

S A GREENER WORLD

POSSIBLE?



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PRODUCTION & DESIGN: SOFIE JENKINSON

THANKS TO: CLIFFORD SINGER, BECKY MALONE, FERGAL O'DWYER, SAM READ & IOANA SIRCA

PRINTED ON RECYCLED PAPER BY: RAP SPIDERWEB

THE ZINE IS FULLY RECYCLABLE IN YOUR HOUSEHOLD RECYCLING

PUBLISHED BY NEW ECONOMICS FOUNDATION

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A FORK IN THE ROAD

ver the last few years there's been a transformation in how the public thinks and talks about the climate crisis. Thanks to the work of a new wave of activists, spearheaded by the student climate strikers,

it seems like the British public and politicians are finally waking up to the dangers of our addiction to fossil fuels. But with the UK hosting Cop26, the UN climate summit, this month, mainstream attention is on all the wrong things.

After a summer of wildfires in the western US, floods in London, and deadly heatwaves in Pakistan, the International Panel on Climate Change (IPCC) issued its starkest warning yet: the climate crisis is already happening as a result of how we live and power our economies. Governments from 197 countries will meet in Glasgow soon for the UN climate talks, in hopes of presenting plans to limit global heating to no more than 1.5C. Our own government has set a legally binding target to slash our greenhouse gas emissions to net zero by 2050.

But despite all this, we can't seem to shake the idea that we can solve the climate crisis with an easy fix – whether it's setting netzero targets without the plans or investment to back them up, flashy new technologies like hydrogen power, or faith in the ability of the market to resolve any sticky problems.

Alongside cutting our greenhouse gases, this government has also made 'levelling up' disadvantaged communities around the country one of their flagship missions. But the government isn't connecting the dots: we can't level up and 'build back better' from the pandemic without thinking seriously about the climate crisis.

The problems we are facing are big and systemic. Right now, we're looking down the barrel of global climate breakdown.

The climate crisis is a symptom of a broken economic system. This system has also delivered a decade of wage stagnation – and last week the Institute for Fiscal Studies reported that we're in for a decade more. Our economic system has let people slip through the cracks during the pandemic, left millions feeling squeezed and created rising poverty and inequality. Fixing an economy-wide problem will take rewriting the rules of the

economy itself. Yet from the government to the media, all the climate talk is about netzero targets and techno-fixes – not the things we really need to change.

If we don't intervene to counter this narrative, we're in danger of trying to solve the climate crisis by channelling all our energy into a system which will continue to funnel wealth towards a small minority, violently extract natural resources from the Global South, and only keep a small sliver of the global population safe from global heating.

The good news is, at the New Economics Foundation (NEF), alongside other progressive organisations, we have a plan! The Green New Deal is an economywide plan that puts the climate crisis and people's living standards at the top of the government's agenda. In the face of climate breakdown, it is a practical, bold solution that will not only curb the worst effects of climate breakdown, it will transform our society into one where everyone can thrive. We need a mass reprogramming of the economy so that it works in the interests of people and the planet. If we take the right action on the climate crisis, we can create a society that meets our needs and benefits us all.

That's what we are exploring in this issue: how we can navigate the murky waters of greenwash and distraction, and figure out how we should really be thinking about the climate crisis.

It's difficult to talk about the climate, something so invisible and yet all around us. Our climate is not just something which happens'up there' in the sky, but changes to it ripple out through our social, economic and cultural lives. In an extract from her new book, Alice Bell demonstrates how historical changes to the climate have impacted our ancestors, from colonial expansion to the value of Stradivarius violins. Josina Calliste also looks to the past for insights, connecting how Britain's imperial ambitions affected our ability to produce food without hurting the climate.

Taking the crisis seriously means thinking about how all aspects of our lives will have to change. Luke Murphy talks us through how the public feel about their lifestyles needing to change. In the Conversation, Adam Corner and Greg Cochrane discuss the main climate

challenges facing the music industry, from the environmental impact of festivals to the fossil fuels powering digital streaming services. And Joycelyn Longdon reviews Consumed by Aja Barber, a new book which stares the fashion industry in the face and explains how we can use our citizen and consumer power to stop its environmental and human harms.

A lot of hype has been built around Cop26, the UN climate summit hosted in the UK this month. But what actually happens at a UN climate summit? Michael Jacobs explains the ins and outs – and the important limitations of these massive international events. And Jonathon Porritt warns how putting all our faith in technological solutions is dangerous magical thinking.

The climate movement is diverse and fights on many fronts. Two of these fronts are included in this issue. Lucy Maxwell explains how taking big polluters to court could offer a way to compel them to take action. And Anannya Dayaparan reflects on her time in youth-led activist group Green New Deal Rising, who confront politicians in person, asking them to support the Green New Deal

bill in parliament.

Changing the rules of our economy so that it meets everyone's needs without trashing the environment we depend upon will be challenging, but we've included in this issue a few places to start. Head of NEF Miatta Fahnbulleh interrogates our government's levelling up ambitions to show how we can't hope to improve people's lives in this country without a Green New Deal. Aydin Dikerdem explains how we can upgrade Britain's housing so that everyone can come home to a warm, comfortable place which isn't powered by fossil fuels – whether we rent a flat or own a castle. And, after decades of industrial change, Rebekah Diski sets out why giving workers more power in our economy would prevent a repeat of the devastating pit closures of the 1980s in our next industrial transition: the one taking us to a zero-carbon, green economy.

If we take the right action on the climate crisis, we can create a society which meets everyone's needs while averting climate breakdown. We hope this issue is one good place to start.

Margaret Welsh, Co-Editor

A TURNING TIDE

As we square up to the climate emergency, politicians are starting to ruminate on how to get the public on board with the many changes that need to happen. **Luke Murphy** talks us through where the public are at, and the opportunities for politicians to work with the public to build a fairer and faster transition to a green economy



ast month the government released its Net Zero Strategy – the long-awaited plan for reducing the UK's emissions and tackling the climate crisis. The strategy talks of the government's intention to "go with the grain of existing behaviour and trends" when tackling the climate crisis – which is as shocking as it is overlooked. Imagine, for a moment, that this had been the government's pandemic response rather than imposing multiple lockdowns. Such a response would have provoked outrage and likely led to a swift change in policy or disaster, or both.

Chris Stark, the head of the government's independent Climate Change Committee (CCC), pointed to it as a significant gap and weakness in the strategy, rightly stating that it was "more of a design feature" than an omission. He went on to warn, somewhat understatedly, that such an approach made "the task bigger and...higher risk".

It's worth pausing for a moment to reflect on why, given the substantial threat posed by the climate crisis to our way of life and the enormous task that confronts the UK and countries around the world, the

government would make it any harder or put success at risk.

One answer that's sometimes proffered is that the public wouldn't wear it - they're simply not up for such shifts in behaviour, or so the argument goes. But this argument is just not borne out by the evidence. Recent surveys have shown that 80% of the UK

...the pandemic ought to provide useful instruction on what the public are willing to do in the face of a collective threat to our health and security

public are concerned about climate change. Crucially, this concern is being translated into a recognition that things must change – 80% of the people also believe the way we live our lives will need to change.

Moreover, the public show strong support for making changes themselves – 84% of British respondents to a recent survey by the Pew Institute said that they "were willing to make either some or a lot of changes to their lifestyle" to reduce the effects of climate change. Such sentiment is shared by both left- and right-wing participants (87% and 84% respectively). The polling aside, the recent experience of the pandemic ought to provide useful instruction on what the public are willing to do in the face of a collective threat to our health and security.

This is not to say that the government sees no role for the public. The Net Zero Strategy highlights the need for communication, trusted advice, and opportunities for the public to participate in and shape the government's climate plans. Yet the truth is the UK government has thus far done very little to engage the public or encourage participation – let alone to accelerate behaviour change that it has set



itself so clearly against.

Involving the public in the transition will be crucial, not least because the action needed to reduce emissions and protect the natural world is about to affect our daily lives more than ever. The progress the UK has made so far on reducing emissions has largely taken place in the background. The greatest strides in switching to renewable energy sources has affected those in the energy sector but it has not made a material difference to many beyond it. The pressing changes that must come next: what we eat, how we get around, and how we heat our homes, will be felt much more keenly by the general public. If we don't do this right, then we risk scuppering ourselves – people won't do it and they'll vote against it.

The *gilet jaunes* protests in France, triggered by President Macron's proposals to increase fuel tax, show the risk of public anger and resistance when policies are not perceived to fairly account for the challenges people face in their day-to-day lives.

Yet the *gilet jaunes* have gone on to campaign for green measures such as mandatory building insulation. These protests were not a rejection of environmental issues: they were about public trust, and how this is lost when policies seem disconnected from people's everyday priorities.

Here too we've seen a number of protests by those frustrated at a lack of action or corporate greenwashing, including the youth climate strikers who occupied the Science Museum, Insulate Britain and Extinction Rebellion. There are also specifically targeted protests like Stop Cambo which is taking action against a newly proposed oil field in the North Sea and Paid to Pollute, a group taking the government to court over tax breaks for oil and gas companies. Some tactics are more popular than others but the protests are cutting through into the day-to-day, raising the profile of the issues and with that, the urgency.

Moreover, the scale of action needed to tackle the climate and nature crises is nonnegotiable – there really is no negotiating with nature – but there are choices in where and when energy and investment is targeted. Involving the public in these decisions will lead to better, fairer outcomes. That means action must not only be about 'taking the public with us', but about

doing it together – giving more power and resources to people, more ownership over decisions *and* of the assets and benefits that arise from the transition.

