

Institute for Public Policy Research



FAIRNESS AND OPPORTUNITY

A PEOPLE-POWERED PLAN FOR THE GREEN TRANSITION

Final report of the IPPR
Environmental Justice
Commission

SUMMARY REPORT



**IPPR Environmental
Justice Commission**

July 2021

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The progressive policy think tank

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ABOUT THE COMMISSION

The IPPR Environmental Justice Commission (EJC) is a landmark initiative building on IPPR's award winning work on environmental breakdown and its Commission for Economic Justice. The commission is co-chaired by Hilary Benn, Caroline Lucas and Laura Sandys, and they are joined by commissioners drawn from business, activism, academia, civil society, and trade unionism.

The central aim of the commission is to present an ambitious, positive vision shaped around people's experiences and needs, and develop a plan of action that integrates policy both to address the climate and environmental emergencies and to deliver economic and social justice.

The commission's final report will be published in 2021.
Find out more at: <https://www.ippr.org/environment-and-justice>

NOTE

This briefing is presented as a submission to the IPPR Environmental Justice Commission in order to stimulate vital public debate. The arguments and the proposals made are those of the authors only. Commissioners serve in an individual capacity, and no report of or for the Commission should be taken as representing the views of the organisations with which they are affiliated.

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This report has been prepared by Luke Murphy (head of the commission) and Becca Massey-Chase and Stephen Frost (co-deputy heads of the commission), with research, writing and contributions by the IPPR Environment and Climate team: Joshua Emden, Lesley Rankin, and Emma Killick, and by IPPR associate fellows Laurie Laybourn-Langton, Marcus Nyman, Ali Plummer and Paul Coleman.

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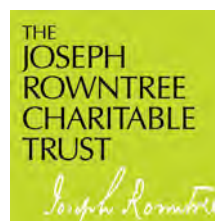
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John Ellerman
Foundation



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“

**Because
together we
can do this**

”

Juror from the South Wales Valleys citizens' jury

FOREWORD

The Environmental Justice Commission was established in May 2019 in recognition that action to address the accelerating climate and nature emergencies can be about more than staving off the worst; it can be about imagining a better world which we can build together. A future where people and nature can thrive, with resilient local communities, good jobs, successful low-carbon businesses, and where inequalities are reduced and opportunities offered to all. A future where progress is measured by the quality of life, security and wellbeing of all citizens as well as the health of our natural world.

To realise this vision will require a new approach which understands the inextricable link between addressing the climate and nature crises with the necessary speed and ambition, and simultaneously tackling economic and social injustice. The transformation must be rooted in fairness – not only because the poorest communities are least responsible for these crises and invariably the worst affected, but because unless action to restore nature and decarbonise the economy is rooted in social and economic justice, it simply won't succeed.

We are proud to be co-chairs of this important commission that not only proposes ambitious policies to achieve net zero as soon as possible, but also examines the obstacles to a successful transition and identifies measures to overcome them. We recognise that the public has a veto – their concerns must be addressed, and their consent won. If the transition is managed poorly, or not managed at all, then it could threaten to make people's lives harder, including those who are already losing out from the current economic system. We cannot make changes that further embed unfairness in our society; on the contrary, this is an opportunity to put fairness at the centre of all we do.

A successful transition means that people must be at the heart of the policy making process, and those most affected by change must be the ones to shape it. This approach not only builds deeper and broader public support which can endure short-term political cycles but also, as this report shows, deliver better and fairer outcomes too.

We have therefore put people at the centre not just of our recommendations, but also our approach to developing them. Since 2019, we have held deliberative workshops, listening exercises and citizens' juries around the UK with people from many different walks of life. Despite the pandemic, we have worked with citizens in Doncaster, Tees Valley and County Durham, London, the South Wales Valleys, Thurrock and Aberdeenshire. These communities were chosen precisely because they are likely to face different challenges as a consequence of the transition to net zero.

Throughout our work, we have also been able to engage with and hear from community groups, workers and their trade unions, businesses, civil society, and national and local politicians. We have spoken to policymakers from around the world, learning lessons – both from what has worked and what hasn't – from transitions in other countries. The learning from these many conversations are distilled in this report.

This is a profound moment of change. The effects of Covid-19 have brought into sharp relief the government's prime responsibility to keep the public safe from the major shocks, challenges and threats to our society. It has also reminded us of the scale and speed at which governments can act when the true nature of an emergency is recognised.

The threats posed by the climate and nature emergencies are orders of magnitude greater than even the worst that we have witnessed throughout these past grim months. If the pandemic has reminded us that far-reaching change to how our economies work is possible, history shows that we have been able to respond to crises by redesigning the economy, as we did in the aftermath of the second world war.

This final report of the Environmental Justice Commission argues for a similarly ambitious approach – one that can secure a cleaner, greener economy, and that is fairer and improves wellbeing too, restoring the health of people and the natural world. It offers a plan that is optimistic and practical, both honest about the challenges we face and committed to seizing this moment to improve lives and offer opportunities for all, ensuring – crucially – that no-one is left behind.

This summary, and the longer full report of the commission, have been shaped by the views, wisdom and recommendations of the people we have engaged with across the UK over the past two years. We are immensely grateful to them all.



A handwritten signature in black ink that reads "Hilary Benn".

Hilary Benn MP



A handwritten signature in black ink that reads "Caroline Lucas".

Caroline Lucas MP



A handwritten signature in black ink that reads "Laura Sandys".

Laura Sandys

Co-chairs of the IPPR Environmental Justice Commission

INTRODUCTION

This summary of the final report of the Environmental Justice Commission sets out a vision for the future of the UK.

Part one defines the shifts needed in the UK's approach to addressing the climate and nature crises and makes the case for a 'new social contract', to deliver a transition that is both rapid and fair.

Part two, in five chapters, outlines the practical steps we propose. Each contains proposals on what we think needs to be done, when and by whom.

The commission's recommendations have been shaped by the experience, insights, and priorities of the jurors of our four citizens' juries held across the UK in 2020-21.

This summary document presents the central proposals of our final report. The full set of recommendations and the detailed evidence to support them are set out in the accompanying evidence report.¹

LISTENING TO THE PUBLIC

Beginning in 2019, the Environmental Justice Commission has held deliberative workshops, listening exercises and citizens' juries around the UK. From managing extreme weather events to transitioning away from high-polluting industries, we heard from communities across the UK facing significant challenges.

Tees Valley and County Durham is home to 60 per cent of the UK's energy-intensive industry (Tennison 2017) and generates carbon emissions three times higher than the UK average (O'Brien et al 2017). It faces significant risks if the transition is badly managed, but could benefit from jobs created in low-carbon industries. There's also potential to develop its substantial natural assets as a carbon sink.

“Even when people don't necessarily come from the same background and beliefs, we have similar thoughts about the importance of positive action and trying to change for the better.”

Juror from the Tees Valley and County Durham citizens' jury²

In the **South Wales Valleys** there are lessons to learn from the area's poorly managed industrial transitions of the past. Investment and government action are needed to move away from high carbon industries and harness 'the green lungs for the region' (MacBride-Stewart 2020), the rich green landscape of the valleys.

“It doesn't matter how knowledgeable you are about the subject beforehand, you can still contribute [to the citizens' jury] and you will be listened to.”

Juror from the South Wales Valleys citizens' jury

¹ See full evidence report: <http://www.ippr.org/research/publications/fairness-and-opportunity>

² All quotes are drawn from the reports of the citizens juries held by IPPR (IPPR 2021a, 2021b, 2021c, 2021d) or directly from the recordings of the juries themselves.

Thurrock, by contrast, sits on the Thames estuary 20 miles east of central London and is part of Essex's commuter belt. Thurrock's economy is tied to its three international ports and the area acts as the industrial gateway to the South East. Consequently, carbon emissions from transport in the region are two thirds higher than the national average (Transport East 2020). As well as being key to the economy, the estuary is also the focal point of Thurrock's natural assets, and active management and restoration of its salt marshes could sequester carbon and provide much needed flood protection (Laffoley and Grimsditch 2009).

Aberdeenshire is the 'oil capital of Europe', and Aberdeen has become central to discussions about the 'just transition' for workers in carbon intensive industries. More than 10 per cent of total employment in Aberdeen City and Aberdeenshire is currently in the oil and gas industry (over 24,000 jobs in total) (Emden, Murphy and Gunson 2020). Yet, across the UK, decommissioning oil and gas rigs, increasing wind power, carbon capture and storage and producing low-carbon hydrogen, could create around 275,000 jobs (ibid). Much of the infrastructure – such as pipe networks, port infrastructure and storage sites – and, crucially, skills and experience needed for these jobs can be found in the oil and gas sector already, giving workers a crucial role to play in the transition. There is also more to Aberdeenshire than oil and gas. With native pinewoods, bogs, sand dunes, mountains and coast, this diverse landscape is also home to over a quarter of Scotland's arable farming areas (Aberdeenshire Council 2017).

Jobs in Doncaster and Yorkshire and the Humber, where we held a citizen workshop, are disproportionately reliant on carbon intensive industries, and South Yorkshire is regularly subject to major flooding.

These very different communities across the UK all recognised the extent of the challenges ahead, but each one provided optimistic, ambitious proposals for action, shaped by the unique characteristics of their areas.

From the opening sessions of our first citizens' jury in Tees Valley and County Durham in October 2020 through to the closing minutes in Aberdeenshire in March 2021, we have been overwhelmed by the good humour, openness and interest shown by every juror who took part. We have worked with 84 jurors over 1,600 combined hours of deliberation and developed over 100 recommendations. It has been a privilege to get to know the jurors and learn about their communities, their anxieties and their hopes for the future.³



3 More information about the citizens' juries carried out for the commission by IPPR can be found in the final evidence report.

