

Levelling up through climate action A once in a lifetime opportunity to make sure no neighbourhood is 'left behind'



A report of the APPG for 'left behind' neighbourhoods

November 2021

This is not an official publication of the House of Commons or the House of Lords. It has not been approved by either House or its committees. All-Party Parliamentary Groups (APPGs) are informal groups of Members of both Houses with a common interest in particular issues. The views expressed in this report are those of the group.

This report was researched and funded by Local Trust, Secretariat to the APPG for 'left behind' neighbourhoods.

Local Trust

About the APPG evidence session

The APPG held its eighth evidence session on 14 September 2021: 'Communities and the climate crisis – levelling up through climate action'. The session considered how communities can be supported at the local level to better adapt and respond to the climate emergency, and what can be done to ensure that 'left behind' neighbourhoods do not bear the costs of climate change mitigation and a move to zero carbon, and are able instead to be at the heart of, and benefit from, a just transition.

Thanks to the expert witnesses who gave evidence to the APPG:

- Madhur Mehra, Director of Research and Anna Reid, Research Executive, Survation
- Luke Murphy, Head of the Environmental Justice Commission
- Mark Pepper, Development Manager, Ambition Lawrence Weston

Local Trust is registered in England and Wales, charity number 1147511, company number 07833396.

localtrust.org.uk

This work is licensed under the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License. To view a copy of this license, visit http://creativecommons.org/ licenses/by-ncsa/4.0/





About the APPG for 'left behind' neighbourhoods

The All-Party Parliamentary Group for 'left behind' neighbourhoods is a cross-party group of MPs and Peers. It was formed to increase opportunities and improve the quality of life for people living in areas which face a mixture of economic deprivation and insufficient social infrastructure – the connections, organisations and spaces to meet that enable communities to make positive changes for themselves.

appg-leftbehindneighbourhoods.org.uk @appaleftbehind

About the Environmental Justice Commission

The cross-party IPPR Environmental Justice Commission was established in 2019 to develop the ideas and policies to bring about a rapid green transition that is fair and just. It put people at the centre of its work, by holding deliberative democracy events and citizens' juries in diverse locations to draw on local knowledge, experience and wisdom. Its final report, Fairness and Opportunity: A people-powered plan for the green transition, was published in July and can be found at https://www.ippr.org/research/publications/fairness-and-opportunity with an interactive digital version at https://www.ippr.org/fairness-and-opportunity

About Local Trust

Local Trust is a place-based funder supporting communities to transform and improve their lives and the places where they live. We believe there is a need to put more power, resources and decision-making into the hands of local people. Our aims are to demonstrate the value of long term, unconditional, resident-led funding through our work supporting local communities to make their areas better places to live, and to draw on the learning from our work to promote a wider transformation in the way policy makers, funders and others enagge with communities and place.

localtrust.org.uk

Contents

Foreword from our co-chairs	2
Executive summary	4
The impact of climate change on communities	7
Perceptions of climate change in 'left behind' neighbourhoods	10
Community readiness for adaptation, mitigation and net zero	14
Levelling up through climate action	19
Conclusion and recommendations	30

Foreword from our co-chairs

With the eyes of the world on the UK as Glasgow plays host to COP26, effective action against climate change is an urgent global priority. It is clear that this is not an issue of the future – climate change is a clear and present danger, and it is imperative that we act now. While co-ordinated international action is critical to tackling the climate crisis, and government has a central role to play in marshalling national efforts to meet its net zero ambitions, being able to take effective action locally is also key.

As we heard in our APPG's eighth evidence session, communities across the country are engaged in activities that pay a real climate dividend, whether or not they are directly focussed on the environment. We must not underestimate the capabilities of communities to develop climate positive projects at a local level - projects which benefit the local area and improve outcomes for its residents, and at the same time help to reduce emissions and increase community resilience. However, we must also recognise the particular issues faced by the communities identified as being 'left behind' that we advocate on behalf of - and specifically how lower levels of community capacity and depleted social infrastructure hamper effective local community action and activities.

We know from the survey data and research commissioned for the APPG not only that residents of 'left behind' neighbourhoods are increasingly concerned about climate change, and believe it will directly impact their lives in a major way, but also that they are likely to be disproportionately affected by its impacts. We also know from the experience of COVID that 'left behind'

neighbourhoods are less able to respond to crisis events. As a result they risk being further 'left behind' if they are unable to build resilience and to participate in the transition to a net zero future.

It is clear from the polling that there is considerable appetite from people in 'left behind' neighbourhoods to take action locally on climate change, and they need the resources, capacity and dedicated community spaces to be able to do so. As a cross-party group we are committed to ensuring residents in 'left behind' neighbourhoods do not miss out on opportunities to improve local outcomes, and as we transition to net zero it is essential that local people's voices are heard and that they are able to take positive action on climate change in their local area.

The climate crisis is the looming, unavoidable backdrop to the levelling up agenda. The projected rise of 2.7 degrees Celsius is a very loud wake-up call to all communities to work together to take the practical urgent action we need to avoid disaster, and levelling up through local community-led climate action is a



key plank in our response. 'Left behind' neighbourhoods must be supported and resourced to take the local climate actions they wish to pursue, and to enable them to benefit from the economic transition underway.

The policy recommendations in this short APPG report include supporting a Community Wealth Fund that invests in the vital building blocks of a neighbourhood's social infrastructure; improving access to green jobs such as next-generation manufacturing; and backing the Local Electricity Bill. These are key tools in our struggle against climate change. By empowering local people in those communities that for too long have been ignored and overlooked, we will meet our shared objective of improving outcomes and ensuring that they do not fall even further behind as we transition to net zero.

Paul Howell MP and Rt Hon Dame Diana Johnson DBE MP

Co-chairs of the APPG for `left behind' neighbourhoods

Executive summary

Climate change is an existential threat that is happening now. The global warming that has already taken place will have impacts for many years to come, and a major adjustment is required to prevent the world from heating to even riskier levels. This will involve changes to our current way of life and a restructuring of the economy that will affect us all.

"There is no going back ... it's too late to avoid climate change and the poorest, the most vulnerable, those with the least security, are now certain to suffer."

Sir David Attenborough

Addressing climate change will require not just co-ordinated global action and commitment at the level of national and local governments. It will also need communities to be in a position to adapt to fundamental changes in many areas of our lives, and to respond to the particular local impacts of a changing climate.

Community-led projects and activities are already delivering real and meaningful climate benefits to areas across the country, whether climate change is the key motivating driver or a co-beneficiary of local community action.

"People in left behind neighbourhoods are just as concerned about climate change as the general population.

And there's also a high level of support for projects with co-benefits to climate action in these areas."

Anna Reid, Survation

Survey data commissioned for the APPG suggests that people living in 'left behind' neighbourhoods are well aware of the risks that climate change poses, and of the opportunities that exist if they are able to participate fully in the unfolding 'green' revolution. The things that residents want most for their community are already wellaligned with climate change mitigation and adaptation. Over 95 per cent of respondents cited 'efficient heating and electricity in homes', 'good quality housing' and 'good air quality' as the top three things it was important to look for in the local area, with 93 per cent also agreeing that 'being able to walk and cycle around the neighbourhood' was important.

But residents are concerned that they may see more of the costs and receive fewer of the benefits than would be fair and equitable in the adaptation and mitigation measures that are needed.

'Left behind' neighbourhoods lack social infrastructure – the places for people to meet and organise in a local community; the local groups, networks and institutions that underpin and support community engagement and activities; and the mechanisms for physical and digital connectivity that link residents to other people, places and opportunities.

As areas with low levels of social infrastructure, 'left behind' neighbourhoods experience a range of worse outcomes compared to other deprived areas. The APPG has previously reported on the central role of social infrastructure in building local social capital (APPG, 2020b); the lower levels of resilience in response to external threats, evident in the impact of COVID-19 (APPG, 2020a); and the significantly lower levels of charitable grant funding these areas have received over the past 17 years (OCSI, 2021). Without social infrastructure, communities lack the skills and networks to enable them to access funding resources, whether for levelling up or for the net zero transition, even where these are available.

