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Research Brief: Public participation in net zero policymaking for rural regions in the UK

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View of Loch Lomond from Conic Hill in Loch Lomond and the Trossachs National Park. Image credit: Marie-Louise Bonzon.

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Summary

Rural regions in the UK, including National Parks, currently experience structural injustices such as non-inclusive recreational opportunities and unequal access and representation for some groups (Auld, 2021; NatureScot, 2018; NatureScot 2021). Rural regions face further injustices that will be created or aggravated by climate change, and yet they tend to be overlooked in net zero policies compared to urban areas (Rural England, 2021; Wilson, 2021). For a 'just transition' to a fair and sustainable future for all, net zero policies and decisions must address these issues.

But who decides how we define a fair distribution of costs and negative impacts associated with the net zero transition? For such complex and sensitive questions, it is crucial to involve the people who will be directly and indirectly impacted to design policies that are just, reasonable, effective and legitimate. To this end, democratic innovations like deliberative or participatory public involvement can be valuable tools.

Despite a rich literature on local climate governance and democratic innovations, little is known on how, in practice, public participation could inform a just transition to net zero in rural areas and in National Parks in the UK. This study aimed to fill this gap. National Parks provide a particularly interesting context for this research, given that their unique model of governance, and their reach and breadth provides unique opportunities on the role that they could (and already) play in terms of local rural governance for decarbonization.

Through a combination of literature review and qualitative interviews, we explored perspectives of people with experience in the field of public participation and National Park governance. We found that:

1. **There is a role for better forms of public participation to improve decision-making in rural regions of the UK.** Most interviewees viewed public engagement and participation in net zero policy making positively, and felt that current processes are inadequate, fail to empower people or to elevate community voices appropriately to influence policy making. The majority of interviewees felt that forms of public participation that would involve the public in decision-making processes are necessary to tackle these inadequacies. It is anticipated that such approaches would bring important benefits such as improving legitimacy and policymakers' social mandate when taking the tricky decisions that will be necessary in the transition to net zero emissions.
2. **Perceived barriers to implementing public participation in decision-making in National Parks are significant.** These include difficulties in securing buy-in from both policymakers in the National Park Authorities and from communities living in or near National Parks, and uncertainties on how to best implement and deliver participatory or deliberative processes in National Parks. Further, since forms of public participation are perceived to be more resource intensive to implement than traditional public engagement approaches such as consultation, there are concerns around the budgets available.
3. **Public participation in decision-making requires incentives.** Although many National Park Authorities go beyond their statutory duties in terms of public engagement and participation around planning and development; deliberative forms of engagement are perceived as particularly challenging and optional and therefore rarely implemented. There is need to better understand what incentives (legislative and otherwise) would best work to encourage the implementation of deliberative public participation, and particularly for National Parks and rural communities.
4. **Several parameters need to be considered for effective public participation to shape policy making in National Parks.** These parameters include power redistribution, picking the right method, creating the conditions for participation, using innovative and novel ways to engage with the public, and institutionalizing public participation within National Parks Authorities. It is also important to ensure that policymakers and those in position of power are aware and understand how innovative forms of public participation could best inform policy making for a just transition to net zero in National Parks and rural areas.

In short, there is a desire to move towards more innovative forms of public participation in decision-making because of the clear role that these processes can have to ensure fit for purpose policies, and a fairer transition to net zero. For this to be possible however, consideration of the barriers facing public participation in rural areas, appropriate resourcing, and careful consideration of key elements to ensure effective public participation are needed.