The Institute for Public Policy Research's Environmental Justice Commission has run citizens' juries across the UK in Tees Valley and County Durham, the South Wales Valleys, Thurrock in Essex, and Aberdeenshire. We heard from these communities that people want fairness to be put at the heart of tackling the climate and nature crises. In the South Wales Valleys we heard how people wanted to be able to live a good life without needing to own a car. In Thurrock we heard how the community want planning decisions to benefit nature. In Tees Valley and County Durham our jurors told us that a one-size-fits-all approach to policy making wasn't good enough. In Aberdeenshire they argued that retraining costs for workers in carbon-intensive industries should not fall to those who can least afford them.

The commission put these jurors' views at the heart of its work, and proposes that the governments of the UK put the same premium on the thoughts, experiences,



Attempting to accelerate behavioural change amongst the public without also better communicating with, engaging, and involving them in decisions as well as giving them greater ownership over the assets that arise from the transition, is doomed to fail

and ideas of the public – the people without whom a fair transition just won't happen. Local communities bring practical knowledge from all corners of society, and they want to be involved in shaping decisions that affect them. And when communities are involved, the decisions are fairer, the outcomes are better and public support longer lasting.

To put this into practice the commission makes several recommendations. First is the proposal to guarantee that no climate and nature recovery plan should be created without public involvement. To enable this, it argues for the creation of a permanent citizens' assembly to scrutinise the government's progress and support ongoing policy development. It also calls for regional and local permanent citizens' assemblies which would provide an efficient way of engaging the public in the response to the climate and nature crises alongside other

Second, to respond better to local needs and improve the relationship between decision makers and the public, the commission calls for all parts of the UK to at least match Scotland's commitment to allocate 1% of local government funding through participatory budgeting – a process which has been shown to increase people's trust in local decision-makers, their sense of belonging to their community, and improve social determinants of health.

Third, the commission calls for the extension of community ownership so that local people have a stake in, and control over, the transition – for example, community-owned energy and nature assets. This includes a target for one third of new onshore renewables in England to be under community ownership by 2030.

Fourth, the commission also calls for a new'one stop shop' called GreenGO - a unifying brand under which financial support and high-quality advice can be marketed to and accessed by the public. This scheme would ensure that the means to act are available to everyone and accessible on their high streets as well as online and via a dedicated phone line.

The other thing that runs like a thread through the commission's work is the recognition that behavioural change isn't just desirable but necessary, contrary to the view of the current government. The UK's strategy, along with many other countries', implicitly relies on technological solutions that are either unproven or non-existent. This simply won't wash – the gamble is too big, the task too herculean. Consequently, the commission makes multiple recommendations on how to accelerate behavioural change in everything from our eating habits to the way we travel.

Hopes of a realisation within the current government that there is merit in working with the public to change behaviour were briefly revived when the government published a document on behavioural change alongside the Net Zero Strategy. In relation to aviation for example, the

now deleted document said "developing interventions to reduce the environmental impact of aviation is critical, both through a technological and behavioural lens". However, hopes were quickly squashed when the document was removed and the government released a statement which said"this was an academic research paper, not government policy. We have no plans whatsoever to dictate consumer behaviour in this way."

The government is right in one sense. Attempting to accelerate behaviour change amongst the public without also better communicating with, engaging, and involving them in decisions as well as giving them greater ownership over the assets that arise from the transition, is doomed to fail. But then only a government that has little intention of involving the public in the transition would see accelerating behaviour change as dictatorial.

Perhaps the answer isn't to abandon the idea of behavioural change in favour of magical technologies, but is instead to bring the public in. The research – both ours and that of many others – suggests that the public aren't raging against bolder change but instead have an appetite for it. Maybe it's time for the government to stop worrying about whether it's dictating to the public and to spend more time catching up with it.

Luke Murphy is head of IPPR's Environmental Justice Commission and their energy, climate, housing and infrastructure team

FURTHER READING

From the Environmental Justice Commission: Fairness and opportunity: A people-powered plan for the green transition – Final report of the Environmental Justice Commission (2021). http://www.ippr.org/research/ publications/fairness-and-opportunity From Involve: 'Citizens' assembly tracker' (2021). https:// www.involve.org.uk/citizensassembly-tracker

From IPPR: Tees Valley and County Durham climate and fairness panel: Briefing and juror recommendations (2021). https://ippr.org/research/publications/citizens-juryteesvalley-county-durham

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From IPPR: Thurrock climate and fairness panel: Briefing and juror recommendations (2021). https://www.ippr.org/ research/publications/citizens-jury-thurrock

From IPPR: Aberdeenshire Climate and Fairness Panel: Briefing and juror recommendations (2021). http://www. ippr.org/research/publications/citizens-jury-aberdeenshire

WHAT IS COP?

he UN climate change conference, Cop26, takes place in Glasgow over the next few weeks. Running from 31 October to 12 November, the conference will be the first major UN climate summit since the Paris Climate Agreement was signed in 2015. There's never been a Cop in the UK before, and this is a particularly important one.

Yet it's hard for outsiders, and even most people attending, to understand exactly what happens at a Cop (short for 'conference of the parties'). And Cop26 will be particularly puzzling.

The best way of understanding it is to think of three concentric circles. At the core is the 'conference of the parties' itself. This is the annual meeting of all the countries which are signatories ('parties') of the international treaty known as the UN Framework Convention on Climate Change (UNFCCC). There are 196 of them, plus the EU. At the conference the parties negotiate the international rules for tackling the climate crisis.

In most years the Cop consists of technical negotiations of little interest to the ordinary citizen. But occasionally a whole new international agreement is signed, like the Kyoto protocol (1997) and the Paris agreement (2015). This year the Cop won't do that, but it will see governments making new climate commitments under the Paris agreement.

But a Cop is also more than this. In the middle circle at Cop is a global conference for every kind of organisation and business with an interest in the climate crisis. These don't attend the official conference, though some particularly nerdy activists are allowed in to observe the plenary sessions. Rather, they come to hold fringe meetings, sell their wares and network. With this year's pandemic-related international travel restrictions, there will be fewer attendees than normal, but several thousand are still expected.

And around the outside of these two events sit the public and the demonstrators, who aren't allowed inside the security cordon but seek to make their presence felt on the streets and in the media, and thereby influence what happens inside.

In the first week of a Cop the official conference is generally quite dull, so most attention is taken up by the fringe meetings and demonstrations. But in the second week – when government ministers take over the negotiations from diplomats and civil servants – it gets a bit spicier.

This year's Cop will be particularly spicy, because under the 2015 Paris climate agreement (a legally binding international treaty) this is the moment countries must make new and stronger commitments to climate action. The Paris agreement requires this strengthening every five years (it's six years in practice because Cop26 was postponed from 2020 due to Covid).

And with the climate crisis now occurring before our eyes, the need to take stronger action has never been more urgent. Countries need to cut their emissions faster. And the rich ones need to provide more money to help the poorer ones adapt.

But the puzzling thing about Cop26 is that countries won't actually be making their commitments in Glasgow. Under the Paris agreement each country decides what it will do for itself. And almost all countries make their announcements ('Nationally Determined Contributions' or NDCs) well in advance. Most of the largest countries have already done so, including the EU, US, UK and Brazil. China and India have got around to it yet but are

also likely to announce their NDCs before the conference itself.

So what is there to actually negotiate about? The answer is not much. There are more rules to agree, particularly how far rich countries and companies can'buy' other countries' emissions reductions in the so-called 'carbon market'. But compared to the core issue of country commitments, these rules are largely a sideshow.

And yet we can still expect fireworks, because we already know that country commitments are not enough. Even before they are all in, it is clear that adding together all the countries' pledges will not cut emissions enough to meet the Paris aspiration of holding global heating to 1.5C above pre-industrial times, or even the weaker goal of 2C. And the financial promises may not achieve even what was agreed in Paris (\$100bn a year from wealthy countries to support poorer countries), let alone strengthen it.

This is what we might call the Great Glasgow Paradox. Even before the conference starts, it looks as if it's going to fail on the two biggest issues. But the negotiating agenda will not actually be about those failures at all.

So what will happen? Three things seem likely. First, the poorest and most vulnerable countries will kick up a hell of a fuss. Cops are unusual among international gatherings because – as the 'victims' of climate change – poor countries carry considerable clout. And they will exercise it. Expect them to use the conference floor to denounce the inadequacy of the commitments made by larger and richer countries. They may even walk out in protest: it has been done before.

Second, as the host nation, the UK government will try to get specific commitments agreed in the conference communique. They are pushing hard on getting countries to agree to end the financing and building of coal-fired power stations, phase out petrol and diesel vehicles faster, slow deforestation, and mobilise private finance. They want to show that emissions will therefore be cut further than national pledges might suggest.

Third, world leaders will turn up. Boris Johnson will chair a summit for prime ministers and presidents at the opening of the conference. This is where it will get really interesting. Leaders don't normally go to Cops: it's usually left to climate and environment ministers. But this being a big one, President Biden has said he will attend, and that makes it likely the rest of the world's leaders will too. And then anything could happen. Last time leaders showed up at a Cop, in Paris in 2015, it helped create the momentum for a deal. But the time before, in Copenhagen in 2009, it left the conference in chaos and

What will happen this time? Will harmony break out? Can leaders grasp victory from the jaws of defeat? We don't know. And right now, nor do they. That's what makes Cop26 so uncertain, and so important.

Michael Jacobs is professor of political economy at the University of Sheffield and was climate adviser to former prime minister Gordon Brown.

FURTHER READING

From Climate Action Tracker: CAT Emissions Gap (2021). https://climateactiontracker.org/global/cat-emissions-gaps/

OUR BIGGEST EXPERIMENT



In an extract from her book, Our Biggest Experiment, Alice Bell deftly shows how historical changes to the climate have impacted our societies, and what this might mean for our future

ne of the many slippery things about the climate crisis is that it doesn't hit people with a clearly identifiable thud. It creeps up gradually over time and does so mixed in with all sorts of other aspects of our world; other problems humans have made and hazards that were already waiting for us. This mixing with other problems is partly what makes the impacts of climate change so hard to predict, but it is also what makes them so toxic. Climate change takes a host of other social, economic and environmental issues, and turns up the heat. It adds new hazards to trip over, squeezes already pressurised systems and further exhausts already depleted resources. As climate scientist Myles Allen puts it: 'People ask me whether I'm kept awake at night by the prospect of five degrees of warming. I don't think we'll make it to five degrees. I'm far more worried about geopolitical breakdown as the injustices of climate change emerge as we steam from two to three degrees.'

