



Making a Net Zero Society: Follow the *Social Science*

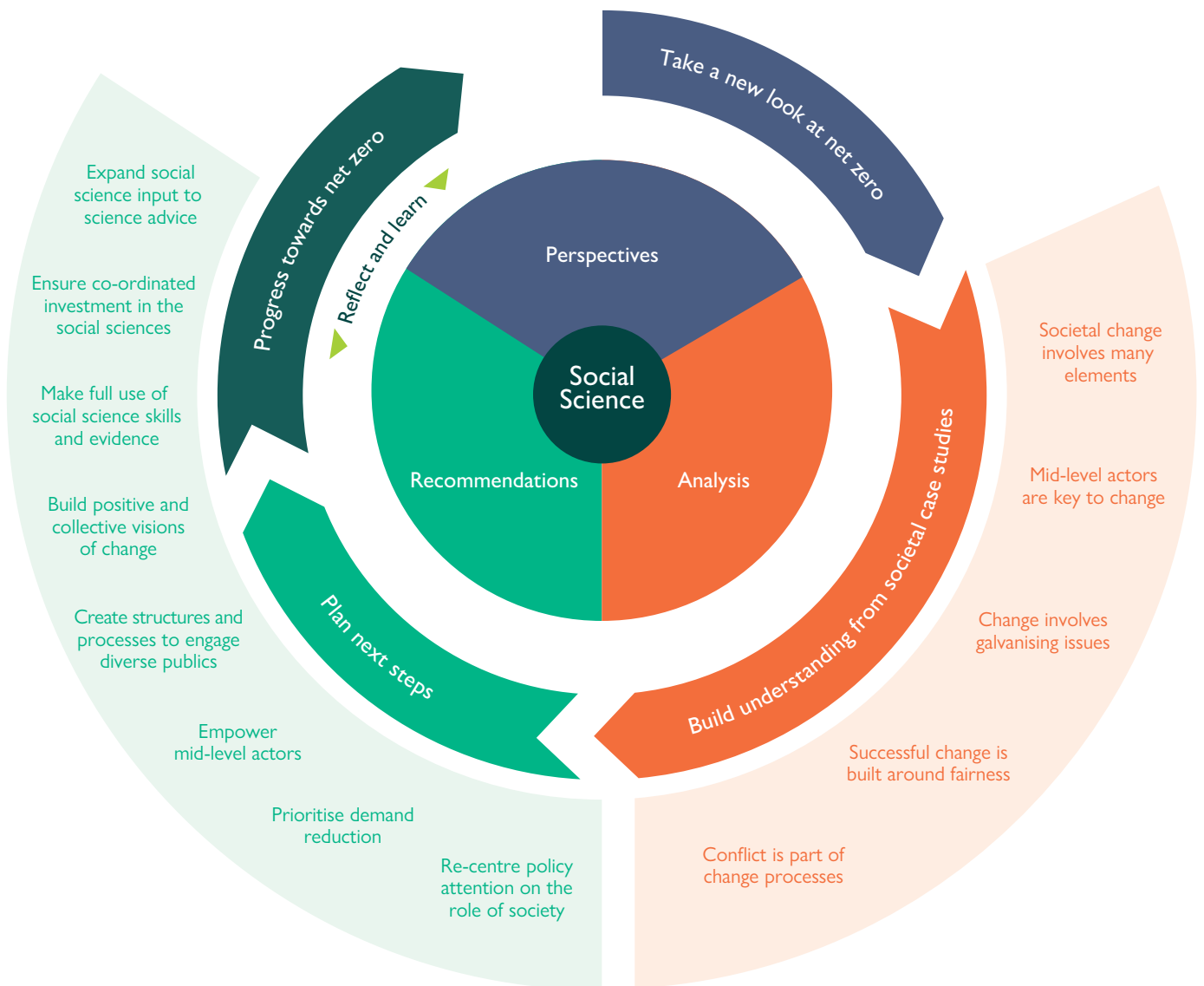
Summary Report

Summary

The Economic and Social Research Council-funded ACCESS network drew together an independent task force of experts to consider the role of social science in UK net zero policy. The task force, which ran for one year between 2023-2024, reviewed a range of social science perspectives, analysed examples of government net zero plans and built understanding from case studies of societal change.