1. Introduction

1.1. Net zero transition in rural areas: the challenge

Half of the global population lives in cities today (United Nations, 2018). Urban areas account for 71 – 76% of global greenhouse gas emissions and, as such, decarbonization policies and decisions have focused on the urban environment (Marteau, Chater & Garnett, 2021; Barber, 2013; van der Heijden, 2019; Sethi & Puppim de Oliveira, 2015; Busch, Bendlin & Fenton, 2018). To date, **net zero policies have tended to overlook rural areas** (Rural England, 2021; Wilson, 2021). This is problematic because the challenges in reducing emissions differ greatly between rural and urban areas, and yet all regions must transition to net zero emissions. Rural areas account for a large part of the UK's territory, for example, 98% of Scotland's landmass is rural (Transport Scotland, 2020) and 92.6% of England and Wales is classified as rural according to the 2011 census (Office for National Statistics, 2015). **Decisions and policies related to net zero need to be appropriate to context, so it is crucial to focus on how to best achieve carbon net zero in rural regions.**

To be just, the transition to net zero will not only need to reduce emissions, but also consider broader sustainability goals such as ensuring a fair process, ensuring that any loss to communities and individuals are fairly compensated, and leaving no one behind (Scottish Government; Linton *et al.*, 2021). The transition to net zero can and should therefore be an opportunity to address social, political, and economic injustice, and maximize win-win situations such as new job opportunities and healthier lives (Ross *et al.*, 2021; Just Transition Commission Scotland, 2021). Rural communities are often those most affected by net zero developments such as onshore renewable energy projects, electricity transmission infrastructure, and nature-based carbon sequestration projects, therefore, decision-making on such projects must involve rural communities to ensure their fairness (Rural Services Network, 2021).

A just transition recognizes that without the support, buy-in and engagement from the publics and communities, net zero will not be achieved (Just Transition Commission Scotland, 2021). In Scotland, the principles for a just transition are embedded in The Climate Change Act 2019 and several policies have recently been put in place to support it through the 2020 Programme for Government and the updated Climate Change Plan (Scottish Government).

1.2. Public participation for net zero decision-making in rural areas

The net zero transition poses complex societal and moral challenges, and failure to acknowledge and respond to these is hindering progress on emissions reduction (CCC, 2020; Capstick *et al.*, 2020; Demski, 2021).

While there are benefits of a net zero future including cleaner air, new job opportunities and healthier lifestyles, there will also be costs and negative impacts (Sasse, Allan, & Rutter 2021; Demski, 2021). For a societally acceptable and just transition, these impacts will need to be distributed fairly (Capstick *et al.*, 2020; Sasse, Allan & Rutter, 2021). **But who decides what is fair, and place appropriate? And how will decision-making – including process and outcomes - be trusted?** One route to this is public participation, which, if done right, can “improve the quality, legitimacy, and feasibility” of net zero policies (Capstick *et al.*, 2020: 1).

Public participation refers to “any type of inclusion of nonstate actors, as members of the public or as organized stakeholders, in any stage of governmental policymaking including implementation” (Wesselink *et al.*, 2011: 2688).