1. THE CASE FOR CHANGE – THE SIX SHIFTS

Listening to people’s experiences and aspirations, we have heard about the many challenges that the UK faces and the anxieties of the people who face them, but we have also heard about the numerous opportunities that could be realised as the country enters this decade of profound change.

Drawn from the insights of jurors from our citizens’ juries across the UK, in this chapter we set out the **six major shifts that are needed in the UK’s approach to addressing the climate and nature crises** if we are to maximise and fairly share the benefits and opportunities of the transition, minimise and share the burdens of the risks, and move at the pace that these crises demand.



SIX SHIFTS IN APPROACH NEEDED FOR A SUCCESSFUL TRANSITION

1. From a problem to be mitigated to an opportunity to be seized

“There is an untapped treasure in the Valleys...There is a sleeping dragon here waiting to breathe fire into a recovery which will help the planet as well as the UK.”

Juror from the South Wales Valleys citizens' jury

Despite the scale of the climate and nature crises – and the impacts, from flooding to extreme heatwaves, which are already with us – the UK must view these challenges not just as a problem to be mitigated, but an opportunity to be seized. The benefits of ambitious action are substantial for both the public and the environment – from the creation of decent jobs, to lower energy bills and significant public health benefits, to burgeoning wildlife and a healthier planet.

All of the communities we spoke with across the UK recognised the challenges of the transition but also pointed to the huge potential of fully drawing upon the assets, skills and talent that lie in their communities.

“We have huge assets – from our local industry to the skills, talent and expertise of all who live in Aberdeenshire. There is a huge opportunity to build on these strengths, but we need a vision and a strategy to maximise them.”

Aberdeenshire citizens' jury

Our existing economic system is driving both environmental damage and deep economic and social unfairness (IPPR 2020). In transforming our economy to deliver better outcomes for the environment we can, and must, also improve the quality of life for everyone.

2. From fairness as an afterthought to fairness as a foundation

“No one can be left out. A fair response to the climate and nature emergencies needs to increase equality in society.”

Tees Valley and County Durham citizens' jury

The debate about *whether* we transition to a clean economy is largely resolved but the debate over *how* we transition has only just begun. The central question to that debate is how it can be done in a way that is *fair* – in the words of Chris Stark, head of the Climate Change Committee, it is ‘almost the only question’ (Garman 2021). This is because, as we have seen with the ‘gilets jaunes’ protests in France, delivering the transition in a fair way is crucial to securing legitimacy for and efficacy of the transition and building enduring public and political support’.

“We need to make sure that all decisions that are made are fair at the point of decision making and throughout their implementation.”

Juror from the Thurrock citizens' jury

This message was reinforced over and over again by the people we spoke to and has been supported by the findings of similar processes such as the UK Climate Assembly.⁴

This is about more than just avoiding unfairness arising in the transition itself. It's also about addressing existing unfairness across our economy and society. The aspects of fairness that the people we spoke to were anxious to have addressed were the following.

- **The distribution of costs for individuals, businesses and the public purse.** This includes taxation, everyday expenses like energy bills, as well as the price of purchasing sustainable food, and the cost of low-carbon goods and services such as energy efficiency retrofits.

“Action should not be regressive and make life harder for people already struggling. People should be supported to make the changes they need to.”

Aberdeenshire citizens' jury

- **The questions of fairness both within and between different places across the UK.** This relates particularly to the distribution of economic investment, the impacts on new and existing jobs, and to who is most affected by the impacts of the climate and nature crises.

“We believe that the future should be inclusive and we recognise that those [places] who have been historically left behind may need additional support to prosper.”

South Wales Valleys citizens' jury

- **Aspects of fairness relating to gender, race and disability.** Jurors were conscious that some people, already disadvantaged by our current economic system, are being impacted disproportionately by the environmental crises and are at risk from badly managed policy responses too, as was underlined in our interim report (IPPR 2020).

“Inequality is a big issue.”

Juror from the Thurrock citizens' jury

- **Fairness for younger and future generations.** Our jurors were acutely aware of the greater impact that the climate and nature crises will have on younger and future generations and wanted to ensure this was reflected in decision making.

“I guess it's not going to have much of an effect on me. But I've got children and grandchildren and it is those who are going to be affected.”

Juror from the Tees Valley and County Durham citizens' jury

- **Fairness internationally, recognising the varying responsibilities, historic contribution and capabilities amongst different countries across the world.** Those we spoke with saw the global role and cumulative contribution of the UK to the climate and nature crises and the need for greater responsibility for addressing the problem, as well as the economic benefits that the UK could accrue in taking a leadership role (Webb et al 2021).

“We need to take the rest of the world with us. If you lead the world then business will follow and that will attract investment. If we can build technologies that can be exported, this can create jobs.”

Juror from the Thurrock citizens' jury

⁴ See: <https://www.climateassembly.uk>

3. From being done to people to being done with and by them

“People need to feel that they are part of the change. We need to bring people with us and for it not to feel like we are having things done to us.”

South Wales Valleys citizens’ jury

Moving from an approach that is centralised and remote, to one owned and importantly informed by the public, will be crucial to a successful transition. People are experts in their own lives and aspirations. They have experiences and knowledge which are hugely valuable in designing better policy.

In addition, the transition is now moving from being conducted ‘in the background’ – through the way we generate electricity, for example – to one that will have a noticeable impact on people’s everyday lives: people changing the boiler in their home, changing their car, switching to public transport, or re-training for a new job. If government is to secure enduring public support, then it needs to take people with it on this journey.

4. From silos and individuals to a whole-economy and all-society approach

“My concern throughout is that everything seems to lead back to individuals doing their bit, which is important, but change needs to start on a much wider scale than that.”

Juror from the Thurrock citizens’ jury

The climate and nature crises require collective, systemic and interrelated action. Addressing them also needs system wide coordination, not leaving the public to do all of the heavy lifting.

Too often greater emphasis is put on what individuals must do than on creating the context that makes it easier for people to make the right choice for them and the environment. As our jurors argued, while we all have a role to play, we have to work together to change our systems too. People want a partnership between government, business, workers, civil society and the public. Every part of the economy and society must be involved in the transition if it is to be a success.

“We need a joined-up, collaborative approach if we are to see the scale of change required.”

Tees Valley and County Durham citizens’ jury

However, far from coordinating change across society, too often government fails to work effectively even with itself. Whether at a national, regional or local level, government too often acts in siloes. Likewise, environmental, economic and social policies are often seen as separate and distinct, having little to do with each other. For example, the UK cannot credibly commit to delivering net zero and restoring nature, and then proceed to support or allow decisions such as building new deep coal mines which will increase global carbon emissions (Deben 2021).

5. From top-down alone to national leadership with local ownership and delivery

“Local areas need to create their own plans and priorities based on their local assets. They will need the resources to see these plans through.”

Tees Valley and County Durham citizens' jury

People want strong leadership from government and see that it can play a powerful role in coordinating a national effort but it must be designed around empowered localities who own and deliver the tailored solutions.

The response to Covid-19 has shown the power of government and what can be achieved, if the political will is there. That does not mean, however, that the answer is a purely top-down approach. Different areas of the UK have different challenges, assets and opportunities, so a 'one size fits all policy' won't secure a transition that is either fair or effective. By contrast, designing policies with local circumstances in mind, through passing powers down to local communities, can help achieve better and fairer outcomes (Raikes 2020).

6. From climate alone to climate and nature together

“Nature and the local wildlife kind of brings communities together for us all really, even though we live in very different areas throughout Wales.”

Juror from the South Wales Valleys citizens' jury

The need to address the climate crisis increasingly, and rightly, occupies time within political and policy debates. Yet the nature crisis is often treated as its 'poorer cousin', receiving significantly less attention and therefore fewer policy commitments, targets and less investment (Laybourn et al 2019). This matters for two principal reasons.

Firstly, the nature crisis is both of equal importance and intimately linked to the climate challenge. The UK is one of the most nature depleted countries in the world (Hayhow et al 2016). Our destruction of nature actively accelerates global heating, but its repair can help to address it (Laybourn et al 2019). If we are to achieve net zero without sufficiently addressing our wider impact on nature, the consequences for our economy and society would still be profound.

Secondly, the great importance that people place on nature and access to green space is not reflected in our national conversation. The jurors want to put nature right at the heart of all climate policy and beyond.

2. A NEW SOCIAL CONTRACT

Drawing on recommendations from the jurors, we believe that now is the time for a new ‘**social contract for a fair transition**’. The contract contains six principles, each of which responds to a shift.

The six shifts...

... a new social contract



1.



A people's dividend

If we are to seize the opportunities of the transition then all people and communities across the UK must benefit, with the greatest return accruing to those who need it most. This is what we call the 'people's dividend'.

“There should be more community ownership of local assets, so that citizens have more control over and a greater stake in the decisions that affect them.”

Tees Valleys and County Durham citizens' jury

The 'people's dividend' should include the following.

- **Universal access to free or affordable services that support sustainable action** – for example, free local decarbonised public transport.
- **The creation of mechanisms for direct 'dividend payments' to the public** – for example, revenue raised through carbon pricing or payments for household contributions to the energy grid.
- **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.
- **Good quality, well-paid jobs and a voice at work** – for example, a funded 'right to retrain' for those transitioning from high-carbon industries.
- **Increased access to nature and improved wellbeing** – for example, transforming neighbourhoods into greener, more social spaces.

2.



A fairness lock

The transition the UK is making must be fair. Our jurors provided a clear sense of what a 'fairness lock' for climate and nature policies could look like. This lock should move beyond a simple 'cost of living test' to one that is more reflective of the different costs and benefits that come with the transition.

