

# CLIMATE CHANGE AND SOCIAL JUSTICE: AN EVIDENCE REVIEW

The social justice aspects of climate change are not well understood. This study explores this emerging field to build the evidence base and support the development of socially just responses to climate change.

## Key points

- The review identifies five forms of climate injustice in the UK: lower-income and other disadvantaged groups contribute least to causing climate change but are likely to be most negatively affected by it; they pay, as a proportion of income, the most towards implementing certain policy responses and benefit least from those policies; and their voices tend to go unheard in decision making.
- Research and policy on social justice aspects of adaptation to climate change are particularly underdeveloped with a focus on emergency preparedness rather than a longer-term and systemic view, which would consider building wider resilience and structural solutions to climate vulnerability. There is also less research on procedural aspects of social justice (i.e. whose voice is heard in decisions) than distributional aspects (i.e. who will be affected by climate change).
- Vulnerability to climate change – and policies designed to mitigate and adapt to it – is determined by a combination of personal, social and environmental factors, alongside institutional practices such as planning rules, consultation processes and the distribution of the costs and benefits of policy measures. This suggests the need for cross-sector policy responses, along with detailed and localised assessments of vulnerability.
- Climate change can compound poverty and disadvantage and, conversely, poverty increases vulnerability to climate impacts. There is also evidence that some adaptation and mitigation policy can deepen inequity. These compounding effects and interactions make a strong case for policy solutions that integrate social justice considerations into climate change policy and vice versa.

## The research

The study was led by the Centre for Sustainable Energy in partnership with the Universities of Oxford and Manchester.

# BACKGROUND

Climate justice is still an underdeveloped research topic, particularly the social justice aspects of adapting to the impacts of climate change. There is also less research on procedural aspects of climate justice (whose voice is heard in decisions) than distributional aspects (who will be affected).

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## What is climate justice?

This study defines climate justice as: ensuring collectively and individually we have the ability to prepare for, respond to and recover from climate change impacts – and the policies to mitigate or adapt to them – by considering existing vulnerabilities, resources and capabilities.

## Why is climate justice needed?

There are ethical, legal and pragmatic rationales for climate justice. There are two types of ethical rationale: one using moral constructs of right and wrong and the other taking a ‘consequentialist’ perspective that judges whether the action delivers the best outcome as agreed by common consent. Legal frameworks include the principles for equity and fairness established in the United Nations Framework Convention on Climate Change. The pragmatic rationale is that populations are more likely to support climate change policy if it is fair. Some go further, seeing the implementation of fair climate change policy as an opportunity to create a fairer society as a whole.

## Climate injustice

Climate injustice relates to how the impacts of climate change will be felt differently by different groups and how some people and places will be more vulnerable than others to these impacts. But vulnerability is not innate to some groups – it is determined by a mix of socio-economic, environmental and cultural factors and institutional practices such as planning rules and housing policy as well as people’s own capability to respond. There is also climate injustice in the way the costs and benefits of climate change policy are distributed. For example, lower-income groups tend to pay proportionally more for policy and benefit less from some carbon reduction measures, despite contributing least to the problem through their emissions.

## Vulnerability

The factors that make people vulnerable to the impacts of climate change are most acute amongst particular groups, typically older people, lower-income groups and tenants. For example, older people are physiologically at most risk of health impacts from extreme heat and cold. A mix of socio-economic and geographical factors also create spatial distributions of vulnerability: lower-income groups living in poorer-quality housing in coastal locations are disproportionately affected by coastal flooding, while disadvantaged groups living in urban areas with the least green space are more vulnerable to pluvial flooding (flooding caused by rainfall) and heatwaves. Tenants are more vulnerable than owner occupiers because they cannot modify their homes, so are less able to prepare for and recover from climate events.

The effects of climate change on other countries may also indirectly affect the UK, with social justice implications. For example, increases in migration to the UK may place additional pressure on services, again affecting some socio-economic groups more than others, although the current evidence suggests that the impacts of climate-related events tend to cause migration within countries rather than to overseas destinations.

Responses to vulnerability are influenced by how it is defined. Policy is likely to be more effective if it recognises that vulnerability is due to a range of interacting factors and is not necessarily inherent to particular groups

## **Social networks and vulnerability**

Social networks can influence vulnerability in complex ways. Well-networked neighbourhoods and communities have been shown to respond better in emergency situations, while social isolation can increase vulnerability. However, social networks may not always mitigate risk; networks around elderly people have in some instances been found to downplay the significance of climate impacts on welfare, which can increase vulnerability. These varying influences on social networks have implications for adaptation policy, particularly for engagement strategies.