"Climate change is likely to widen existing inequalities through its disproportionate effects on socially and economically disadvantaged groups."

Climate Change Committee

'Left behind' neighbourhoods find themselves doubly exposed to the threats posed by climate change. They are more vulnerable to its physical impacts – for example, extreme weather events such as flooding – and they lack the resilience to respond to emerging challenges and shocks as effectively as other deprived areas. Limited social infrastructure also undermines the ability of communities to initiate and lead local climate action projects that bring a range of immediate community benefits as well as contributing to a post-carbon future.

Many 'left behind' neighbourhoods have local economies that are among the least resilient to rapid decarbonisation and structural change. They face the potential of serious negative economic impacts caused by changes in the labour market and the consequences of adaptation to zero carbon in areas including energy, housing and transport.

"The UK's workforce is chronically ill-equipped for the transition to a green economy ... These skills gaps are most acute in areas which the government is targeting as a part of their Levelling Up agenda, [which] have disproportionately high levels of deprivation, low wages and poor housing."

Onward

The green industrial revolution must go beyond the creation of new job opportunities in renewable energy and other technologies if it is to benefit 'left behind' neighbourhoods. It must actively help people to acquire the skills necessary for employment in the new and emerging sectors of a net zero world.

Action to tackle climate change can go hand in hand with a strategy to level up 'left behind' neighbourhoods. A co-ordinated approach to face into the economic adjustments needed, one which builds community capacity and supports community-led responses, could address many of the issues faced by 'left behind' areas and ensure that they have the resources and resilience for local climate change adaptation and mitigation.

"Across the country...local people are coming together to create shared low carbon assets and doing so in a way which is improving their health, wellbeing, local neighbourhoods and also reducing poverty and increasing local control. This is what we describe...as the local climate commons: local stewardship of resources which are created and owned locally."

Luke Murphy, IPPR

A failure to involve 'left behind' neighbourhoods in our efforts to achieve net zero will leave them vulnerable to the worst impacts of climate change, and at risk of falling even further behind as the economy undergoes a fundamental restructuring. It will undermine ambitions to level up and improve local outcomes for those communities most in need.

And the talents and potential of people living in communities that for far too long have been overlooked and ignored will continue to go untapped and unrealised. Given the magnitude of the challenges we face, and the need for everyone to be able to play their part, neglecting to develop and harness the abilities of people living in those communities likely to be on the frontline of the climate crisis will weaken the effectiveness of our efforts to achieve net zero and leave us all more exposed to the changes to come.

We make the following recommendations to ensure all parts of the country are able to benefit from the transition to net zero:

Create a Community Wealth Fund, to build community capacity and confidence in those deprived and 'left behind' neighbourhoods with a lack of civic assets, low levels of community engagement and poor connectivity. Endowed with £2 billion from the next wave of dormant assets and designed to invest over the long term at the hyper-local level in foundational social infrastructure, the Community Wealth Fund will help support local community-led action to tackle climate change, level up local areas and improve outcomes for the people that live there.

The Community Wealth Fund is backed by the Community Wealth Fund Alliance, a coalition of over 440 civil society, public and private sector organisations, and is supported by the APPG for 'left behind' neighbourhoods.

Establish a Just Transition Fund, focussed on the areas least able to bear the costs of climate change adaptation, providing funds for schemes such as retrofitting homes or adaptation by small businesses.

Ensure residents of 'left behind' neighbourhoods can access 'green' jobs, through policies such as a dedicated net zero retraining scheme to assist people into new, quality jobs where they have been displaced by decarbonisation, and net zero academies in areas that are most at risk of disruption to provide training relevant to the new jobs needed to reach net zero.

Support the Local Electricity Bill, to allow community-led energy generation schemes to supply a local area. The Bill currently has the support of 268 MPs, including many members of the APPG.

The impact of climate change on communities

"In the next stage of decarbonisation there are going to be changes in industry, food, land use, transport, housing, planning – right across every aspect of the economy and society in a way that everyone and all communities will see and feel."

Luke Murphy, IPPR, giving evidence to the APPG

In August 2021, marking the release of the Intergovernmental Panel on Climate Change's (IPCC) latest report on the rate at which the planet was warming, UN Secretary General António Guterres called the situation "code red for humanity" (UN, 2021b). The world was "perilously close" to hitting the 1.5 degree Celsius limit agreed by the international community in Paris in 2015 and "the only way to prevent exceeding this threshold, is by urgently stepping up our efforts". But only a month later, UN analysis based on the current plans of countries who signed up to the Paris Agreement found that the world is on track for 2.7 degree Celsius warming by the end of the century (UN, 2021c). This is uncharted and perilous territory.

On a global level, the impacts of climate change have been clear for some time. The IPCC (2021) report listed a range of changes to the climate caused by human action that could be observed over several decades. These included more frequent and more intense heatwaves, heavier rainstorms, an increased number of tropical

cyclones, and in other areas more drought. The effects on communities have already been devastating: destroyed houses and infrastructure, loss of crops, livestock, livelihoods, and in the worst scenario, people forced to leave their homes and become 'climate refugees'. As Sir David Attenborough said to the UN Security Council session in February 2021, chaired by the Prime Minister, "there is no going back – no matter what we do now, it's too late to avoid climate change and the poorest, the most vulnerable, those with the least security, are now certain to suffer" (UN, 2021a).

The impact of global warming will be felt differently in different places, even in a country the size of England. Physical geography matters – whether a community sits on a floodplain or by the coast, for example. Other factors are also important, including local wealth and income levels, and a community's ability to organise and use the levers at its disposal to respond to events and changing circumstances, and to make positive change locally.

Whilst at home the impact of climate change has not yet been felt as keenly as it has overseas, the Adaptation Committee of the UK's Committee on Climate Change (CCC), the independent body which monitors the UK's response to this challenge, identified more than 60 climate change risks and opportunities that are fundamental to every aspect of life in the UK, covering our natural environment, health, homes, infrastructure and economy (CCC, 2021a). For example, the CCC warned of the risk to human health of increased heat exposure in buildings that were poorly suited for rising temperatures, citing the 2,500 heatrelated deaths during the 2020 heatwave. It found that the gap between the level of risks faced and the level of adaptation underway is widening, and that whilst the UK has the capacity and resources to respond effectively to these risks, it has not yet done so.

The CCC categorised the range of negative impacts that were likely to increase in the coming years into three main themes:

- the direct environmental impacts
- the impact of the economic transition needed to meet net-zero targets
- the impact of changes to living conditions and lifestyles needed to address climate change.

The overall impact will depend upon how the transition to net zero is handled. Without a coherent plan for decarbonisation that ensures equitable benefits for all communities, the most deprived and 'left behind' areas are likely to fall further behind and be less able to respond in times of crisis.

In its report the CCC identified eight priority areas for action, from threats to natural habitats and humans through to climaterelated disruption to food supply chains and the power system. In the assessment of the CCC, "climate change is likely to widen existing inequalities through its disproportionate effects on socially and economically disadvantaged groups". It also warned that "actions to address climate change could also exacerbate existing inequalities if not carefully planned". The CCC urged the government to "address" the inequal impacts of climate change as part of its levelling up agenda so that no community is left behind" (CCC, 2021a, pp. 25-26).

World leaders meeting at the UN climate change conference will be expected to agree a dramatic change of course on global carbon emissions. This is essential, but despite the outcome at COP26, for many people the need for a dramatic reduction in global carbon emissions may still feel a long way away from their daily lives. The 40 per cent reduction in emissions achieved since 1990 (CCC, 2021b) has been primarily through structural changes in the economy and shifts in the energy balance, i.e changes that are perhaps imperceptible to most. However, future reductions in emissions will bring more major alterations to our lifestyles, from such basic things as the homes and neighbourhoods we live in and the food we eat, to the work we do and how we travel to it.

What are 'left behind' neighbourhoods and why are they 'left behind'?