“The cost of change – both financial and in how we live – has to be shared fairly.”

South Wales Valleys citizens' jury

A fairness lock should guarantee the following.

- **Procedural fairness** – people are fully involved in decision making, including those who are most disadvantaged.
- **The fair distribution of costs for consumers and the taxpayer** – including carbon pricing that protects those on the lowest incomes.
- **That all policies will be assessed for how they affect, and involve:**
 - **places and communities particularly impacted across the UK – no place will be left behind**
 - **different people and communities including by income, age, gender, race and disability**
 - **younger and future generations.**

- **Help is put in place ahead of change to allay anxieties and maintain public support** – for example, households have the means to transition to low-carbon heating systems before regulations come into place.
- **That the UK makes a fair contribution internationally** – the UK recognises that there are varying responsibilities and capabilities to respond amongst different countries across the world.

3. **A people-first approach**

The public want to be part of this transition. They want change brought about with or by them – not done to them.

“The area needs the input of local people with on the ground experience to share with those who have responsibility to make things happen.”

Juror from the Thurrock citizens’ jury

A people first approach must ensure the following.

- **Clear, accessible information about the transition is available to the public** – including a public communications plan and ‘one stop shops’ for support.
- **The public have a clear role in the creation of plans** – including through a permanent, national citizens’ assembly for climate and nature deliberation and a leading role in local plans too.
- **Local communities have greater ownership over the decisions that affect them** – including a nationwide commitment to participatory budgeting.⁵

4. **National leadership and local delivery**

Our jurors were clear that we need national leadership and a strategy to deliver the change needed.

“Action must reflect the urgency of the situation. We need to act now. Leadership has to be shown by government, but everyone is accountable for taking action and should feel part of making the changes that are required.”

Aberdeenshire citizens’ jury

However, the impacts of the transition will be different in different places. Communities, and their local leaders, have a better understanding of their local areas – the challenges, the assets and the opportunities – and they must be able to shape and deliver their own response.

“Local people need to be empowered to act. Every area is unique and a ‘one size fits all’ approach isn’t going to work..”

Tees Valleys and County Durham citizens’ jury

In practice this means the following.

- **The UK government and devolved nations show leadership** by developing plans and making investments to manage the transition, but devolving as many powers and resources as is possible.
- **Local areas and communities are able to shape and deliver their own response** through consistent, long-term, devolution deals.

⁵ Participatory budgeting involves the public making decisions over how local budgets are spent.

5.



A whole-economy, all-society approach

Our jurors wanted to see a joined up approach across governments and their departments, and a partnership approach across the whole of the economy and society too.

“Decisions need to be joined up with different organisations working together to make the most of the resources and time we have. We shouldn’t be acting in silos.”

South Wales Valleys citizens’ jury

“We should involve workers and the businesses affected by these regulations in designing and advocating for them.”

South Wales Valleys citizens’ jury

In practice this means the following.

- **For government, all policies, programmes and investment must be compliant with our collective climate and nature goals** – including a net zero and nature rule to ensure no public money is spent on projects which make the problem worse.
- **The innovation and job creation of the private sector, including SMEs, are harnessed to help us achieve our goals** – with government providing an enabling environment through tax incentives, small business loans and regulation.
- **A partnership must be forged with wider civil society, workers and their trade unions, businesses particularly SMEs** – including transition plans in carbon intensive industries, drawn up with workers, and engaging with small businesses.

6.



Valuing what matters

Our jurors were clear about the high value they place on nature in their lives and the need to protect, invest in and restore it. They had a much broader conception of what a ‘better life for all’ looks like than the often-narrow focus in the national debate on measures such as GDP. To succeed, they believe we must move to a focus on wellbeing, the things that contribute to it, and that matter most to people.

“To bring people with us on this journey we need to see this not as a sacrifice but as a progression to a more sustainable way of life. We need to be positive in our response to these emergencies.”

Aberdeenshire citizens’ jury

In practice this will mean the following.

- **Putting nature on the same footing as climate** – including through the creation of a Nature Recovery Committee and similar legally binding targets for the environment.
- **Recognising that a healthy and restored natural environment builds greater climate and economic resilience** – for example nature supports sustainable agriculture, underpins productivity, and supports work-life balance.
- **Placing a focus on wellbeing** – including introducing a Wellbeing of Future Generations Act and embedding the Sustainable Development Goals as the preferred measures of success for all government policy.

WHAT'S NEXT

The recommendations made in this summary, and in our full report, cover areas where the UK government holds reserve powers and areas where responsibility is devolved across the four nations. The vast majority of our recommendations are relevant for the UK government and the devolved nations but in recognition of the different policy contexts, proposals will need to be adapted to suit the particular circumstances.⁶

As part of its work, the commission has recognised that action to address the climate and nature crises will necessarily involve change in every sector of the economy. While the commission's work has been wide ranging, we have sought to focus on the priorities expressed by our citizens juries. Issues not covered by this report include the UK's energy mix, aviation and shipping, nevertheless we recognise their importance and the necessity for a fair transition.

The five chapters that follow apply the six principles of our social contract across our economy and society. More detail on our proposals, and full list of the recommendations, are available in the longer evidence report of the commission.

⁶ Where costings are presented, they are for the UK government and commensurate funding will be required to support those policies in areas where policy is devolved.

3. SHARING POWER

THE CHANGE WE NEED TO SEE

Responding to the climate and nature crises requires involving and empowering people in decision-making. It will mean sharing power.

People have a veto on all climate and nature policies, which they can exercise at the ballot box. Through greater public involvement in decision making, policies and plans will garner wider and more enduring public support, and be fairer in both perception and practice.

We can and must revitalise UK democracy, ensuring people feel part of the change, have a renewed sense of ownership over the actions taken, and are actively involved in improving their local communities, with the benefits widely shared.

“If a small amount of strangers can come together and discuss this topic and make suggestions and ideas to improve our future, imagine what a whole community can achieve.”

Juror from the Aberdeenshire citizens’ jury

POLICY RECOMMENDATIONS

Empowering the public

A permanent, national Climate and Nature Assembly to support public deliberation.

Ongoing citizens’ assemblies at a local or regional level covering a range of topics.

1 per cent of all local budgets to be allocated through participatory budgeting.

Valuing what matters

A Wellbeing of Future Generations act to provide a framework for embedding wellbeing, fairness and environmental protection in all decision making.

Define the environmental limits the economy operates within.

Include a ‘net zero and protection of nature’ rule on all public spending.

Supporting local action

Devolve the powers authorities need to achieve net zero and support nature to recover.

A new Community Right to Own and Manage.

A third of all onshore renewables to be in community ownership by 2030.

A £1.5 billion Thriving Places Fund.

EMPOWERING THE PUBLIC

“Genuine, meaningful consultation is crucial to ensure that decisions are fair for local people. People should be involved before decisions get taken and kept informed. When people are asked to have their say they must be listened to and not overruled, otherwise trust is lost.”

Aberdeenshire citizens’ jury

- **To give people ownership over the actions taken, no climate and nature recovery plan should be created without public involvement.** To enable this, a permanent citizens’ assembly should be established, the membership of which will be refreshed annually. The UK Climate and Nature Assembly, should be established to scrutinise the government’s progress and support ongoing policy development.⁷ The governments of Northern Ireland, Scotland⁸ and Wales should mirror this approach. At a regional and local level a permanent citizens’ assembly would provide an efficient way of engaging the public in the response to the climate and nature crises alongside other topics.
- **To respond better to local needs and improve the relationship between decision makers and the public, all parts of the UK should at least match Scotland’s commitment to allocate one per cent of local government funding through participatory budgeting.**^{9,10} Participatory budgeting can increase people’s trust in local decision makers, their sense of belonging to their community, and improve social determinants of health (Pennington et al 2018).



VALUING WHAT MATTERS

“Decisions should prioritise wellbeing and nature over profit.”

Thurrock citizens’ jury

- **To root wellbeing and fairness at the heart of policymaking, the Northern Irish Executive, Scottish and UK governments should introduce a Wellbeing of Future Generations Act.** This would build on similar legislation in Wales. These acts would embed the Sustainable Development Goals into all decision-making frameworks and should be championed by a new Wellbeing of Future Generations Commission or Commissioner. This will provide measures of success that focus on wellbeing and fairness, not just economic growth, for all public policy.
- **So that nature restoration is treated with the same importance as the climate crisis, the UK government should define and adopt the environmental limits within which the economy must operate and provide statutory targets across a full range of environmental impacts.** Modelled on the UK’s target of reaching net zero by 2050 and the recently announced 2030 target for reversing wildlife decline (DEFRA 2021) these legally binding targets would support the conservation and restoration of all natural systems, including ecological resilience, soil fertility and air quality. The Nature Recovery Committee would oversee these targets, providing advice and budgets modelling how to achieve them, and the Office of Environmental Protection should be provided with the powers to enforce them and hold the government to account for



7 This assembly would support all government departments, the CCC and the proposed Nature Recovery Committee (see chapter 8) to effectively and efficiently engage the public in deliberation on the fairness implications of action for climate and nature.

8 To provide the appropriate focus and scrutiny we suggest a permanent citizens’ assembly focussed on climate and nature is required alongside the Scottish government’s commitment to deliver annual events on a range of other topics.

9 In 2019/20 this approach would have seen over £940 million allocated through participative budgeting approaches in England.

