parts, companies, and organisations involved, perhaps more in fact. Great

>> British Railways brings it all back together and will be a legacy for this country. The other thing, as you touched on this is, is these Beeching reversals. I just went to Dartmoor, which was genuinely the best day of my life as Transport Secretary. It was incredible with locals all celebrating the reopening of this connectivity between local communities. I've seen the power of reversing these Beeching cuts and we're going to be doing more of that by the next election.

I asked you who inspired you at the start – is Richard Beeching the enemy? Is he the person whose legacy you want to reverse?

I always feel slightly bad actually, because I understand he's a good guy and he was doing what he was asked to do. In terms of executing the role which was to wield the axe, no one can doubt that it was done in an efficient manner. However, sadly, it left a large number of communities completely cut off; it scarred our railway permanently. Around 5,500 miles, and about half as many stations, were taken away. Reversing that is a big project, more than we can do in a single Parliament or even a series of Parliaments. However, we are finally building railways again, and a lot of them, as well as electrifying existing railways. One of my favourite stats is that in their 13 years in office, Labour electrified just 63 miles of Britain's railways. In our first 11 years, we have electrified 1,220 miles, and I've just announced another 400 miles for electrification.

“ I always feel slightly bad ... I understand [Beeching was] a good guy and he was doing what he was asked to do. In terms of executing the role which was to wield the axe, no one can doubt that it was done in an efficient manner

On a personal level as Transport Secretary, what are you hoping will be your biggest legacy from your time leading the department?

I'm a big believer in the railways. Whether you love driving, like I do, or you love the railways, as I do as well, the more cargo you can get onto the rails, the more you get people travelling around conveniently, by rail, the more pressure it takes off the roads which is a good thing in and of itself. Unless the Department for Transport invents teleportation, I don't think there's going to be an obvious other approach to moving people around. We need to invest in our different forms of transport. I would be proud of 'jet zero' and the Jet Zero Council, which is the body which is working hard with the

Government, academics, and industry to get to zero-carbon flights. Certainly, I would be proud of Great British Railways and what we're doing with that. I'll be proud of the extra connectivity we're bringing back through things like the Integrated Rail Plan, the Beeching reversals, and that side of things, and turning all cars electric, so I'm struggling to choose one!

During the pandemic, you've been central to a lot of the decisions around restrictions on entering and leaving the United Kingdom. These decisions have obviously had a massive impact on a lot of people. They were imposed very early on Southern Africa when Omicron was first identified, but that variant ripped through and spread throughout the UK anyway. Do you think the travel restrictions have been an effective tool for controlling the pandemic?

One thing that the travel restrictions did was enable us to really get a jumpstart on boosting vaccination. Over 13 million people have been vaccinated since we did the 'red list'. When you look at the league table of countries who are vaccinated, of any major economy, we are at the top, and if you include some of the smaller ones, we're right near the top too. Looking at what's happening with the data, we've seen a fall of cases. Another set of charts I have seen were about Washington DC, Chicago, and New York. Whereas we're saying, "Omicron is not as dangerous, people aren't getting into ICU, they don't need mechanical ventilation," in those three American cities, hospitalisations, ICU, and ventilators are all going up at the same rate. The reason that hasn't happened here is because of the takeup of the booster jab. The red listing and some of those measures provided an opportunity, a window of two or three weeks, to get those jabs in arms. On the other hand, we should be completely clear that the ultimate final destination is test-free travel.

Do you foresee the disclosure of people's medical information, not just Covid-19 vaccination status, becoming commonplace for international travel in the wake of the pandemic?

No, I don't. We will never do that as the UK and, even now, we don't require somebody's vaccine status. What we say is if you're not vaccinated, you can still come here, but you need to follow what we think of as the old rules: pre-departure, day two, and day eight testing, etc. There won't be an obligation to declare your vaccination status. I don't see international travel moving in that direction either. We want to make life as easy as possible, and Britain should help lead that process. It is something I've been doing since we're chairing the G7. I've been meeting with the transport ministers, my equivalents in the G7, and so trying to come up with a common approach to

>> ensuring that travel remains as free and open as it can.

So your impression from your counterparts in the G7 is that they wouldn't be going down that direction either?

Yes, and I don't want to see that happen. You should always be able to travel. It's perfectly reasonable for a state to say, if you haven't got a vaccination, you'll need to do x, y, and z, but we'll always ensure that travelling is available.

“ There won't be an obligation to declare your vaccination status. I don't see international travel moving in that direction either. We want to make life as easy as possible, and Britain should help lead that process

As you've been combating the pandemic, you've had to wield quite an unprecedented level of power. As a Conservative who doesn't believe in an overbearing state, how have you felt personally about exercising that sort of control over people's lives? Has it made you feel uncomfortable, even when you believe it has been necessary?


It's been absolutely astonishing. I remember walking outside on one of the meagre pieces of daily exercise during one of the earlier lockdowns and just turning to my wife and saying: "This is extraordinary – do you realise a Conservative Government has brought in a law that says that you must have one of four or five legitimate reasons to leave your house, otherwise it's actually illegal, not just against guidelines, not just ill-advised, but illegal to leave your home." Of course, that's an incredibly difficult decision for any democratic politician to take, and probably all the more so for Conservatives who believe in liberty to our core. It's reset what we understand about the concerns that existed early on about whether people will be prepared to do that, and for how long.

Have you been surprised at how willing people have been to obey these rules, and have you been pleased or a bit concerned that maybe people were more willing than you expected?

Yes, I have been surprised, but in other countries, we have seen police patrols on the streets, armies deployed to enforce restrictions.

In France, they issued papers and you had to have a certificate to leave your home. We didn't have to do any of that stuff, nor have we had some of the civil unrest that's been seen elsewhere. People are very pragmatic. How does it leave me overall? Desperate for all the freedoms that we had before. Our decision to go for Plan B and resist another lockdown, despite lots of calls before Christmas to go further, looks like it paid off, and it's a very good example of the judgement call that a Conservative Government makes, dare I say, in contrast to our opponents who would always be tempted to go further. We see an SNP Government in Scotland, we see a Labour Government in Wales, and we see their instincts are always to eat further into personal freedoms and liberties. Our instinct has not been to do that and, what's more, to release ourselves from restrictions much further. If you look at our effective liberties compared with other countries in the world, then what you see is we have maintained a more open society for longer, particularly since the unlocking last year, than any other country. The International Stringency Index puts Germany effectively at the bottom, so they have the most stringent measures in place up to the end of 2021. Germany is followed by Italy, France, the Netherlands, Austria, Spain, the Republic of Ireland, Belgium, Switzerland, Portugal, Norway, Northern Ireland, Scotland, Denmark, Finland, Wales, Sweden, Poland, and the most open society is England. Yet if you look at cases now, and hospitalisation per capita, we are doing better than those countries right at the bottom like France.

You have a reputation of being a solid and reliable media performer when the Government has come into difficulty over the past couple of years. What's your secret?

Firstly, know your subject and know the facts. Secondly, the problem when politicians appear in the media, is they start to say things like, "Well we want to introduce a sustainable, integrated approach to management of..." In my mind, I'm always thinking how I would have a conversation in my local; how I would talk to a friend who isn't involved in politics, public affairs, the intricacies of Covid-19, transport, or whatever else. I don't know anyone who isn't working in transport who would use the word 'mode' to describe whether they got in a car, on a train, or cycled. No one would say mode of transport in real life. Why don't we just say "type of transport". I don't know anyone who discusses housing by saying that they live in a 'unit'. In the former Ministry of Housing, Communities and Local Government, certainly when I was there, people would say how many units have been built that year, but these are people's homes, so we should say how many homes have been built. Every time I think about what I'm going to be saying, I try and think about what I would say if I were not sitting there as a politician, as if I were just having a conversation with a mate. That's my 101. 

Low carbon heating for rural households

Government pins hopes on dramatic drop in cost of heat

Reducing emissions from heating our homes and businesses is a vital part of our response to the climate emergency. Following the recent publication of the Government's *Heat and Buildings Strategy*, one of the most significant decisions by Government is the 'rural first' approach it has taken, by proposing to start the phase out of fossil fuel heating in rural off gas grid homes and smaller rural businesses from 2026, and from 2024 for larger businesses. This is nine years earlier than on grid homes and businesses, where government has an ambition to start the phase out of natural gas boilers in 2035.

The urgent need to lower carbon emissions should not be under debate, but what rural households and businesses will rightly ask is: is it fair we go first, and more prosaically, how much is it going to cost me?

Heating via electric heat pumps – low carbon heating that works like a fridge in reverse – will be an important technology for replacement heating as we transition away from fossil fuels. But air source heat pumps currently cost £12,500 for the average rural home (according to BEIS), significantly more than the BEIS estimates of £4,600 for an oil boiler, the main off grid heating option right now, or £2,800 for an LPG boiler (which can also run on renewable BioLPG). This is clearly unaffordable for many.

The Government is pinning its hopes on the price of heat pumps falling dramatically to the same as gas boilers by the end of this decade. Independent analysis by Delta EE suggests a more modest fall of 38% may be possible over the same time period, leaving many feeling sceptical of the Government's ambition. By starting in 2035, urban households are much more likely than rural to be the beneficiary of any fall in heat pumps costs. Our recent YouGov polling shows 79% of rural owner occupiers feel Government prioritises urban energy and environmental issues over rural ones and trust in the Conservative Government to deliver an affordable transition to Net Zero has fallen to 21% in 2021 from 26% in 2020. Against this backdrop, government appears intent on gambling

on heat pump costs falling dramatically, with rural households potentially on the losing end of this gamble.

So called 'able to pay' households are also expected pay the full cost of the 'minor' energy efficiency upgrades their home may need for a heat pump to operate efficiently, up to £2,000 according to BEIS. Quite how the installation of these energy efficiency upgrades and any heat pump installation are coordinated isn't considered. This presents a real risk householders will be frantically trying to find contractors to both insulate their home and fit a heat pump when their boiler breaks down, often in the depths of winter. At best this could lead to high-cost electric heating while consumers wait for works to be completed, and at worst it could leave vulnerable people in colder homes.

Government acknowledges not all homes are suitable for heat pumps, and alternatives are needed. Government estimates 81% of off grid homes could technically take a low temperature heat pump, without any energy efficiency upgrades. Given that many rural homes are poorly insulated – only 3% at EPC C or higher – this again seems very optimistic. Boiler to heat pump is not a like for like replacement, and many homes will need additional radiators installed, causing inconvenience, disruption, and cost from redecorating, with most homes also needing a hot water cylinder added.

Calor wants consumers able to choose from a range of net zero compatible heating solutions, including our green gas, BioLPG, in a fair and competitive marketplace, without their choice being mandated. On sale in Britain since 2018, BioLPG can reduce carbon emission by up to 80% compared to LPG, the fossil equivalent. BioLPG is a drop in fuel, so existing LPG customers can continue to use their boiler without upgrade. It offers a low upfront cost and long-term solution, either in standalone boilers or if combined with a heat pump in a hybrid heating system, and compliments other low carbon heating options.



Painting the Red Wall green

Jonathan Gullis MP explains why levelling up and net zero are a perfect match



Stoke-on-Trent is a textbook example of where the transition to net zero could help consolidate Conservative gains in the Red Wall. An area steeped in industrial history, associated with factories and mines, and which for decades under successive governments has been overlooked, the Staffordshire Potteries might not seem like a place where decarbonisation would be welcomed. With the Government's plan to level up the country with a Green Industrial Revolution, however, areas like Stoke-on-Trent North, Kidsgrove, and Talke have the most to gain from net zero, as well as the most to offer.