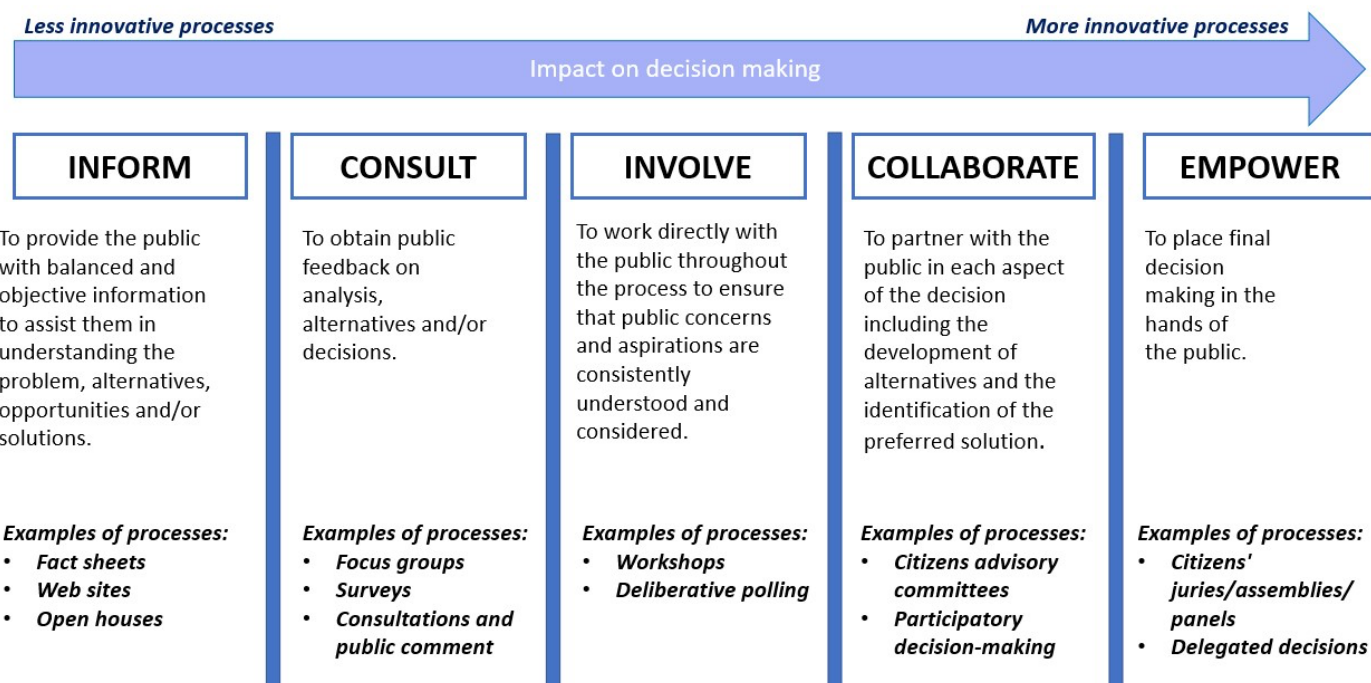
There are three rationales for public participation:

1. The *instrumental rationale* argues that public participation leads to policies that are perceived as more legitimate and are therefore more likely to be successful. People are more likely to accept and comply with a decision if they have been directly involved in taking it or if they feel that ‘people like them’ were involved in the process (Carmichael, 2019) or if the decision-making process as perceived as fair (Jo & Nabatchi, 2021; Demski, 2021). **In the context of the net zero transition, this can ensure that 'tricky policies' are successfully adopted because they are seen as legitimate** (Demski, 2021; Wesselink & Paavola, 2011; Bickerstaff & Walker, 2001).

2. The *substantive rationale* argues that expert's knowledge is not enough for successful environmental governance because **'lay' knowledge can bring insights into issues, problems and solutions that experts can miss**. Decisions are also better when the breadth and depth of knowledge increases because the public can bring new insights and solutions on their own, as well as generate new insights and solutions that would not have been achieved individually (Demski, 2021; Wesselink & Paavola, 2011; Bickerstaff & Walker, 2001).
3. The *normative rationale* finally argues that in a democracy, participation should be ensured as much as possible because **people should have agency over decisions that directly affect them**. In terms of net zero, and the scale of actions necessary, this is particularly important (Demski, 2021; Wesselink & Paavola, 2011; Bickerstaff & Walker, 2001).

The degree of influence or say that publics have in shaping decision outcomes varies greatly depending on the process and methods used (Arnstein, 2019; iap2.org), often conceptualized as a spectrum (Figure 1), with different methods, including citizens' juries, citizen assemblies, planning cells, deliberative polls, and so on (see Elstob, 2014). In all cases, involvement of the public early enough to impact decisions is critical to ensure the credibility and legitimacy of public engagement (Allan, Sasse & Rutter, 2021).

IAP2 SPECTRUM OF PUBLIC PARTICIPATION



Adapted from the IAP2 Spectrum of Public Participation (iap2.org)

Figure 1. Spectrum of Public Participation by the IAP2 (source: iap2.org)

1.3. Net zero transition in rural regions: National Parks as case studies

National Parks were established to conserve and enhance UK landscapes' natural beauty whilst providing recreational opportunities for people. There are 15 National Parks in the UK: ten in England, two in Scotland and three in Wales. In the UK, National Parks are a statutory designation from the government on behalf of the nation. Governance is devolved to National Park Authorities – with one for each park – which are executive non-departmental public bodies made up of paid staff, board members and volunteers (Blackstock, Dinnie & Dille, 2017; NPs UK). Each National Park Authority has specific Statutory Aims set in legislation by their own government to conserve the natural and cultural heritage of the National

Park and to promote opportunities for enjoyment, understanding of the area, and sustainable development for the public (NPs UK).