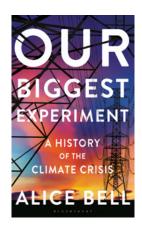
The American state of California offers a good example of how the climate crisis tightens the grip of other injustices. Teams of prison inmates - many on minor drug offences and including youth offenders are sent to fight wildfires for a dollar an hour and the promise of credit towards early parole. This has happened since the 1940s, but as wildfires get worse, the state relies more and more on this cheap, captive workforce. It's been estimated the program saves the state nearly a hundred million US dollars a year. And that's just the tip of the speedily melting iceberg. We can't tell for sure if the 2014-16 Ebola breakout in West Africa was caused by climate change shifting bat populations, but it's likely we'll see more of these interactions in the future as the pressures surrounding rising temperatures push people and other animals closer together. The same can be said about mosquito-borne diseases like Zika or malaria. There's no evidence linking climate change to Covid-19, but it could well mean we see more pandemics, deadlier ones, spreading faster. There's also plenty of research showing that as temperatures rise, so do instances of violence, be that rape, domestic violence or civil war. And, in case you were wondering, Harvard researchers reckon climate gentrification has been discernible for a few years already too, as the rich push the poor out to riskier land.

Greenhouse gas emissions can go down as well as up. As Mark Maslin and Simon Lewis stress in their book on the anthropocene (the geological era characterised by the impact of humans), The Human Planet, there is a noticeable dip in atmospheric carbon around the start of the seventeenth century. Maslin and Lewis trace this back to the colonisation of the Americas a century or so before, or more precisely the deaths of 50 million indigenous people. The dead don't farm and so the unmanaged land shifted back into forests, which in turn inhaled enough carbon dioxide for it to be in bubbles of air from the time preserved deep in the polar ice caps. This regrowth was short lived. European settlers in North America soon got to farming for themselves, not to mention coal mining, inventing kerosene and laying railway tracks, highways, and oil and gas pipelines. Still, this temporary drop in carbon dioxide levels might well have played a role in the so-called'little ice age', a series of cold snaps between, roughly, 1350 and 1850. This little ice age most likely had a mix of causes dust from volcanoes intercepting sunlight, for example – but the regrowth caused by colonialism of the Americas might well have been one of them; human forces combining with those from other parts of nature to shift climates, just as they do today.

The little ice age wasn't cold enough to be a true ice age, but it was cold. The carnivalesque end of this involved frost fairs, puppet shows, ox roasts and children playing football on the thickly frozen ice. There are stories of frozen birds falling from the sky, Henry VIII sleighing

between palaces, New Yorkers walking from Manhattan to Staten Island and even an elephant being led across the Thames. It's one reason Stradivarius violins are so prized; trees during this period took longer to mature in the cold, making denser wood and thus a very particular quality of sound. The darker side of this mini ice age was people shivering to death. Whole villages in Switzerland were destroyed by growing glaciers. Prolonged cold, dry periods had an impact on crops and livestock. People starved. Some environmental historians spin this as a warning from history, tracing the changes in weather to a rise in antisemitism and the witch-hunts as well as several wars. There were winners – there are always people who can make an opportunity out of a crisis – but only off the back of a lot more suffering elsewhere. People in the mid-seventeenth century believed they were living in truly awful times. And, unlike pretty much every other generation that's made that complaint, they had a point. Still, that's nothing compared with what could be in store for people born in the twenty-first century.

This is an extract from Dr Alice Bell's Our Biggest Experiment: A History of the Climate Crisis (Bloomsbury Sigma), available in hardback and ebook. Alice is a climate campaigner who co-runs the climate change charity Possible, writer, and author of Our Biggest Experiment: A History of the Climate Crisis (Bloomsbury Sigma).



RISING VOICES



Anannya Dayaparan was tired of our government not taking the climate emergency seriously. She was searching for a way to make a difference – and discovered Green New Deal Rising, a new youth-led movement fighting for climate justice in the UK

became interested in the climate crisis while I was studying for my civil engineering degree, and I took a module on sustainability. I discovered that the construction industry accounts for over 38% of energy-related carbon dioxide emissions, which contributes to the dangerous heating of our planet.

The UK has become 0.9C warmer and 6% wetter in the last 30 years. We need to curb carbon emissions or else the UK and the rest of the Earth will continue to undergo disruptive climate change. In the UK, this means increased flooding, more heatwaves, and unmanageably hot temperatures. Governments around the world have committed to limiting global temperature rise to 1.5C. Even though the UK parliament has declared a climate emergency, scientists from the Intergovernmental Panel on Climate Change (IPCC) have expressed their concern that the government is not acting fast enough or at a big enough scale.

I was disappointed in our government for not taking the climate emergency seriously. Without action, future generations will face new challenges for survival, like frequent and intense droughts, storms, heat waves, rising sea levels and melting glaciers. I decided I no longer wanted to be a passive observer – I wanted to take action. I turned to my university's sustainability team to find opportunities to make a difference and there I found the opportunity to join Green New Deal Rising.

I hadn't heard of this movement before, but I was intrigued by their active stance on the climate crisis. Green New Deal Rising (GND Rising) is both a climate activism organisation and a concept. It is a group of young people rising together for climate justice. They are calling for parliament to adopt a plan for addressing the climate crisis called the Green New Deal bill (its formal name is the decarbonisation and economic strategy bill). The bill is a 10-year, gamechanging plan to address the climate crisis, the collapse of ecosystems and wildlife, and the destructive inequality in our society. The

proposed bill would shake the system to end our dependence on polluting fossil fuels and speed up the actions we need to limit the effects of climate breakdown on our lives and our environment

I was offered the opportunity to join GND Rising's youth leadership training programme. This was my chance to take action rather than sit there and wait for the government to come up with a proposition to tackle the climate emergency. The training programme was an inspiring and refreshing experience where I met likeminded young people who shared the same passion I had to fix this crisis. They also recognised that time is running out and that if we do not act collectively soon, our Earth as we know it will cease to exist.

As youth leaders of GND Rising, our aim is to start gaining political and societal support for the Green New Deal bill. To ensure the bill is passed through parliament, MPs across the nation need to be aware of GND Rising and what the bill entails. The strategy is to challenge MPs to pick a side – to declare whether they are willing to sign the bill or not. We are challenging to MPs to act or to reveal their unwillingness to take the climate crisis seriously. The training equipped me with the information and skills I need to challenge MPs according to their political affiliation.

Following the training weekend, along with other trainee youth leaders I attended a climate change picnic in Swansea with the Swansea West Labour MP, Geraint Davies. The purpose was to encourage him to be brave and back the bill – and we succeeded! Geraint Davies discussed and understood our concerns with climate breakdown. He recognised the importance of young people like us being involved a movement that spearheads change to stop the climate crisis and build a world in which we can thrive. He heard us and showed active support for the Green New Deal bill by posting an image of us with him holding the bill on his Twitter feed. It was an adrenaline rush for me. It felt like, as a member of

GND Rising, I had the power to create change in combating the climate crisis. I could see how, as a collective, we were all committed to taking the scale of the climate crisis seriously and do whatever it takes to win, and these MP challenges are just the beginning of the real action.

I feel so proud to part of an organisation like GND Rising that refuses to be silenced, understands the gravity of the climate crisis, and has an active solution. GND Rising will continue to fight until climate justice is achieved for all. I am excited to push the cause forward by gaining more political and public support, and recruiting more organisers. I hope that if you are a young person reading this, you will be inspired to join GND Rising too.

Anannya Dayaparan studied civil engineering at Swansea University and is one of the youth leaders of Green New Deal Rising.

Green New Deal Rising is a movement of young people (16-35) across the UK fighting for climate justice and a Green New Deal. Find out more and get involved by joining a welcome call: www.gndrising.org/events

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BARTH, WIND AND FIRE



Industrial change in the UK is associated with the smashing of the miners' strike of the 1980s and the many mine and factory closures since, from which many communities are yet to recover. It's no wonder that fossil-fuel workers are sceptical about plans for a green industrial revolution, writes **Rebekah Diski**

ast month, over 500 workers at the GKN car factory in Birmingham voted to strike following news that Melrose, GKN's owner, planned to close their plant and move jobs overseas. Strike leader Frank Duffy said that striking was a last resort after bosses refused an alternative plan that workers developed to manufacture components for electric vehicles instead of traditional petrolor diesel-powered combustion engines. To meet its climate targets, the UK has committed to ban the sale of internal combustion engines from 2030. GKN has the capability to produce electric vehicle components to support this shift, and has even received government innovation funding, but their plans to move overseas won't translate into green jobs for workers in the Birmingham factory.

A few miles away, and almost 50 years earlier, another group of workers had presented a similar plan to their bosses at Lucas Aerospace and the then-Labour government. In the mid-1970s, threatened with mass redundancies, workers at 15 Lucas Aerospace plants developed what became known as the Lucas Plan to save jobs and reorient production towards socially valuable products. Instead of producing hardware for publicly-funded military contracts, workers argued for government support to produce kidney dialysis machines, wind turbines, heat pumps and solar and fuel-cell technology. Climate change was not yet the emergency it is today, but against the backdrop of the Cold War and the peace and anti-nuclear movements, workers at Lucas Aerospace were thinking about how their skills could contribute to a safer world. In rejecting this worker-led plan, the company closed the door on a just transition for those workers and ushered in a period of restructuring and job losses that contributed to the decline of manufacturing in the UK.