“ There is an opportunity to reignite Britain's industrial heartlands, providing well-paid jobs, local investment, and room for social mobility

Although the events in Glasgow for COP26 felt very far removed from Stokies' everyday concerns, the Government's policies to attract public and private investment to deliver net zero are a huge opportunity for my community. Ultimately, when people cast their vote at the next

election, their key question will be – am I better off? Important factors in answering this question will be whether they have a good job, a clean and safe place to live, good transport links, and if their area has improved overall. When it's affordable, fair, and tailored to local circumstances, net zero can meet some of these pressing needs, and resonate with industrial heartland voters like mine.

Although we still have some great companies locally, like Steelite and Churchill China, the decline of British manufacturing did not spare Stoke's world-renowned ceramics industry. On top of this, it has had to face seemingly insurmountable logistical and commercial hurdles due to the pandemic. Its recovery was already threatened by the significant costs of materials and energy, but the international gas price spike may be the straw that breaks the camel's back.

This would be a real tragedy for our area, which even now is so closely tied to our past as the world's ceramics centre.

Net zero represents a chance not just for a recovery, but a future for the industry which is sustainable both environmentally and economically. The kilns that are essential for our ceramics require a lot of

energy for heating, usually supplied by gas.

Typically, the cost of firing these up to the necessary temperatures, sometimes above 1000°C, can reach a third of production costs. Similar energy-intensive industries tend to be based in industrial clusters, which have been supported by Government initiatives to decarbonise and transition to low-carbon technologies, such as electrification or carbon capture and storage. Ceramics needs this too. With the right support to improve energy efficiency and roll out low-carbon alternatives to gas for heating such as hydrogen or electricity, the industry's 41,000 jobs would be future-proofed, and the UK could become a global leader in low-carbon ceramics.

Some of these technologies aren't here yet, though, and we need immediate action if we are to save the 300-year-old ceramics industry and meet our industrial climate target of a two-thirds reduction in emissions by 2035. Removing social and environmental levies from energy bills, and funding them from general taxation instead, could deliver immediate cuts to the soaring



>> costs of running a ceramics manufacturing business during the current gas price spike.

To enable development of these technologies and deliver our net zero target, we need a workforce that has the necessary skills. Net zero industries, like the offshore wind sector, offer opportunities for job creation and industry growth, but it won't be possible without the right training schemes in place now. By 2030 the UK will need 170,000 more workers to qualify for jobs in these industries each year.

This jobs boom could be transformational for Red Wall areas that have historically been affected by factory closures, and been dependent on carbon-intensive industries. For places like Stoke-on-Trent, the transition to a new low-carbon model could require not just new training, but extensive retraining. Government-

backed 'skills bridges' that support retraining through targeted programmes, apprenticeships, and short-term work placements would help those who have been affected by the transition to find new work. This would complement the welcome steps the Government is already taking by including net zero and nature as priorities for local skills plans in the Skills Bill.

Linking all these benefits is the public transport that physically connects people and places. Getting this sorted will increase the number of accessible jobs, bring in investment for new businesses, and expand horizons for thousands of people. To level up public transport we have secured £29 million from the Government to improve rail and bus links across the city and are now bidding for up to £90 million under the Bus Back Better programme. Public transport is also a great example of how

levelling up and net zero go hand in hand. Improving public transport will give people an affordable, low-carbon alternative to driving themselves around. With that will come better air quality, less noise pollution, and reduced congestion.

Net zero has benefits that go beyond reducing damaging carbon emissions, it offers tangible real world rewards for areas that have historically been starved of attention. With the low-carbon transition, there is an opportunity to reignite Britain's industrial heartlands, providing well-paid jobs, local investment, and room for social mobility for millions of people.

Net zero and levelling up truly are the perfect match. 

Jonathan Gullis MP is the Member of Parliament for Stoke-on-Trent North and Co-Chair of the Coalfield Communities APPG

Securing the supply

Our national resilience relies on our energy security, warns **Professor Jim Watson**

The security of the UK's energy supplies has made the headlines once again in recent months.

This demonstrates the fundamental importance of reliable energy sources and infrastructures for modern economies.

One of the reactions to these events has been calls to redouble our efforts to reduce our dependence on fossil fuels – and to accelerate the shift to a more sustainable economy with net zero emissions. As the Government's *Integrated Review* put it: "ensuring the supply of secure, affordable and clean energy is essential to the UK's national interests"

The UK has already made significant progress with this transition. Since 1990, territorial emissions of greenhouse gases have been reduced by over 45%, but there

is much more to do. The Government's *Net Zero Strategy* sets out some detailed plans for reducing emissions further. In addition, the Government needs to ensure that the costs and benefits are distributed fairly – and that the security and resilience of our energy system is maintained or strengthened.

Fossil fuels are likely to be used in the UK for many years, even if climate action is swift and successful. Natural gas will continue to heat homes and help to balance the electricity grid and supply industry during the transition. Future price spikes will therefore continue to impact energy bills for some time.

Climate change is already changing weather patterns. Weather events such as Storm Arwen are likely to become more

frequent and intense.

This is not only a problem for those communities directly affected. As the Ministry of Defence puts it in their latest assessment of *Global Strategic Trends*, climate change means that "transport and trade routes, including key chokepoints, are likely to be disrupted affecting global markets and supply chains".

The energy transition will also present new challenges to security and resilience. In the electricity sector, which has decarbonised the most so far, the growth of wind and solar power has been a clear success story. As the share of weather-dependent renewables continues to



>> grow, however, the grid will need to be managed differently to balance supply and demand. This means complementing traditional strategies based on flexible power plants, which will need to be low or zero carbon, with more investment in cables to other countries, electricity storage, and incentives for flexible demand.

One of the consequences of the shift to low carbon electricity is rapidly increasing demand for important minerals. The production of many of these minerals is highly concentrated. For example, cobalt is used in batteries for electric vehicles. Mining is concentrated in the Democratic Republic of Congo – with severe environmental and social consequences. Production of so-called ‘rare earth elements’ that are used in many low carbon technologies is concentrated in China. Reserves of these materials are more widely distributed elsewhere, but it will take time to diversify production.

The energy sector is likely to integrate more digital technologies in future. If implemented carefully, this could provide a boost to decarbonisation – such as by helping to balance electricity grids. One of the downsides will be increasing vulnerability to cyber attacks. There have already been high profile examples of such attacks – for example on the Ukrainian

power grid in 2015, and on the world’s biggest oil company, Saudi Aramco, in 2012.


It is tempting to think that the best solution is to hunker down, and rely on so-called ‘home grown’ sources of energy and other resources. That ignores the benefits of sharing security with other countries because they do not have all the resources they need. This is a strategy the UK has pursued since at least the early 1970s. This includes shared approaches to oil security established under the International Energy Agency and, more recently, supporting more electricity cables to neighbouring countries. It also neglects the unpredictability of specific risks to security, and the history of security risks that come from within the UK’s borders.

Given the interconnected nature of global energy systems and supply chains, a strategy that emphasises resilience of our energy infrastructures is required. It means redoubling efforts to ensure our use of energy is as efficient as possible. Upgrading the UK housing stock will require investment, but it could lead to dramatic reductions in heating bills. This will also make it much easier to shift homes to the necessary low carbon alternatives to gas and oil heating.

It means following Winston Churchill’s advice. When reflecting on the risks of

shifting the Royal Navy from coal to oil, he said: “on no one quality, on no one process, on no one country, on no one route, and on no one field must we be dependent. Safety and certainty in oil lie in variety and variety alone”. This applies just as much to rare earth elements as it does to oil.

“ Production of so-called ‘rare earth elements’ that are used in many low carbon technologies is concentrated in China

Finally, the role of storage in our energy system also needs to be kept under review. Recent headlines have highlighted the lack of gas storage, and have questioned whether this has exacerbated the price spikes we have seen. In the net zero economy, storage is likely to take new forms. Whilst the proliferation of batteries in electric vehicles could increase resilience, larger scale storage may be required to help meet winter peaks in heating demand. 

Professor Jim Watson is Professor of Energy Policy and Director of the Institute for Sustainable Resources at UCL, as well as Research Director of the FCDO Climate Compatible Growth programme

The price is right?

Reform carbon pricing to hasten decarbonisation, argues **Eamonn Ives**

When parliamentarians returned to Westminster for 2022, one policy issue was dominating all others – energy bills. In particular, newspaper inches were filled with worries about the impending rise of several hundreds of pounds which will hit households once the energy price cap is lifted in April.

Countless groups have offered their own perspectives on how to cushion the coming blow. One which I have found most compelling comes from Chris Skidmore MP – the man who ultimately signed the UK up to reaching net zero emissions by 2050.

His analysis of the energy crisis is essentially that: costs are rising due to

spiralling fossil gas prices, in part thanks to strategic game playing by President Putin. Shifting away from gas, and towards more homegrown, renewable electricity is therefore the long-



>> term answer to shielding the UK from future energy woes.

I broadly agree, but how will we get there? As well as Skidmore's unimpeachable diagnosis, he gives an equally cogent prescription – carbon pricing.

As somebody who has long-campaigned for wider carbon pricing across the British economy, this was music to my ears. Carbon pricing works on the principle of applying a charge to various activities in accordance to the greenhouse gases they emit. If you're responsible for a tonne of carbon dioxide entering the atmosphere, you should expect to pay a fee as a result.

Carbon pricing has a formidable track record in terms of prompting decarbonisation, and the effects are perhaps most evident in the power sector. In 2013, the Coalition Government introduced the Carbon Price Support (CPS), which meant that for every tonne of carbon dioxide a liable generator put into the atmosphere, a tax of £16 would be incurred. (This has since risen to a little over £18/tCO₂e.)

The CPS radically tilted the incentives facing power generators. Burn dirty fuels such as coal or oil and face a nasty tax bill; opt for cleaner, though still polluting, fuels like fossil gas and pay less; harness zero-emission energy from the sun and wind and pay nothing

at all. Suddenly, the economics shifted towards cleaner forms of generation – and the impact on coal was profound. Between 2013 and

2020, the amount of electricity generated by coal-fired power stations contracted by a staggering 96%.

Of course, the CPS cannot claim all of the credit for Britain's rapidly changing energy landscape. Subsidies for the research, development, and deployment of renewables have been important, especially in their early stages. An ultimate phase-out date for coal – agreed to by the Conservatives, Labour, and the Liberal Democrats in the 2015 general election – gave long-term industry certainty. Nevertheless, by making generators financially responsible for the emissions they cause, the CPS played a pivotal role in cleaning up Britain's electricity grid.

“ The UK Emissions Trading Scheme – one of the primary forms of carbon pricing in the UK – covers only around a third of the country's emissions

As we embark on the next phase of decarbonisation, we should consider how carbon pricing could be applied more widely to the economy. Last year, the Centre for Policy Studies published my report – *Pricing Pollution Properly* – which laid out how the UK could do just that.


I advocated the adoption of a comprehensive carbon tax, levied 'upstream' in the economy. What this essentially means is that the only companies liable for paying it are those which are directly responsible for bringing pollution into the economy – be it those which pipe oil and gas from the depths, or those which mine coal from the ground. By administering the tax in this way, a far greater portion of emissions,

which will ultimately be generated from burning such fossil fuels, can be priced, and it becomes far simpler for the Government to manage, given that it applies only to a handful of large corporations.