In line with the Climate Change Act in the UK (Legislation.gov.uk, 2008 and 2019a) and in Scotland (Legislation.gov.uk, 2019b), the Authorities have a statutory duty to take the necessary actions to contribute to the net zero effort. Many National Park Authorities have in fact already set 2030 targets to achieve net zero for their organizations (NPs UK, 2021) and some have set targets to achieve net zero for the entire National Park area. National Park Authorities' decisions have important impacts for the UK's biodiversity, its wildlife, nature-based carbon sequestration, and the communities living in and around the Parks which are mostly in rural and remote areas.

Public participation to shape National Park policies has previously been proposed for example under the Community Empowerment (Scotland) Act 2015 (Lange & Hehl-Lange, 2011; LLTNPA, no date). However, **there has been little research on how public participation could inform decision-making for a just transition to net zero in rural areas including National Parks.**

National Parks are of particular interest for research on public participation for net zero transition in rural regions for three reasons:

- (1) **National Parks are unique in their reach and breadth:** they cover large areas of land, for example, National Parks cover 9.7% of England's land area (Rural England), encompassing multiple communities and Local Authorities. The scale, remit, and complex network of partnerships that National Parks' Authorities deal with makes them good places to test out new approaches to meeting complex challenges, such as reaching net zero in rural areas in a just way.
- (2) **Authorities within National Parks present unique and complex forms of governance** and the role that they could play (and already play) in terms of local rural governance for decarbonization in rural areas has barely been investigated in practice and in the literature.
- (3) **The challenges that National Parks face to reach net zero are similar to those faced by rural areas,** for example in terms of low carbon mobility with many popular destinations within National Parks located in remote rural areas with no sustainable options to access them - for example in the Loch Lomond and the Trossachs National Park (Auld, 2021). This is a problem because journeys to National Parks are predominantly made by car and are steadily increasing, causing high traffic, congestion and increasing pollution. These challenges are not unique to Scotland's National Parks and are encountered in National Parks in the UK and in Europe as well (Auld, 2021).

2. Project scope, aims and methods

This research looked at public participation processes that aim for public collaboration and empowerment to influence and shape decision-making in UK rural regions – and National Parks in particular – regarding policies and strategies to reach net zero emissions by 2050 in the UK.

The **research aimed to:**

- (1) Investigate how democratic innovations in public engagement such as deliberative processes might be implemented in UK National Parks to inform a just transition
- (2) Understand the opportunities, benefits and challenges of using public participation to shape climate policy in UK National Parks.

Research methods included:

1. **A desk-based literature review** on rural climate governance and public participation in environmental policy and governance in rural areas and National Parks.
2. **Interviews with stakeholders:** Seven semi-structured interviews were conducted in the summer of 2022. Interview questions were tailored to the interviewee's profession and experience.
 - 3 interviewees worked for a National Park Authority either as a staff member or board member;

- 2 interviewees worked for an organization that promote public participation and/or organized participative and deliberative processes like citizens' assemblies;
- 1 interviewee was an academic with research interests in public participation;
- 1 interviewee worked for an organization representing the interests of the public and communities on relevant issues like land ownership.

Interview responses were thematically analysed following the approach prescribed by Braun and Clarke (2006).

3. Research findings

3.1. Improved public participation is needed for better decision-making in National Parks

The majority of interviewees felt that public engagement processes currently used in National Parks such as consultation are failing to inclusively involve the publics in decision-making, and the influence of these processes on decision-making is limited. They reflect how **National Parks Authorities have historically and are currently still facing questions around legitimacy and authority regarding decision-making**, indicating that current modes of governance and policymaking are failing to confer legitimacy to National Park Authorities by (unintentionally) excluding some sections of the population. This is particularly problematic for implementing policies on complex and challenging issues such as just transitions to net zero as explained through the instrumental rationale for public participation (section 1.2), and there is concern around inequalities being 'baked in' to governance and decision-making.