## **How socially just are climate change adaptation responses?**

Research assessing the justice of adaptation responses is still in its infancy. However, a number of initiatives at the local level are beginning to address questions of climate justice in adaptive planning, offering valuable lessons for socially just adaptation.

## **Carbon emissions and transport policy**

The review highlights the inequitable distribution of carbon emissions. The wealthiest 10 per cent of households are responsible for 16 per cent of UK household and personal transport emissions, while the poorest 10 per cent are responsible for just 5 per cent. Little consideration has been given to how responsibility for emissions might inform responsibility for mitigation responses.

Policies to mitigate emissions from transport through fuel duty and vehicle excise duty (VED) also appear regressive. The cost of fuel and VED represents 8.1 per cent of the budget of the poorest 10 per cent of car owners but only 5.8 per cent of the 10 per cent with the highest incomes. Lower-income groups also appear to benefit less from spending on transport because they travel less overall, with less car ownership, and tend to use buses rather than trains, which receive greater public subsidy.

## **How socially just is carbon reduction policy?**

Much of the cost of the UK's domestic sustainable energy policies is paid for through levies on energy bills rather than taxation. Consequently, lower-income households pay more for mitigation policy as a proportion of their income than higher-income households. Overall, higher-income households also benefit more from current government policy than lower-income groups: by 2020 the richest 10 per cent should see an average reduction of 12 per cent on their energy bills compared to a 7 per cent reduction for the poorest 10 per cent. So everyone is expected to gain under current policies, but the lowest-income groups gain least.

## **Mitigation and adaptation policies as levers for greater social justice**

'Transformational' adaptation – constructing physical and institutional infrastructure to deliver long-term resilience to climate change impacts – could be an opportunity for new economic activity and a fairer society, but local authorities need resources that empower them to incorporate climate justice into their duties. The economic benefits of mitigation activity, such as green growth and jobs, could also bring social justice if fairly distributed.

## **Policy implications**

The review identifies a wide range of policy implications:

- Climate change policy is largely developed and conducted separately to policy that aims to tackle social vulnerability, poverty and disadvantage. Adaptation and mitigation policy need to be integrated into activities to reduce material deprivation, and climate justice issues need to become

more closely aligned with other core government agendas, such as green growth. The tools and procedures for doing this need development.

- To encourage policy that works across sectors, climate change policies should use broader definitions of vulnerability, understanding it as multi-dimensional and not just related to individual circumstances or location.
- Policy must also move beyond emergency planning and build the institutions and infrastructure needed to create permanent resilience across all social groups through transformational adaptation. This could be seen as an opportunity to create a fairer society and stimulate economic activity.
- Governance and the policy design process need to change so that those most affected by climate change and climate change policy have more say in shaping responses. This will require new procedures and tools for engaging communities in more collaborative planning processes.
- The rebalancing of planning powers to local levels presents opportunities for tackling climate change and social justice issues. However, local authorities need sufficient resources for this purpose and their activities should be coordinated within national frameworks to ensure best practices are shared and supported.

## Conclusion

Disadvantaged groups are disproportionately affected in many ways by climate change and associated policy. However, emerging examples of adaptation and mitigation practice at the local level show that it is possible to achieve adaptation objectives and carbon reduction targets in socially just ways. Climate change policies integrating social justice are not only a moral imperative – it is also easier to achieve resilience and mitigation targets with the political and social acceptance that results from fair policy. Furthermore, developing just responses to climate change is an opportunity to develop systems and infrastructure that will create a more resilient and fairer society as a whole.

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## About the project

This evidence review used a Rapid Evidence Assessment (REA) methodology to systematically collect and analyse literature on different aspects of climate justice, sifting several thousand of articles and studies to generate a shortlist of around 70 studies for detailed review.

## FOR FURTHER INFORMATION

This summary is part of JRF's research and development programme. The views are those of the authors and not necessarily those of JRF.

The main report, **Climate change and social justice: an evidence review** by Ian Preston, Nick Banks, Katy Hargreaves, Aleksandra Kazmierczak, Karen Lucas, Ruth Mayne, Clare Downing and Roger Street, is available as a free download at [www.jrf.org.uk](http://www.jrf.org.uk)

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Joseph Rowntree Foundation  
The Homestead  
40 Water End  
York YO30 6WP  
Tel: 01904 615905

email: [publications@jrf.org.uk](mailto:publications@jrf.org.uk)  
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