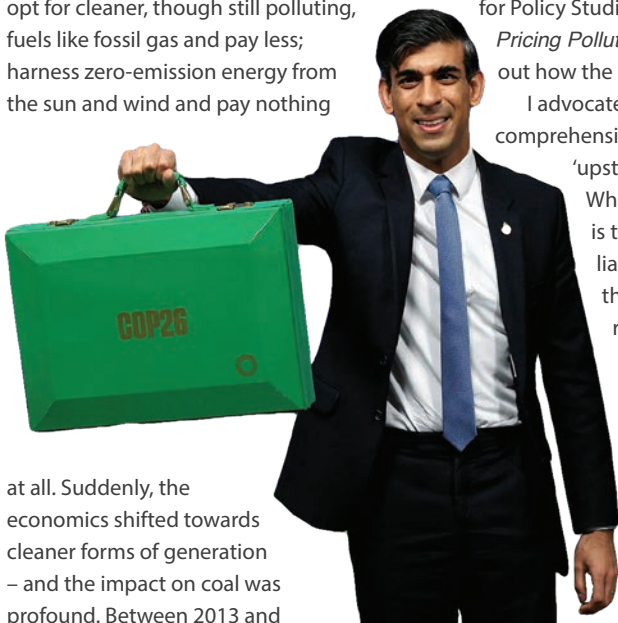
A carbon tax resembling this form would ensure that constant pressure is applied to pollution. Almost every decision in the economy would – consciously or not – take into consideration what it would entail for emissions. Economic theory dictates that this would cause them to shrink, and empirical fact tells us that is invariably the case.

Yet, despite carbon pricing's obvious merits in hastening decarbonisation, its adoption remains incoherent. The UK Emissions Trading Scheme – one of the primary forms of carbon pricing in the UK – covers only around a third of the country's emissions. There are many reasons for this, but the most obvious one is politics – voters generally don't like taxes, and they especially don't like new taxes.

To mitigate this, my report examined how 'carbon dividends' could accompany a reformed system of carbon pricing. These dividends would see regular cash payments made directly to individuals, funded with the revenues raised by the carbon tax. With enough careful design, it would be perfectly possible to ensure that the majority of citizens are net winners under this new scheme, giving each of them a tangible stake in its implementation, and building support for its longevity.

There are no easy options out of the current energy predicament, but ministers can and must look for solutions to prevent future ones occurring. In that respect, the Government's overall aim of reducing our dependence on imports of volatile, high-carbon energy is the right one. No single policy will fulfil that ambition alone, but instigating a better system of carbon pricing would be as good a move as any. 

Éamonn Ives is the Head of Energy and Environment at the Centre for Policy Studies



How savings can save the world

Frank Carson calls on pension funds to seize the opportunities of net zero



It's fair to say that 'pensions' is not a word that gets people's hearts racing. Indeed, not a word that people like to talk about much at all, but as the power of pensions to tackle climate change is becoming clearer, all that is beginning to change.

With around £3 trillion invested in UK pension schemes, pensions can have a transformative effect on efforts to tackle climate change. As investors, pension schemes can support low carbon innovation, as risk managers they can mitigate climate risks, and as shareholders they can drive net zero across the whole economy.

“ Climate change could wipe \$43 trillion off the global economy – that is 30% of all the world's manageable assets

The impact could be enormous. Aviva research shows that switching to a green pension is 21 times more impactful in reducing carbon emissions than giving up flying, going vegetarian, and switching energy providers combined. That has some impact.

People are beginning to sit up and take notice. Interest in green pensions has increased markedly in recent years. With auto-enrolment driving ever more people to enjoy a workplace pension, this matters to an ever greater number of people.

It is little wonder. Climate change represents both a material risk and a huge opportunity for pension schemes.

Research Aviva commissioned with the Economist Intelligence Unit, estimated that climate change could wipe \$43 trillion off the global economy – that is 30% of all the

world's manageable assets. With pension returns dependent upon the performance of the underlying investments, the hit to people's pension pots could be enormous.

At the same time, climate change presents a huge investment opportunity for pension schemes. Mark Carney, former Governor of the Bank of England and now UN Special Advisor on Climate Action and Finance, described the net zero transition as “the greatest commercial opportunity of our age.”

Faced with such risks and opportunities, pension trustees have a responsibility to manage the financial impacts of climate change on behalf of pension savers.

As one of the UK's leading pensions providers, this is a key Aviva priority. We have announced a goal to reach net zero emissions by 2040. This is the most demanding target of any major insurance company in the world today. It means that all our auto-enrolment pension funds are on the path to net zero.

That we're using our influence as shareholders to ensure that the firms we invest in target net zero too. For example, we are demanding that 30 of the largest emitting companies, responsible for approximately one third of global emissions, set demanding net zero targets with strong governance to deliver. If they do not demonstrate adequate progress, we will withdraw our funding.

Our target is certainly challenging, and we don't yet have all the answers, but we

believe it is the right thing to do.

However, if the UK is to meet its net zero target, others must act too.

To its credit, the UK Government has been instrumental in driving action on climate change. The Government's amendments to the Pensions Schemes Bill last year – which require pension schemes to assess and report on their climate risks and opportunities – are hugely welcome and will lead to far greater understanding of climate change amongst trustees and

beneficiaries. This was the first time that climate change had been included in a pensions-related bill and for that, the Government should be applauded.

At COP26 the Government went further, announcing that firms will be required to publish net zero transition plans. Again, this is

hugely welcome and will help ensure that voluntary net zero targets translate into real world emissions cuts.


It is vital that these transition plans are delivered without delay and that pension schemes are at the forefront of this journey.

Despite this, pensions remain a powerful, but under-recognised lever for change. Only a fraction of the £3 trillion invested in pension schemes is aligned to the UK's net zero target. Pension schemes are still not fully harnessing their role as shareholders



to press the companies they invest in to decarbonise. Pension savers themselves have a role to play too, by using their voice to demand that their pensions are invested sustainably.

We are faced with both climate and biodiversity crises that must be urgently tackled, but we mustn't be daunted. The window is small but the opportunity is large. Pension funds must seize the opportunity.

The future for millions of pension savers depends on it. 

Frank Carson is the Director of UK Public Policy at Aviva

A blueprint for phasing out coal

Liana Downey presents three principles for ending coal mining in Australia



Technology and economics are shifting the energy landscape. Alongside the accelerating decarbonisation agenda of global finance, unanimous agreement to a global 'phase-down' of coal-fired generation at COP26 has pressured even China and India to begin to get on with it.

Australia is another big coal exporter, shipping about 80% of its thermal coal overseas. At 551 million tonnes of carbon dioxide in 2018 and rising, Australia's six biggest mines produce more emissions than the entire domestic economy. Given the global context, there's no denying that the industry is living on borrowed time.

The warning signs have been around for a while, with Australia's coal-fired power stations already facing massive write-downs and early closures. Unable to compete with the plunging costs of electricity from renewable sources, these assets are increasingly losing money. Of the roughly 50,000 workers employed in coal in Australia, just over 10,000 are exposed to the immediate domestic decline.

Unfortunately, Australia's leaders are only slowly accepting this reality after a long history of politicising regional communities, simplifying the various avenues of coal employment into a single unified mass and over-emphasising the

economic dependence of the surrounding rural towns. Unsurprisingly, the issue is far more nuanced and the outlook far more optimistic than many would have us believe.

“ Of the roughly 50,000 workers employed in coal in Australia, just over 10,000 are exposed to the immediate domestic decline

That's why Blueprint Institute has been hard at work mapping Australia's coal industry in detail, and charting the best path forward, with lessons for all coal-impacted regions around the world.

Our recent report, *From the ground up: A Blueprint for economic diversification in*

regional Australia, draws on an extensive review of what works and what doesn't in domestic and overseas examples, to identify three critical imperatives for structural adaptation: empowering comm-

unities, renewing economies, and supporting workers.

The knowledge, networks, credibility, and on-the-ground capacity of local leadership are essential to drive productive diversification. In Australia, there are some

examples of this model already at work, with the Latrobe Valley Authority (LVA) enjoying measurable success and broad local support. These outcomes have prompted domestic community groups like the Hunter Jobs Alliance to demand similar authorities for their regions

Three years after the short-notice closure of Latrobe Valley's 1,600MW, 53-year-old Hazelwood power station, the community-led institutional response had generated \$99 million in private investment, and created more than 2,500 jobs, reducing unemployment in the Latrobe Valley below original levels. This success can and must be translated elsewhere.

That's why we recommend empowering new local authorities to make the most of their community's unique strengths through regular stakeholder engagement and thorough, data-driven research. In Australia, we're suggesting local authorities receive an initial \$20 million and funding drawn from 5% dividends of ongoing coal royalties. Rather than waiting until it's too late, our research highlights the critical value of short, sharp, and early investment, a lesson that governments around the world might also heed as they seek to support their own effective transitions.

Although coal generators are losing





>> value, their infrastructure doesn't have to. Following inventive overseas examples like Becker's data centre proposal in the United States, Australia's AGL is already planning to convert its Liddell power station into a renewable energy hub for solar storage systems, grid-scale batteries, and a waste-to-energy facility.

To support similarly inventive plans, the Federal Government should match private investment up to \$100 million per asset. The Government must also set up frameworks to help launch emerging industries. Renewable energy is the obvious priority, not to mention opportunities in critical minerals mining, carbon sequestration, and the enterprises that start-up incubators could drive.

In Australia, the proposed Hunter

Renewable Energy Zone alone would bring \$32 billion in private investment, 6,300 construction jobs, and 2,800 ongoing jobs to the region by 2030. Meanwhile, the Star of the South offshore wind project further demonstrates how real the opportunities for reemployment in renewables are. The project has liaised directly with Yallourn coal power station in the Latrobe Valley to connect workers to the 760 construction and 200 ongoing jobs generated.

Employers should bear as much responsibility as possible to arrange job transfers and to offer generous severance compensation, but well-designed income insurance, job search services, and retraining opportunities can be powerful short-term tools to achieve long-term reemployment outcomes. Alongside

a variety of other interesting findings, Blueprint's recent polling research, *Voices from the regions*, found that an average 81% of respondents favoured government-funded retraining for redundant coal workers across regions with coal assets.

By empowering communities, renewing economies, and supporting workers, any jurisdiction can successfully implement policies that are proactive, coordinated, targeted, diversified, and multiplicative. If we play this right, boldly seizing the opportunities, a new and more sustainable energy economy can offer, regional Australia, and all Australians, will be better off for it. 

Liana Downey is the acting Chief Executive of the Blueprint Institute

Subscribe to our YouTube channel



Ensure you don't miss out on any of our events by subscribing to Bright Blue's YouTube channel. You can watch livestreams and recordings of all of our public panels, conferences, keynote speeches, as well as catch up on our latest media appearances.

Subscribe now at: youtube.com/c/brightbluethinktank

cadentgas.com/future-of-gas

Cadent
Your Gas Network

Fuelling the future

At Cadent, we are the largest gas distribution network in the UK, delivering gas to 11 million homes and businesses throughout the North West, West Midlands, East Midlands, South Yorkshire, East of England and North London – helping keep consumers on our network safe and warm, while at the same time planning for the future by thinking about hydrogen. COP26 offered a great forum to galvanise thoughts on how to make net zero a reality, and while we were proud to have a strong presence in Glasgow, it became clear that the scale of the challenge we face is enormous, but, equally, one we cannot fail to achieve.

The challenge

In the UK, more than 80% of heat is delivered by gas. Decarbonising our gas supply is achievable and something we are fully committed to delivering. We will need a range of technologies in order to get there, and one of those is hydrogen.

We have already developed our Ten Point Plan for hydrogen, setting our commitments that we plan to deliver in order to ensure we have the hydrogen we need for tomorrow. This includes making the necessary investments to upgrade our network to ensure it can safely supply hydrogen we will need to keep homes warm and businesses and industry running.

By 2030, the Government is aiming for 5GW of low-carbon hydrogen production capacity to be used across the economy. To achieve this, organisations from across the energy industry need to

work together to scale up low-carbon hydrogen production. To date it has been proven that blending up to 20% volume of hydrogen with fossil gas is a safe and greener alternative to the gas we use now. Although we will continue to work towards our goal of 100% hydrogen in our pipeline, blending is an important intermediate step in achieving our long-term production goals.