The Lucas Plan was the very definition of what would become known as the 'just transition': the idea that workers and communities must be protected during industrial change – whether forced by globalisation, automation or the climate crisis – and are well placed to determine what that process should look like. The just transition concept emerged from the US trade union movement between the 1970s and 90s, when unions argued for support for workers impacted by, first, disarmament and, later, environmental protections. Since then it has been variously defined: narrowly, as compensation and training for workers in fossil-fuel industries, or broadly, as a set of policies to smooth the effects of cutting carbon emissions on the poorest in society.

The climate crisis, and the need to shift to a low-carbon economy, has enormous implications for workers, many of whom are understandably concerned about their livelihoods. After all, how many examples are there of a just transition in practice? Germany and Spain are moving away from coal through negotiated just transition agreements with unions, civil society and businesses. But these are limited examples, focused on one industry rather than wholesale economic transformation, and are happening in countries with a stronger tradition of social dialogue between unions, business and government, and greater union power than in the UK.

Here in the UK, our most enduring recent experience of industrial change is the deindustrialisation of the 1980s and 90s, within which the closure of the coal pits, the smashing of the miners' strike and the loss of over 250,000 mining jobs is the exemplar of an unjust transition. Many of those

communities are still dealing with the longterm impact of industrial decline, with a rise in unemployment and precarious work, and persistently poor health outcomes. Still disproportionately reliant on carbonintensive industry – from steelmaking to gas plants – it's not surprising that some are sceptical that this time will be different.

And if you look at what most governments and businesses are doing right now, that scepticism is valid. Despite the flurry of 'net-zero' commitments and, more recently, the copy-pasting of just-transition language into government statements and business strategies, the world is still on course for a catastrophic temperature rise that will imperil workers and the planet they live on. G20 countries have subsidised fossil-fuel projects by £2.4tn since the international Paris agreement was signed at a UN climate summit in 2015. Meanwhile, unjust transitions continue apace. Last year, thousands of jobs were lost as a result of crashing oil demand, the widespread use of fire-and-rehire practices as private companies protect their pandemic-dented profits at workers' expense, and missed opportunities to create good, green jobs in the growing renewables sector.

Like promises to reach net-zero emissions, just transition has been effectively co-opted by interests keen to demonstrate that they are part of the solution while shoring up the status quo. We have reached a stage of greenwashing where oil giants BP and Shell proclaim their net-zero targets while expanding fossil-fuel exploration. Even when companies also move to profit from the renewables boom, they do so with the same predation that has characterised their fossil-fuel operations for the last century. Relentlessly extracting resources and labour where they are



cheapest, with little regard for workers or their environment, they have no interest in a genuinely just transition.

Climate justice activists have argued for a justice transition, arguing that the 'green industrial revolution' already relies on exploiting the Global South for its resources, including minerals like lithium, cobalt and copper which are crucial for renewable energy technology. Most transition plans envisage simply swapping fossil fuels for renewable energy while leaving an inherently exploitative and unjust economic system intact. This perpetuates unfair distribution, in which billions don't have access to electricity at home and huge tracts of their lands are colonised for food, products or carbon offsets for wealthier countries. A just transition for workers in the Global North based on the growth imperative that caused the climate crisis is not really just. For this reason, climate justice demands a transformative global Green New Deal that reduces demand for energy and materials, prioritises public ownership, and protects communities and ecosystems in the Global South and North. Within this, the just transition is an opportunity to transform the injustices at the heart of the climate

crisis: not just for high-carbon workers but for everyone who is oppressed by contemporary social and economic relations.

Back in Birmingham, private equityowned GKN wants to profit without retaining relatively well-paid workers in the UK. So workers like Frank Duffy are taking matters into their own hands - and they're not the only ones. In the US, the biggest mining union has recently called for a just transition that would see members supported out of the mining industry and into renewables. In France, energy unions are fighting off the attempted privatisation of state-owned EDF and arguing for publicly-led decarbonisation. Organisations like the New Economics Foundation and the Campaign Against Climate Change have called for one million climate jobs, and Green New Deal campaigns are making the case for tackling the climate and inequality crises together, with demands for good green jobs in low-carbon industries and social infrastructure like care work.

Connecting these dots requires political education and deep organising in workplaces and in every struggle against class, racial and gender injustice. These are David and Goliath fights, with workers and frontline communities pitted against big business and its defenders in government. Those interests are increasingly adept at co-opting the language of just transition and sowing division between and among workers and grassroots movements. But one thing is clear: if a just transition happens, it will be won by building power and solidarity from below rather than delivered from above.

Rebekah Diski is a senior researcher at the New Economics Foundation and leads its just transition work

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THIS LAND IS



Who owns land in the UK influenced the industrial revolution and British colonial ambitions. And now it's a vital part of addressing the climate crisis. **Josina Calliste** explains what the land beneath our feet has to do with racial and climate justice.

and is ultimately about power. Those who own the land decide what to do with it, who can access it, and how they are allowed to behave on it. Historically, the more land you owned the more political clout you had in parliament, the more wealth you could accumulate and, perhaps, the more desire you had to acquire greater swathes of land at home and abroad. The accumulation of land and power led to the mass-enclosures (a process whereby common land is taken into private ownership) in the UK from the mid-18th century (although informal practices of enclosure had been taking place for hundreds of years before). These brought more and more of the country out of common ownership into private ownership, forcing people off rural land and into the towns and cities to fuel the burgeoning industrial revolution.

At the same time, the colonisation of land abroad, and the violence towards indigenous populations often involved, brought more and more of the Earth's surface under British control (alongside other European colonial powers). Extraction of resources, 'improvement' of the land to make it yield ever more goods, and the capture and use of human beings to generate bigger profits through enslavement are all deeply interwoven processes. Racial injustice that persists today has its roots in the colonisation and enslavement of peoples across the world by the ancestors of many living in the UK today. Over time, the exploitation of the land and those

forced to labour upon it, using the deeply damaging agricultural practices of the plantation, harmed ecosystems, ruined soils, and continue to have devastating climate implications today. If we want to repair and transform the harm that has been done to the land, to the climate and to racialised peoples we need to connect struggles for land, climate and racial justice.

Driven by the climate anxieties that a lot of us feel, and the sense that any hope in our future lies in a better relationship with

...the exploitation of the land and those forced to labour upon it, using the deeply damaging agricultural practices of the plantation, harmed ecosystems, ruined soils, and continue to have devastating climate implications today

the land, ecologies and knowledge of how to grow food, I co-founded Land in our Names (LION). We are a grassroots Blackled collective committed to reparations in Britain by connecting land and climate justice with racial justice. It is important to articulate issues related to food, land and farming in Britain from our perspective as Black people and people of colour, and from a racial justice lens. We stand in solidarity with the essential work of those on the frontlines of climate injustice – the land defenders, the communities fighting air pollution, and the small-scale farmers battling'green-led revolutions' led by Bill Gates and others.

As LION, we take a reparative approach to agriculture and food production. Reparations are primarily about repair and combining the repair of the land with the repair of people. A lot of the communities we are supporting are from formerly colonised countries, people who were enslaved, and peoples whose ancestors built the wealth of Britain. We are minorities in Britain, and trying to build positive identifications using imperfect terminology around race and racialisation. We want to get more Black people and people of colour into agriculture, from urban community gardens to farming in rural areas. This means addressing everything that comes with that - from rural racism to land ownership and unequal access to resources.

We know that we need to understand regenerative farming, which sustains the natural world rather than extracts from it,

in order to address climate breakdown. We know that three of the least diverse - the whitest - sectors in Britain are the agriculture, horticulture and environment sectors. We know that a lot of the people who own the most land in Britain have inherited wealth built up through economic activity in the former colonies. And we know that Black communities and communities of colour in Britain are dispossessed from the land in their countries of heritage. We arrived in Britain with knowledge and experience of growing food harmoniously with the wider ecosystem but often have not been able to express or pass on those skills, outside of the few people with private gardens, allotments and communitygrowing projects. Our Rootz into Food Growing research suggests that Black and other social enterprise food growers of colour are often underpaid, exploited, or treated as incompetent.

The impact of land use, especially in farming, has a dramatic impact on our climate. You can't have climate justice without land justice. In a report published by the Landworkers Alliance (LWA), it was estimated that the UK food system is responsible for 30% of our emissions. This encapsulates the full impact of food and farming, from agriculture to transportation, refrigeration to packaging and waste, as well as land use overseas, including deforestation and cultivation of pasture. The report recommended a shift to farming practices that would both regenerate soils and reduce emissions: the development of a more

localised food system and application of ecological principles to farming techniques that will ensure resilience in the food system as the impacts of the climate crisis accelerate. This would mean transitioning away from the current industrial agricultural system to more small-scale farms and farming practices that improve soil quality and ecosystem health.

At LION we are working to build an anti-racist food and farming movement. We are building an evidence base around the barriers to access to land and food in Britain. We are also articulating the right Black communities and communities of colour in Britain have to land access and ownership of land that can be used for food growing and other regenerative ecological practices. These practices might be for health benefits, spiritual reasons, or the revival of more communal ways of living with the land that we know existed in pre-colonial times – from the kinship-based commons found in West Africa, indigenous practices that support flourishing biodiversity, and nomadic communities found the world over. We fundamentally believe in the principle that we all should steward the land and have a positive impact on the world. We are supporting new growers and Black growers and other growers of colour in particular who have historically been dispossessed of resources. The ways we do this include offering grants for growers, building networks and movements of support and solidarity, and changing the narratives, representation and realities of who can

access land to grow food in ways that tend towards climate, land and racial justice.

Due to the historic interconnections of racial injustice, unequal access to land and the climate crisis, we at LION call for land as reparations – to repair the injustices of the past that live on in the present. Support us in this work, join with us, so that we might all dwell, grow, play and heal on land in our

Josina Calliste is a health professional, community organiser, and co-founder of Land in our Names (LION), a Black-led collective addressing land inequalities affecting Black people and people of colour's ability to farm and grow food in Britain.