We now call upon government to make more consistent and effective use of social science in delivering UK net zero ambitions. Our work shows the huge opportunities, and wide range of benefits, that can be delivered through sustained action to reduce demand for energy. To achieve net zero we need actors from across society to be engaged. Actors that work at the mid-level, between scales, silos and sectors, are especially important. Engaging citizens in meaningful debate about change and generating positive visions of a net zero future will also be essential. We recommend that government establish a Net Zero Social Science Advisory Committee in the Department of Energy Security and Net Zero.

Steps to Making a Net Zero Society



This diagram summarises important social science capabilities and how they contribute to net zero planning. By drawing on social science **perspectives** [Annex 1], government can **take a new look** at net zero goals and challenges; social science **analysis** can **build understanding from other societal changes**; and these social science inputs can help to **plan next steps** to accelerate **progress to net zero**.

Key Recommendations

We make **eight recommendations to government**, based on the weight of social science research evidence. They present opportunities for the social sciences to contribute more fully to policy development on net zero and the challenges posed by rapid societal transformation.

1. **Re-centre net zero policy attention on the role of society.** This is critical to a fully socio-technical approach to net zero transformations and will bring important new opportunities for intervention around the drivers of, and roadblocks to, societal change.
2. **Prioritise interventions to reduce demand for energy.** Net zero will not be achieved by supply-side options alone and demand reduction offers many wider benefits. There is considerable scope for developing and mobilising demand-side knowledge, innovation and action.
3. **Empower mid-level actors** (e.g. local government, civil society, businesses, schools) to deliver place-sensitive, locally appropriate, net zero interventions. Enabling these actors - through funding, legislation and devolved powers - is crucial to realising their potential roles in reaching net zero.
4. **Create structures and processes that engage diverse publics** in conversations about the changes required - recognising not only the benefits of net zero measures but also the concerns and challenges they can raise. The purpose and scope of these engagements must be clearly laid out. Climate Commissions and Climate Citizens' Assemblies have been successfully applied to supporting place-based climate policy. Such mechanisms can help to deliver a transition that is smoother, faster and more equal.
5. **Build and communicate positive and collective visions of a net zero future** that can galvanise widespread support for net zero changes, and that recognise the many benefits of action beyond reducing emissions - including better health, new jobs, technological innovation and a fairer society. These visions must also engage with the downsides of net zero policies and with sources of contestation.
6. **Embed the critical, reflective and analytical skills of the social sciences** in net zero institutions and policy, as exemplified by the work of the [Intergovernmental Panel on Climate Change \(IPCC\)](#) and the Government Office for Science [Net Zero Society Report](#).
7. **Ensure concerted and coordinated investment in social science expertise** across all aspects of the next UK Net Zero Research and Innovation Framework Delivery Plan.
8. **We recommend that the UK and devolved governments include more social science expertise in science advisory committees looking at net zero. We suggest establishment of a Net Zero Social Science Advisory Committee within the Department for Energy Security and Net Zero (DESNZ),** with terms of reference to include diverse social science disciplines and topics of net zero expertise.

Key Steps

Take a new look. Social and technological change is a multifaceted process involving governments, organisations, people, devices and cultural shifts.

Build understanding from other societal changes. Understanding processes of societal change is a vital area of net zero research and policy investment.

- **Societal change involves many elements: governments, organisations, people, devices and cultural shifts.** The social sciences provide a wealth of perspectives and insights on these elements and how they interact to deliver, or inhibit, rapid societal change. This knowledge can support decision-makers in reflecting on policy assumptions and identifying new opportunities for intervention.
- **Mid-level actors are key to change.** Change is rarely simply bottom-up from individual action or top-down from national policy prescriptions. Crucially it is often also about what happens in the middle: mid-level actors and organisations such as local authorities, employers, businesses, faith-based groups, schools and third sector organisations, operating in-between and across local and national scales. The case of School Streets [[Annex 3 A](#)] highlights the importance of mid-level stakeholders. These schemes, which suspend motor traffic access to roads outside schools during drop-off and pick-up times, have been led by community groups, parent-led organisations, schools and local authorities. The role of these mid-level actors has been critical to delivering projects that reduce emissions, that are widely supported and that fit with local context.
- **Studies of past societal changes have shown that change tends to involve particular ‘galvanising issues’,** such as ‘saving the National Health Service’ as a motivating factor for supporting non-pharmaceutical COVID-19 restrictions [[see Annex 3 E](#)]. It is a framing of intervention that actively supports disruption of habits and the situations that tend to normalise those habits. Identification of such galvanising issues, that can bring together diverse groups and organisations, is an important leverage point for delivering net zero policy.
- **Fairness and justice are central to change processes and have a geographical context.** Social science evidence demonstrates that fairness, in process and outcomes, is crucial for building policies that have popular support, are place-sensitive and are locally appropriate.