The APPG was set up to advocate on behalf of England's 225 'left behind' neighbourhoods, those communities identified by Local Trust which experience both high levels of economic deprivation and low levels of social infrastructure.

'Left behind' neighbourhoods are those that fall in the bottom ten per cent of the Index of Multiple Deprivation (which measures factors such as income, education and health), and in the ten per cent of areas in most need as measured by the Community Needs Index (CNI). This was developed for Local Trust by Oxford Consultants for Social Inclusion (OCSI) and measures how an area performs in terms of social infrastructure:

- civic assets the places for communities to meet, green space and recreational opportunities
- community engagement the number of registered charities, voter turn-out, and levels of volunteering
- physical and digital connectivity travel times to key services, car ownership, broadband speeds

Previous APPG evidence sessions have heard how residents living in 'left behind' neighbourhoods experience worse outcomes and disadvantage across a number of dimensions, from lower educational attainment and poor health to difficulties finding a job (and travelling to it on affordable public transport) to under-indexing in the concentrations of mutual aid groups and access to charitable funding in response to COVID-19.

Throughout its work programme, the APPG has heard many examples of where residents and local community-led organisations have worked together to overcome the issues they face, improving their lives and the areas where they live. However, with lower levels of community capacity and confidence, and lacking the means to identify and pursue practical and effective solutions to local problems, 'left behind' neighbourhoods can find themselves at a serious disadvantage when it comes to action to level up local outcomes – not least in tackling climate change.

Perceptions of climate change in 'left behind' neighbourhoods

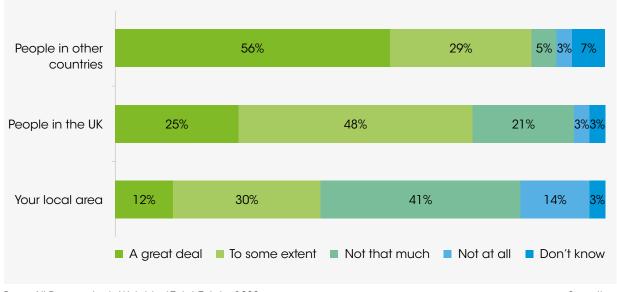
"People in left behind neighbourhoods are just as concerned about climate change as the general population. And there's also a high level of support for projects with co-benefits to climate action in these areas."

Anna Reid, Survation, giving evidence to the APPG

According to recent Survation research (Survation, 2021b), more than four in five people living in 'left behind' neighbourhoods (81 per cent) said that they were very or fairly concerned about climate change. This is in line with general public opinion for the country at large, according to a separate survey conducted by the Department for Business, Energy and Industrial Strategy, which puts concern at 83 per cent (BEIS, 2021a).

At the moment, people in 'left behind' neighbourhoods largely view climate change as something that affects 'people in other countries' (85 per cent) rather than their local area (42 per cent), but there is an awareness of how much it is impacting on communities elsewhere, with more than half (56 per cent) thinking it affects people overseas 'a great deal'. However, two thirds of respondents expect that the impacts of climate change on their local area were likely to increase in the future.

To what extent, if at all, do you think climate change is currently affecting...



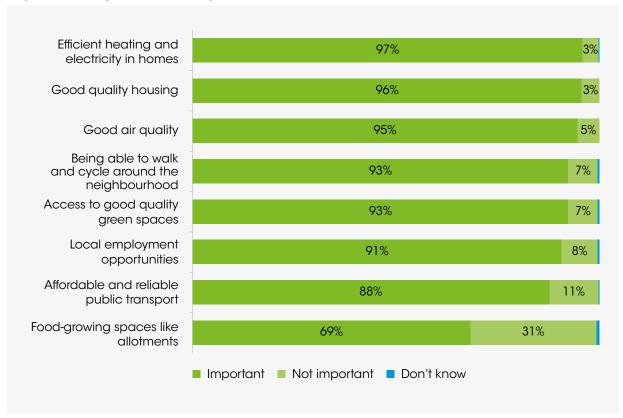
Base: All Respondents Weighted Total: Total = 1009

Survation

In terms of local action against climate change, a majority of residents (54 per cent) felt that their local authority was not doing enough, with less then a quarter (23 per cent) believing that their council was doing enough. This contrasts with just under a third (32 per cent) of respondents saying that people in their community were already engaged in activities to tackle climate change, and suggests that there is an appetite for local action to tap into and build upon.

Significantly, the survey found that the things that the residents in 'left behind' neighbourhoods want most for their community are already well-aligned with climate change mitigation and adaptation, even if tackling climate change was not the driving motivation. The top three things it was felt important to look for in the local area (according to over 95 per cent of respondents) were 'efficient heating and electricity in homes', 'good quality housing' and 'good air quality', with 93 per cent also agreeing that 'being able to walk and cycle around the neighbourhood' was important.

I have a list of things that some people have said they look for in their local area. As I read out each of these one by one, please tell me if it is 'important' or 'not important' for you to have in your local area?



Base: All Respondents Weighted Total: Total = 1009

Survation



'Left behind' neighbourhoods and the physical effects of climate change

'Left behind' communities are in the frontline when it comes to the impact of climate change in the UK:

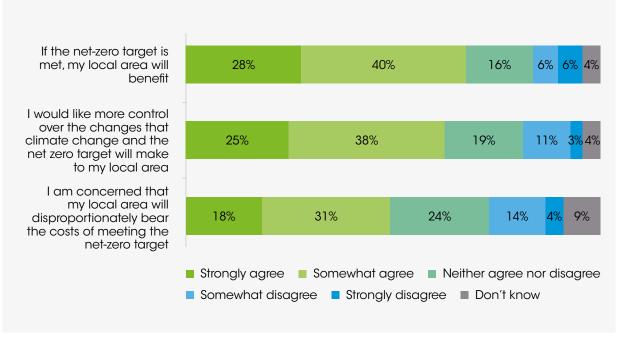
- Around a quarter of areas identified as 'left behind' are coastal communities, bringing a number of challenges and risks associated with the impact of climate change, such as rising sea levels, coastal erosion and sea defences
- 'Left behind' neighbourhoods are more deprived in terms of access to outdoor green spaces including public parks, gardens, open space, playing fields and allotments with lower density of green assets than other deprived areas and England as a whole (of importance due to the cooling effect, natural draining in high rainfall, and in terms of a connection to nature and valuing open spaces)
- Research to be published later this year for the APPG by OCSI shows that a higher proportion of land in 'left behind' neighbourhoods is in National Flood Zone 3 (11.6 per cent) than the English average (10.5 per cent), with a more than one in 100 risk of flooding

Given the characteristics of 'left behind' neighbourhoods, there will undoubtedly be specific climate-related problems that they are likely to face, which will intensify significantly in the decades to come.

From the Survation survey it is equally clear that 'left behind' communities see the link between action to deal with climate change and their quality of life. Nearly seven in ten respondents (68 per cent) agreed that 'if the net-zero target is met, my local area will benefit'. Not only do

residents strongly back local climate action measures, but they also want a greater say on the changes set to happen locally in response, as well as more local community initiatives that would deliver climate benefits and generate a community dividend.

The UK government has set a target for reducing UK carbon emissions to tackle climate change (the "net zero" target) which will involve significant changes across society and the way we live. To what extent do you agree or disagree with the following statements?



Base: All Respondents Weighted Total: Total = 1009

Survation

Community readiness for adaptation, mitigation and net zero

"The Green Industrial Revolution is a vital part of our struggle to save the planet from the threat of climate breakdown. To make it succeed we need more and more people to get the training and skills they need to perform the green jobs of tomorrow. We can tackle intergenerational unemployment in our 'left behind' neighbourhoods by training our residents for the highly skilled and well-paid jobs in the new green economy."

Stuart Whittingham, Office of Mick Whitley MP

The ability of communities to adapt to changes in climate and adopt mitigation measures to reduce carbon emissions varies from area to area. As economically deprived communities with high levels of community need, 'left behind' neighbourhoods risk falling even further 'behind' if they are unable to participate in the transition to a net zero future and benefit from the economic restructuring underway. At the same time, they are not well placed to respond to the growing threats that climate change poses.