A whole systems approach

Whether it will be better to decarbonise by installing a heat pump or hydrogen boiler will depend on the specific characteristics of homes, and individual consumer needs and personal preferences. We will need a range of technologies to heat homes, instead of a 'one size fits all' approach. This means that developing a whole systems approach to energy planning will be crucial, with gas and electricity companies working together with local authorities and communities to deliver a solution that leaves no home or business behind.

It's important to consider that we need to invest in hydrogen now if we are going to make it work at scale in the future and reach our ultimate target of net zero by 2050. There isn't a gold-plated solution to the problems we face; we need to deliver the right solution, in the right place. Time, unfortunately, isn't on our side for decarbonisation, but that will only be made worse if we take the wrong step forward now, even with all the greatest intentions. The future needs gas, and that gas is hydrogen. And when it arrives, it will help us to make more informed and better decisions about where to invest, and how, ensuring we deliver net zero as smoothly and efficiently as possible.



Back to life

Tony Juniper CBE highlights the vital link between restoring nature and net zero



It has been the case for some time now that environmental challenges have been seen primarily through the lens of carbon and climate change, whether this be in political discourse, media coverage, or public consciousness. This is understandable, given the terrifying implications of rapid global heating, and the screaming urgency of taking action to avoid the worst of what lies ahead.

However, it is far from the only dimension of an ecological emergency pressing upon us. In parallel with the soaring build-up of greenhouse gases in the atmosphere, there is a planet-scale unravelling of the web of life, manifesting in precipitous species loss and decline, degradation of ecosystems, and the disruption of natural processes that sustain the Earth's biosphere.

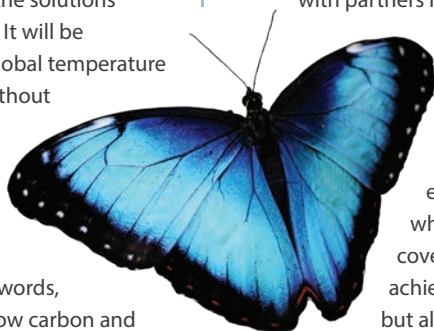
The scale, scope and immediacy of the changes taking place are underlined by a wide range of expert reviews, and increasingly reflected in official targets, policy, and action which arose from COP26. In addition to a deeper understanding of the carbon and ecological challenges, there is the growing realisation as to how fundamentally inter-connected they are, both in their origin and the solutions needed to resolve them. It will be impossible to stabilise global temperature increase to 1.5 to 2 °C without taking action to restore the natural world, just as restoring nature cannot realistically happen in a rapidly-heating planet. In other words, the world must aim for low carbon and high nature at the same time, as part of a combined plan of action.

All countries must embrace this reality.

At Natural England, climate change has become even more central to our work for nature recovery. There are three reasons for this: nature can catch and hold a lot of carbon; healthy ecosystems can help us adapt to inevitable climate changes; and if we are to leave nature in a better state for the future it must be resilient to climate change. Blending these priorities into our work is vital in order to get climate change right.

Some clear routes to effective action are already being pursued. One is in relation to peatlands: our largest natural carbon stores, locking away over 580 million tonnes of carbon. We are working with Defra and partners on the ground to restore thousands of hectares of peatland habitats, notably blanket bogs and raised mires. This will not only have multiple carbon benefits, but also: help restore wildlife's habitats; in some cases help reduce flood risk; and at the same time rendering such landscapes more resilient to climate change impacts, for example through being wetter, thereby reducing fire risk.

Trees are also vital for our national effort to achieve net zero emissions and for achieving nature recovery goals. By working with partners in the Forestry



Commission, we are seeking joined-up outcomes for our ambitious national woodland expansion targets, whereby increasing tree cover not only helps to achieve low carbon goals, but also supports wildlife and the landscape. By being careful to plant the right trees in the right place, and for the right reason, we can also

reduce flood risk, protect rivers from pollution and create wonderful places for people to enjoy outdoor recreation.

This work on trees and peat will help advance Natural England's mission to create a Nature Recovery Network. This priority, set out in the Government's *25 Year Environment Plan*, provides the vehicle to meet the fundamental need outlined by Sir John Lawton in his 2010 review *Making Space for Nature*.

“ In parallel with the soaring build-up of greenhouse gases in the atmosphere, there is a planet-scale unravelling of the web of life


He concluded that in order to restore nature and render it resilient to climate change, it would be necessary to have more nature-rich places that are bigger, of better quality and connected to one another. The work we and others are doing with trees and peat complements, the new tools of Environmental Land Management schemes, and 'biodiversity net gain', as well as the existing network of protected areas, including National Parks, AONBs, and National Nature Reserves, will help deliver a concerted boost for nature recovery far beyond anything that could be achieved by one of these tools alone.

The challenge will be to integrate these and other tools effectively. Fortunately, we have opportunities to do this, not least via the new Local Nature Recovery Strategies mandated by the Environment Act 2021.

>> Although complex, it is certainly possible as long as we set out to integrate the different budgets, policies and targets that we have and to go low carbon and high nature at the same time, achieving multiple benefits for society. Together with the

other UK nature recovery agencies, Natural England has set out how we can succeed in detail in our *Nature Positive 2030* report.

The past few years have seen intense discussion and activity to shape targets, laws, and policies. The coming few years

must be all about delivery, before the environmental emergency becomes an environmental disaster. 

Tony Juniper CBE is the Chair of Natural England

Gentle greening

Density done right makes for more sustainable places, explains **Ben Southwood**

Since 1850, most Britons have lived in urban settings – towns and cities – rather than in isolated farmhouses or hamlets. These days, only a tiny fraction of us live outside towns. Therefore, our impact on the environment is affected enormously by how cities are designed. This is not just a question of greener spaces: what materials we use in construction, how well we insulate our homes, and whether we burn gas or use a heat pump to warm our home. In many cases the layout of our cities and how we get around them are even more important for living greener lives overall.

Before the invention of the steam engine, there were no mechanised forms of transport. Some might travel by carriage, or on horseback. After it was invented by George Shillibeer in 1827, one might travel in a horse-drawn omnibus. In canal cities like Venice or Amsterdam, one might go by boat. By and large, though, people walked.

The requirement that almost everyone walk everywhere in premodern cities led to a certain iron law of settlement size and shape. The more widely the buildings were spaced out, the longer people had to walk between them, and so all of our settlements were laid out with streets as narrow as the climate and traffic could stand, and homes joined to one another in terraces.

Cities only rarely, in extreme cases, grew so large that one could not walk across them in 15 to 20 minutes: Naples,

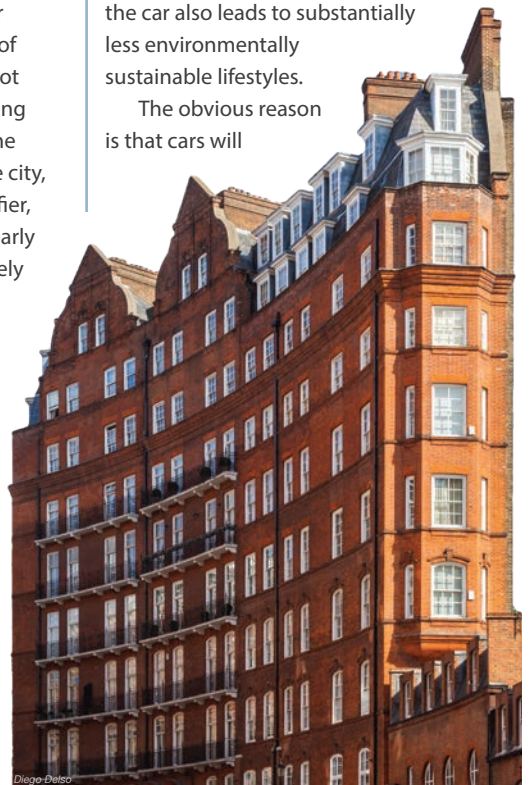
Rome, London, Paris, and Constantinople are among the handful of examples, all capitals of rich and powerful states. Before spreading out, cities built as high as their technology allowed them, and people accepted living with much less space in return for living closer to work.

Mechanised transport has changed all of this. First, the train, tram, and tube created suburbs – the first commuter train ran from Greenwich to the City of London. These suburbs meant that not everyone needed to live within walking distance of the city centre to enjoy the economic benefits of being in a large city, allowing them to spread out into leafier, quieter neighbourhoods. But these early suburbs still tended to be fairly densely populated, with three or four storey terraces near the station. After all, all transport for anything other than getting in and out of town was no faster than before, so one still needed to be within walking distance of the station, and any local amenities. The bicycle, in a time of lower-quality road surfaces, changed this only a little, making it convenient to live slightly further out.

The key change came with the advent of the car. Now people did not need to live near a station, and could live in relatively isolated

areas near no amenities at all. With this has come a dramatic step change in freedom, and few would seriously want to go back to a world without any of the benefits the car can bring, but building our cities too heavily around the car also leads to substantially less environmentally sustainable lifestyles.

The obvious reason is that cars will




>> generally tend to produce locally and globally harmful emissions for decades to come, even if we achieve our ambitious goals of phasing most of them out for electric vehicles. Transport is responsible for 27% of UK emissions and 24% of world emissions. Even electric cars tend to result in substantially higher greenhouse gas emissions, both in their manufacture and the power they use, compared to transit, walking, cycling, or e-bikes. In addition, pollution from brake pads and tyre wear is very hard to completely eliminate.

This means that, on average, those living in outer low-density post-war suburbs tend to produce the most carbon per capita of anyone in the UK and in other countries, whereas those living nearby the city centre

in moderate-density Victorian and Georgian neighbourhoods tend to produce the least. This is mostly because living in moderate density leads to less driving, with shops, schools, stations, and jobs all within easy walking distance.

The good news is that we can do something about this while we wait for the shift to EVs. In fact, unlike the shift to EVs, it won't even cost us very much. The sort of 'gentle density' we would need is just Victorian and Georgian-style neighbourhoods without overly wide streets, and with two to four storey terraced buildings. After all, the single most densely populated square kilometre in the UK includes Little Venice in Maida Vale, rather than a dystopian high rise. This sort of

gentle density gets built when we let it get built, and that it is popular with local communities. We also think there are further ways we could enable this to happen, for example through the popular idea of 'street votes' that grant permission to residents to radically densify existing suburban streets.

We should not, and could not, totally eliminate cars from our towns or cities, but luckily, we don't need to do that in order to green urban spaces. As well as shifting over to far cleaner cars, we can build the conditions for greener lifestyles in general: enabling 'gentle density' in traditional and popular ways. 

Ben Southwood is the Head of Research at Create Streets

Food, glorious food?

Dr Rosemary Green examines how we navigate the politics on our plate

Is there anything in life that is so simultaneously personal and political as food? Not only is it vital to our health, our social lives, and our cultural identities, but we now also have to face the consequences of the impacts human agriculture has had on our natural systems, the look of our landscapes, and the amount of greenhouse gases in our atmosphere.

“If the average consumer was truly aware of the conditions this type of farming entails, they would be put off their Sunday roast

Food was conspicuous by its absence in the discussions at COP26, and yet climate change makes us incredibly vulnerable in a world where we have developed sophisticated global agricultural systems to

support a burgeoning population. Future climate changes will make maintaining production at current levels a challenge in the major food-producing regions of the world, and it's clear that, as well as adapting our farming methods, we are going to have to change the way we eat. Globally, nearly 80% of agricultural land is devoted to livestock and their food, and much of the resulting meat and dairy is destined for countries that are already eating too much of it. In 2018, the global average meat supply was just over 100g per person per day, but in the UK it was over twice that. Eating too much meat is not only using up valuable land and contributing to climate change, it is also damaging our health: the UK's Food Strategy estimated that nearly 30% of ill health due to poor diets is from too much red and processed meat.