A just transition for net zero must also address barriers to participation and action, such as the price of low carbon options (e.g. electric vehicles or heat pumps) or the comparatively low cost of high carbon services such as flying. We also know that a just transition will mean different things in different contexts, across different places and communities. Research highlights the ways in which social and cultural difference (for instance, gender, race, class and ability) impact on the experience of net zero measures. This requires a place-sensitive approach that ensures that net zero interventions are locally and culturally appropriate, rather than ‘one size fits all’. The case of a community-based approach to housing retrofit offers a good illustration of how such a place-sensitive approach can be achieved [[see Annex 3 B](#)].
- **Contests and even conflicts are a part of any change process.** Differences will exist that reflect a range of identities, power relations and roles in relation to net zero. Creating opportunities for differences to be aired and debated, and seeking forms of deliberative resolution (e.g. citizens’ assemblies and dialogue processes), should be integral to steering social and technological change. Furthermore, vested interests play an important role in seeding and sustaining conflict around net zero. As the case of smoking [[Annex 3 C](#)] underlines, it is also essential to understand the influence of vested interests and the structural contexts that are undermining action on net zero. The social sciences must be central to developing such an understanding and how net zero has been drawn into the ‘culture wars’ in the UK.

Plan next steps. The net zero transition needs to be informed by an understanding of social and cultural dynamics. It needs to go beyond economic, supply-side and narrowly framed consumer-based perspectives. The social sciences have a unique set of skills to bring to this task.

Current net zero pathways are underpinned by the dominant use of economic models and analysis that prioritise supply-side and energy efficiency technologies. They also emphasise the ways in which individuals, as consumers, can be persuaded to adopt better behaviours and accept new norms. It is an approach to net zero that creates imbalances in decision-making and limits options for delivering policy goals and wider social benefits. We advocate five areas of policy innovation:

- **A richer understanding of change and society is needed.** A solid evidence base on different approaches to understanding and steering change is essential for navigating the scale and complexity of net zero and the multiple policy levers that will be needed [Annex 1]. Whilst net zero requires the input of many disciplines, the key challenges to rapid emission cuts are fundamentally social and political. It also requires a responsiveness to the many different roles and capabilities people hold in relation to aspects of net zero policy and action (e.g. as citizens, consumers, employers, employees, leaders, parents, investors, activists and members of communities). An understanding of these identities and capabilities will be key to delivering lasting change.
- **Demand reduction is urgently needed. Supply-side change alone is not sufficient.** Social science research has highlighted the limits of a reliance on supply-side technological innovations to deliver decarbonisation at the scale and pace needed to meet the UK's net zero goals. There are also considerable risks associated with an over-reliance on novel technologies (e.g. Hydrogen, Direct Air Capture, Carbon Capture and Storage) and a neglect of the demand that drives emissions. Moreover, there are wide-ranging benefits from social and behavioural changes (e.g. health improvements from changing travel or dietary habits) that are missed by relying on net zero technologies alone.

Research makes clear the huge scope for developing a comprehensive programme of low-cost, demand-oriented innovation and action. For example, reducing the need for travel, enabling active travel and making the timing of demand more flexible and responsive to the needs of the energy system.

One of the necessary conditions for acceleration of mitigation through demand-side measures is a sound understanding of how meaningful public engagement on energy demand reduction can be achieved. The social sciences can contribute to an understanding of how such engagement might best be achieved.

It is also important to recognise the structural factors that underpin inequalities in access to mitigation measures – notably in relation to fuel and transport poverty [see Annex 3 B, housing retrofit]. Here, the social sciences can play a critical role in understanding and advising on the range of issues and processes involved.

- **Recognise the role of mid-level actors.** The social science community has repeatedly identified governance gaps that are actively frustrating our ability to transition to a net zero society. Actors that work at the mid-level, between scales, silos and sectors, are especially important. To assist mid-level actors in delivering change, improvement could be made to the extent and clarity of mechanisms that support net zero delivery, including the devolution of more powers and responsibilities.