10 As per recommendations from the evaluation of Scotland’s participatory budgeting programme this target must sit alongside guidance and support for authorities to ensure it delivers the transformation in relationships between people and government that leads to the public becoming genuine partners in decision making (Hagan et al 2019).

breaches. These targets could be established through the Wellbeing of Future Generations Act (see above) or the government’s Environment Bill. The devolved nations each have their own net zero targets and these measures would need to be adopted by them in the same fashion.

- **To keep 1.5°C degrees of warming in reach and halt the decline of nature, the UK government, devolved nations, local government and all public bodies, including the UK Infrastructure Bank, should adopt a new ‘net zero and protection of nature’ rule and apply this to all investment decisions.** Within central government, such a test would apply to the budget and comprehensive spending reviews. It would strengthen existing guidance on assessing greenhouse gas emissions within the Green Book by ensuring all spending decisions, across all government departments, contribute to meeting legally-binding environmental targets.¹¹



SUPPORTING LOCAL ACTION

“Local areas need to create their own plans and priorities based on their local assets. They will need the resources to see these plans through.”

Tees Valley and County Durham citizens’ jury

- **All policy must be tailored to the different needs of local communities, therefore all local areas should be offered the powers and resources to play their part in achieving net zero and support nature to recover as part of a new devolution framework.**¹² The UK is one of the most centralised nations in the developed world despite significant evidence that more devolved economies deliver better outcomes (Raikes 2020). English combined and local authorities must be given new powers over economic strategy, public services (such as skills and welfare), taxation, transport and spatial planning.
- **To empower communities to actively take part in the transition, the UK government should aim to significantly increase the proportion of community-owned low-carbon assets.** As part of this, one third of new onshore renewables in England, such as wind turbines and solar panels, should be under community ownership by 2030.¹³ In addition, the existing Community Right to Bid, within the Localism Act, should be extended to cover a larger definition of community value and support communities to buy or lease unused or underused local assets from both the public sector and private investors. All community-owned projects must also adopt high-quality work standards in consultation with unions. As part of delivering this target the UK government should create a single new, independent and permanent Thriving Places Fund for England that is endowed by the government, and the National Lottery, with at least £1.5 billion over the next three years.¹⁴



OTHER RECOMMENDATIONS

The commission has also made recommendations on public communications and engagement and changes to the curriculum. These, and further information on the recommendations above, can be found in the longer evidence report of the commission.

11 WWF UK outlined the design of a ‘net zero test’ within their response to the Comprehensive Spending Review (WWF UK 2020) with the same principles being equally relevant to the protection of nature.
 12 The framework for devolved powers and the funding settlements required to support this is defined in Webb (2020) and further detail on the powers to be devolved is available in the evidence report of the commission.
 13 This could be partly achieved through a new ‘right to invest’ that ensures community’s at least a 20% stake in all onshore windfarms, as per Denmark’s 2009 ‘Promotion of Renewable Energy Act’.
 14 Our proposal sits between the amounts allocated to Big Local and Power to Change (£150 million) and the proposal for up to £5 billion for a Community Wealth Fund argued for by the Alliance for a Community Wealth Fund Alliance (Local Trust 2018). Similar funds should be created in the devolved nations.

4.

TRANSFORMING OUR ECONOMY

THE CHANGE WE NEED TO SEE

For a fair transition to succeed, the UK must transform its economy to better serve society and the planet we live on. Through this transformation we can create high-quality jobs, improve wellbeing and 'level up' to narrow regional inequalities. Analysis by IPPR shows that the transition could create 1.7 million jobs by 2035 in sectors from transport to home retrofit and low-carbon electricity.



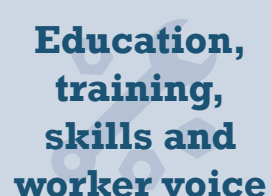
Our jurors were clear that we need national leadership to set the ambition and drive the change needed. They were also clear that the state cannot deliver this alone. A new partnership between the state and business is needed. This means providing the incentives for businesses, particularly SMEs, to act and applying penalties and regulation for those that don't.

Our jurors also want a partnership with workers and their trade unions. Government at all levels must focus on the education, training and skills needs of workers of all ages, at all points in life. This must include support for workers in carbon intensive industries – up to 3.2 million jobs will need reskilling as part of the transition to net zero (Robins et al 2019). The UK needs to equip its workforce with the skills for new and different jobs that sustain people and the natural world. Workers must be given a greater voice and stake over their futures, particularly those who will be directly affected by the transition.

“We need to make it easier for businesses to make these changes and reward them for being proactive in taking action.”

South Wales Valleys citizens' jury

POLICY RECOMMENDATIONS

 <h3>Government leadership</h3> <p>Establish a Net Zero and Fair Transition body for the UK and each devolved nation.</p> <p>Co-develop a Net Zero and Fair Transition Delivery Plan with business, trade unions and workers, local government and community voices, academia and civil society.</p> <p>Support ‘fair transition plans’ for every sector of the economy.</p>	 <h3>Raising investment in net zero and nature</h3> <p>Government commits to £30 billion additional annual investment in climate and nature.</p> <p>Incentives and schemes to support businesses are brought forward including zero interest business loans and industrial energy ‘big switches’.</p> <p>Carbon pricing used more extensively but with strong measures in place to protect those on the lowest incomes.</p> <p>Set tougher targets to level in greater private finance in the clean transition.</p>	 <h3>Education, training, skills and worker voice</h3> <p>A new ‘right to retrain’ is introduced for all workers impacted by the transition.</p> <p>Government launches Green Training Fund to support retraining, education and skills.</p> <p>New Skills Academies launched across the country to support carbon intensive workers to retrain and new entrants to get skilled up.</p>
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GOVERNMENT LEADERSHIP

“The government leading the way on investments means that individuals, communities and businesses are more likely to follow, rather than having to take the risks themselves of starting something new.”

Tees Valley and County Durham citizens’ jury

- **To effectively manage the transition across all sectors of the economy, a Net Zero and Fair Transition Delivery Body should be established for the UK, and each of the devolved nations,¹⁵ in order to manage the transition across all sectors of the economy.** Its objective should be to involve stakeholders from across business, trade unions and workers themselves, local government and community voices, academia and civil society. The aim of this body should be to facilitate dialogue between these key stakeholders and government, co-develop a Net Zero and Fair Transition Delivery Plan with all these stakeholders, including worker-led ‘fair transition agreements’,¹⁶ and support the development of fair transition plans across every sector of the economy, including sectors in the ‘everyday economy’ such as retail and wholesale.



“Businesses and investors need to be part of the solution ... They need to be incentivised to act, but there needs to be penalties if they don’t.”

Tees Valley and County Durham citizens’ jury

¹⁵ These bodies should be focused on delivery. The UK-wide body would be charged with working with its sister bodies in the devolved nations. Lessons should be learned from the format and output of the Just Transition Commission in Scotland, though that body was advisory. <https://www.gov.scot/groups/just-transition-commission/>

¹⁶ These agreements should cover issues including pay, job security, working time, job descriptions, training and skills, apprenticeships, retirement policy, performance management, and equal opportunities.

RAISING INVESTMENT IN NET ZERO AND NATURE

“Action is urgent, and we need to accelerate the pace of change. We need to increase the scale of investment and for this to align with the urgency of change required.”

Aberdeenshire citizens’ jury

- **To meet the scale of the climate and nature crisis, we call on the UK government to make a minimum public investment of £30 billion on an annual basis up until at least 2030.**¹⁷ This should be funded by borrowing, as it is an investment that will deliver ongoing savings in terms of reduced environmental costs, greater tax revenues (as a result of high employment) and lower public expenditure (due to lower welfare and public service demand). Funding should be used to accelerate the path to net zero, to create jobs and ‘level up’ regions within England and within the devolved nations, and to help the economy recover and stabilise public finances after Covid-19.¹⁸
- **To support businesses to decarbonise,** the UK government should develop and deliver the following.
 - **Zero-interest business loans to support continuing investment into business energy efficiency** and decarbonising energy consumption. This should form part of the GreenGO scheme outlined in the following chapter and have a particular focus on SMEs.
 - **Industrial energy ‘big switches’, to reduce high energy costs, that offer power purchasing agreements (PPAs) to multiple industries and green energy providers.** The agreements would involve the government aggregating industries interested in participating and then conducting an auction process among energy suppliers to supply these industries with renewable-based electricity at a fixed energy price for a number of years.
- **Carbon pricing¹⁹ has a role to play in making environmentally damaging behaviours more expensive, and clean activities cheaper through subsidies but its use must meet a series of fairness tests.** Any increase or expansion in the use of carbon pricing should be introduced incrementally and targeted at activities with the worst environmental impacts. Support should be in place before prices rise for households and some businesses to transition, as well as protections for low-income households and a revenue recycling compensation scheme (see GreenGO section in chapter 5). It should be used as part of a wider package of investment and reforms.

“Where there are additional costs, like fossil fuel taxes, they should be phased in to give people time to prepare and those on low incomes should be protected.”

Thurrock Citizens’ Jury

- **To align their investments with net zero, the Paris Agreement and wider environmental targets, UK financial institutions should be legally required to set science based interim and long-term targets for net zero and for nature too.** Financial institutions should be obliged to report on their progress and set out the barriers and reasons for not meeting them and a future pathway



¹⁷ With consequential funding for the devolved administrations.

¹⁸ IPPR analysis of investment required to meet net zero across all sectors, of the investment required for nature restoration and of the funding needed for retraining, skills and education. See evidence report of the commission for further detail on the breakdown.