Happily, it seems that in the UK there is now an appetite for changing our diets. In

2020 I was lucky enough to be part of the first ever UK Climate Assembly, with a jury of people taken from all walks of life, tasked with advising the Government on how to get to net zero by 2050. Over the course of several weeks of intense discussions, I learned how important both food and farming are to people. With meat consumption in the UK already having fallen 17% in the last decade, it's clear that the lower-meat message is cutting through. However, the trend will need to accelerate for us to meet our net zero targets. When the Assembly voted, support for changing behaviour was clear, with over 90% of participants supporting carbon labelling of foods, nearly 80% supporting government contracts for low-carbon food, and nearly



>> 70% supporting food taxes.


However, there is another question: what are we going to eat instead of all this meat? At the London School of Hygiene & Tropical Medicine, we research the complex relationships between diets, the environment, and our health. Some of our recent work has found that consumption of plant-based meat and dairy alternatives has doubled in the last 10 years as meat consumption has fallen. There has been an explosion of new foods during this time to replace meat and dairy, including plant milks, fake burgers, and ever increasing varieties of soy. There is no doubt that these foods have dramatically expanded the choices available to people who want to reduce the amount of animal foods they eat, but in many cases they are highly processed, and we know very little about whether they are genuinely a healthier choice.



There is also the effect that an increasing demonisation of meat and dairy might have on our already beleaguered farmers. The returns on farms are low, and in many ways the types of livestock farming we might want to encourage, smaller scale, with fewer animals on larger areas of land and fewer chemical inputs, are the hardest with which to turn a profit. Instead, industrial-scale agriculture and mega farms are becoming more popular. If the average consumer was truly aware of the conditions this type of farming entails, they would be put off their Sunday roast.

There is a lot to be said for a 'less and better' model of meat consumption, where meat and dairy are viewed more as luxury foods, and the effort that goes into producing them is more effectively rewarded. In this kind of model some of the cheaper and lower quality meat used as filler in processed foods

like our sandwiches and ready meals could be phased out and replaced with more pulses and veg, and there could be increased regulation of meat-heavy and unhealthy fast food, while incentivising British farmers to produce high quality and high welfare meat and dairy. At the moment, the true costs of meat and dairy are not reflected in their price, and rebalancing this while incentivising people to eat more fruit and veg would solve many of our problems.

Last year's ban on junk food advertising before the watershed is a start at tipping the scales back towards healthy and more sustainable food. It will be interesting to see whether it will have a further effect on people's meat consumption. If we can build better relationships with our food and our farmers, the future can be bright. 

Dr Rosemary Green is Associate Professor in Sustainability, Nutrition, and Health at the London School of Hygiene and Tropical Medicine

On your bike

Active travel can help your health and the environment, writes **Dr Suzanne Bartington**

Over the past 40 years, the design of towns, cities, and transport systems in the UK has favoured the motor car – generating major environmental and health costs for wider society. Poor air quality is responsible for around 36,000 early deaths in the UK each year, with road transport a major source in urban areas. Road traffic accidents kill almost 1,500 people each year with one child death occurring each week. Traffic congestion is estimated to cost the UK economy £6.9 million each year, with the average motorist spending 124 hours stuck in traffic gridlock.

Consistent evidence shows that

travelling by foot or bike boosts physical and mental health, reducing the healthcare burden of preventable diseases. Cycling to work reduces the risk of early death by almost 40% and results in less sickness absence. Active travel is also of benefit for ageing well, and living independently for longer. People travelling by foot and bike spend more money at retail outlets, making more trips, with benefits for local amenities.

Yet despite consistent scientific evidence of the benefits of investment in active travel for the environment, economy, and health, our travel patterns

remain largely dominated by private vehicle usage.

Department for Transport statistics suggest an extra 10 million cars in the last decade, with predictions for motor transport to further increase by up to 50% by 2050. This quantity of private vehicles presents major challenges for allocation and use of urban space, with the average car remaining parked stationary for 95% of time.

The Government's *Transport*



>> *Decarbonisation Plan* released in summer 2021, recognises the major challenge of decarbonising the transport sector – responsible for over a quarter of domestic carbon dioxide emissions. At COP26, the UK Government was one of 38 national governments, in addition to local and regional governments, automotive manufacturers, fleet owners and operators, and investors, to sign the ‘Glasgow Declaration’ committing themselves to a rapid acceleration of the transition to zero-emission vehicles, motivated by the goals of the Paris Agreement. However, the dominant focus on policies to achieve accelerated uptake and usage of electric and autonomous vehicles, as opposed to those which incentivise walking and cycling, is a missed opportunity to also deliver healthier lives.

We should guard against the premise that technological advances will solve our transport problems. A vision of clean private motorised transport provides a tempting alternative to avoid the public debate concerning radical interventions necessary to change shorter trips to active modes. Changes in travel patterns during Covid-19 lockdown periods demonstrated the major potential for

behavioural change and the technologies which really offer policy solutions are those which apply scientific evidence and effectively utilise communications. A focus on technological solutions also reflects a wider lack of consideration for tackling existing challenges of inclusivity, accessibility, and inequalities with regards to UK mobility.


“In Amsterdam, just 260 miles from London, half of all urban trips are made by bike, and in Denmark, 60% of children cycle to school every day

We know that active travel interventions can be effective, and much can be learned from those countries which have achieved step-changes in travel behaviours. In Amsterdam, just 260 miles from London, half of all urban trips are made by bike, and in Denmark, 60% of children cycle to school every day, reflecting differences in culture, rather than climate. It is clear these changes took bold political courage, with coordinated policies which consistently protected and prioritised the needs of vulnerable road users. Yet typically, transport policy

decisions are taken by those within the most car-dependent sectors within societies – with limited representation from those less likely to have access to a car, including women, minority ethnic groups, and those living in areas of high deprivation.

It is evident that consistent policies are needed at both national and local levels, including those which address social, cultural, and structural barriers. Interventions have been most effective when delivered at a whole town or city level, and supported by targeted and consistent public messaging.

To achieve healthier lives and greener cities, the Government needs to change, and ultimately reset, the public debate. Investment priorities need to be urgently reviewed – with the road building programme placed under ever increasing scrutiny.

It's often much easier to opt for emerging technologies rather than age-old solutions – but if we neglect to act radically now – citizens will pay the costs for many years to come. 

Dr Suzanne Bartington is a Clinical Research Fellow in Environmental Health at the University of Birmingham

Reconnecting with nature

The pandemic has taught us the value of our landscapes, argues **Patrick Begg**

One of the most powerful lessons of the pandemic has been that people want, and need, access to nature-rich green spaces near where they live. Since the start of 2020, we've seen an extraordinary growth in people visiting National Trust countryside sites, and especially those close to towns and cities.

Many are new visitors to the outdoors

looking to escape from the confines of their home and to experience the simple joys of nature. As we've emerged from lockdowns, this new passion for the outdoors has held steady and numbers of new visitors to our countryside remain extremely high.

We also know that when people become more connected to nature, they feel happier and more fulfilled. Research shows that

higher levels of engagement in heritage activities and the use of green space for health or exercise is associated with lower wellbeing inequality. National Trust's own research with Derby University found very close links



>> between everyday 'noticing of nature' with mental wellbeing, a 'worthwhile life', and willingness to actively help nature.

Yet too many don't have the opportunity to connect with nature in their daily lives. National Trust research with Vivid Economics and Barton Wilmore highlights the extent of the nature deficit in some parts of the UK – and makes a powerful case for investment.

Across the UK, 295 deprived neighbourhoods of 440,000 people live in 'grey deserts', with no trees or accessible green space. If we invest £5.5 billion across the UK in greening the country's most left behind and greyest urban communities, this research predicts an impressive £200 billion in physical health benefits through disease prevention and mental wellbeing benefits to alleviate some of the strain on local health service providers and to improve people's quality of life.

This increased connection is important not just for the health of our communities, but also for the future of nature itself. As Sir David Attenborough memorably said: "No one will protect what they don't care about; and no one will care about what they have never experienced."

To its credit, the Government has recognised this challenge. Earlier this year, the Treasury set up a commission led by Lord Agnew to significantly improve people's access to the outdoors. This year, we expect a new Levelling Up Bill under the leadership of Michael Gove – who championed a nature-friendly approach in his time at Defra; a Nature Green Paper; and the Government's response to the Glover Review of National Parks and AONBs.

Our request to ministers is a simple one: make a renaissance in urban green space a central part of levelling up. The need is great, and the potential benefits are huge.

The wider natural environment is in serious decline. One in four UK bird species are now on the red list of threatened species and 26% of mammals are at risk of disappearing altogether. In England, only 14% of rivers are in good ecological



shape. This is due to a powerful cocktail of agricultural pollution and the regular and direct discharge of raw sewage. All this adds up to the UK sitting rock bottom of the G7 biodiversity league table.

Again, the Government has been making some noteworthy and welcome moves. We have a legally binding target for species recovery, complemented by the Leaders' Pledge to become nature net positive by 2030, and the Agriculture Act 2020 – the first for more than 70 years – which commits to the concept of rewarding farmers with 'public money for public goods'.


“ We have been handed a Sustainable Farming Incentive that pays for activity no more likely to reduce or lock up carbon, or restore nature

Glasgow's COP26 statement couldn't be clearer as it: "Emphasises the importance of protecting, conserving and restoring nature and ecosystems, including forests and other terrestrial and marine ecosystems, to achieve the long-term global goal of the Convention". This explicit commitment to developing nature-based solutions has the UK Government's fingerprints all over it.

These positive moves need to be backed by tangible domestic action, which is why

the first tranche of new agricultural support schemes were so disappointing. Freed from the CAP, we expected the kind of market signals and hard support that would help our farmers become the climate and nature heroes we need. Over 70% of our land is farmed; how we deliver food production really matters for emissions and nature.

Instead, we have been handed a Sustainable Farming Incentive that pays for activity no more likely to reduce or lock up carbon, or restore nature and heritage, than the most basic tenets of the failed CAP. This is the worst of both worlds – neither providing value for taxpayer investment, nor delivering adequate or meaningful support for farmers to transition into new business models that blend climate, nature, and food production.

We need clear ties to national targets for nature recovery at a landscape scale. Support has to be targeted at land use which pulls its weight in reducing emissions, which delivers a nature-rich countryside in service of people's wellbeing (whether you live in, work in or visit it), and which bakes in resilience to the climate shocks already hitting communities. Only then can the Government deliver on its excellent 25 Year Environment Plan. 

Patrick Begg is the Outdoors and Natural Resources Director at the National Trust

Raising our resilience

Climate-related disasters are here and we need to be ready, cautions **Mary Friel**



Every day Red Cross Red Crescent staff and volunteers around the world are out there responding to emergencies. Across the 192 countries we work in, their message is the same: we are seeing a clear rise in climate and weather related-emergencies, with impacts compounded by Covid-19, and felt most harshly in conflict-affected regions.

Wildfires, drought, flooding, heat waves, hurricanes; extreme weather events are happening more often, and are putting more people in danger. Red Cross research found in the last decade 83% of all disasters triggered by natural hazards were caused by extreme weather and climate-related events, and sadly have killed more than 410,000, the vast majority in low and lower middle-income countries.

We are already feeling the heat now at 1.1°C global warming. Last year alone included unprecedented heatwaves in North America, flash floods in London, Germany, and Belgium, wildfires in Southern Europe, and flooding and drought in Kenya.