The paucity of foundational social infrastructure in 'left behind' neighbourhoods will exacerbate the challenges they face when dealing with the direct impacts of climate change. The lack of community spaces, connectivity and available resources in the local area will hamper immediate community-led responses to external shocks, such as to incidents of extreme weather and

local flooding. This was apparent in the local response to COVID-19, where low concentrations of mutual aid groups and below average success in accessing COVID-specific charitable foundation funding when compared to other deprived areas was testament to the depleted levels of social capital, resulting in a lack of community resilience (APPG, 2020a).

Residents of 'left behind' neighbourhoods are aware of their position relative to other places – in a previous Survation survey for Local Trust (Survation and Local Trust, 2021a), 39 per cent of respondents said that their area received less than a fair share of resources, and only 3 per cent felt they received more. This is likely to be the reason that almost half of residents in 'left behind' neighbourhoods (49 per cent) are currently worried that their community will disproportionately pay the costs of meeting the net zero target, a concern expressed at previous APPG evidence sessions.

Indeed, many of the improvements that need to be made to our economies will be harder to achieve in 'left behind' neighbourhoods. There are fewer existing job opportunities in 'left behind' places, and with lower than average levels of educational attainment (52 per cent of inhabitants having no or low qualifications) and local residents lacking transferable skills (OCSI, 2020), it is unlikely that they will be able to swiftly transition to new opportunities.

Other characteristics of 'left behind' neighbourhoods, such as poor transport connections, put residents of 'left behind' neighbourhoods at risk of missing out as new industries and jobs are created to manage climate adaptation. In Connecting Communities (APPG, 2021), the APPG reported how 84 per cent of 'left behind' council wards had worse overall transport connectivity, compared to England as a whole, with lower levels of car ownership, limited rail links, and declining bus services.

The APPG has previously heard (APPG, 2021) that infrequent, or expensive, transport limited the ability of people in 'left behind' neighbourhoods to travel to find good jobs, and even though many 'left behind' neighbourhoods are situated near to sites with industries like advanced manufacturing, such as Allerdale and Copeland in Cumbria, people from those areas struggle to access employment opportunities in these companies. The think tank Onward (an external nonparliamentary member of the APPG), points out that a lack of skills necessary for achieving the UK's net zero target is an issue in many parts of country:



"The UK's workforce is chronically ill-equipped for the transition to a green economy. If we are to hit the net zero target, we need many more scientists, mathematicians, engineers, technicians and retrofit installers than are currently available. These skills gaps are most acute in areas which the government is targeting as a part of their Levelling Up agenda, [which] have disproportionately high levels of deprivation, low wages and poor housing."

(Onward, 2021)

One concern raised in our evidence session was that, even though homes in 'left behind' neighbourhoods will need retrofitting to make them more energy-efficient, it does not necessarily follow that this work will go to people in the area. As Chris Brown, Chief Executive and founder of igloo, put it, it is "hard to target those jobs in the neighbourhoods and communities that most need them, they leak out really, really easily."

These structural issues need to be addressed now so that residents are not fighting climate change on multiple fronts – environmental, economic and social. Past industrial shifts have demonstrated how a poorly managed transition can have long-lasting adverse impacts (Emden and Murphy, 2019). A failure to train and skill people in 'left behind' neighbourhoods for new jobs which are created as part of climate change adaptation not only denies them opportunity, it will also make it harder for the country to achieve its pressing climate goals. As the Survation polling shows, 89 per cent of people in 'left behind' neighbourhoods want to see more training in 'green' jobs, such as next generation manufacturing, but they also want to be involved in the decisions on how schemes to upskill residents are run.

Disruption and opportunity

As the CCC makes clear, the disruption that arises from moving to net zero will be significant, and threatens to be particularly severe in 'left behind' areas. Recent research by the Social Market Foundation (Corfe and Norman, 2021) looked at the disruption local authority areas will face in the move to net zero (such as job losses in carbon-intensive industries), and the opportunities arising for others (such as job and business creation in green industries). Some local authority areas containing 'left behind' wards scored highly on the SMF's measure for net zero opportunity, on the basis of proximity to renewable energy sites, decarbonisation clusters and universities conducting science and technology research, such as Knowesley, Halton and Sunderland.

However, on the whole, the areas deemed to be facing high disruption but with low opportunities to benefit from net zero tend to be located in the north of England or on the coast, areas with high concentrations of 'left behind' neighbourhoods. Tendring in Essex, which contains eight 'left behind' wards, has one of the worst scores for net zero opportunities. The SMF recommends that local authorities should be granted additional fundraising powers, so that they have the ability to make green investments with certainty.

Case study: Ambition Lawrence Weston

"Being on the outskirts of Bristol we didn't get a lot of attention from politicians or other decision makers. As a result, we didn't get involved in local politics or democracy. That was a bit of a vicious circle, we felt we were a little bit ignored and...left behind".

Mark Pepper, Development Manager of Ambition Lawrence Weston, giving evidence to the APPG

Lawrence Weston is the name of a post-war housing estate in north-west Bristol. While the city is the economic centre of the south-west of England, it also contains significant inequality (CoDE, 2017). The 7,000 residents of Lawrence Weston face deprivation in terms of income, health, child poverty, and have seen services deteriorate over time.

Ambition Lawrence Weston (ALW) was formed in 2012 by local residents who wanted to make the area a better place to live. The catalyst for organising was the closure of a local college, which had emotional as well as practical ties for residents. Mark Pepper, who is a life-long resident as well as Development Manager at ALW, called the closure "the straw that broke the camel's back".

The organisation began by asking residents what they wanted to improve about Lawrence Weston. Using a group of community researchers, who were trained – and paid – for the job, ALW found out what really mattered to local people, turning the results into a community plan, that covered eight categories for local action:

- housing
- crime and community safety
- traffic and transport
- jobs, skills, business and financial inclusion
- · health, wellbeing and social care
- planning and public realm
- young people, children, families and education
- community facilities, activities, art, leisure and sport

Climate change was not an issue that residents were talking about in 2012 nor the motivation underpinning ALW's local ambitions. Over time, however, it became clear that addressing many of the most pressing issues, such as fuel poverty and poorly-insulated houses, would improve the lives of residents and have co-benefits for tackling climate change.



Supported by a £1 million grant under the Big Local programme, ALW has brought about significant positive change for the area, including creating an employment hub to support residents to find work, helping locals to write a Neighbourhood Development Plan (a document which allows them to influence building in their area), improving access to affordable housing for residents, and funding and delivering a shuttle bus service that established the business case for a public transport provider to run a local bus service. While addressing climate change may not have been the original driver, through seeking to address resident's needs, ALW has undertaken projects that have associated benefits like reducing energy use and creating local energy generation.

For example, after discovering that 70 per cent of residents were struggling with energy bills, and offering energy audits, which showed people where they are losing heat from their homes, ALW partnered with Bristol Energy Co-operative to build a solar farm. It generates enough electricity to power 1,000 homes a year, with profits reinvested back into community projects. In 2020, ALW secured planning permission and external funding to build a community-owned wind farm. The planned 4.2 megawatt turbine will power 3,500 homes and is expected to generate £150,000 a year for the community.

ALW exemplifies the way in which community-led organisations can improve the lives of local residents, if they have the resources, access to appropriate long-term support, and investment targeted at the hyper-local level. And, given the way in which 'left behind' neighbourhoods are exposed to the impacts of climate change, the priorities for residents overlap considerably with efforts to hit net zero.



Levelling up through climate action

"For communities across the country and 'left behind' neighbourhoods in particular this [climate change] is an opportunity to level up like no other."

Participant at the APPG evidence session

The national picture

In the introduction to the government's Ten Point Plan for a Green Industrial Revolution¹ (BEIS and Prime Minister's Office, 2021) the Prime Minister compared this new, green, revolution to the first industrial revolution, stating that it would "level up our country and enable our proud industrial heartlands to forge the future once again". Action to make buildings greener was specifically singled out as an opportunity for levelling up, with jobs created through such measures as heat pump manufacturing and installation (with an ambition to install 600,000 heat pumps per year by 2028).