¹⁹ Pricing carbon encourages emissions to be reduced where it is cheapest to do. Its use rests on a key principle of environmental law - that polluters must pay for the damage they cause or for its abatement. A carbon price can be levied through an emissions trading scheme (as has been the case for the UK when it was a member of the EU) or through taxation. The UK government is in the process of developing its own emissions trading scheme.

for doing so. The Financial Conduct Authority should be empowered to provide an impartial assessment of firms' performance against these indicators.²⁰

- **So that the public can use their pensions and investments to support the transition, the government should set a legal requirement for the 'default' defined contribution funds to be net zero aligned by 2030 at the latest** and to make it quicker and easier for consumers to switch in the meantime. All financial indices should be required to disclose their overall carbon and environmental footprint to investors.



EDUCATION, TRAINING, SKILLS AND WORKER VOICE

“Urgency is needed in the creation of new job opportunities, which must be equitably distributed across the country. This needs to be supported by a clear strategy and monitored over time.”

Aberdeenshire citizens' jury

- **To protect workers and harness their skills, the UK government and devolved nations should introduce a new funded 'right to retrain' for all workers impacted by the transition to net zero.** All workers whose jobs may be affected by the transition should have a legal right to receive training to set them on a path towards re-employment. Where possible, retraining within the same business should be prioritised.
- **To fund a workers' right to retrain, the UK government should create a Green Training Fund of up to £9.9 billion (£1.1 billion per year)²¹ until 2030, with a comparative commitment by the devolved nations** – including the Scottish government expanding the funding of their own Transition Training Fund. The funding would be distributed by Skills Academies (see below) to businesses applying for training courses on behalf of existing workers and new labour market entrants.
- **To provide a route into net-zero compatible employment, Green Skills Academies should be established by the UK government and devolved nations for existing workers, unemployed individuals and new entrants to the labour market.** The academies should be partnerships between local authorities and/or combined authorities and further education colleges. These should be funded through the Green Training Fund.



OTHER RECOMMENDATIONS

The commission's other recommendations in this area include supporting the circular economy, local economic strategies, additional measures to support business including carbon contracts for difference, standards, labelling schemes and accreditation marks; green procurement; and carbon border adjustments and import standards, the involvement of workers and trade unions in the process of the transition, skills passports, and education. These, and further information on the recommendations above, can be found in the longer evidence report of the commission.

²⁰ These proposals go beyond mandatory climate disclosures by requiring targets to be set and plans published on how they can be met.

²¹ We estimate this figure using the following methodology. First, we apply the government's recent increase to payments for the Apprenticeship Levy of £3,000 per graduate (EFSA 2021) and set out a hypothetical scenario where similar costs for retraining would apply to existing workers. We then multiply this figure by 3.2 million – the number of workers estimated by the LSE (Robins et al 2019) who will require reskilling in the transition. Finally, we average out this cost over 9 years to reach the 2030 target date.

5. HOW WE LIVE

THE CHANGE WE NEED TO SEE

Where we live and how we get around, how we heat our homes, and what we eat, all have a significant role in tackling the climate crisis and protecting and restoring nature. How we enable people to make better choices matters: it will determine how quickly – and how fairly – we make the transition to a healthier and cleaner society.

As it stands, most people cannot afford to retrofit their homes, install low-carbon heating systems or buy an electric vehicle or e-bike. This must change. Our jurors told us that the green choice must be an easy one, especially for those on low incomes.

In decarbonising our homes, we can tackle fuel poverty and improve people's health. People's homes could even be treated as individual 'power stations' from which people can accrue financial benefits. In reducing emissions from transport, we can also make it easier for people to travel in ways that are affordable, healthy and connect them to their neighbours. In changing what we eat, we can ensure that everyone is able to eat nutritious meals that have also been produced in ways that are sustainable.

"Affordability has to really mean affordable for all. The things people need to live a good life, including housing and transport, must be genuinely affordable to the people who live here."

Thurrock citizens' jury

POLICY RECOMMENDATIONS

How we heat our homes

New national and local strategies for retrofit led by devolved and local governments and coordinated nationally.

The UK sets a legal target for Minimum Energy Efficiency Standards in socially rented homes.

Recruitment and training for 300,000 jobs in home retrofit and low-carbon heat is a priority for the Green Training Fund and Skills Academies.

What we eat

Every schoolchild who lives in a household in receipt of universal credit is provided with a healthy and sustainable free school meal.

The UK government establishes nationally agreed targets for increased consumption of fruit and vegetables and less and better meat and dairy consumption.

All food products associated with deforestations removed from UK supply chains before 2030.

How we travel

Transport decarbonisation plans have the aim of making it possible to live a good life, wherever you live, without needing to own a car

UK creates a world-leading local public transport system that is free at the point of use by 2030.

All UK cities and towns are supported to set and deliver ambitious targets to reallocate road space to cycling, walking and green space every year.

MAKING GREEN AND HEALTHY CHOICES EASY AND POSSIBLE FOR EVERYONE

To provide people with the information and support they need to make greener and healthier decisions, we recommend the creation of a new GreenGO scheme – a ‘one stop shop’ to provide people with the information and financial support they need. GreenGO will provide a unifying brand under which financial support and high-quality advice can be marketed to and accessed by the public. This scheme aims to ensure that the means to take action are available to everyone and accessible on their high streets as well as online and via a dedicated phone line.

One of the main functions of the GreenGO scheme would be to provide all households with funding and incentives to transition to green alternatives. It would offer the public a way to save money and give access to low-cost loans and grants for home retrofit and zero carbon travel options. If carbon pricing is adopted across the economy, as discussed in chapter 4, GreenGO could provide people compensation for higher prices through credits to be exchanged for low-carbon goods and services. The GreenGO scheme would incorporate the following elements.²²

- **GreenGO grants and loans:** GreenGO would streamline all existing government schemes supporting the public to invest in cleaner, healthier technologies. This would include those helping with insulation of homes and low-carbon heat, and transport schemes supporting alternatives to private car ownership. These grants and loans could be combined with GreenGO credits or savings to help overcome the barriers to capital that many households currently face. As such, this scheme could serve as a boost for bringing about a growing market for net zero and nature friendly goods and services. We propose that at its launch the scheme has two core programmes:
 - **A GreenGO Warm scheme for England capitalised with £6 billion per year through to 2030²³ focussed on heat pumps and high energy efficiency upgrades. This scheme would comprise means-tested grants and zero or low-cost loans for homeowners and zero or low-cost loans for private landlords (for social homes see below). It would help up to 650,000 households per year.**
 - **a GreenGO Move scheme of at least at £1.5 billion per year²⁴ through to 2030 in grants and loans to support people to repair existing cycles and buy new cycles, electric scooters or e-bikes, and support those who no longer want to own a private car.** Modelled on existing support available in Scotland, this would include interest free loans of up to £6,000 per household and additional grant funding for those living in low-income households (Energy Saving Trust 2021). A scrappage scheme targeted in the areas with the poorest air quality should allow for polluting, older vehicles to be traded in for up to £3,000 per household in GreenGO credits²⁵ – helping to pay for shared mobility schemes or public transport.

22 The GreenGO scheme could operate UK-wide but as grants and loans for home energy efficiency (for example) are devolved, it would be for the devolved nations to design and implement their own versions of the scheme.

23 This cost is based on the upper estimate of indicative annual public investment for home heating in the CCC's 6th carbon budget (CCC 2020a), less an estimated annual £0.5bn per year for investment in heat networks (which will be needed but not in the form of grants and loans to households) and £0.5bn per year for social housing decarbonisation (we recommend this additional spending in our evidence report). The upper estimate is chosen due to assumptions about higher costs for lower-income households due to lower efficiency properties that may be more difficult to access as described in Emden et al (2018).

24 This would match the scale of funding called for by UK100 to support and enhance 30 Clean Air Zones (UK100 2020).




25 This scheme is based on a pilot being delivered as part of the West Midlands Future Transport Zone and should incorporate learnings from this project.

- **GreenGO ISAs:** Modelled on the government’s Lifetime and Help to Buy ISAs, the GreenGO account could add, for example, a 25 per cent bonus to the account holders’ investments on a maximum investment of £1,000 per year. Only net zero aligned and accredited shares and investment funds will be eligible to be held within the account. The bonus, realised in the form of GreenGO credits, will only be awarded to the account holder where withdrawals are exchanged for green goods and services²⁶ or where shares and investments are held in net zero aligned investment funds for the long-term. These ISAs would offer higher returns than for the government’s other schemes, to incentivise take-up.
- **GreenGO and carbon pricing credits:** Revenue from future carbon prices on consumer-facing goods and services could be recycled through GreenGO to pay back all households, with low-income households receiving a larger proportion. People who receive these GreenGO credits could use them to purchase low-carbon technologies like heat pumps, or make low-carbon lifestyle choices like cycling, and buying healthier, low environmental impact food.

HOW WE HEAT OUR HOMES

“Increase the level of funding for housing retrofit and make its distribution fairer ... Give powers to allocate funding to local areas to ensure that those most in need are able to access the funding.”

South Wales Valleys Citizens’ Jury

- **To ensure heat decarbonisation is tailored to the needs of individual communities and homes, we recommend that retrofit is led by local government but with coordination and support provided by the UK and devolved governments.** An area-based approach to housing retrofit is needed, with local authorities supported to develop heat zoning – a process of identifying the best low-carbon heat options for each local area – with advice and guidelines on how to decide on technologies to be used and installed; holding local and regional ‘big heat debates’; and working with the industry to develop, monitor and verify consistent training standards. 
- **To tackle high energy bills in the private rented sector, the UK should set a more ambitious legal requirement for minimum energy efficiency standards in socially rented and privately rented homes.** This should be gradually brought up to at least B by 2030, with an exception of ‘C’ rating for hard-to-treat stock. The government should also set a legal requirement to eliminate oil heating systems no later than 2028 and gas heating systems by 2033. 
- **To accelerate heat decarbonisation and create future job opportunities, the recruitment of the nearly 300,000 workers²⁷ in energy efficiency retrofitting, heat pump and heat network installation should be a priority.** The UK government and devolved nations should work with industry, further education colleges and local and regional government to establish skills academies and create the Green Training Fund (above), as well as a recruitment and training plan for the sector. SMEs will be crucial to success and should be engaged as part of drawing up these plans. 