There are also ways that government can intervene beyond market-led policies which can be exclusionary of other opportunities and business models, such as not-for-profit businesses and community ownership models. The Danish district heating case [Annex 3 F] illustrates how a move to decentralised, community control of energy infrastructure was crucial to achieving widespread support for a national shift towards a low carbon energy system. The social sciences have insights to offer into the workings of markets as well as the evolution of alternative business and service provision models that can support actors operating in the mid-level. For example, work on the co-production of services and on public support for community energy projects sheds light on some of these issues.

- **Mechanisms of citizen dialogue are vital to establishing a social license for net zero policies.** Dialogue can reveal areas of contestation, anticipate unintended consequences and identify galvanising issues that bring people together around net zero action. Dialogue-based methods have challenges, and building a deeper understanding of issues is often more likely than delivering agreement or consensus. It is particularly important that mid-level actors can draw on the right expertise to build successful partnerships for dialogue, including transparent reporting of how dialogue made a difference. Examples like School Streets and housing retrofit projects, that work with communities [see [Annex 3 A & B](#)], highlight the importance of dialogue to increase public and policymaker understanding, and co-devise solutions that are acceptable and fair. Social science evidence also shows that these forms of engagement can also build trust in policy processes and increase the chances of success.

Dialogue processes do not replace mechanisms of representative democracy but supplement them, creating a more responsive democratic process in which those with different views and positions learn from one another. Social science has much to offer

here, with leading expertise on methods of public dialogue, including those that recognise and engage directly with conflict, and on the evaluation of participatory practice.

- **It is important to recognise and communicate the positive and collective dimensions of net zero transformation.** Research supports a wider framing of a net zero future in terms of a range of co-benefits (for instance: health, jobs and quality of life), and demonstrates public support for such objectives. The government also has a role to play in building meaningful alliances and goals, particularly with mid-level actors, that incorporate positive change from the outset, and that position demand reduction and just transition goals as an opportunity, not a threat. Social science can reveal key lessons about how to build these alliances.

Problems and genuine concerns will also exist and need to be understood and addressed (e.g. shortages of skilled labour, visual impacts and problems in installing net zero technology). Social science can help to show how such issues might be approached in ways that recognise their causes and avoid them being dismissed as merely obstacles.

Who are we?

This task force brings together an interdisciplinary group of environmental social scientists to highlight how UK social science expertise can be more effectively deployed to support a rapid societal transition to net zero. The task force ran between April 2023 and March 2024.

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The task force approach

This policy advice report is based on the outputs of a dialogue between task force members around:

- A focused review of social science *perspectives* on societal change, reflecting the diverse expertise of task force members. [[Annex 1](#)].
- *Analysis of the UK Net Zero and Innovation Framework (DESNZ, 2021) and associated Delivery Plan 2022-25 (DESNZ) and the Net Zero Society: Scenarios and Pathways Report (Go-Science, 2023)* [[Annex 2](#)].
- *Analysis of selected case studies of past and ongoing societal change and transition, both successful and more problematic, that offer lessons for net zero policy* [[Annex 3](#)].



Please view the full report [here](#)

To cite this report: Bickerstaff K, Abram S, Christie I, Devine-Wright P, Guilbert S, Hinchliffe S, Moseley A, Pitchforth E, Walker G and Whitmarsh L. (2024) Making a Net Zero Society: Follow the Social Science – Summary Report. ACCESS Project, University of Exeter, UK.

Acknowledgements: Our thanks to the following individuals and / or organisational representatives for their input to the deliberations and outputs of this taskforce: Harriet Bulkeley (University of Durham); Andy Jordan (UEA); Gary Kass (University of Surrey); Julie MacArthur (Royal Roads University); Susan Owens (University of Cambridge); Benjamin Sovacool (University of Sussex); Academy of Social Sciences; British Academy; Department for Energy Security & Net Zero; Government Office for Science; Department for Environment, Food & Rural Affairs; Department for Transport; Scottish Government; Welsh Government; Department of Agriculture, Environment & Rural Affairs, Northern Ireland; Environment Agency and Natural England.

The design work was led by Sarah Baker (University of Exeter) and proofread by Trevor Hood (University of Surrey).

This work was supported by the Economic & Social Research Council Grant ref ES/W00805X/1; and the Leverhulme Trust Research Fellowship RF-2023-70417.

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September 2024

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