The plan also promised the publication of a Heat and Buildings strategy, providing full details on decarbonising buildings in order to reach net zero, expected to be published shortly, with further policy announcements due in connection with COP26 and the comprehensive spending review. As the House of Commons Business, **Energy and Industrial Strategy Committee** (BEIS)² was told in an evidence session in September 2021 (House of Commons, 2021b), the publication of the government's Net Zero strategy is important as its objectives "are hugely ambitious, very-quickdelivery targets", which will only be met if government, industry and investors have certainty about the path ahead.

- ¹ 1. Advancing offshore wind
- 2. Driving the growth of low carbon hydrogen
- 3. Delivering new and advanced nuclear power
- 4. Accelerating the shift to zero emission vehicles
- 5. Green public transport, cycling and walking
- 6. Jet zero and green ships
- 7. Greener buildings
- 8. Investing in carbon capture, usage and storage
- 9. Protecting our natural environment
- 10. Green finance and innovation
- ² Paul Howell MP, Co-chair of the APPG also sits on the BEIS Committee.

The CCC has recognised the important role of communities if action against climate change is to have the impact and effect that is needed. In its Sixth Carbon Budget of December 2020, produced to advise ministers on how to achieve net zero emissions, it states that "decarbonisation strategies will need to be tailored to local circumstances and local communities", and that opportunities exist regarding maximising investment in those areas and communities which have missed out on funding and resources in the past (CCC, 2020, p. 287).

Whilst the government's ambitions around levelling up are the focus of the forthcoming Levelling Up White Paper, in evidence presented to the APPG it is clear that levelling up and action against climate change must go hand in hand. For one to succeed, successful delivery against the other is a non-negotiable prerequisite. Like levelling up, to be successful over the long term, action against climate change is something that will involve the commitment and contributions from all levels of government, the public and private sectors, civil society, and as importantly, local communities themselves.

Local government

Local government has a key role to play in supporting measures that tackle the climate crisis, not least in raising awareness. Over 300 councils, with a range of political leaderships, have declared a climate emergency, and many of the actions required for both climate change mitigation and adaptation fall under their list of responsibilities. The Local Government Association, representing councils in England and Wales, gives as examples how councils have installed over 17,000 electric vehicle charging devices across England, and spent £40m on flood defences in 2019/20 (LGA, 2021).

However, as the Survation survey of 'left behind' neighbourhoods found, people feel that local government could certainly be doing more. At the BEIS Committee session, the Director of Value for Money at the National Audit Office suggested that "government needed to do a lot more to clarify the roles that local authorities should play in achieving net zero." If this was not made clear when the Net Zero Strategy was published, "there is a risk that local authority activity is not as widespread as it might need to be" (House of Commons, 2021b). There is perhaps a disconnect between the declaration made by many local authorities of a climate emergency, and acting like they are in an emergency.

One key area where local government could do more is in working with their communities to build capacity and ensure that they have the skills, resources and support needed to respond to the climate crisis. Local government can play a critical role in supporting community-led action. For example, the APPG heard from ALW's Mark Pepper of the importance of local authority support in conducting the initial research on residents' priorities. As the community organisation developed its abilities and ambitions, it was also able to draw on funding from Bristol City Council and the West of England Combined Authority for its community-owned wind farm project as well as benefit from land and other community asset transfers to underpin its work.

The opportunity: Empowering communities

"Across the country...local people are coming together to create shared low carbon assets and doing so in a way which is improving their health, wellbeing, local neighborhoods and also reducing poverty and increasing local control. This is what we describe...as the local climate commons: local stewardship of resources which are created and owned locally."

Luke Murphy, IPPR, giving evidence to the APPG

Local people ready to act

All communities should have the equality of opportunity and the means to participate in the changes needed in tackling climate change, and to make the most of the potential arising from the transition to a net zero economy. There is no reason why 'left behind' neighbourhoods should be excluded. There is certainly no lack of appetite to get involved: as the 63 per cent of respondents who said they wanted 'more control over the changes that climate change and the net zero target' will make to their area demonstrated.

While it is essential that the right policies for achieving net zero flow down from central and local government, and that there is a proper recognition of the role for local communities, it is equally vital that communities have the opportunity to shape how these are implemented, and are able to take pre-emptive action to better prepare for the impact of climate change. This ambition to put communities in the lead has seen support from government and the National Lottery. For example, the Cabinet

Office's Community Resilience Development Framework is working to develop local resilience in the face of extreme weather, aiming to put communities in the lead of emergency planning, response and recovery (Cabinet Office, 2019), whilst the National Lottery Community Fund's £100 million ten-year Climate Action Fund is supporting community-led partnership projects across the UK in tackling climate change.

As the IPPR's research makes clear (Webb et al., 2021), communities can play a key role. Luke Murphy, one of the report's authors, told the APPG that "at present, we are neither making the most of the opportunities available, nor managing the unequal negative impacts of the climate crisis and the transition". He argued that "policy responses are often too dependent on top-down interventions to manage the mitigation and adaptation efforts...or are too reliant on achieving individual behavior change, when it's actually collective responses that are required".

Murphy pointed out that local people are often the best placed to say what needs to be done in their area: "they might not all be experts in the energy system, but they're experts on their communities and they're experts in their own lives. They can often respond to local challenges more effectively than other actors". This reflects much of the evidence heard by the APPG in its first year of research into the issues affecting 'left behind' neighbourhoods, and how local residents can help to deliver sustainable improvements to their local area when provided with the resources to do so.

Defining 'community-led' projects as those that "draw on support from the voluntary, private and public sectors but are crucially created, led or owned by people living locally", the extensive consultation conducted for the report found that communities are engaged in numerous and multi-faceted activities to tackle the impacts of climate change, from rewilding green space to establishing schemes for repairing, swapping or sharing products.

Different forms of community climate action



Source: IPPR, presentation to the eighth evidence session of the APPG for 'left behind' neighbourhoods

The benefits of community-led responses on climate action

The APPG heard that community work is inherently sustainable - in that it will help tackle both the direct and indirect impacts of climate change - largely because residents have to live with the long-term impacts of decisions. Community work at its core is climate work - whether climate is explicit in the work or not. This is because activity to strengthen a local community, activity which increases levels of resilience and the capacity and confidence of the community to organise and to create and take advantage of opportunities that arise, is essential for any community to thrive in a climate changing world.

The extent of the work being undertaken within local communities will bolster climate outcomes across a range of government's key policy areas. Providing communities with greater agency in climate-focused policy locally will not only help ensure better outcomes in preparing for the impacts of climate change and underpin a fairer and more equitable transition, it will also be critical to meeting levelling up objectives.

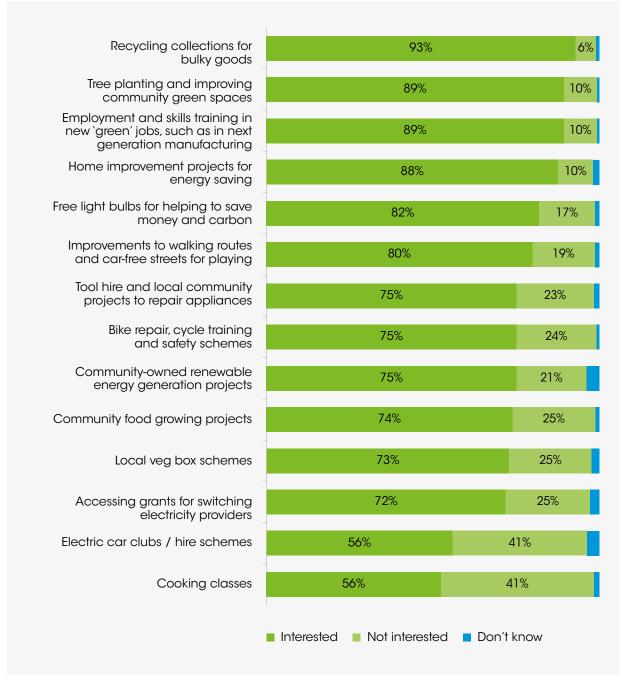
As demonstrated by Survation polling and the ALW case study, climate change does not need to be the primary motivation for a community to take action that is beneficial

for climate mitigation or adaptation. In fact, evidence presented to the APPG suggests that, in order to maximise community engagement, messaging relating to creating iobs, reducing energy bills and making the local neighbourhood a better place to live should be 'front and centre' in terms of local community-led action, rather than solely focussing on reducing emissions.