²⁶ An accreditation scheme will be required as set out in the full report.

²⁷ Based on IPPR analysis of the numbers of workers required in energy efficiency retrofitting, heat pump and heat network installation.

The fair transition for changing how we heat our homes



WHAT WE EAT

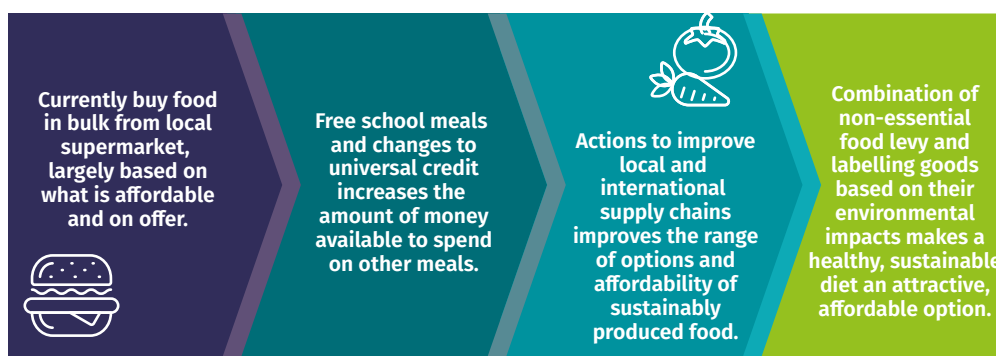
“Focus on the social justice aspects as well as the environmental aspects of food.”

Thurrock citizens' jury

- **To tackle food insecurity, the government should provide every school child who lives in a household in receipt of universal credit with a daily healthy and sustainable free school meal.** This will cost an estimated £275 million.²⁸ The health and economic benefits of this for children living in low-income households will be significant. This will help meet a new government target to end household food insecurity and child food poverty in the UK by 2030.
- **To encourage healthier food choices and reduce greenhouse gas emissions, the UK and devolved governments should establish nationally agreed targets for increased consumption of fruit and vegetables and less and better meat and dairy consumption.** These targets would be based on the Eating Better recommended target and framework of a 50 per cent reduction in meat and dairy consumption by 2030. The government should introduce a ‘non-essential’ food levy on foods that contain excessive levels of sugar, fat, and salt, and use this revenue to reduce food insecurity. The revenue from this food levy could fund a healthy food incentive scheme, similar to the Rose vouchers given to families on low incomes to buy fresh fruit and vegetables by children’s services across some local authorities.
- **To ensure the UK tackles global environmental destruction, all food products associated with global deforestation should be removed from UK supply chains before 2030.** By this point sustainably produced food should represent the majority of the calories consumed in the UK. Public bodies, including schools, and companies should set targets towards eliminating deforestation from all supply chains by 2030.



The fair transition for changing what we eat



²⁸ Based on government projections that 1.1 million pupils would receive free school meals, should the current criteria of eligibility based on receipt of universal credit continue. We use a cost of £2.30 per meal across the required 190 days of schooling mandated and assuming a 90 per cent uptake rate.

HOW WE TRAVEL

“We don’t want to punish anyone for where they live, so benefits and subsidies are better than sanctions and penalties for encouraging greener travel.”

South Wales Valleys citizens’ jury

- **To be successful transport decarbonisation plans must aim to make it possible to live a good life, wherever you are, without needing to own a car.** This will mean that alternatives to the private car, including both public transport and shared mobility schemes, reach a level of convenience and affordability that makes them the obvious choice for personal travel for far more people than they do today. To reduce the need to travel longer distances, and to support thriving places, the UK government must ensure the principles of local access within a 20-minute²⁹ walk, cycle or public transport trip are adopted within the UK’s soon to be announced Transport Decarbonisation Plan and the National Planning Policy Framework. Planners need the power and backing of national governments to refuse planning applications that generate extra traffic and do not contribute to reducing car dependence.



“Public transport needs to be affordable, joined up, convenient and quick, and take people where they want to go safely. Copy the TfL [Transport for London] model for running buses so that bus companies get paid centrally rather than relying on making their own profit. This can help make bus fares cheaper for everyone and mean buses serve more areas.”

Thurrock citizens’ jury

- **To make it possible for people to choose public transport as the new normal, the UK should create a world-leading local public transport system that is free at the point of use by 2030.** The UK government should follow Scotland’s lead by extending the concessionary scheme for local travel for older people to all young people aged under 19 in the UK by 2022, and aim to make all bus travel free³⁰ at the point of use by 2025, and finally making all other forms of local public transport (including trams and the metro) free at the point of use by 2030. To sustain and grow a free public transport network local and regional authorities need to be able to raise more funds locally.³¹
- **To create a healthier environment, all UK cities and towns should be supported to set ambitious targets to reallocate road space to cycling, walking and green space every year.** The approach to this should be determined by local authorities with the active involvement of residents, so that those who need to are still able to travel by car, and businesses are supported through these changes. The immediate focus should be a rapid rollout of School Street schemes. Local transport planners should work with communities to design more car-free areas in city and town centres by 2025, and aim for at least a 50 per cent cut in car use in towns and cities overall.

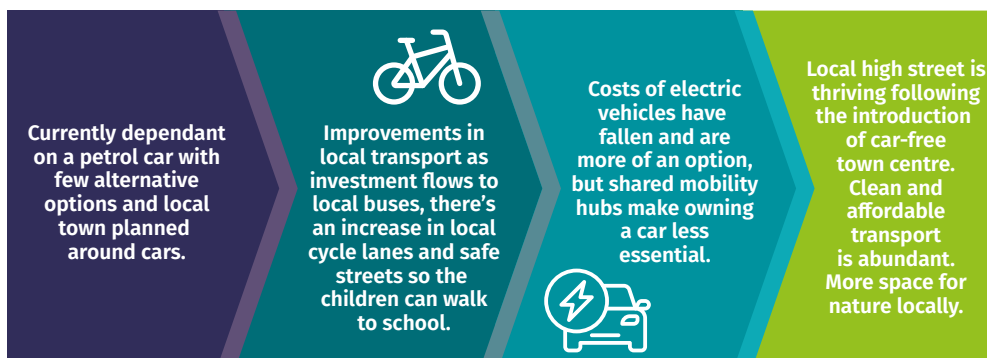


29 Popularised by Melbourne and Paris as ‘20-minute neighbourhoods’ and ‘the 15-minute city’ this principle is already a key part of Scottish government policy (Scottish Government 2020) and the principle it represents sits as a top priority in Wales’ transport strategy: “bring services to people in order to reduce the need to travel” (Welsh Government 2021).

30 In normal times, the revenue raised from bus ticketing is around £3 billion in England (DfT 2020), around £380 million in Scotland (Transport Scotland 2019) and around £55 million in Wales (Bevan Foundation 2018).

31 Around the world, a wide range of local charges have been implemented to pay for public transport services. Business property taxes, used widely in the USA and also temporarily used in London to raise £4 billion for Crossrail, sit alongside road user charging and a visitor lodging levy as potential funding sources (Sloman and Hopkinson 2019). Schemes such as this need to be designed carefully and in consultation with residents and businesses.

The fair transition for changing how we travel



OTHER RECOMMENDATIONS

The commission has also made recommendations on the role of the Bank of England in reducing the risk profile of retrofit, changes to taxation to support home improvements, flood insurance, a right to food, local food strategies, food supply chain practices, funding for walking and cycling, the rollout of a comprehensive public charging network, a ban on purchasing carbon emitting cars for fleets and involving the public in the design of a national road user charging scheme. These can be found in the longer evidence report of the commission.

6. OUR NATURAL WORLD

THE CHANGE WE NEED TO SEE

Our jurors were clear that achieving net zero on its own is not enough. They want government to give equal weight to – and address simultaneously – both the climate and nature crises. Urgent action is needed to restore our lands and sea as habitats where wildlife can flourish, not just for nature, but also for people to thrive. This means changing our relationship with the natural world.

People’s health and happiness are intrinsically linked to the environment in which they live. The poorest and most marginalised tend to have markedly lower levels of access to local green space, and restoration of our natural world must address rather than reinforce these inequalities.

“I felt guilty about the failure of our species to appreciate our responsibilities to protect the environment for the benefit of nature and our own survival.”

Thurrock citizens’ jury

POLICY RECOMMENDATIONS

Space for nature to thrive

All governments of the UK work together to ensure that 30 per cent of both land and sea is protected for nature and in good ecological condition by 2030.

The UK government establishes a new Nature Recovery Committee, playing an equivalent role to the Climate Change Committee.

A new relationship with nature

At least £1 billion a year invested in a new National Nature Service that covers all four nations of the UK.

A new ‘3 x 30 x 300’ rule introduced for local planning to ensure everyone has the chance to connect with nature.

Farmers in the vanguard of action for climate and nature

England’s new Environmental Land Management scheme needs to do more than incentivise harm avoidance; it must promote genuinely environmentally beneficial activities.

Advice services are put in place to support farmers to collaborate and adopt nature-friendly practices.

GIVING NATURE THE SPACE IT NEEDS TO THRIVE

“We need urgent and wide-reaching action to protect nature; things need to change in order for nature to recover and to thrive.”