Better public participation in decision-making is perceived to bring several benefits, including:

1. Improved breadth and depth of evidence available to policymakers because knowledge, information, and views from a range of people and communities became available, improving the quality of the ensuing policies.
2. Improved decisions shaped by citizens' 'lay' knowledge, which provides rich contextual and practical insight.
3. Public participation would support improved legitimacy of decision-making in National Parks.

Certain forms of public participation that use random selection or incorporate deliberation, are perceived as more rigorous and resulting in more valid outputs from citizens. Thus, introducing democratic innovations such as deliberative 'mini publics' could be used to effectively involve people in decision-making, conferring legitimacy to ensuing policies, whilst also ensuring that citizens' views are seen as valid by policymakers.

This echoes previous research that finds that improving the legitimacy of decision-making, engendering public trust and having a strong social mandate, are all critical to ensure the success of net zero policies implementation (Demski, 2021; Jaske, 2019; Willis, 2018 and 2020).

3.2. There are barriers and challenges to public participation in decision-making in National Parks

There are several perceived barriers and challenges to implementing and delivering deeper forms of public participation in National Parks. Key barriers included:

1. **Uncertainties about the practicalities of implementing participatory processes in practice.** Since participatory approaches are not widely or commonly adopted, there is uncertainty around their resourcing, design and delivery. In particular, there were uncertainties around implementing processes for sustained participation for medium to long term participation.
2. **Ensuring that outcomes shape decision-making.** The policy and decision-making framework or process must be adapted to ensure that outcomes are embedded into, inform or shape decision-making. If public perspectives do not adequately shape decision outcomes, the process would effectively be an embellished version of a consultation or focus group, and risks further exacerbating the issues that participatory processes are seeking to redress.
3. **Public participation approaches are perceived to be resource intensive.** There are concerns around difficulties in securing the resources necessary to adequately conduct forms of public participation.

4. **Lack of 'buy in' from policymakers for new approaches to public participation.** It was felt that this was due to a lack of awareness or understanding of these processes and the value that they bring amongst senior leaders within National Park Authorities. This accentuated the challenge of securing appropriate resource to do these processes.
5. **Consultation fatigue, disengagement and distrust.** There are concerns around uptake and engagement of public participants, especially if there is consultation fatigue and/or scepticism around current decision-making processes. These issues could have knock on effect in terms of the perceived legitimacy and credibility of the outcomes of participatory processes.
6. **Potential barriers and challenges specific to National Parks are not well understood.** For examples in terms of achieving representation and inclusion due to the Parks' geography and the number of people having a stake in the decision made in National Parks. A potential challenge might be in balancing the different views stakeholders might hold and if certain interests should have more weight than others, for example between communities living within the parks and those that don't. Some interests can also be harder to represent and balance against competing interests, such as environmental and biodiversity concerns.

Many of these barriers indicate the need for upskilling and training to support further understanding of participatory approaches in practice.

3.3. Key aspects to consider when implementing public participation in National Parks

Several components were identified by interviewees as key elements for effective public participation in National Parks. These include:

1. **Process co-design:** Power redistribution can be further supported by co-designing the participatory process with the publics, which will in turn support process legitimacy.
2. **Ensuring outcomes have influence:** Public participation method(s) and design, and their potential influence, must be carefully considered and appropriate to the decision-making scope, which will be region and National Park specific. This is important to ensure the outcomes have influence, as well as to avoid "unrealistic expectations about outcomes" of such processes (Demski, 2021 p. 15). The latter can lead to frustration and fatigue from people who gave up their time to participate (Sasse, Allan and Rutter, 2021) and potentially exacerbating one of the issues that participatory approaches seek to redress.
3. **Creating the conditions for participation:** Approach(es) to public participation should maximize access and inclusion, reducing barriers to participation, particularly from historically marginalized groups or those most vulnerable to policy impacts. In some cases it might be appropriate to mix several methods to appeal to different communities (Demski, 2021; Sasse, Allan and Rutter, 2021). This might improve legitimacy of outcomes from policymaker perspective, too. Participatory approaches can support wider engagement approaches by informing the frames, language, visuals and narratives are most effective in engaging with communities (Demski, 2021).
4. **Innovation and institutionalization:** For public participation to have a meaningful impact, participatory approaches may need to be supported over medium to long term. This means that consideration must be given to how best to institutionalize participatory approaches within National Park Authorities.
5. **Sharing practices:** There is a lack of understanding of how widespread innovative forms of public participation are across National Parks in the UK. National Park Authorities will benefit from coordinating and sharing knowledge on deliberative and participatory processes in order to inform how future methods might be best implemented.