IPPR's findings also show that a by-product of community-led initiatives is often that they provide a net benefit for the local environment. This is particularly relevant for 'left behind' neighbourhoods experiencing multi-dimensional disadvantage, where tacklina climate change may not be the most important priority for residents in the local area.

Nevertheless, Survation's research demonstrates a clear majority of residents in 'left behind' neighbourhoods are in support of local community-led action to combat climate change and of greater control over what that transition locally will entail, with a firm sense of the priorities for action. IPPR's research and evidence presented to the APPG suggest that giving residents the resources and the skills to support themselves will also provide a climate dividend in these areas over the long-term, and bring a range of improved outcomes to local residents.

What types of projects to tackle climate change, if any, would you be interested in seeing happen in your local area?



Base: All Respondents Weighted Total: Total = 1009

Case study: Plymouth Energy Community

Plymouth Energy Community (PEC) was established by local residents to tackle the climate crisis and the high levels of fuel poverty in Plymouth. PEC operates through a mix of community share funding, grants and external loans, with any profits flowing back into the community. They undertake a wide variety of projects intended to fulfil their mission to increase local ownership and influence over local energy systems, tackle fuel poverty and reduce carbon emissions.

PEC has evolved to run a variety of projects, including affordable or free insulation and boiler schemes, energy advice delivered through house visits, a volunteering and training programme, as well as installing and managing renewable energy generation schemes in Plymouth for the benefit of the community through their sister organisation PEC Renewables.

In 2015, PEC worked with Four Greens Community Trust to help turn derelict land into a community asset. PEC raised funds to build a 4.1MW community-owned solar farm on local brownfield land that would reduce fuel poverty by generating enough clean energy to meet the annual needs of 1,000 homes. The costs of the loan were partly paid back through a community share offer that raised £1 million.

In 2019, PEC helped over 2,800 households, including 816 who received one-to-one support. This resulted in an estimated financial saving of £465,000 for households. In addition, PEC projects produced 6,128 megawatt hours of clean energy. The community-led aspect of PEC's work is crucial to its success. PEC is a trusted local brand, and invests in training for their energy advisors to ensure that they are best placed to work with vulnerable people, including suicide awareness, mental health, refugee awareness, and so on.

Plymouth City Council played a key role in the early days of PEC. Several staff members have job-share arrangements between PEC and the local council and there is a strong ongoing partnership between the two. However, the organisation operates independently, with a membership of more than 1,600 individuals. This arrangement is mutually beneficial - as an established organisation, PEC is now able to demonstrate impact and insight that benefit the council and help it to meet its strategic goals. PEC is now a trusted delivery partner, providing expertise and credibility to inform the council's wider work on climate and fuel poverty.

This Case Study first appeared in the IPPR report The climate commons: How communities can thrive in a climate changing world. It appears here with the authors' permission.

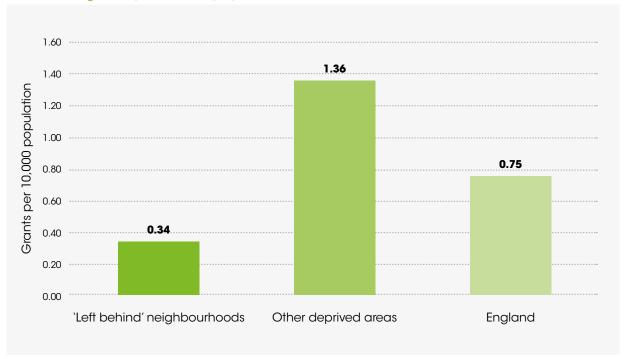


Ensuring those 'left behind' do not fall further behind

The essential elements for successful climate action at the community level, according to the IPPR report, were a shared vision, making efforts to include a diverse range of people (for example in terms of ethnicity and income), using local volunteers and, where appropriate, accessing external expertise, and building relationships between different community organisations. Also crucial is access to funding that was "invested in people, as well as the projects...led by local needs and available over the long term" (Webb et al., 2021, p. 6). This matches the experience of Ambition Lawrence Weston, where the APPG heard that being given £1 million under the Big Local programme was "the game changer" for ALW, giving the resident-led group the "resources and power to make some real changes".

However, 'left behind' and other deprived neighbourhoods are significantly underrepresented in community responses to climate change - primarily due to a lack of community confidence, capacity, and ability to access funding and resources. Funding for climate-related initiatives can often be difficult to come by without adequate knowledge of available grants or government-backed schemes (Hempshall, 2021) and the capacity to submit successful grant applications. This echoes research commissioned for the APPG (OCSI, 2021) which found that from 2004 until May 2021 'left behind' neighbourhoods received fewer charitable grants per 10,000 population than other deprived areas and the England average.3

Number of grants per 10,000 population



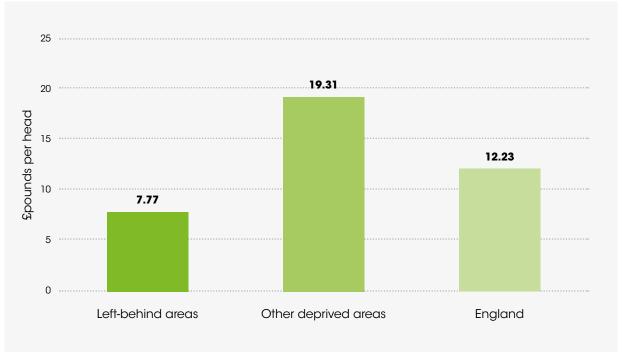
Source: 360 Giving Grant Nav data 2004 to May 2021

³ Based on data collected by 360 Giving on all grants and the amounts given by UK funders. The figures are based on the location of the recipient organisation and include grants from 88 funders (only national grant funding organisations that submitted data to GrantNav were included and grants of over £1m were excluded).

In terms of the monetary amount received from key charitable grant funders per person, 'left behind' neighbourhoods received £7.77 in funding per head, less than half the

proportion received across other deprived areas (£19.31) and just under two-thirds of the average across England as a whole (£12.23).

Grant funding in pounds per head



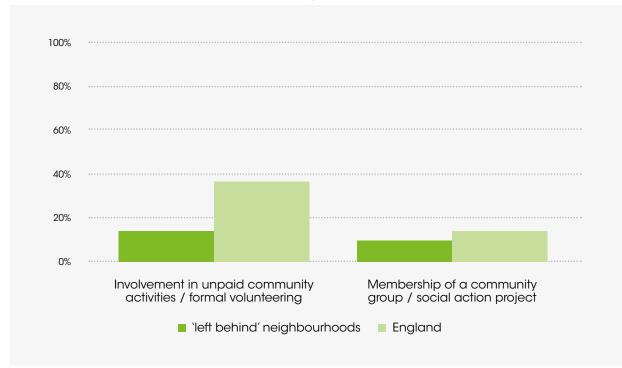
Source: 360 Giving Grant Nav data 2004 to May 2021

Such lower levels of charitable funding into 'left behind' neighbourhoods, particularly when compared to other, similarly deprived areas, is testament to their low levels of social infrastructure, and their ability to access grant funding that is on offer. As recent research for the APPG has found (OCSI, 2021), 'left behind' neighbourhoods:

- have a lower density of charities registered in their neighbourhoods (1.1 per 100,000 population) than other deprived areas (2.0 per 100,000) and nationally (2.8 per 100,000 population)
- are less likely to have other third sector organisations operating in their local areas, including mutual societies, cooperative societies, community benefit societies and former industrial and provident societies groups, with 23.4 per

- 100,000 population compared to 31.9 per 100,000 in other deprived areas and 27.8 per 100,000 nationally
- have a lower proportion of mutual societies registered than on average, with 112.9 per 100,000 people compared to 208 per 100,000 in other deprived areas and 215 per 100,000 nationally.