This piece was written with input from Katherine Wall who is a facilitator and organiser with Tipping Point UK, Resist + Renew and Organising for Change, supporting social movements to build the power.

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HCOVERSATION

Burning down the house

What does the music industry have to do with the climate crisis? From festivals to streaming to the songs themselves, **Greg Cochrane** and **Adam Corner** swap notes on the main challenges facing the industry, and how it's beginning to change





or as long as I can remember music has been a major part of my life.

As a young adult I was a dedicated reader of music magazines and websites, and I've been fortunate to translate my fandom into a career ever since I was a teenager. It was also my untraditional gateway into climate action. In 2016 I interviewed the artist ANOHNI – formerly known as Antony and the Johnsons. She spoke in powerful terms about how our climate and ecological crisis had informed her creativity.

That encounter had a lasting impression on me, and prompted me to educate myself about the emergency. I've been investigating the intersection between music and climate action ever since. It's not just about how the most popular musicians on the planet have become advocates for change through their



music and public platforms, but also how the inner-workings of the music industry are responding to the urgent need for more sustainable practices and systems.

So, in spring 2021 I launched Sounds Like A Plan – a podcast dedicated to shining a light on how the music community is responding to the climate crisis. We've spoken to changemakers ranging from festival organisers to record labels. It's been a thrill to speak to environmentally conscious artists like Radiohead and Brian Eno, and the process has filled me with energy and hope: after all, our climate crisis needs creative solutions and people power – music supplies both in abundance.

Greg Cochrane is a podcaster and journalist covering the intersection between music and climate.



Whilst I was studying, I was also working in a record shop (Catapult Records, Cardiff – RIP), and writing for a music magazine called Kruger (also RIP!). Over the last 15 years I've written about music (alongside my climate communication research), mostly for Crack magazine. But around the time of the Paris UN climate conference in 2015 – when I first wrote about musicians, music and climate change – I realised that music and



...communication and culture are the beating heart of the fight against the climate emergency

culture had a crucial but underplayed role in tackling the climate crisis. Since then, I've tried to spotlight artists and campaigners doing good work at the intersection of climate and music, and contribute to projects pushing things forward in this space. I believe that communication and culture are the beating heart of the fight against the climate emergency – so music has a crucial role to play in shaping the defining story of our times.

Adam Corner is a writer and independent researcher specialising in climate change communication, and climate/culture collaborations.

Q&A Q&A Q&A Q&A Q&A Q&A Q&A

GREG: Hi Adam. Let's start with a general question – what roles do you think music can play when it comes to climate action, both how it speaks and how it acts?

ADAM: What artists say and do matters, whether and how they use their platforms but also their art (in this case, their songs) to illuminate or soundtrack this unprecedented social transformation and existential challenge we face. But I think it's less about'climate anthems' and more about the cultural power of music and the platforms musicians have to normalise the issue, change the social norms so that we're factoring in the climate crisis to everything we do. Music needs to 'transition' like any other industry – and there are a lot of practical questions in there around what that looks like. But unlike most other industries, music can catalyse much wider change through the transition it goes through itself and how music and musicians talk about the transition – how the story is told and whether that story can inspire others.

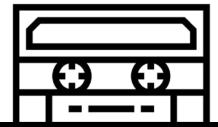
ADAM: Greg, linked to this point, I think one of the under-appreciated critical elements of getting to grips with the climate crisis is talking about it as part-and-parcel of acting on it. Do you think that the conversations you've been having with guests on your podcast are helping to move things forwards – is that why you started it, or was there another reason?

GREG: It's one of the reasons, yes. In my other more musicoriented work I found climate action was increasingly something artists wanted to talk about, so it was about creating a specific, long-form space to air those discussions. Also, more personally, it felt my way of taking action – a chance to create a platform that shares knowledge, entertains and tells solution-based stories in an accessible way. The people we feature are those who're moving things forward, we're just hopefully surfacing their passion and ideas.



GREG: Music, like every other industry, needs to address its carbon footprint, from international touring through to how vinyl records are produced, and the impact of streaming services. What do you think are the main challenges the industry needs to address, and where are the opportunities?

ADAM: Live shows are the big one but I feel like there is a huge opportunity to creatively rethink audience travel – often the biggest/least controllable part of an event's footprint – to make the journeys around live performances or festivals much more a part of the experience. I also think that while most of us are sick of streaming and video calls, and a show without an audience is a bit of a non-starter in most cases, there are lots of creative ways of doing virtual performances that the pandemic has forced to the surface. They've shown how well-programmed hybrid shows – where some people and performers are in the room, but it's not necessarily an exclusively in-person event – can work, when they've been well thought through. And in some ways there's a chance for making shows and events more inclusive if they can bridge the digital/IRL divide.



ADAM: Maybe sticking with live shows and festivals, do you think the way forward is to have fewer shows, more local shows, a hybrid mixture of inperson and streamed performances – or are there problems with all of these?

GREG: There are so many ways to come at the challenge. Of course, the least destructive thing for the environment would be not to gig at all, but no one wants to live in a world where they can't see their favourite band perform live.

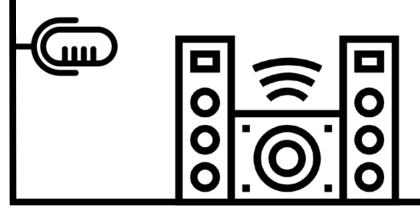
From the musicians' side, touring can definitely be more mindful: with more efficient routing, venues powered by clean energy, and electric tour transport. There's even an argument for more gigs. Since audience-travel makes up a significant chunk of the carbon produced by a live music event, it may make more sense for artists to go to their audience instead of their audience coming to them. Streaming isn't without its problems (mostly because of energy consumption from internet servers), but the pandemic has proved there's a sizable appetite for quality digital alternatives. It's a period of experimentation, but I do think it's a hybrid future for the live music experience.

GREG: We've seen this year how global heating is causing more extreme weather events. Music culture doesn't escape that – we're seeing more and more festivals being affected by things like severe flooding, high winds and extreme heat. For those people who aren't as engaged in the climate crisis, how useful do you think it is to talk about it through this prism – for example, that their favourite festivals are increasingly under threat?

ADAM: This is a good question that I haven't thought much about: how climate change will affect music, rather than how music can become more sustainable and help rein in the climate crisis! I think for a long time scientists were quite uneasy linking specific storms or weather extremes to climate change but that's now shifted. Two of the scientists who have done most to popularise the link between extreme weather and climate and help communicate this were in Time Magazine's most influential people this year!

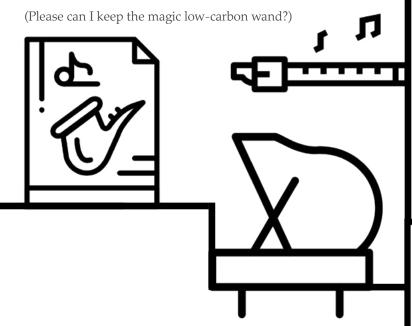


I think from a psychological or publicengagement point of view, linking the climate story with the things people love, care about or are familiar with is always a good approach, so when you see how the climate crisis is impacting your favourite festival that is a good connection to make for sure. But I think now the story is moving forwards, everyone knows what climate change is and more and more, people say they're concerned or worried. Do we need to make people more worried, or do we need to get them focused on how to solve the problem? So I'd say showing how a festival could be undermined by climate change might be a good starting point, but it shouldn't be the only message for festival-goers. It's basically a hook to move the conversation on to what the music industry can do and what we all can do – as voters and citizens, as much as music fans or energy consumers.



ADAM: If you could wave a magic low-carbon wand and change one thing about the music industry overnight to make it more sustainable, what would it be?

GREG: Ooph. Good question. I would probably make all digital music consumption – from streaming platforms to online radio stations – powered by clean renewable energy. I mean, it's a chain of consumption: from the vast server warehouses where the music is hosted through to the phone where it's streamed. The difference would be enormous.



GREG: I'd love to hear which particular artists or organisations within the music sphere you think are doing particularly transformative work.

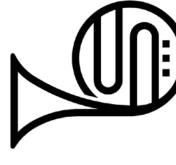
ADAM: I think there's a growing number of artists, but also the wider'industry' taking their first, but significant steps now. Massive Attack and the Tyndall Centre for Climate Change Research recently put out a report showing how to cut the carbon footprint of live music. That feels like a good step forward and line in the sand, and they are thinking at the'systems' level which is important – things like what needs to change for live shows in city centres, to get fans these more sustainably. But it would be great to see an act like Massive Attack using their cultural clout to bring the data analysis in that report to life, so people can get excited about it. But Shambala as a festival has been miles ahead of most others for a while now – there's been no meat on sale there for years for example, and they power the event sustainably too.

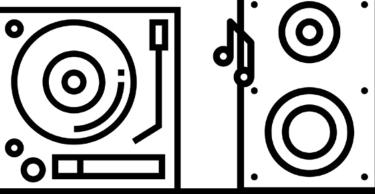
And I guess for me, I'm personally quite invested in the electronic/DJ scene, and here there are really some major changes that are going to have to happen. I supported the Clean Scene team on their report'Last Night a DJ Took A Flight'. It had a really good take on the unsustainability of touring DJs as a model (economically and environmentally) and how to change that – for example, through removing exclusivity clauses so artists can play more than one show in a certain area, or by nurturing local artists more consistently or paying them the same as guests from further afield.

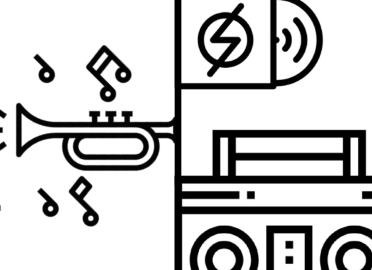
ADAM: What about you Greg – who would you say is doing good work on climate change within or around the music industry?