4. Recommendations

4.1. Recommendations for future work

Our research has identified potential for innovative participatory decision-making solutions to support local climate governance of rural areas to support just transition to net zero.

Research on democratic innovations and public participation that goes beyond legislative compliance in National Parks in the UK is lacking. There is evidence of recent instances of such processes being implemented - in the Brecon Beacon National Park for example (beacons-npa.gov.uk) -, but uncertainties remain in terms of how widespread these practices are across the National Park Authorities and the effectiveness and limits of these processes on policymaking, particularly around just transition.

Further research is needed to understand:

- (1) **How can participatory decision-making be embedded into local climate governance in rural areas including National Parks?** What would a deliberative process in a National Park look like? Who should be represented and how? What techniques and models need to be used and why? What resources would be needed for sustained implementation?
- (2) **How can the perceived challenges for implementing public participation in rural areas National Parks be overcome?** Are these concerns specific to National Parks or similar to challenges in other institutions? What challenges are specific to rural areas and/ or National Parks?

4.2. Recommendations for future practice

Our research has identified recommendations for future practice, including the need:

- (1) **To raise awareness of public participation amongst National Park Authority staff and wider stakeholders** including approaches, purpose and benefits in the context of just transition and particular considerations for the rural economy. Wider awareness is needed to support the full potential of participatory decision-making to be realized, from resourcing, to ensuring the tender process recruits and selects the most suitable external experts, to how the outcomes influence decision-making.
- (2) **To embed best practice principles** such as for placing public engagement and participation within net zero policymaking (Sasse, Allan & Rutter, 2021) and for deliberative engagement (OECD, 2020) in the public engagement activities of National Parks.
- (3) **Understand and reduce barriers to participation** amongst publics in rural areas, including National Parks.
- (4) **Design policy and decision frameworks that support public input**, to ensure that public participation outcomes have a clear route to policy influence.
- (5) **Coordinate and share knowledge on deliberative and participatory processes** amongst National Parks and associated authorities to share best practice and experience.

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For a copy of the full dissertation, please contact Marie-Louise Bonzon at mlbonzon@gmail.com.