Aberdeenshire citizens’ jury

- **To provide the space that nature needs to recover, all governments of the UK will need to work together to ensure that 30 per cent of both land and sea is protected for nature and in good ecological condition by 2030.**³² These places should be covered by long-term, statutory protection. This target should be applied to both the UK as a whole, each of the nations, and local areas and regions, so that the costs and benefits of a nature recovery are fairly distributed.
- **To both advise the governments of the UK and hold them to account for restoring nature, we propose the UK government establishes a new Nature Recovery Committee, playing an equivalent role to the Climate Change Committee.** This new committee would report to parliament, unlike the Office for Environmental Protection which reports to ministers. It will focus on halting and reversing declines in nature and work alongside the CCC to ensure close alignment between their recommended pathways for addressing the climate and nature crises. The Nature Recovery Committee would provide annual reports on progress in delivering against agreed targets (proposed in chapter 4), including identify investment gaps, and consult with DEFRA and the Office for Environmental Protection in developing its advice on how to deliver on these targets.



BUILDING A NEW RELATIONSHIP WITH NATURE

“Raise awareness and aspiration through the national curriculum, awards and scholarships ... creating an ‘Attenborough Scholarship’ – a scholarship scheme to encourage young people into low-carbon jobs [and] creating a ‘National Nature Service’ to provide work and volunteering opportunities.”

Tees Valley and County Durham citizens’ jury

- **To create new high-quality job opportunities and mobilise the workforce needed to restore nature, at least £1 billion a year should be invested in a new National Nature Service that covers all four nations of the UK.**³³ The scheme would provide at least a year of paid work and training for ‘rangers’ and would be designed with a focus on providing roles to young people (including apprenticeships), under-represented groups, and in the communities that need them most, as well as delivering natural recovery projects. Our jurors suggested that the opportunities offered for young people to start careers in restoring nature, alongside other low-carbon jobs, might be called the ‘Attenborough scholarship’.
- **To improve access to green spaces and nature for everyone, a new ‘3 x 30 x 300’ rule should be introduced for local planning.** This would ensure at least three natural features are visible from every new home, every neighbourhood has at least 30 per cent tree canopy cover, and no new home is further than 300 metres from an accessible green space,



³² Although the UK government argue that 26 per cent of land in England is already protected in this way, including National Parks and AONBs, these landscapes are often in poor ecological condition and significant improvements need to be made for these to be considered ‘protected for nature’.

³³ The scheme would be a partnership between the UK government and devolved nations of the UK. The service should either be established jointly by all, or if separate services are created they should at least be linked, sharing staff, knowledge and resources. A proposed National Nature Service for England is costed at £741 million a year and would deliver nearly 10,000 entry level jobs alongside 5,000 supervisory and expert roles (Thoren 2020). This proposal should be scaled up and provided with proportionate funding to cover the whole of the UK.

such as a parks or a nature reserve. This rule can also be applied to identify existing neighbourhoods lacking in nature and establish priority areas for urban greening.

FARMERS IN THE VANGUARD OF ACTION FOR CLIMATE AND NATURE

A fair transition for the farming sector would mean farmers, land managers and agriculture workers are fairly rewarded for their work while helping to address the climate crisis and restore nature.

“I think they’ve got to help them financially. I’ve got family that have farmed for generations and that’s all they know, you know, farming cattle and sheep. It’s not all that easy to change.”

Juror from the Aberdeenshire citizens’ jury

- **To support farmers in the transition and incentivise genuine restoration, not business-as-usual or reduced harm, England’s new Environmental Land Management (ELMs) scheme must promote genuinely environmentally beneficial activities and support collaboration.** Harm-avoidance should be dealt with through regulation, rather than incentives. Working in partnership across multiple holdings, the ELMS scheme should not just provide sufficient financial incentives but also the advice services that facilitate peer-to-peer learning so that farmers understand how best to undertake activities, such as species recovery or improving water quality, which can help restore nature.



OTHER RECOMMENDATIONS

The commission has also made recommendations on the expansion of the ‘Right to Roam’, reform of the planning system to align it with net zero and nature recovery goals, and further support for farmers. These, and further information on the recommendations above, can be found in the longer evidence report of the commission.

7.

OUR PLACE IN THE WORLD

THE CHANGE WE NEED TO SEE

The UK has a unique opportunity to play a leading role in a global fair transition and keeping temperature rises below 1.5 degrees. This means reducing the UK's negative impacts on climate and nature by a greater, fairer share, commensurate with our historical damage and current capability, and providing more support to developing nations to both help them through the transition and to become more resilient to the now unavoidable impacts of the climate and nature emergencies. Aligning climate action with the UN's Sustainable Development Goals, both at home and abroad, will also be crucial.

Our jurors recognised that the UK has been a leading contributor to global heating and the destruction of nature. They saw that the UK had a responsibility to act with partners around the world to address the climate and nature crises both at home and abroad. As well as having a responsibility to help poorer countries, they also saw potential for economic benefits for the UK. Many of the jurors also had concerns that the UK would lose out if it acted alone or implemented policies that were stricter than elsewhere. They wanted to make sure that businesses weren't forced to leave and take jobs with them.

There is now a huge opportunity for the UK to help reinvigorate international cooperation to better enable societies around the world to realise the benefits of the clean transition. Doing so can maximise economic benefits at home and improve global resilience to environmental shocks, which will better protect the UK itself.

“It is the more vulnerable people in the poorer countries that are taking the brunt of this and it's us causing it and that's horrendous.”

Juror from the Aberdeenshire citizens' jury

POLICY RECOMMENDATIONS

 <h3 style="text-align: center;">The UK's fair share</h3> <p>Adopt a fair share target to contribute to global emissions reductions.</p> <p>Immediately reestablish official development assistance spending at 0.7 per cent of gross national income. Make a greater financial contribution to support lower income countries to decarbonise.</p> <p>Amend the Environment Bill to include a target to halve the UK's global environmental footprint by 2030 and commit to a target on consumption emissions.</p>	 <h3 style="text-align: center;">Helping rewrite international rules</h3> <p>A new due diligence law requiring multinationals to audit their supply chains and ensure high standards in areas such as labour conditions, human rights, and climate and nature impacts, under the law of their home states.</p> <p>UK government to work in collaboration with the EU and other key partners to ensure low-income countries' economies are at the heart of policy development for carbon border adjustment mechanisms and associated measures.</p>	 <h3 style="text-align: center;">Trade policy</h3> <p>A comprehensive non-regression clause in UK environmental legislation that commits to maintaining at least current levels of environmental protection.</p> <p>Establish a set of core standards for environment, animal welfare and food safety. Include provisions to conserve or sustainably manage forests and other ecosystems in all new trade agreements.</p> <p>A trade policy framework should be adopted that supports an increase in core environmental standards over time.</p>
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THE UK'S FAIR SHARE

“Wherever possible, public investment should seek to address the climate and nature crises, both at home and abroad. But this should not come at the expense of those most in need, whether at home or in terms of humanitarian aid abroad. Investment should not go to projects that make the problem worse.”

Tees Valley and County Durham citizens' jury

- **To take meaningful action on reducing global emissions and recognise its historic, cumulative contribution, the UK government should adopt a fair share target to contribute to global emissions reductions.** Delivered in full, such an approach could be equivalent to a reduction of UK emissions of 200 per cent below 1990 levels by 2030 (Laybourn-Langton and Rankin 2019). This would require a combination of a greater financial contribution to lower-income countries to decarbonise and restore nature, and accelerating progress at home. A financial contribution commensurate with a ‘fairer share’ approach outlined above would require committing up to £20 billion in financial support to lower-income countries up to 2030 to both reduce emissions and adapt to the changing climate.
- **To reassert the UK’s commitment to fairness in reducing global emissions, the UK government should immediately re-establish official development assistance (ODA) spending at the UN target of 0.7 per cent of gross national income which is so crucial to meeting the Sustainable Development Goals³⁴**



34 For more information on the Sustainable Development Goals see here: <https://sdgs.un.org/goals>

around the world. All ODA must be compatible with environmental targets and high standards of human rights and social and economic standards abroad.

- **To reduce our environmental impact, we recommend that the UK government amend the Environment Bill to include a target to halve the UK’s global environmental footprint by 2030 and commit to a target on consumption emissions as part of its wider net zero strategy.** This should form part of the UK taking the first steps toward a comprehensive system of measuring and reducing the UK’s full global environmental footprint.



HELPING REWRITE INTERNATIONAL RULES

“The cost of acting now is much less than the cost of inaction, both in the UK and worldwide.”

Tees Valley and County Durham citizens’ jury

- **To ensure the private sector matches government commitments, we recommend a new due diligence law³⁵ which would require multinationals operating in the UK to audit their supply chains and ensure high standards in areas such as labour conditions, human rights, and climate and nature impacts, under the law of their home states.** This would establish liability between the parent company of a multinational corporation and its subsidiaries and subcontractors in the event of human or environmental rights violations.
- **To ensure lower income countries’ economies are at the heart of international policy, the UK government should work in collaboration with the EU, key trading partners and developing nations on the development of carbon border adjustment mechanisms and associated measures.** This should include the creation of mechanisms to ensure that carbon pricing schemes direct revenues to those countries least responsible and worst affected by the climate crisis. This should occur alongside working with the EU and other key partners in ensuring environmental standards are aligned.