As the scientific community and UN call the latest evidence from the Intergovernmental Panel on Climate Change report a “code red for humanity” there’s no time for delay in scaling up action.

The good news is, thanks to investment in weather forecasting capability globally, we are collectively better equipped to prepare for these events today than we have ever been. We’re better able to predict the weather, we no longer have to wait until a disaster strikes, and we can take action before the impact of these hazards are felt.

One in three people are still not adequately covered by early warning systems, let alone early action plans. We can have the most amazing weather forecasting capabilities, but if the message doesn’t

reach the community, come in a language they can understand, from a trusted source, in a format people know how to react to, it won’t save lives.

In areas where people are receiving early warnings, we still face the challenge of acting early. Funding commitments to act early and prearrange finance before a disaster strikes featured on the global agenda from the G7 in Cornwall to COP26 in Glasgow, but we still have some way to go to make early action the default response.

“ By 2050, the UK will be 50% more likely to experience hot summers, and heat-related deaths could triple, reaching around 7,000 annually

Pre-agreed funding to act swiftly before a crisis strikes is critical. Globally, less than 3% of humanitarian funding is currently available for anticipatory humanitarian action. The UK COP Presidency and UK Government are a leading proponent of acting early. The Race to Resilience and the support of the Risk Informed Early Action Partnership (REAP) will save lives linking scientific, humanitarian, and donor expertise to make a real shift and scale action for communities and people most affected by climate change.


In Bangladesh, thanks to robust early warning and early action systems, 2.4 million people were evacuated prior to Cyclone Amphan hitting. An extensive shelter network was opened and people were supported to evacuate safely by 70,000 volunteers, including from the Bangladesh Red Crescent.

The importance of building resilience and early action to new climate extremes

is also crucial in the UK and across Europe, from flash floods and storms to the growing risk of heat. The Climate Change Committee identified tackling the health risks from heat as a urgent priority for government.

Extreme heat is one of the deadliest, but also one of the most hidden extreme weather hazards – a silent killer in the UK. Heatwaves are becoming more frequent, longer and more extreme. By 2050, the UK will be 50% more likely to experience hot summers, and heat-related deaths could triple, reaching around 7,000 annually.

In 2020, here in the UK, we sadly had the highest ever recorded excess deaths as a result of heat – with over 2,500 excess heat related deaths recorded in England alone. Worryingly, British Red Cross research found a significant perception gap on heat risk, with 1 in 4 people thinking the UK isn’t hot enough for a heatwave. We know older people are more at risk, but we found that over half of over 75s in the UK do not identify themselves as higher risk in hotter weather, which means they are less likely to take life saving early action.

We need the systems, plans, and finance in place to scale early warning, early action now. We need to build resilience to existing risks, shocks, and more extreme weather by harnessing the knowledge and building the capacity of local volunteers and communities most affected. As we look to COP27, 2022 will be critical year to scale up early action to safeguard against disasters. 

Mary Friel is the Climate and Resilience Policy Manager, and was the COP26 Policy & Advocacy Manager, for the British Red Cross



Three years ago, the NFU set the ambitious goal of reaching net zero greenhouse gas (GHG) emissions across the whole of agriculture in England and Wales by 2040. Since then, farmers have been making strides in delivering this ambition.

As farmers, we are proud of the unique role that British agriculture can play to be part of the solution to net-zero, as both an emissions source and a sink. For example, we must protect and enhance the carbon reserves already in our soils and vegetation, by modifying some of our farm practices and better managing our hedgerows and farmland trees. We know that the grass pastures which make up our livestock farms also store significant amounts of carbon. In addition to these 'nature-based' climate solutions, we can help to capture more carbon by growing the raw materials for bioenergy and the bioeconomy so long as this is done alongside sustainable food production.

But I must be clear. There are no 'silver bullets'; we believe action to tackle climate change in UK agriculture requires a range of measures that fall under three broad headings:

- Improving resource use efficiency of farming across all sectors;
- Increasing on-farm carbon storage in vegetation and soil;
- Boosting production of land based renewable energy, including bioenergy for processes coupled to carbon capture, use and storage, to generate credits for GHG emissions avoided and GHG removal

It's important to remember that every farm will start the journey to net zero from a different place and will need its own action plan. In the past two years, the NFU has made significant progress in developing systems for farmers and growers to track and be rewarded for reduction or offsetting GHG emissions. What we need urgently now from government and private finance is an agreed reward structure that values carbon management and enables all farmers, whether tenant or owner occupier, to play a full role in managing a climate-friendly and productive countryside.

Of course, many NFU members are already carrying out net zero measures on farm and the NFU has reviewed and provided guidance on GHG calculation tools to encourage take-up and help farmers make an informed decision on which tool might best suit their farm system. For some farmers, that might be utilising feed additives to reduce methane emission from their dairy herds. Whereas arable farmers could look to enhance carbon storage in their soils to deliver significant GHG savings.

While all this action is taking place to reduce UK agriculture's impact on the climate, we must not reduce our capacity to feed UK consumers with high quality, affordable British food. The UK must not achieve its climate change ambitions by exporting UK production, or our greenhouse gas emissions, to other countries.

Farmers will not be able to achieve our ambitious target of net zero by 2040 alone. We are therefore looking to government and other stakeholders to act with us and help us deliver this goal – but it will take concerted and robust action from all sides. The NFU stands ready to work with all areas of government and policy makers to support in the delivery of the UK's net zero goal.

Agriculture is very much part of the solution to decarbonising the UK economy and must be considered and valued in that way.

Minette Batters

President, National Farmers' Union of England and Wales

Why I'm a Bright Blue MP

Sir Robert Buckland QC MP shares his political journey and why he supports us



I have long been an admirer of consistency. Not the sort of consistency that involves a rigid adherence to dogmas that do not age well, but a more meaningful consistency of principle and approach that I have tried to apply each day of my working and political life.

My involvement in conservative politics was prompted most fundamentally by my belief in our United Kingdom and what it stands for; free democracy where everyone is equal under the law and there is equality of opportunity. It was accompanied by a deep suspicion of unaccountable power, manifested in the 1970s and '80s by the activities of some trades unions and nowadays in the form of oligopolies that work against the interests of consumers.

I have always been a positive, optimistic conservative, whose belief in our meaningful traditions is deep and profound, but whose fundamental fixation is on our future and the future potential of our people. The free market, where profit is invested back into improving goods and services, is the best mechanism yet devised for reducing poverty, but it is not perfect.

Where necessary, government

should intervene if that has the effect of rebalancing things in favour of us, the citizens. The market, like government, should be our servant, not our master. We should remind ourselves that as Conservatives, our traditions descend from Shaftesbury and Disraeli, not from Gladstone. Our long history of success emanates from intervention aimed at protecting the individual from unrestricted forces; the elevation of the condition of the people, to use Disraeli's famous phrase.

One of the biggest post-pandemic challenges is the rise of automation and digitisation, bringing benefits, but risks too. As atomisation of the workplace and wider society occurs, are we in control of AI or can it ultimately control us?

Bright Blue conservatives instinctively know that the human element in this activity should never be entirely removed, and that its operation requires an international set of standards, particularly in the field of defence and weapons procurement.

Technology increasingly will be our strength and stay in education and health, but with a strong recognition that the

greatest resource we have are dedicated public servants who work to the highest of standards.

“We should remind ourselves that as Conservatives our traditions descend from Shaftesbury and Disraeli, not from Gladstone

Bright Blue conservatives know that the best way to lead is to serve, which is why, when I was in office, I engaged closely with civil servants and sought to encourage and bring people together. This was particularly important when it came to the unprecedented challenge of Covid-19, when we had to work at a frenetic pace in order to maintain or preserve our prison and courts systems.

Covid-19 meant that the bitter, often visceral, divisions of Brexit had to be put to one side. Our aim should now be to unify, not divide. When we talk of reform, it should be couched in the language of reasoned and measured change, not clash and tumult. The British people have had enough of turmoil, and it is surely part of who we are as Conservatives that we deliver ambitious but steady progress in fulfilling the manifesto pledges of 2019.

As part of that work, we were determined to show seriousness of purpose in order to complete important reforms to our Probation Service, our sentencing system, and divorce law. I was proud to lead dedicated teams at the Ministry of Justice who have delivered on this. The most important aspect of my role as Lord



Roger Harris


>> Chancellor, and all Lord Chancellors before me, was protecting the rule of law. If we are really going to emphasise our seriousness of purpose and unify the British people, then Conservatives must continue our long-held tradition of respect for the law, and remember that this is a key factor determining how other countries view us.

The past few years of Brexit and Covid-19 have led to a period of national introspection. In this world of rapidly-changing trends, we cannot afford to take this stance any longer. The effects of climate change and conflict on population movement are being felt daily across

Europe. The issue of energy security and the need for the UK to adopt a consistent and clear plan for our supply has never been of greater importance, as Russia sabre-rattles and seeks to destabilise neighbouring countries on its western and southern flank.

The greatest challenge of all is China, whose economic development has not been matched with greater freedom, and are being more and more assertive about their version of the rule of law in places like Hong Kong. Bright Blue Conservatives support the free trade agenda of the Government, but also expect Britain to be loud and clear when it comes to

fundamental human rights and freedoms too. Just as we must respect the rule of law at home, we need to recognise it as one of our greatest exports, and always be ready to fight for it internationally.

As we emerge from the pandemic to face inflationary pressures at home and increasing competition from abroad, we Bright Blue Conservatives can be confident that the balances we seek to strike are the ones that I believe are shared by the majority of our country. 

The Rt Hon Sir Robert Buckland QC MP is on the Bright Blue Advisory Council

Research update

Max Anderson provides an update on Bright Blue's research programme


Bright Blue has been as busy as ever over the last six months with lots of exciting new reports being published, pioneering the latest research on everything from benefit claimants to flooding.

In August we published our analysis *Under stress?* The analysis investigates the differences in the experiences of benefit claimants compared to the rest of the public in the first year of the pandemic. This was then supplemented by a later analysis piece, *Beyond the safety net*, in October which examined the changes in the financial situation of Universal Credit claimants during the same period.

At the end of last year as home working guidance was reissued, we released *No place like home?* The timely report unearthed the leading non-financial benefits and challenges of home working during the pandemic. It concluded by recommending new policies that aim to primarily mitigate the impacts of the challenges of home working, but also widen the benefits of it, especially among vulnerable groups, including introducing a right to domestic abuse leave, and mandating minimum internet speed provisions by private landlords.

2022 began with our Associate Fellow

Helen Jackson's report on flooding impact, *In deep water*. By using a novel AI technique called Natural Language Processing, we were able to reveal and map the impact of flooding in the UK since 2007. It put forward a range of recommendations to bolster the UK's resilience towards flooding in the decades ahead, including suspending Sunday trading laws during flood events and launching a major public information campaign about flood risk.

We have been busy with events, having put on a lively schedule at Conservative Party Conference in Manchester and COP26 in Glasgow, with hundreds of speakers involved. Many further events and research papers are already underway, so Bright Blue will not be slowing down in 2022. 

Max Anderson is the Digital Communications Officer at Bright Blue



Tamworth Prize 2021 winner

Tom Spencer explains how the Government can revive so-called 'left-behind' areas



When William IV appointed Sir Robert Peel as Prime Minister against the expressed will of the electorate, Peel was forced to prove that his brand of Toryism was in the electorate's best interests. Boris Johnson finds himself in a very similar position today. Through the electoral benefits of Brexit, the Conservatives have found themselves controlling large swathes of the north – if he's to stay in Government he must finally take regional inequality seriously – levelling up is the Government's attempt to do exactly that.