GREG: There are so many. In terms of galvanising the community, Music Declares Emergency now has more than 4000 musicians and organisations signed up to their pledges. They've become a magnet and community for those who care and want to learn about the issue. The recently launched EarthPercent also has great potential. Co-founded by Brian Eno, they're asking music organisations or individuals to pledge a small amount of their income which then gets funnelled to an independently-selected collection of the most

their income which then gets funnelled to an independently-selected collection of the most impactful climate causes – it's an assisted route'in' for those who want to do something to contribute to climate solutions. There's so much energy, ideas and creativity out there – the climate-and-music movement is growing all the time.







TAKING THE CLIMATE CRISIS TO THE COURTS

As the world heads towards climate breakdown, legal challenges and the courts offer a way to compel polluters to take urgent action. In recent years, individuals and communities around the world have taken their governments and companies to court – and, as **Lucy Maxwell** explains, they're having success



he world is heading towards catastrophic climate crisis, and the facts are stark: the past decade was the hottest on record, and extreme weather events are wreaking havoc around the world. Without deep and immediate climate action, we are on track to exceed global heating of 1.5C within the next two decades, and up to 3C by the end of the century.

There is no 'safe' level of global heating. A 3C warmer world would be a hostile environment for all life, transforming the world as we know it. Our best chance to prevent the most severe impacts of climate breakdown is to hold global heating to below 1.5C, according to climate science. Countries committed to pursuing this target when they signed the international Paris agreement at a UN climate summit in 2015. Since then, the science has only become firmer.

The action required is also clear: we must halve global greenhouse gas emissions

this decade to hold global heating below 1.5C, according to the world's leading climate scientists. Developed countries must take the lead in adopting deep emissions reductions – which means reaching netnegative emissions by 2030. In this context, there is no room for us to search for new fossil fuels to extract.

And yet, governments and companies are nowhere close to meeting this challenge. Countries' current climate pledges are "seriously inadequate" to achieve the goals of the Paris agreement, according to the UN Environment Programme. To have any chance of staying below 1.5C, their ambition needs to increase fivefold – and fast. In the lead-up to Cop26, the UN climate body has issued a grave assessment: countries' current pledges would see global greenhouse gas emissions increase by 16% by 2030 (compared to 2010 levels) - nowhere near the halving of emissions required. The International Energy Agency has echoed this warning, reporting a "stark" difference

Young people, elderly people, First Nations peoples, NGOs, sub-national governments and communities exposed to climate-related risks have brought cases seeking greater climate action from governments and fossil-fuel companies

between current pledges and the net zero goal: global emissions would only be reduced by 40% by 2050 – a far cry from net zero.

Flying in the face of science, fossil-fuel exploration and exploitation continues at pace: governments in Norway, the UK and Australia continue to approve (or consider approving) new oil and gas exploration and coal mines. Carbon majors – the world's largest fossil-fuel companies – continue to push for expansion of new fossil-fuel reserves, especially in the Global South.

Faced with this culpable conduct from governments and fossil-fuel companies, communities around the world are demanding accountability. In recent years, alongside global school student strikes and non-violent direct action, attention has turned to the courts. From the Netherlands, to South Korea, Colombia, and South Africa, people are looking to the courts as a last resort, to compel high-emitting countries and companies to take urgent action, and, in some cases, to compensate for the harm they have already caused.

Climate litigation refers to a wide range of lawsuits in courts or tribunals which have the climate crisis as their central focus. Climate litigation is defined by its diversity. Plaintiffs can be individuals, groups, NGOs, shareholders, companies or sub-national governments. They may seek to compel greater climate action by governments or companies – or to restrain it (something the big fossil-fuel companies have attempted in recent high-profile cases).

Climate-related cases have been filed in 40 countries and the total number has more than doubled since 2015, according to the latest tally. Young people, elderly people, First Nations peoples, NGOs, sub-national governments and communities exposed to climate-related risks have brought cases seeking greater climate action from governments and fossil-fuel companies. These cases target the full range of climate 'misconduct'. This includes: governments' weak mitigation efforts (especially in the Global North); their failures to stop deforestation; their support for the fossilfuel industry; and their decisions to approve new oil exploration, coal mines and airport expansions. When it comes to targeting companies, cases also challenge their weak mitigation efforts, as well as widespread greenwashing and, in some cases, seek compensation for their outsized contribution to climate change.

Common to all such cases is a desire to hold powerful actors accountable based on unequivocal scientific evidence and existing legal obligations. These cases draw inspiration from other moments when

marginalised groups have achieved justice in the courts – from battles against Big Tobacco, to land rights for First Nations peoples, and ongoing fights for equality. In the climate crisis, litigation offers a chance to hold governments accountable to their legal commitments (which date back at least three decades to the first UN climate treaty, signed by 196 countries and the European Union) and to scrutinise the climate commitments of governments and companies against science in an objective forum.

Many climate cases have been inspired by the successful, world-first case against the Dutch government. In 2015, a Dutch



These cases draw inspiration from other moments when marginalised groups have achieved justice in the courts – from battles against Big Tobacco, to land rights for First Nations peoples, and ongoing fights for equality

court upheld the challenge by the Urgenda Foundation, a Dutch sustainability organisation, to compel the Dutch government to increase its climate ambition, leading to the closure of almost all coal-fired power generation and €3bn in low-carbon investment. This was the first time globally that a court had ordered a government (or company) to reduce its emissions, leading to real-world reductions.

Since then, and particularly in the past year, there have been a series of breakthrough positive court rulings in cases against governments and companies. Courts in Ireland, France, Germany, Belgium and Australia have recognised that governments

have a legal duty to take action to mitigate the climate crisis and, in some cases, have required additional mitigation action to be taken. In June 2021, a Dutch court issued a landmark decision against Royal Dutch Shell, ordering the company to reduce the emissions from its global activities by net 45% by 2030 relative to 2019 – the first decision of its kind globally.

Climate litigation is an important tool, among others, for challenging the dangerous inaction of governments and companies. But there are drawbacks: it can be slow, costly and demanding for the individual plaintiffs. To be effective in spurring systemic action, climate litigation also needs to be part of a broad social movement and a well-developed advocacy strategy.

Given, however, that developed countries and carbon majors are guilty of inexcusable inaction on climate breakdown, national courts have a critical role to play in scrutinising their climate-related conduct, and determining whether it meets the standards imposed by law. These decisions illustrate that climate litigation can compel high-emitting countries and companies to increase their mitigation efforts, with global ripple-effects.

Lucy Maxwell is an international human rights lawyer and senior legal associate at the Climate Litigation Network, a project of the Urgenda Foundation.

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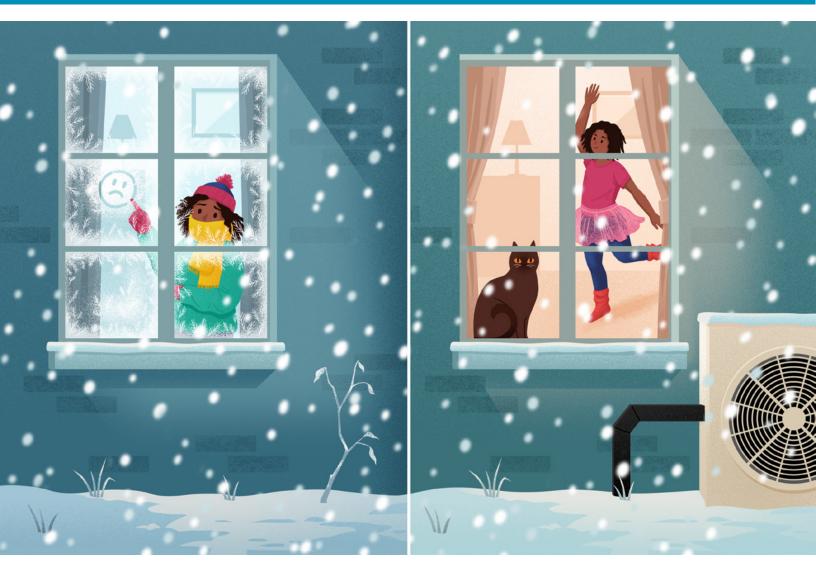
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WARMER HOMES FOR A COOLER PLANET

Everyone wants to come home to somewhere warm, safe and comfortable. But the UK's housing is draughty, wastes energy, and relies on polluting fossil fuels. **Aydin Dikerdem** explains why the New Economics Foundation is calling for a Great Homes Upgrade



hen people talk about the Green New Deal or creating green jobs, it can often seem fairly abstract. And for those of us fighting for these ideas, it can be hard to know how

to organise around something so big and how to make a difference on the ground. For many people, climate justice and addressing the climate emergency can seem daunting or unwieldy. What is a green job? Will I lose out? My life is hard enough as it is!

Future-proofing our housing is one of the golden green policies that bridges this gap. Upgrading our homes, also known as 'retrofitting', is the process of installing new features in a building which has already been built. First, we can make housing more energy efficient through things like better insulation and double- or triple-glazed windows. Second, we can replace dirty fossil-fuel heating, like gas boilers, with clean alternatives, like heat pumps. Retrofitting in this way means that our houses aren't heated with polluting fuels like gas, and don't waste as much energy.

It's not about taking away any kind of modern convenience in our lives: it will primarily make our lives better by making our homes warmer and safer, lowering our energy bills, creating jobs, and improving living standards. These reasons alone would make upgrading our homes worthwhile – but it will also stop our housing from relying on polluting fossil fuels. We also don't have another option. If we are to meet our climate targets and avoid devastating climate emergency, we will need to retrofit at least 19m homes by 2030. Currently our damp and leaky housing stock is one of the largest sources of carbon dioxide emissions in the UK, our home energy use alone being around 20% of total UK carbon emissions. We have to get moving on this work, but currently even if we wanted to we wouldn't have the skills, supply chains or capacity to get started.