TRADE POLICY

- **To ensure the climate and environment are prioritised within trade policy, we propose the provision of a comprehensive non-regression clause in UK environmental legislation that commits to maintaining at least current levels of environmental protection.** The strategic use of trade policy is fundamental to ensuring the UK acts as a responsible nation on climate and the environment on the world stage. Furthermore, the government should establish a set of core import standards for environment, animal welfare, and food safety. These must be based on stated policy objectives and scientific evidence, to which all food will be expected to comply.
- **To ratchet up progress on global environmental restoration, a global trade policy framework should be adopted that supports an increase in core global environmental standards over time.** This would involve reforming the World Trade Organisation to adopt a ‘climate waiver’ that would enable governments to cooperate and collectively develop regulations and import standards operating at the bottom of the market, taking out the worst environmental practices. Labelling and taxation incentives would then work at the top supporting best practice. This would allow for dynamic change where, over time, the old best practice becomes the new minimum standard.³⁶



35 Building in similar laws that have been or are in the process of being introduced in France, Germany and across the EU. See the full report for more detail.

36 More information on this approach can found in Baldock 2020 and WWF 2021.

- **To ensure all future trade negotiations embed environmental preservation, the UK should include provisions to conserve or sustainably manage forests and other international ecosystems in all new trade agreements.** Sustainability chapters of trade agreements should be made mandatory and mechanisms put in place to ensure they are strictly enforced.



OTHER RECOMMENDATIONS

The commission has also made recommendations on the UK's key priorities for COP26, use of export finance to support its environmental goals, and aviation and shipping. These, and further information on the recommendations above, can be found in the longer evidence report of the commission.

REFERENCES

- Aberdeenshire Council (2017) *Agriculture Statistics for Aberdeenshire: November 2017*. <https://www.aberdeenshire.gov.uk/media/21852/agriculture-statistics.pdf>
- Bevan Foundation (2018) *Mandatory concessionary fares scheme in Wales*, Bevan Foundation. <https://www.bevanfoundation.org/wp-content/uploads/2018/01/Concessionary-Fares-response-160118.pdf>
- Lord Deben (2021) 'Letter: Deep Coal Mining in the UK', Climate Change Committee. <https://www.theccc.org.uk/publication/letter-deep-coal-mining-in-the-uk/>
- Department for Environment, Food & Rural Affairs [DEFRA] (2021) 'Environment Secretary to set out plans to restore nature and build back greener from the pandemic', press release, DEFRA. <https://www.gov.uk/government/news/environment-secretary-to-set-out-plans-to-restore-nature-and-build-back-greener-from-the-pandemic>
- CCC [Climate Change Committee] (2020a) *Policies for the Sixth Carbon Budget and Net Zero*, CCC. <https://www.theccc.org.uk/wp-content/uploads/2020/12/Policies-for-the-Sixth-Carbon-Budget-and-Net-Zero.pdf>
- CCC [Climate Change Committee] (2020b) *The Sixth Carbon Budget Surface Transport*. <https://www.theccc.org.uk/wp-content/uploads/2020/12/Sector-summary-Surface-transport.pdf>
- CCC [Climate Change Committee] (2021) 'Letter: Deep Coal Mining in the UK'. <https://www.theccc.org.uk/publication/letter-deep-coal-mining-in-the-uk/>
- Department for Transport [DfT] (2021) 'Operating revenue for local bus services by revenue type, by metropolitan area status: England'. <https://www.gov.uk/government/statistical-data-sets/bus05-subsidies-and-concessions>
- Emden J, Murphy L and Lloyd H (2018) *Beyond ECO: The future of fuel poverty*, IPPR. <http://www.ippr.org/publications/beyond-eco>
- Emden J, Murphy L and Gunson R (2020) *Net zero North Sea: A managed transition for oil and gas in Scotland and the UK after Covid-19*, IPPR. <http://www.ippr.org/research/publications/net-zero-north-sea>
- Education & Skills Funding Agency [ESFA] (2021) *Apprenticeship funding rules and guidance for employers*, ESFA. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/975792/2021_Employer_Rules_Version_5v1.0_FINAL_002_.pdf
- Garman J (2021) The end of Britain's "invisible transition", blogpost. <https://jossgarman.substack.com/p/the-end-of-britains-invisible-transition>
- Hayhow DB et al (2016) *State of Nature 2016*. The State of Nature partnership. <https://www.rspb.org.uk/globalassets/downloads/documents/conservation-projects/state-of-nature/state-of-nature-uk-report-2016.pdf>
- Hagan A, Hill-O'Connoer C, MacRae C, Teedon P (2019) *Evaluation of Participatory Budgeting Activity in Scotland 2016-2018*, Scottish Government. <https://www.gov.scot/publications/evaluation-participatory-budgeting-activity-scotland-2016-2018/>
- IPPR (2020) *Faster, further, fairer: Putting people at the heart of tackling the climate and nature emergency*, interim report of the IPPR Environmental Justice Commission. <http://www.ippr.org/publications/faster-further-fairer>
- IPPR (2021a) *Tees Valley and County Durham climate and fairness panel: Briefing and juror recommendations*, IPPR. <https://www.ippr.org/research/publications/citizens-jury-tees-valley-county-durham>
- IPPR (2021b) *South Wales Valleys Climate and Fairness Panel: Briefing and juror recommendations*, IPPR. <https://www.ippr.org/research/publications/citizens-jury-south-wales-valleys>
- IPPR (2021c) *Thurrock climate and fairness panel: Briefing and juror recommendations*, IPPR. <https://www.ippr.org/research/publications/citizens-jury-thurrock>

- IPPR (2021d) *South Wales Valleys Climate and Fairness Panel: Briefing and juror recommendations*, IPPR. <http://www.ippr.org/research/publications/citizens-jury-aberdeenshire>
- Jung C and Murphy L (2020) *Transforming the economy after Covid-19: A clean, fair and resilient recovery*, IPPR. <http://www.ippr.org/research/publications/transforming-the-economy-after-covid19>
- Laffoley D, and Grimsditch G (eds) (2009) 'The management of natural coastal carbon sinks', IUCN. <https://www.iucn.org/lo/content/management-natural-coastal-carbon-sinks-2>
- Laybourn-Langton L and Rankin L (2019) *Our responsibility: A new model of international cooperation for the era of environmental breakdown*, IPPR. <http://www.ippr.org/research/publications/our-responsibility>
- Laybourn-Langton L, Rankin L and Baxter D (2019) *This is a crisis: Facing up to the age of environmental breakdown*, IPPR. <http://www.ippr.org/research/publications/age-of-environmental-breakdown>
- MacBride-Stewart S (2020) 'Climate Fairness: Jobs and Industry', presentation to the South Wales Valleys Climate and Fairness Panel, 4 November 2020
- O'Brien P, Coombes M, Dawley S, Evans L, Pike A (2017) *How to create great jobs: Towards a regional industrial strategy for Tees Valley*, Trades Union Congress, Newcastle University. <https://www.tuc.org.uk/research-analysis/reports/how-create-great-jobs-towards-regional-industrial-strategy-tees-valley>
- Pennington A et al (2018) *A systematic review of evidence on the impacts of joint decision-making on community wellbeing*, What Works Centre for Wellbeing. <https://whatworkswellbeing.org/resources/joint-decision-making/>
- Raikes L (2020) *The devolution parliament: Devolving power to England's regions, towns and cities*, IPPR North. <http://www.ippr.org/research/publications/the-devolution-parliament>
- Robins N et al (2019) *Investing in a just transition in the UK: How investors can integrate social impact and place-based financing into climate strategies*. <https://www.lse.ac.uk/GranthamInstitute/publication/investing-in-a-just-transition-in-the-uk/>
- Scottish Government (no date) 'Community empowerment: Participatory budgeting', web page. <https://www.gov.scot/policies/community-empowerment/participatory-budgeting/>
- Scottish Government (2020) *Protecting Scotland, renewing Scotland: The government's programme for Scotland 2020-2021*. <https://www.gov.scot/publications/protecting-scotland-renewing-scotland-governments-programme-scotland-2020-2021/>
- Sloman L and Hopkinson L (2019) *Transforming transport funding to meet our climate targets*, Transport for Quality of Life for friends of the Earth. <https://policy.friendsoftheearth.uk/insight/transforming-transport-funding-meet-our-climate-targets>
- Tennison, S (2017) *Teesside Collective case study: Creating one of Europe's first clean industrial zone*, Tees Valley Collective and Tees Valley Combined Authority. <https://www.ice.org.uk/knowledge-and-resources/case-studies/teesside-clean-industrial-zone>
- Thoren B (2020) 'National Nature Service Overview and Plan', Wildlife and Countryside Link. https://www.wcl.org.uk/assets/uploads/img/files/National_Nature_Service_Overview_and_Plan_23.09.2020_1.pdf
- Transport East (2020) *Decarbonisation evidence Base and Strategic recommendations report*. https://www.transporteast.org.uk/wp-content/uploads/Transport-East-Decarbonisation-Evidence-Base-and-Strategic-Recommendations-Report_WEB.pdf
- Transport Scotland (2019) *Scottish Transport Statistics*, Transport Scotland. <https://www.transport.gov.scot/media/47196/scottish-transport-statistics-2019.pdf>
- Webb J (2020) *Forging the future: A vision for northern steel's net zero transformation*, IPPR North. <http://www.ippr.org/research/publications/forging-the-future>
- Webb J, Stone L, Murphy L and Hunter J (2021) *The climate commons: How communities can thrive in a climate changing world*, IPPR. <http://www.ippr.org/research/publications/the-climate-commons>
- Welsh Government (2021) *Llwybr Newydd: The Wales Transport Strategy 2021*. <https://gov.wales/llwybr-newydd-wales-transport-strategy-2021>
- WWF (2020) 'WWF Comprehensive Spending Review Response'. https://www.wwf.org.uk/sites/default/files/2020-09/Final%20WWF%20CSR%20submission_.pdf

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