New research into cash benefits has found that the best way to increase someone's welfare is often to put more money into their pockets. A literature review conducted by the economist Ioana Marinescu found that unconditional cash transfers consistently are found to improve health and educational outcomes, and decrease criminality and drug & alcohol use. Moreover, a recent randomised control trial has found that these schemes can even increase the incentive to work. However, giving people direct payments is not the only way to increase the amount of money in people's pockets. An easier way is to finally fix council tax.

The way council tax is currently calculated really makes no sense. It is based upon property valuations that are now 30 years old making it extremely regressive. This is because wealthier regions have seen higher levels of house price inflation than less well-off regions. The effect is that those in London pay council tax based on massive undervaluations and those in the north are largely paying based on overvaluations. To make things worse the rates are set locally forcing poorer authorities with higher welfare bills to set higher rates than

wealthier ones. Consequently, the effective tax rate in the north east is now 3.5x larger than it is in London. Given this it is no wonder that over 3.5 Million people are currently behind on their council tax bills.

By fixing the council tax system, we can lessen the burden put on the areas that need assistance by putting more cash in hands and increasing their quality of life. The best way to do this is the proportional property tax. This, as advocated by Fairer Share, would put a 0.48% tax on current property values. As well as evening up the divide caused by the out of date valuations we currently use, this move would also be broadly progressive and result in cash savings each year for 76% of households nationwide – the average household saving as much as £453 per annum.

The most important benefits of this policy will be seen in precisely the areas the Government are targeting with their levelling up agenda. Across the 44 Red Wall seats that the Conservatives won in 2019, 97% of households would be better off with the average gaining £660 every year as a result of this change. Furthermore this wouldn't just be a bribe to Conservative voters. Evidence from the Resolution Foundation indicates that it is the young who would benefit most from this reform – people who are unlikely to vote Conservative.


Thus, the Conservatives should introduce proportional property tax not just because it would win them votes, but also because it's the right thing to do.

Moreover, it will also help level up another group that suffers disproportionately under the current system. More than a fifth of young people currently live in overcrowded or concealed housing – and the tax system supports this.

Those who live in under crowded conditions with multiple unused bedrooms currently have little incentive to downsize and so that stock is not made available. What PPT would do is incentivise those living in houses larger than they require to sell and purchase somewhere smaller to reduce their tax bill. Inadvertently this decision would increase the supply, and thus lower the cost, of those larger houses allowing more young people to live in homes appropriate for their needs.

It is a standard Conservative principle that the individual knows best when it comes to spending their own money – and modern economic evidence supports this. If we want to level up forgotten regions it cannot be done effectively through central state planning as this will only end up with bureaucracy taking over and inefficiencies ridding the project of its potential to create Adam Smith's dream of universal opulence.

Like Peel abandoned Wellingtonite traditional Toryism in his Tamworth Manifesto to deliver 98 additional seats, Boris Johnson must too abandon council tax. Given the financial pressures the pandemic has placed upon families, anything other than abolition would be actively causing harm to the poorest people in the country.

PPT is the simplest way of creating a fairer system of property tax and would help put more money in the hands of those who need it most, and relieve the burden of council tax arrears that 5% of Britons are currently experiencing. 

Tom Spencer is a Law student at City, University of London



Heating proposals set to leave

rural areas behind



Much of the focus following the Heat & Buildings Strategy has been on a 2035 end-date for fossil fuel gas boilers, but did you know there are proposals for this to be even sooner in rural off-gas-grid homes? As close as 2026?

Its vital rural areas have a just transition to Net Zero. To achieve this, a mixed technology approach utilising LPG and bioLPG needs to be supported.

Current proposals for off-grid regulations would leave rural homes and businesses forced to change their heating system at their most vulnerable, at point of breakdown, with limited unaffordable choices.

A recent study show these choices would cost nearly 25% of oil-heated homes £19,000 for a heat pump or £18,000 for a biomass system. In order to reduce the heat pump running costs to the households existing fuel bill, an additional investment of £13,000 would need to be made in retrofit [1].

These costs are not viable for rural households. 28% of rural households said they could not afford to spend any money on a new low-carbon heating system, a further 20% would only pay up to £2,000. Only 5% of respondents were willing to spend between £8,000 – £10,000.

Further to this 59% were concerned about upheaval and disruption, 75% were concerned about the ongoing running costs and a further 59% on the ability for heat pumps to provide consistent and reliable heat [2].

The current proposals demonstrate that the needs and views of rural areas are not being heard, in line with 88% of off-grid households who told us that Government should take more account of their views.

Instead, Liquid Gas UK advocate taking a mixed technology approach in rural off-grid areas when it comes to decarbonising heat. A mixed approach, utilising LPG and bioLPG in addition to heat pumps, biomass and other innovative solutions, will give rural homes and businesses the most cost-effective and practical route to meeting Net Zero.

This is important as not all properties are suited to heat pumps, due to cost, practicalities of retrofit or energy demand. Indeed, recent research found that at least 44% of rural off-grid properties would need a bioLPG or hybrid solution [3].

There is no silver bullet and rural households agree with 87% wanting Government to support as many low-carbon technologies for rural areas as possible. Energy experts Ecuity also found that taking a mixed technology approach in the UK would save rural households £7bn in the run up to 2050, and still meet Net Zero [4].

Switching from oil to LPG today immediately improves your carbon foot print and contributes towards better air quality. Importantly, LPG users then have a seamless transition to 'drop-in' bioLPG which delivers up to 90% carbon emissions reduction.

Already available on the market today, bioLPG is chemically indistinct from LPG and can be used as it is, just like conventional LPG, with no need to upgrade appliances and infrastructure.

Looking to the future, policy makers can empower rural areas to reach Net Zero by supporting a mix of low-carbon solutions and moving away from 'one size fits all' thinking.



George Webb,
CEO of Liquid Gas UK



Liquid Gas UK

mail@liquidgasuk.org www.liquidgasuk.org

Music: Let there be nothing

Judicator takes us back to the sixth century Byzantine reconquest of Rome

Sam Robinson

Senior Researcher, Bright Blue

Much ink has been spilled about the efforts of Byzantine, or Eastern Roman, Emperor Justinian I and his capable general, Flavius Belisarius, to reconquer the provinces of the Western Roman Empire about half a century after its demise.

Arizona-based power metal band Judicator have taken a different approach to uncovering the history of the early Byzantine Empire. Their fifth studio album transports us back to the sixth century AD, following Belisarius on his campaigns to wrest back control of North Africa and Italy, all the while navigating his inner demons and turbulent relationship with his unfaithful wife Antonina.

The first track, *Let There Be Light*, sets the tone of the album right out of the gate. Thoughtful, delicate harmonies from vocalist John Yelland give way to aggressive, galloping riffs as Belisarius gears up for war against the Vandals. "Let there be light!"

is the rallying cry of this song, painting the picture of a bold and hopeful campaign to restore the glory of the Roman Empire.

Yelland's powerful, soaring vocals – more than a little reminiscent of Blind Guardian's Hansi Kürsch – are without a doubt the star of the show. Much of the album comprises

a belting account of warfare, with suitably formidable and bombastic vocals to match. In parts of the album where the band lifts the lid on Belisarius' inner turmoil – particularly his regret about past defeats and simmering anger about Antonina's infidelity – Yelland is also able to dial back the aggro and deliver a ponderous, melancholic performance.

The guitar and drum work is no less impressive. The distorted tone and heavy, driving rhythm on *Tomorrow's Sun* comprehensively captures the brutally effective campaign against the Vandals; the melodic, bombastic lead riffs on *Gloria* the symbolic triumph of recapturing Rome. Even within the same song, the band is able to seamlessly switch settings. *Amber Dusk* brings together a soft, almost dreamlike intro exploring Belisarius' darkest fears; a rousing, power-chord laden depiction of armies clashing at the siege of Rome; a face-melting solo; and deep, slow, and crushing riffs as Belisarius' rage at his wife's affair reaches boiling point. If anything, there are some points where the guitar could

have been higher in the mix; as awesome as Yelland's voice is, a little more emphasis on the driving rhythm guitar work would not have gone amiss.


Of course, the album's blend of sweeping, epic history, and personal melodrama was always going to be difficult to get right.

There are points where the lyrics are stretched

just a little too far for comfort, the soppy peroration of *Strange To The World* being the worst offender here. Given the sheer amount of ground the album is trying to cover, it isn't surprising that sometimes the lyrics end up being clunky or cheesy. Although, in all fairness, you do have to accept at least a little bit of cheesiness if you want to sit through a power metal concept album.

Nevertheless, the way the band has brought together various strands of narrative – the historical accounts of Byzantine reconquest, the doubts gnawing at Belisarius, his messy personal life – is impressive. Throughout the album there are musical motifs hinting at each of these: grandiose guitar and vocals for imperial triumphs, altogether more stripped back melodies for the general's personal anguish, and growling power chords for those moments where stife is dominant.

The last track, especially, showcases the attention to detail the band has put into this record. After his incredible reconquest of Italy, Belisarius is dragged back to the Byzantine capital of Constantinople, mired in a bitter vendetta against his wife, and ensnared by the internal politics of the Empire. The lyrics come full circle, but with a twist: Emperor Justinian bellows "Let there be light? Let there be nothing!" – with that, the high hopes set in the first song are dashed, and the dream of reunifying Rome is dead.

Of course, the most accurate way of finding out about this period in history would be to read the accounts of Procopius and other learned historical texts, but it's not as fun as sticking this album on. 



Film: Limbo

Ben Sharrock directs a windswept yet beautiful dark comedy about refugee life

Ioana Diac

Research Assistant, Bright Blue



Ben Sharrock's sophomore feature film *Limbo* (2020) opens with an absurd scene. We watch as Boris and Helga – two middle aged 'cultural awareness' instructors – dance stiffly in an awkward role play of how a man and woman should, or rather should not, interact in a nightclub. A group of male refugees stare blankly at the ridiculous scene before them, notebooks remaining unopened in their laps. After several rejected advances, Boris grabs Helga's backside and is consequently met with a hard slap across the face. The music stops and Helga turns to ask the class to tell her what Boris did wrong. One of the men slowly, tentatively lifts his hand up. We never get to hear the answer.

So begins Sharrock's tragicomic depiction of four lone male refugees stranded on a remote Scottish island while they await the outcome of their asylum applications. Released in July 2021, the 103

minute film centers around Omar, a young Syrian musician played by British-Egyptian actor Amir El-Masry, who struggles to adapt to his new environment and the separation from his family, home, and culture that it brings. He develops an unlikely friendship with eccentric, Freddie Mercury superfan Farhad (Vikash Bhai), an Afghan refugee who has been waiting for "32 months and 5 days" – not that he is counting. The two share a run-down house with Wasef (Ola Orebiyi) and Abedi (Kwabena Ansah), a Nigerian and a Ghanaian, who pretend to be brothers in the hope of increasing their chances of being granted asylum.

The four of them cannot do anything about their situation but wait. To pass the time, they attend the unwittingly offensive cultural awareness classes, binge-watch epis-odes of *Friends*, and comically stare at the postman every time he does the rounds, in the hope that he brings news of their status. Their main priority is to stay out of trouble, for any misstep risks their deportation, something we later see

happen to a group of refugees caught illegally working cash-in-hand at the local fish processing factory. One of the residents had recommended this job to Omar just moments earlier. Luckily, he was wise enough not to take it.

“ There are no images of violence, crowded border controls, or people fleeing war-torn countries in overflowing dinghies

Asylum seekers in the UK are currently not allowed to work whilst their claim is being processed. It is only when they have been waiting for more than 12 months, through no fault of their own, that the Home Office may grant them the right to work. Bright Blue has called for the



Focus Features

>> Government to give the right to work to refugees sooner. This would not only be the morally right thing to do, but it would also help relieve critical skills shortages in medical and care sectors that have been particularly hard hit by the Covid-19 pandemic. It might have also saved people Omar, Farhad, Wasef, and Abedi the excruciatingly long days with nothing to do. Instead, we watch them grow increasingly frustrated and irritable, their hopes slowly draining away as the film goes on without resolution.