Low levels of social infrastructure have a negative effect on the ability of local people to play a bigger role in their local community – despite a desire to be more involved in community activites. The APPG's report, *Communities of trust* (APPG, 2020b), showed how volunteering and the membership of community groups is lower in 'left behind' neighbourhoods than across England as a whole.



Levels of resident involvement in community activities

Source: Survation poll of 'left behind' neighbourhoods 2020 and DCMS Community Life Survey 2019-20

Lacking the foundational frameworks, assets and institutions needed to support vibrant and active communities, 'left behind' neighbourhoods face additional obstacles compared to other deprived areas to building the type of community engagement necessary to broker local climate solutions and put them into practice. To fully enable 'left behind' neighbourhoods to respond to the climate crisis requires a 'paradigm shift' in how the UK's climate policy is designed and delivered - involving a genuine devolution process that is inclusive of communities and which puts communities at the heart of addressing the climate crisis (Webb et al., 2021, pp. 39-40).

This should begin by investing in building the capacity of residents in 'left behind' neighbourhoods to drive local climate action, as Community Energy England (Hempshall, 2021) has called for. As the example of Lawrence Weston illustrates, community organising can produce a virtuous circle. Once local residents had formed together to create ALW, they were then able to access support from the local authority and Public Health England which helped them to conduct their initial research into the community's needs.

This enabled them to draw up a plan, which gave them access to funding. Over time they were able to expand their scope, and, seeing the ways in which climate change would affect residents, to begin to run educational activities. They moved from simply reacting to residents' concerns to working towards anticipating and mitigating developing issues.

Similar inspirational activity could be replicated across all of England's 'left behind' neighbourhoods, growing the climate dividend through supporting a greater number of local areas to be involved in tackling climate change, as well as improving local outcomes and levelling up. Building capacity and confidence in communities identified as 'left behind' will be a necessary first step in many cases, so that local people are able to follow the pioneering example of Lawrence Weston.

Key to building that initial community capacity is investment over the long-term in the building blocks of social infrastructure, supporting the development of local civic assets and community engagement, and boosting connectivity. A decade ago, Nesta (2010) made the case for an independent income stream to bolster community-led climate initiatives, such as preferential access to capital and early-stage investment for community-led initiatives. The more recent proposal for a Community Wealth Fund (CWF), supported by the APPG, would provide the foundational investment for 'left behind' areas to build the community capacity needed to respond effectively to the climate emergency as well as providing the seed capital to deliver specific climate-focused projects.



Conclusion and recommendations

Achieving net zero, and making levelling up a reality should not be seen as separate projects. They are interlinked and increasingly inseparable. If levelling up is to mean anything to the residents of our most deprived localities and overlooked communities, it must mean that they see improvements in their local area and environment, and that they are able to withstand and respond to the impacts of climate change they will increasingly face. It must mean that new jobs in green industries are within their reach, both through support to acquire the skills needed and improved connectivity to new employment opportunities.

It cannot mean that they are left worse off as the way the country generates and consumes energy changes, or that the quality of their housing makes their homes increasingly expensive to maintain or inhospitable to live in. In the race to transition to the new economy, it cannot mean that their residents are unable to take part on a fair and equitable footing, and are left spectators on the sidelines, hamstrung by lacking the basic but fundamental social infrastructure that many other communities take for granted.



The scope of this short report does not extend to every aspect of what will be needed to reach net zero. Its focus instead is on how 'left behind' neighbourhoods can best be supported to take part in this journey, alongside and on the same basis as the rest of the country. If they are not able to fully engage in the issues involved, and deploy locally tailored solutions to meet the needs of their areas, these communities – which have already missed out on so much – will experience all the negative consequences of climate change, without access to the opportunities that the transition to net zero could offer.

Whether it is helping to hit retrofitting targets or ensuring that green space is rewilded to trap excess carbon, greater efforts should be made to ensure that community-led responses connect with centrally driven targets and programmes in order to maximise the full effects of locally delivered solutions. Recent reports from a range of think tanks and policy commissions identify a number of policy prescriptions that aim to support communities – and in particular those most at risk of missing out – and warrant further investigation.

For example, IPPR's specific recommendations include new legal rights for communities to organise, and to own or manage community assets, a government goal to increase community ownership of green economy assets, and using the planning system to prioritise community-led land use. Recommendations from the No Place Left Behind Commission (Create Streets Foundation, 2021) published after the APPG's evidence session contains a number of policy proposals designed to support the transition to net zero.

Based on the research into 'left behind' neighbourhoods that the APPG has conducted to date, and the evidence we have received on the issue of communities and climate change, we make the following immediate recommendations:

Create a Community Wealth Fund

The Community Wealth Fund is a proposal, backed by over 440 civil society, public and private sector organisations, to dedicate the next wave of dormant assets (from stocks, shares, bonds, insurance and pension policies) to create a new, independent endowment to provide targeted, neighbourhood-level, community-led investment in the social infrastructure of the most disadvantaged and 'left behind' places over the long term.

While the government has created funding streams connected to the levelling-up agenda (including the Levelling-Up Fund and the Community Renewal Fund), which are welcome, these schemes tend to focus on infrastructure and operate on a competitive bid basis. In 'left behind' neighbourhoods, a key factor holding communities back from taking action is a lack of capacity and confidence.

Using the example of Lawrence Weston, the ability to secure external funds only came after the community had organised itself and developed a plan. In many 'left behind' neighbourhoods a lack of community groups (often exacerbated by a simple lack of places to meet) means there is no resident-led organisation capable of building wider networks or writing bids. The Big Local model, where grants are provided over the long-term with many fewer strings, shows the value of investing in community capacity or, as the IPPR put it, investing in people as well as projects.

Establish a Just Transition Fund

There is the need for a dedicated fund for local authorities to alleviate the financial impact on people least able to bear the costs of transitioning to net zero. Focussed on the most exposed neighbourhoods, the fund could cover schemes such as community energy-generation projects, retrofitting poorly insulated homes, meanstested grants for replacing gas boilers, support for small businesses (e.g to switch to electric vehicles).

The fund, whether through grants or loans, should allow communities to pick their own priorities, and include provision for accessing technical support (for example on the planning system).

The establishment of a Just Transition Fund is a key policy recommendation that features in the October 2021 joint statement by the APPG on Inclusive Growth and the APPG for 'left behind' neighbourhoods (Centre for Progressive Policy, 2021).

Ensure residents of 'left behind' neighbourhoods can access 'green' jobs

Recognising the risk that, even if money is spent in Lawrence Weston on climate change adaptation – retrofitting homes, for example – the jobs will not necessarily go to locals, ALW is seeking to establish a renewable energy skills academy in the area. Funds from a community climate change adaptation fund could go towards specific skills projects, but a more comprehensive approach is also needed.

The government should consider the proposals made by Onward (Christie-Miller and Luke, 2021), including the creation of Net Zero Academies in areas that are particularly at risk from disruption, and launching a dedicated Net Zero Retraining Scheme, as featured in the joint statement by the APPG for 'left behind' neighbourhoods and the APPG on Inclusive Growth (Centre for Progressive Policy, 2021). This would assist people into new, quality jobs where they have been displaced by the process of decarbonisation - working with sector representatives, trade unions, skills providers and employers, especially in the most carbon intensive industries.

Capacity-building in 'left behind' neighbourhoods will still be necessary to enable them to be involved in decisions over the location of academies or similar green economy training schemes, so that they are accessible to their residents.

Support the Local Electricity Bill

The Bill, which had its first reading in the House of Commons in July 2021 would enable the local supply of clean electricity by local renewable electricity generators. As Sally-Ann Hart MP, a member of this APPG told our evidence session, the Bill has crossparty support from over 250 MPs, and would enable local energy generators – including, most importantly, projects owned, controlled and led by the local community – to supply a defined local area.