References

- Arnstein, S.R., (2019). A Ladder of Citizen Participation. *Journal of the American Planning Association*, 85(1), pp.24–34.
- Auld, K., (2021). *Enhanced Sustainable Travel Provision*. [online]. Available at: <https://www.lochlomond-trossachs.org/wp-content/uploads/2021/06/20210428-Discussion-paper-on-sustainable-transport.pdf> [Accessed 12 June 2022].
- Barber, B.R., 2013. *If Mayors Ruled the World*, New Haven: Yale University Press.
- Bickerstaff, K. & Walker, G., (2001). Participatory local governance and transport planning. *Environment and planning*, 33(3), pp.431–451.
- Blackstock, K.L., Dinnie, E. & Dilley, R., 2017. Governing the Cairngorms National Park – Revisiting the neglected concept of authority. *Journal of Rural Studies*, 52, pp.12–20.
- Braun, V. & Clarke, V., (2006). ‘Using thematic analysis in psychology’. *Qualitative Research in Psychology*, 3(2), pp.77–101.
- Busch, H., Bendlin, L. & Fenton, P., (2018). Shaping local response – The influence of transnational municipal climate networks on urban climate governance. *Urban climate*, 24, pp.221–230.
- Carmichael, R., (2019). *Behaviour change, public engagement and Net Zero A report for the Committee on Climate Change*. [online]. Available at: <https://www.theccc.org.uk/wp-content/uploads/2019/10/Behaviour-change-public-engagement-and-Net-Zero-Imperial-College-London.pdf> [Accessed June 2022].
- Capstick, S., Demski, C., Cherry, C., Verfuert, C. & Steentjes, K., (2020). *Climate Change Citizens’ Assemblies. CAST Briefing Paper 03*. [online]. Available at: <https://cast.ac.uk/wp-content/uploads/2020/03/CAST-Briefing-03-Climate-Change-Citizens-Assemblies.pdf> [Accessed June 2022].
- Demski, C., (2021). *Net zero public engagement and participation*. [online]. Available at: <https://assets.publishing.service.gov.uk/government/uploads/s>
[ystem/uploads/attachment_data/file/969428/net-zero-public-engagement-participation-research-note.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/969428/net-zero-public-engagement-participation-research-note.pdf) [Accessed June 2022].
- Elstub, S. (2014) ‘Mini-publics: issues and cases’ in *Deliberative Democracy: Issues and cases*. Edinburgh University Press, pp 166-189.
- International Association for Public Participation (IAP2), (no date b). *IAP2 Public Participation Spectrum*. [online] Available at: <https://iap2.org.au/resources/spectrum/> [Accessed July 2022].
- Jaske, M., (2019). Participatory innovations and maxi-publics: The influence of participation possibilities on perceived legitimacy at the local level in Finland. *European journal of political research*, 58(2), pp.603–630.
- Jo, S., & Nabatchi, T., (2021). Different Processes, Different Outcomes? Assessing the Individual-Level Impacts of Public Participation. *Public Administration Review*, 81(1), pp.137–51.
- Just Transition Commission, (2021). *Just Transition Commission: A National Mission for a fairer, greener Scotland*. [online]. Available at: <https://www.gov.scot/publications/transition-commission-national-mission-fairer-greener-scotland/> [Accessed December 2022].
- Lange, E. & Hehl-Lange, S., (2011). Citizen participation in the conservation and use of rural landscapes in Britain: the Alport Valley case study. *Landscape and ecological engineering*, 7(2), pp.223–230.
- Legislation.gov.uk, (2008). *Climate Change Act 2008*. [online] Available at: <https://www.legislation.gov.uk/ukpga/2008/27/contents> [Accessed July 2022].
- Legislation.gov.uk, (2019a). *The Climate Change Act 2008 (2050 Target Amendment) Order 2019*. [online] Available at: <https://www.legislation.gov.uk/uksi/2019/1056/introduction/made> [Accessed July 2022].
- Legislation.gov.uk, (2019b). *Climate Change (Emissions Reduction Targets) (Scotland) Act 2019*. [online] Available at:

Research Brief: Public participation in net zero policymaking for rural regions in the UK

<https://www.legislation.gov.uk/asp/2019/15/enacted> [Accessed July 2022].

Linton, S., Clarke, A. and Tozer, L. (2021) 'Strategies and governance for implementing deep decarbonization plans at the local level'. *Sustainability (Basel, Switzerland)*, 13 (1), pp. 1-22.

Loch Lomond and The Trossachs National Park Authority (LLTNPA), (no date). *Community Empowerment*. [online]. Available at: <https://www.lochlomond-trossachs.org/park-authority/how-we-can-help/communities/community-empowerment/> [Accessed June 2022].

Marteau, T.M., Chater, N. and Garnett, E.E. (2021) 'Changing behaviour for net zero 2050'. *BMJ (Online)*, 375, n2293-n2293.

National Parks (NPS) UK, (no date). WHAT IS A NATIONAL PARK? [online]. Available at: <https://www.nationalparks.uk/what-is-a-national-park/> [Accessed July 2022].