To this end, Sharrock's cinematography perfectly evokes the feeling of waiting in limbo by using static frames where the camera rarely moves or cuts. The audience is left to view the characters inside the restricted 4:3 aspect ratio of the frame in long, lengthy sequences, adding a sense

of inertia and claustrophobia to what is already uncomfortable viewing. Flashes of Omar's guitar-like oud instrument being strung tighter and tighter contributes to the tension, and leaves you wondering when the breaking point will finally come. The sound of wind constantly howling in the background compounds the chilling effect as we watch the refugees shiver in their jumpers in the middle of winter. All the while, the film is interspersed with lingering shots of the desolate, mountainous landscape they involuntarily find themselves in. As one reviewer has remarked, it is ironic that "men whose options are currently so curtailed are confronted daily by horizons that are limitless."

Ultimately, what Sharrock does so well with this film is to give audiences an insight into the refugee experience

without pandering to the tropes we have come to expect from this genre. There are no images of violence, crowded border controls, or people fleeing war-torn countries in overflowing dinghies. Instead, the characters' traumas are present but in subtler forms; in Omar's deadpan expressions and Abedi's casual admission that he has "already been to hell".

With the Taliban's takeover of Afghanistan last year sparking a whole new refugee crisis, and the impacts of the climate crisis threatening displacement of people worldwide, *Limbo* is a timely film that humanises the stories of refugees behind the media's statistics. If you are looking for the perfect combination of humour and drama with a socially conscious message, this quirky offbeat indie will not disappoint. [D](#)

Film: Last night in Soho

Edgar Wright delivers a visually stunning Swinging Sixties flick

Max Anderson

Digital Communications Officer, Bright Blue

Much like *Once Upon A Time In Hollywood* (2019) was an homage to the glory days of Hollywood, *Last night in Soho* (2021) is a tribute to Britain in the 1960s.

The difference between the two is Quentin Tarantino's traditional storytelling is replaced by Edgar Wright's typical tricks as he steps into the realms of horror. The gore is not lost, as Wright delivers an entertaining addition to the genre.

The film sees Eloise (Thomasin McKenzie), a 1960s London-obsessed fashion student, starting at the London College of Fashion. After early troubles adjusting to student life, she soon finds herself renting a room outside of student

halls. When Eloise falls asleep in this room, she finds herself dreaming of a life lived by Sandy (Anya Taylor-Joy) in the 1960s.

Sandy is a strong and confident role model for Eloise, who becomes desperate to keep jumping down the rabbit hole. The fantasy quickly turns into a nightmare as Eloise is forced to learn of the horrors that await Sandy as she attempts to pursue a life on the stage.

Edgar Wright is known as one of the most visually stunning and colourful directors in Hollywood, and it was lovely to see this come through.

The film builds throughout, starting with the rather plain and simply shot scenes in the current day, to visually spectacular shots in the 1960s. This in particular helped draw the lines between reality and fantasy, and enticed you to

get lost in the latter.

In particular, the use of colours builds on Wright's previous films such as *Baby Driver* (2017), taking it to a whole new level, and featuring some truly glorious fantasy and horror scenes.

We also get some of Wright's trademark hidden yet cheeky foreshadowing throughout the film, which makes the wonderful twist all the more satisfying.

Wright harnesses another trick learned from *Baby Driver*, using a mesmerising period music that drove the film forward flawlessly. This is accompanied by possibly one of the best scores Steven Price has written since *Gravity* (2013).

There was a lot of pressure on the new



>> budding stars in Hollywood, McKenzie and Taylor-Joy. McKenzie had given us a strong performance in Taika Waititi's *Jojo Rabbit* (2019) so there were a lot of eyes on the potential star.

“Wright is known as one of the most visually stunning and colourful directors in Hollywood, and it was lovely to see this come through

McKenzie makes a natural yet phenomenal leap in her acting career as it seems a new star is born. Her quirky and shy personality draws sympathy from the start, and her building terror and desperation then brought us to the edge of our seat. Her acting prowess really

made this film.


Taylor-Joy is also perfectly cast. My only concern is she is now being type-cast as she plays an incredibly similar role to Beth in *The Queen's Gambit* (2020). This should not detract from a wonderful performance, however, as she can hold her own on the big screen. Other noteworthy performances go to Michael Ajao as John and the late Dame Diana Rigg as Ms Collins.

Matt Smith was a disappointment. Miscast, his presence and performance felt incredibly wooden, adding nothing more than shouting semi-intimidatingly at camera. This is not to say he takes away from the film too much, but he certainly doesn't add anything to it.

One of the most unsettling and horrifying parts of this film was the

sexism faced by Sandy and Eloise in London. I praise both Wright and his cast for highlighting the true horrors of the red light district in 1960s Britain, which has haunting echoes of the sexism that women in London still face today.

Last night in Soho is an entertaining and visually stunning film. Edgar Wright once again takes another evolutionary step from his *Three Flavours Cornetto* trilogy of old. Anna Taylor-Joy and Thomasin McKenzie were both fabulous and, although they never really had dialogue as such, they worked brilliantly off each other.

Too many film-goers might write this film off because of Wright, and worry he cannot deliver in the horror genre, but he does, while adding political undertones, colour, and truly gorgeous scenes. 

TV: Impeachment

Sarah Burgess brings us a gripping account of the Clinton-Lewinsky scandal

Joseph Silke

Communications Manager, Bright Blue

Only one year since Donald Trump left Washington, bookended by the attack on the Capitol and his second impeachment by the House of Representatives, revisiting the infamous Clinton-Lewinsky scandal in *Impeachment: American Crime Story* (2021) is a reminder that corruption and conspiracy, indeed charges of criminality, are nothing new to the American presidency.

In the wake of the Me Too movement both in the United States and the United Kingdom, however, it is a story worth examining with fresh eyes.

The series is a 10-part deep dive into the affair of President Bill Clinton (Clive Owen) and White House intern Monica Lewinsky

(Beanie Feldstein), and the explosive scandal that followed and led to Clinton's own impeachment. He was only the second President in history to be impeached, following Andrew Johnson, with the third being Donald Trump.

“More of the Clinton couple together would have been welcome, as their relationship always makes for fascinating drama

Sarah Burgess continues the docudrama anthology format of *The People v. O. J. Simpson* (2016) and *The Assassination of Gianni Versace* (2018). The criminal stakes are set from the opening scene, in which a shaken Lewinsky is detained in a hotel room

by an intimidating suite of federal agents there to interrogate her about her relationship with the President.

That vulnerability is at the heart of the series, and after a standout performance in Olivia Wilde's exceptional comedy *Booksmart* (2019), Feldstein delivers a nuanced and genuinely sympathetic performance as Lewinsky. She doesn't always help herself, and you will cringe with frustration, but you will keep rooting for her, particularly as the story reveals more about her troubled life before the White House.

The political context is one of a Clinton Administration under siege. Led by Independent Counsel Ken Starr (Dan



Bakkedahl), the President's litigious enemies, including some familiar faces like Ann Coulter (Cobie Smulders) and Brett Kavanaugh (Alan Starzinski), are determined to use any means necessary to remove him from office, with little regard for the women they are using to get there.

It is from inside this tinderbox that scorned civil servant Linda Tripp (Sarah Paulson) emerges to light a spark from the inside. Tripp is a total ogre. Rarely does a character possess no redeeming qualities whatsoever, but there is nothing likeable about her. Her desperation for relevance and revenge after being shuffled out of the White House leads her to shamelessly betray the one person who can bear to be around her, her young friend Lewinsky.

It's a masterful performance from Paulson, but credit must also go to the costume and makeup department for nailing

the likeness to the real Tripp. There has been some controversy around the use of a fat suit, but there's no denying that she looks and sounds the part.

In fact, the cast looks and sounds superb across the board, with striking likenesses achieved across the ensemble, including for Owen as President Clinton, who nails the distinctive Arkansas accent, and has real gravitas and charisma on screen. Yet there is a sensitivity there too, such that you will feel tempted to forgive some of his terrible behaviour.


After only a brief appearance in the first episode, we finally get significant screen time for Hillary Clinton (Edie Falco) in the final few instalments.

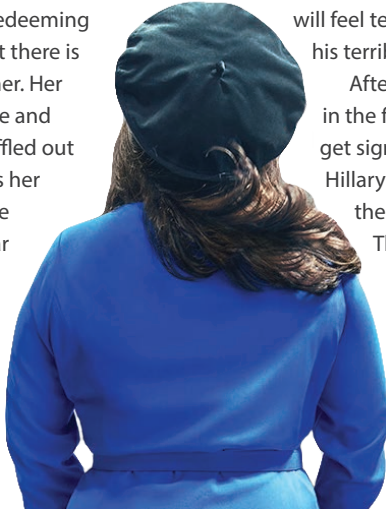
The depiction of Clinton, unable to leave the man who has humiliated her in front of the world, overlaid by Tammy Wynette's *Stand by your man* is a particularly memorable moment.

The series tends to

balance its characters well, keeping the narrative fresh and engaging, but more of the Clinton couple together would have been welcome, as their relationship always makes for fascinating drama.

The character of Bill Clinton is clearly a deeply flawed man, who is adulterous at the very least, but the allegations of serious sex crimes also feature. The allegation of harassment by Paula Jones (Annaleigh Ashford) is a main plot point, and the allegation of rape by Juanita Broaddrick (Ashlie Atkinson) is also riased. Unsurprisingly the series makes no firm conclusion about the President's guilt or innocence in either case.

What the series does well is highlight that the Clinton-Lewinsky scandal wasn't merely a political drama, it was a peronal ordeal for many of those it touched, particularly the vulnerable women involved. President Clinton was acquitted in the Senate and would complete his second term, but his accusers had their lives derailed forever. If you haven't seen it, I recommend Lewinsky's brilliant TED Talk on 'the price of shame'. It's well worth your time. 



Become a member of Bright Blue

Becoming a member of Bright Blue enables you to support and partake in the championing of liberal conservatism.

You will be an official part of Bright Blue's network – invited to all our events and conferences, with the opportunity to meet a wide range of people who share Bright Blue's positive and open-minded view of politics. You will also have the opportunity to contribute ideas on policies and strategy in various ways – in debates, on our blog and in our magazine.

Join today and receive:

- A special members pass for the annual Bright Blue Conference
- Access to members meet-ups with eminent guests
- An exclusive members-only reception each year with high-profile speakers
- Hard copies of all our books and magazines





Decarbonising Rural Britain

There are over 2 million rural, off-gas grid homes and businesses, where over 4.5 million people live and work.

Government wants these homes to be amongst the first to transition to low carbon heating from 2026, and from 2024 for some businesses, well in advance of properties on the gas grid. Swapping boilers for electric heat pumps will currently cost the average off grid home £12k, with government support unavailable for everyone.

100,000s of rural homes are 'hard-to-treat' and may be unsuitable for heat pumps, with only 3% at EPC C or higher.

BioLPG is already being sold in Britain: a renewable, low carbon gas, particularly for 'hard-to-treat' homes and businesses.



Rural Communities Need Affordable Choices

- BioLPG supports the low carbon heating transition, as a drop-in solution for existing LPG boilers as well as in hybrid heat pumps systems
- With government support, it can help more homes unable to transition to a heat pump, due to cost, technical or planning constraints
- BioLPG offers an affordable transition to low-carbon heating for homes and businesses