In April the Environmental Audit Committee's inquiry into community energy showed that, if properly enabled, it has the potential to increase *twenty fold* by 2030, powering 2.2 million homes and saving 2.5 million tonnes of CO2 emissions every year (House of Commons, 2021a).

Bibliography

APPG for 'left behind' neighbourhoods (2021) Connecting communities: improving transport to get 'left behind' neighbourhoods back on track.

Available at: https://www.appgleftbehindneighbourhoods.org.uk/wp-content/uploads/2021/03/APPGLBN Connecting-Communities HD-1.pdf (Accessed: October 2021).

APPG for 'left behind' neighbourhoods (2020a) Communities at risk: the early impact of COVID-19 on 'left behind' neighbourhoods. Available at: https://www.appg-leftbehindneighbourhoods.org.uk/publication/communities-at-risk/ (Accessed: October 2021).

APPG for 'left behind' neighbourhoods (2020b) Communities of Trust: why we must invest in the social infrastructure of 'left behind' neighbourhoods.

Available at: https://www.appg-leftbehindneighbourhoods.org.uk/wp-content/uploads/2021/03/8118-APPG-Communities-Report-NEW.pdf (Accessed: October 2021).

Cabinet Office (2019). Community resilience development framework. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/828813/20190902-Community_Resilience_Development_Framework_Final.pdf (Accessed: October 2021).

Centre for Progressive Policy (2021). A joint statement unites cross-party Parliamentarians in a call for a healthier, greener and more inclusive United Kingdom (20 October). Available at: https://www.progressive-policy.net/publications/a-joint-statement-unites-cross-party-parliamentarians-in-a-call-for-a-healthier-greener-and-more-inclusive-united-kingdom (Accessed: October 2021).

Centre on Dynamics of Ethnicity (CoDE) and The Runnymede Trust (2017) *Bristol: a city divided?* Available at: https://www.runnymedetrust.org/uploads/CoDE%20 Briefing%20Bristol%20v2.pdf (Accessed: October 2021).

Christie-Miller, T. and Luke, A. (2021)
Qualifying for the race to net zero: How to solve the net zero skills challenge. Onward.
Available at: https://www.ukonward.com/wp-content/uploads/2021/09/Qualifying-for-the-race-to-net-zero-FINAL.pdf (Accessed: October 2021.

Climate Change Committee (2020) The sixth carbon budget: the UK's path to net zero. Available at: https://www.theccc.org.uk/wp-content/uploads/2020/12/The-Sixth-Carbon-Budget-The-UKs-path-to-Net-Zero.pdf (Accessed: October 2021).

Climate Change Committee (2021a)
Independent Assessment of UK Climate Risk.
Available at: https://www.theccc.org.uk/publication/independent-assessment-of-uk-climate-risk/ (Accessed: October 2021).

Climate Change Committee (2021b)

Progress in reducing emissions 2021

Report to Parliament. Available at:

https://www.theccc.org.uk/wp-content/
uploads/2021/06/Progress-in-reducingemissions-2021-Report-to-Parliament.pdf
(Accessed: October 2021).

Corfe, S. and Norman, A. (2021) Zeroing In: Net Zero Disruption and Opportunity at a Local Level. Social Market Foundation. Available at: https://www.smf.co.uk/wp-content/uploads/2021/09/Zeroing-in-Sept2021.pdf (Accessed: October 2021).

Create Streets Foundation (2021) No Place Left Behind: The Commission into Prosperity and Community Placemaking. Available at: https://www.createstreetsfoundation.org.uk/wp-content/uploads/2021/10/8560_PS_Create_No_Place_Left_Behind_FINAL_amended.pdf (Accessed: October 2021).

Department for Business, Energy and Industrial Strategy (BEIS) and Prime Minister's Office (2021) The Ten Point Plan for a Green Industrial Revolution. Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/936567/10_POINT_PLAN_BOOKLET.pdf (Accessed: October 2021).

Department for Business, Energy and Industrial Strategy (BEIS) (2021a) Climate Change and Net Zero: Public Awareness and Perceptions (Research Paper No. 2021/034). Available at: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/996575/Climate_change_and_net_zero_public_awareness_and_perceptions_summary_report.pdf (Accessed: October 2021).

Emden, J. and Murphy, L. (2019) A just transition: Realising the opportunities of decarbonisation in the north of England. IPPR North. Available at: https://www.ippr.org/files/2019-03/energy-skills-march19.pdf (Accessed: October 2021).

Hempshall, K. (2021) 'How do you generate effective community-led action on climate in 2021?', Community Energy England, 18 June. Available at: https://communityenergyengland.org/news/how-do-you-generate-effective-community-led-action-on-climate-in-2021 (Accessed: August 2021).

House of Commons (2021a) Oral evidence: Technological innovations and Climate Change:Community Energy (HC 1208, 14 April). Environmental Audit Committee. Available at: https://committees.parliament.uk/event/4125/formal-meeting-oral-evidence-session/ (Accessed: October 2021)

House of Commons (2021b) Oral evidence: Net Zero Governance (HC 486, 21 September). Business, Energy and Industrial Strategy Committee. Available at: https://committees.parliament.uk/oralevidence/2775/pdf/ (Accessed: October 2021).

Intergovernmental Panel on Climate Change (IPCC) (2021) *The Physical Science Basis: Summary for Policymakers.* Available at: https://www.ipcc.ch/report/ar6/wg1/downloads/report/IPCC_AR6_WGI_SPM.pdf (Accessed: October 2021).

Local Government Association (2021) Councils spearheading national climate change effort. Available at: https://www.local.gov.uk/about/news/councils-spearheading-national-climate-change-effort (Accessed: October 2021).

Nesta (2010). Galvanising community-led responses to climate change. London: The Lab, Innovating Public Services. Available at: https://media.nesta.org.uk/documents/galvanising_community-led_responses_to_climate_change.pdf (Accessed September 2021).

OCSI (2020) 'Left behind areas': economic data dive. Available at: https://www.appgleftbehindneighbourhoods.org.uk/wpcontent/uploads/2020/09/OCSI-EconomicData-dive-for-the-APPG.pdf (Accessed: October 2021).

OCSI (2021) 'Left behind' neighbourhoods: community data dive. Available at: https://www.appg-leftbehindneighbourhoods.org.uk/wp-content/uploads/2021/06/APPG-Community-Data-Dive-Report-for-APPG-S7.pdf (Accessed: October 2021)

Survation and Local Trust (2021a)
Left Behind Survey. Available at:
https://localtrust.org.uk/wp-content/
uploads/2021/08/Left-Behind-2021summary-document_Survation030821.pdf
(Accessed: October 2021)

Survation and Local Trust (2021b)

Perceptions of climate change and green initatives in 'left behind' neighbourhoods.

Available at https://localtrust.org.uk/wp-content/uploads/2021/10/Perceptions-of-climate-change-and-green-initiatives-in-left-behind-neighbourhoods.pdf (Accessed: October 2021)

United Nations (2021a) World risks 'collapse of everything' without strong climate action, Attenborough warns Security Council (Press Release, 23 February). Available at: https://news.un.org/en/story/2021/02/1085452 (Accessed: October 2021).

United Nations (2021b) Secretary-General's statement on the IPCC Working Group 1 Report on the Physical Science Basis of the Sixth Assessment (9 August). Available at: https://www.un.org/sg/en/content/secretary-generals-statement-the-ipcc-working-group-1-report-the-physical-science-basis-of-the-sixth-assessment (Accessed: October 2021).

United Nations (2021c) Full NDC Synthesis Report: Some Progress, but Still a Big Concern (Press Release, 17 September). Available at: https://unfccc.int/news/full-ndc-synthesis-report-some-progress-but-still-a-big-concern (Accessed: October 2021).

Webb, J., et al. (2021). The climate commons: how communities can thrive in a climate changing world. IPPR. Available at: https://www.ippr.org/files/2021-03/ejc-climate-communities-mar21.pdf (Accessed: October 2021).