But the scale of this project is actually a huge opportunity. For three months now the New Economics Foundation (NEF) has been organising a national campaign around retrofitting homes called the Great Homes Upgrade. For NEF this is a crucial area where green jobs and a tangible Green New Deal for communities can be realised.

If we get this right, the investment from the government needed to kickstart a Great Homes Upgrade could create hundreds of thousands of jobs and see small businesses and suppliers flourish up and down the country.

But, while we urgently need investment

from central government to make such a large-scale and transformative policy a success it is important that local authorities are the engines of the retrofit transformation – putting local communities at the heart of any and all plans. Many local authorities have already begun work on upgrading their own housing stock, and a national scheme offers a chance for councils to stimulate their local economies as part of a post-Covid recovery. They will need money from the national government to do this. But this money would build on local authorities' innovation and expertise. Government investment would build up skills and supply chains, driving down the price of home upgrades. But over the medium-term, the Great Homes Upgrade will need to be paid for with money from both the government and private companies. Private money can be unlocked with things like tax and regulations.

While upgrading and future-proofing our homes may seem like a technocratic and niche area, it is essential if the UK is to cut our carbon emissions fast enough. To do this we need the help and support of those in communities who want to see a change. NEF will be working with those that

want to join us by supporting people to do things like meet with local further education organisations and training colleges to see what training is being set up and helping residents work with housing associations to upgrade their homes.

NEF's Great Homes Upgrade hopes to put retrofitting on the national agenda, so everyone can live in a warm, safe home which doesn't pollute the planet. If you care about housing, inequality and the climate crisis, come and join us!

Aydin Dikerdem is an organiser at the New Economics Foundation.

Join the Great Homes Upgrade by visiting greathomesupgrade.org

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TECHNO-FIXES ALONE

Government and companies want us to believe that we can stop the climate crisis without redesigning our economy, by using new technology. But putting all our faith in tech solutions is just magical thinking, argues **Jonathon Porritt**



two stories:

The first is that the climate emergency is serious. Happily, we've got all the technology we need

ompare and contrast these

to decarbonise our economies, maintain high levels of economic growth, and ensure continuing improvements in both material standards of living and quality of life – for everyone, the world over.

The second story is also that the climate emergency is serious – very serious. Happily, technology makes it possible to decarbonise sectors of the economy very rapidly, but we're simultaneously going to have to address systemic social injustice and move away from excessive dependence on economic growth.

Whenever the next general election comes along (and many suspect that moment may be much sooner than anticipated), candidates for the Tories, Labour and the Lib Dems will be enthusiastically offering us slightly nuanced versions of the first narrative. Green Party candidates will be out there advocating for the second narrative, but with all sorts of hedging gambits: an inclusive Green New Deal, 'low growth' rather than 'no growth', a 'just transition' to a net-zero economy, and so on.

The discourse about economic growth, underpinned by continuing technology-driven innovation, has been unchanged for decades. It says that progress depends on keeping the economy growing, year on year, indefinitely into the future, and one of the best ways of

generating that growth is through new technology, regardless of its impact on the environment.

It remains devilishly difficult coming up with a compelling campaign pitch for moving our economy beyond growth - as I first discovered back in 1977 as a local candidate for the Green Party (then called the Ecology Party). It's no less difficult, even now, challenging today's still dominant technocratic paradigm against the backdrop of accelerating climate change. Many genuinely believe that a combination of already proven technologies (things like renewable electricity, electric vehicles and energy storage), plus a surge of future technology breakthroughs (like 'green hydrogen', carbon capture and storage, nature-based solutions and sustainable aviation fuels) is all that we need. They see technology as the fix to get us to an economy that emits net-zero greenhouse gas emissions by 2050, ensuring that global temperature doesn't increase by more than 1.5C (or, worst case, 2C) by the end of the century.

Even as I write those words, I myself feel the seductive pull! None of the other massive challenges we face today (worsening injustice, infectious diseases, militarism, the erosion of democracy, etc) would be any less problematic, but at least the climate crisis could be 'sorted' by technology. And wouldn't it be brilliant if that was all that was needed to prevent dangerous climate breakdown? Well, yes – but unfortunately, that isn't the case.

This government is reluctant to

acknowledge that any lifestyle changes will be necessary to cut emissions. They think that technological innovation will do all the heavy lifting, even when it comes to those tricky sectors like heating and cooling, shipping and aviation, or even concrete and steel. This particular variant of magical thinking is made all the more startling as its focus is exclusively on supply-side options (different ways of generating clean, green energy) rather than on efficiency and demand-management (generating energy more efficiently, and using less of it). The latter is actually where the biggest gains are to be made.

"We are bringing forward by 15 years the government's commitment to a fully decarbonised power system to secure a future clean electricity supply that's generated in the UK, for the UK. To ensure this ambition becomes a reality, the government will double down on efforts to deploy a new generation of home-grown technologies – from offshore wind, hydrogen and solar, to nuclear, onshore wind and carbon capture and storage."

So read the government's latest announcement (October 7) on decarbonising our electricity system by 2035. There wasn't so much as a passing reference to energy efficiency, let alone to the most pressing imperative of all: to address the scourge of continuing fuel poverty here in the UK, with more than 3 million households now facing a wretched winter as gas prices continue to rise. NEF's admirable new campaign, the Great Homes Upgrade, will find

WON'T SAVE US

few takers in this technology-obsessed government, with the newly-launched heat and buildings strategy providing little more than an outline sketch of what will be needed over the next decade.

Let's be clear: totally decarbonising the grid by 2035 is the right ambition. However, instead of contributing to that target, this government's fixation with nuclear power, alongside its misplaced confidence in carbon capture and storage, and hydrogen, will prove to be major barriers to any kind of genuinely just transition.

When it comes to nuclear power, the huge new plant at Hinkley Point in Somerset is scheduled to come online in 2026, providing more expensive electricity for consumers than any other single source in the UK. Carbon capture and storage is also an expensive technology, but despite this it's now seen as the only way of reducing emissions from gas-fired power stations and other industrial facilities. And if we want to turn to hydrogen to fuel our net-zero emissions economy, whatever hydrogen we use has to be 'green hydrogen' (generated using electrolysis and renewable electricity), which means it too will always be very expensive.

In short, these are all high-risk distractions, hitting consumers' bills hard and diverting taxpayers' money into unproven techno-fixes – money that should be going into energy efficiency, upgrading our housing, better public transport, and proven, low-cost renewable energy and storage.

Worse yet, these illusory techno-fixes obscure the uncomfortable reality that our massively wasteful, consumption-driven

The discourse about economic growth, underpinned by continuing technology-driven innovation, has been unchanged for decades. It says that progress depends on keeping the economy growing, year on year, indefinitely into the future, and one of the best ways of generating that growth is through new technology, regardless of its impact on the environment.

lifestyles here in the UK still depend on exploitative supply chains and on planet-trashing extractive economic growth elsewhere in the world – regardless of whatever success we might have in decarbonising our own grid. New technological innovations mean more demand for the minerals that make those technologies possible. Minerals like lithium, cobalt and copper will need to be mined, often in countries in the Global South, which can lead to environmental devastation and human rights abuses.

As NEF has been arguing for years, today's climate emergency is not some one-off failure in an otherwise fully functioning economy. It's simply the most devastating symptom of an inherently cruel and unsustainable economic system – in which no amount of last-minute techno-fixing will make the slightest difference.

Jonathon Porritt is an author and campaigner, and founder of Forum for the Future.

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THE REVIEW: CONSUMED

WORDS BY JOYCELYN LONGDON





n 2018, key fashion stakeholders came together, facilitated by UN Climate Change, to figure out how to transition the fashion, textiles and clothing industry towards genuine climate action. The result was the Fashion Industry Charter for Climate Action: a detailed collective vision to cut the industry's emissions to net zero by 2050. Despite this, fashion is still one of our dirtiest industries. Accounting for around 10% of our global carbon emissions and rife with workplace human-rights abuses, the industry exploits both vulnerable communities and our environment.

With the UN's global climate conference, Cop26, around the corner, and the industry's continuing lethargy in regards to climate action, we need to be having conversations about the destructive nature of fashion especially fast fashion. The conversations at Cop26 will try to nail down some key targets for the industry. But how much more damage will be inflicted and for how long before the fashion industry and its consumers wake up and acknowledge that we need to interrogate the system itself? Aja Barber's Consumed: The Need for Collective Change: Colonialism; Climate Change & Consumerism (Octopus Publishing Group, 2021), is a powerful address to these issues. Across two distinct sections, Barber challenges the way the fashion industry uses systems of misinformation, oppression, and

rejection of harm or responsibility, and calls for a deeper inquiry into the habits of both consumers and corporations.

We've seen an increase in the critique of fast-fashion and the rise of sustainable and ethical fashion gurus, influencers, educators and activists. There has been increased mobilisation around these issues. Campaigns and resources such as Remember Who Made Them, #PayUp and Good On You are encouraging consumers to

...how much more damage will be inflicted and for how long before the fashion industry and its consumers wake up and acknowledge that we need to interrogate the system itself?

hold fast-fashion brands accountable and question the system that, as described in Barber's book, "exploits those at the bottom with little pay", fuels "compulsive buying disorders that affect 18 million US adults" and "abuses valuable resources on Earth".

Consumed takes a holistic approach, not only educating but guiding and reassuring consumers. Employing a conversational style and excerpts from interviews with other thought leaders, commentators and experts across the fashion space, Barber makes clear that these discussions require "constant learning and growth" from all involved.

Unlike most resources in the sustainable and ethical fashion space, *Consumed* does not shy away from the intersections of fashion and colonialism and how these links manifest in the suffering of BIPOC (Black, Indigenous and People of Colour) around the world.

Words from Kalkidan Legesse in an interview with Barber summarise the connection eloquently: "The link to colonisation is the confidence with which the fashion industry [tells us] the best they (garment workers) could hope for is the opportunity to work underpaid in unsafe factories so that owners in the West could become wealthier". Take the 2013 collapse of the Rana Plaza garment factory in Bangladesh, where over 1000 people were killed and 2500 injured. Other companies in

the building evacuated when they found out it was structurally unsafe. But the lives of the victims were, to the fast fashion companies who employed them, disposable.

Barber also sheds light on how the majority of clothes are "produced in the Global South, consumed in the Global North and then dumped right back on the Global South as donations". Unfortunately, for those of us who donate old clothing to charity, comforted"by the little voice that tells us we're being saviours to someone otherwise without resources", only 10-20% of the clothes given to charity actually get sold. The rest"gets turned into a bale and shipped to various locations in the Global South like Kantamanto Market in Accra, Ghana, one of the world's largest second-hand markets, receiving 15 million garments a week with dire consequences". The market sellers who receive the bales of clothing can only sell so much, with the rest heading straight to landfill. This costs the government of Accra"over \$100,000 every year on tipping fees for secondhand clothing waste alone...and in 2019, second-hand clothing caused the city's main engineered landfill to catch fire".

On the subject of fire, Barber also makes direct links between the fashion industry and the climate crisis. She raises awareness of the fact that "synthetic fabrics such as polyester, nylon, Lycra and acrylic" all come

Barber brings up the uncomfortable truth that if you have the privilege of purchasing clothes multiple times a month, every month, then you probably aren't living near the poverty line

from fossil fuels, highlighting the need to not only criticise fossil-fuel companies but all the industries, like fashion, who "utilise and draw on its bastion of power".

Defenders of fast fashion's rock-bottom prices argue that it makes clothing affordable to people on low incomes and that the villainisation of fast fashion is an inherent villainisation of poor people. The book takes on these arguments, making clear that "people buying 5-10 garments of fast fashion a year rather than 50+ are not the problem". Barber brings up the

uncomfortable truth that if you have the privilege of purchasing clothes multiple times a month, every month, then you probably aren't living near the poverty line. She urges us to question whether we are genuinely poor or rather feel poor based on our comparison with others' overconsumption.

In order for the fashion industry to change for good, action needs to be taken at the consumer, corporate and government levels. Focusing on the former, Barber ends with a call to consumers to reject the myth that overconsumption is solved by replacing it with eco-consumption. She says we should become more diligent consumers, who question brands before giving them our money. We should also step into the power of the consumer. This means using our voices - through letters, social media, and with our friends and family – to advocate for change, because "every cause has an effect. Every word can bring about change. Every decision can be a step forward"

Joycelyn Longdon is first year PhD student at Cambridge University combining machine learning, bioacoustics, forest ecology, indigenous knowledge and sociology to investigate the role of technology in forest conservation. She is also the founder of ClimateInColour, an online education platform, making climate conversation more accessible and diverse.

YOU CAN'T LEVEL UP WITHOUT A GREEN NEW DEAL

Our government wants to be known for two things: levelling up, and fighting the climate crisis. But, as **Miatta Fahnbulleh** writes, they don't really understand how the two are connected



evelling up' is this government's favourite phrase. It formed the central pillar of Boris Johnson's recent Tory Party conference speech.

Many of us hoped that by the end of it, we would be clearer about what'levelling up' means and how the government is planning to deliver it. But we're still none the wiser.

We've also heard a lot from the PM about how proud he is of our ambitious targets to cut greenhouse gas emissions to net zero by 2050, issuing a net-zero strategy that leaves much to be desired. No action, and no proper plan for two defining and critical issues is very bad news. But for me, there's a silver lining. That is: levelling up and tackling the climate crisis can go hand-in-hand.

So, what is levelling up? However ill-defined the concept, the phrase has huge political traction because it goes to the heart of the issues that dominate our politics: how do we get the economy to work for everyone? Our prime minister may have dismissed concerns about our country's wellbeing by saying, "never mind life expectancy, never mind cancer outcomes — look at wage growth" — but we need to recognise that levelling up should include not just the ability to make ends meet, but the ability to thrive and live happy lives.

We've just seen a decade where the benefits of growth have been unfairly distributed, and huge swathes of our country have been held back. For the last two decades, living standards haven't budged. Against this backdrop, the goal of levelling up should be quite simple: to ensure everyone has a decent standard of living, particularly the communities that have faced decades of deprivation and neglect. It needs to tackle disparity within regions as well as between them. The challenge of levelling up is as real in Barking & Dagenham or Hackney as it is in Barrow, Darlington or Barnsley.

At the same time as dealing with widening inequalities, we have the urgent and ever-intensifying issue of tackling climate change. The impacts of the climate crisis are becoming more visible to us all, even if the worst effects haven't touched us directly yet. We know that climate action is a deadly can to kick down the road, but as of March this year, the government was still only spending 1% of what its own Climate Change Committee (CCC) recommends it should on green policies. The CCC is calling for 1% of national wealth (GDP) to be spent every year for us to meet our climate targets. WWF have said that the actual amount being promised is just 0.01%.

These two challenges are immense, and

more difficult to resolve in the economic aftershocks of the pandemic. But we can meet them. To do so we will need national investment and policy innovation at the same scale we saw in the pandemic: a national mission for climate change that has levelling up in its DNA.

If the government is serious about levelling up and tackling the climate crisis, it needs to get five things right.

First, the government cannot tackle the climate crisis or level up on the cheap. The UK has a long-standing problem of low

start to bite. If we need to invest to cut our emissions, why not plough this into our communities now to create jobs, boost industries and revive places?

Second, large-scale local investment should be combined with local industrial strategies. These strategies should show us the potential for new jobs in sectors which are likely to grow in our clean, green future – such as housing retrofitting, renewable energy, health or social care. Taken together, these sectors could create millions of low-carbon jobs, many of which



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investment in communities, which has also been unequally distributed across the country. Now, we need a big injection of investment with initiatives that cut our greenhouse-gas emissions to net zero. The question is whether we do this as part of a proactive strategy to reprogramme our economy for the better, or in a blind panic as the impacts of the climate emergency

directly contribute to projects which further reduce the UK's carbon emissions. This pipeline of jobs should be supported by a training programme that builds up skills in an area, so that local residents can access these new jobs. But simply creating new jobs isn't enough – they need to be secure, have decent working conditions, and pay a living wage.

Third, the government cannot level up struggling areas without empowering regional and local government. The economic challenges in the West Midlands are different from those in the North of Tyne, and each need tailored responses. If we simply yank levers in Whitehall and hope for the best, it won't work.

Levelling up requires rapid devolution of power to regional and local government. Local politicians should have more power over certain taxes, devolved funding, education, skills, employment support, energy, housing, planning and local public transport. To be meaningful, this should come along with the creation of strong local institutions, like Mayoral Combined Authorities.

In return for new powers, local leaders should make sure that when local public institutions buy services or goods, they buy them locally. Leaders should also support community ownership, employee ownership, mutuals and cooperatives, so that local people have a bigger stake in their local economy.

Fourth, in many parts of the country, levelling up will require focusing on parts of the economy which create jobs but are often overlooked. Small and mediumsized businesses account for over half of the jobs created across the UK. In the north of England, almost two-thirds of all private sector jobs are in small and medium businesses. They are the bedrock of local economies. But there has been little focus



The scale of the challenge is clear – but so is the roadmap to boosting the economy and getting us closer to net zero. All we need is a government bold and brave enough to get behind the wheel

in improving productivity in these firms. Supporting these businesses to thrive, not just survive – particularly after the pandemic – through things like affordable rents and tailored business support, is essential.

Finally, levelling up should revive places by building up community assets and wealth. Some devolved funding for combined authorities should be used to create a Community Wealth Fund that would allow community groups to design local schemes to improve the look and feel of their places. This might include creating more green spaces and planting more trees, building community food-growing projects, or developing community energy schemes. When local areas are invested in and supported, both money and people stay local.

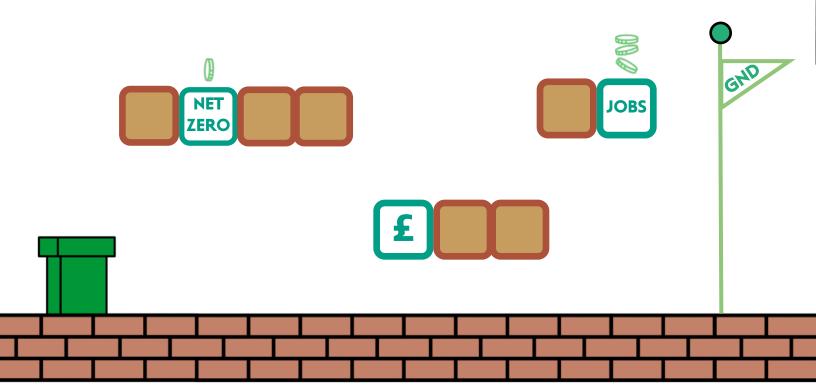
The scale of the challenge is clear – but so is the roadmap to boosting the economy and getting us closer to net zero. All we need is a government bold and brave enough to get behind the wheel.

Miatta Fahnbulleh is the chief executive of the New Economics Foundation

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"I've supported NEF from its very earliest days. In communities across the country, I've seen how NEF is nurturing equality, empowering people and standing up for the environment. Which is why I urge you to support its work by thinking of making a gift in your Will to the New Economics Foundation today, as I have." **Jonathon Porritt**

This autumn, we're pleased to be able to offer NEF Supporters a free will writing service. You don't have to leave a gift to NEF but we hope you will consider it once your loved ones are taken care of. Simply go to farewill.com/nef-zine and our partners Farewill will support you through the process.