NatureScot, 2018. Scotland's People and Nature Survey - Participation in outdoor recreation: under-represented groups 17/18. [online]. Available at: <https://www.nature.scot/doc/scotlands-people-and-nature-survey-participation-outdoor-recreation-under-represented-groups-1718> [Accessed December 2022].

NatureScot, 2021a. Scottish Household Survey 2019 Visits to the outdoors – equalities data. [online]. Available at: <https://www.nature.scot/sites/default/files/2021-03/Scottish%20Household%20Survey%20-%202019%20-%20Equalities%20data%20-%20Visits%20to%20the%20outdoors.pdf> [Accessed December 2022].

Office for National Statistics, (2015). *Urban areas in the UK* [online]. Available at: <https://www.ons.gov.uk/aboutus/transparencyandgovernance/freedomofinformationfoi/urbanareasintheuk> [Accessed December 2022].

Ross, A., Van Alstine, J., Cotton, M., & Middlemiss, L. (2021). Deliberative democracy and environmental justice: evaluating the role of citizens' juries in urban climate governance. *Local environment*, 26(12), pp.1512–1531.

Rural England, (2021). *Opportunities and challenges for rural communities from net zero carbon legislation*. [online]. Available at: <https://rurallengland.org/wp-content/uploads/2021/06/Net-Zero-Inquiry-Report-June-2021.pdf> [Accessed July 2022].

Rural England, (no date). *Rural England Stakeholder – National Parks England* [online]. Available at: <https://rurallengland.org/rural-england-stakeholder-national-parks-england/> [Accessed December 2022].

Sasse, T., Allan, S., & Rutter J., (2021). *Public engagement and net zero How government should involve citizens in climate policy making*. [online]. Available at: <https://www.instituteforgovernment.org.uk/sites/default/files/>

<publications/public-engagement-net-zero.pdf> [Accessed June 2022].

Scottish Government, (no date). *Policy Climate Change – Just transition* [online]. Available at: <https://www.gov.scot/policies/climate-change/just-transition/> [Accessed December 2022].

Sethi, M. and Puppim de Oliveira, J. (2015) 'From global 'North-South' to local 'Urban-Rural': A shifting paradigm in climate governance?'. *Urban climate*, 14 529-543.

The Committee on Climate Change (CCC), (2020). *Reducing UK emissions: 2020 Progress Report to Parliament* [online]. Available at: <https://www.theccc.org.uk/publication/reducing-uk-emissions-2020-progress-report-to-parliament/> [Accessed June 2022].

The Organization for Economic Co-operation and Development (OECD), (2020). *Innovative Citizen Participation and New Democratic Institutions CATCHING THE DELIBERATIVE WAVE*. [online]. Available at: <https://www.oecd.org/gov/open-government/innovative-citizen-participation-new-democratic-institutions-catching-the-deliberative-wave-highlights.pdf> [Accessed July 2022].

Transport Scotland, (2020). *National Transport Strategy 2*. [online]. Available at: <https://www.transport.gov.scot/publication/national-transport-strategy-2/> [Accessed June 2022].

United Nations, (2018). *68% of the world population projected to live in urban areas by 2050, says UN*. [online] Available at: <https://www.un.org/development/desa/en/news/population/2018-revision-of-world-urbanization-prospects.html> [Accessed July 2022].

van der Heijden, J. (2019). Studying urban climate governance: Where to begin, what to look for, and how to make a meaningful contribution to scholarship and practice. *Earth System Governance*, 1 (100005), pp.1-9

Wesseling, A., Paavola, J., Fritsch, O., & Renn, O. (2011). Rationales for public participation in environmental policy and governance: practitioners' perspectives. *Environment and planning. A*, 43(11), pp.2688–2704.

Willis, R., (2018). *Building the political mandate for climate action*. [online]. Available at: https://www.rebeccawillis.co.uk/wp-content/uploads/2018/12/Building_a_political_mandate_for_climate_action.pdf [Accessed July 2022].

Willis, R., (2020). A social contract for the climate crisis. *IPPR progressive review*, 27(2), pp.156–164.

Wilson, B. (2021). *Rural Lens Review Net Zero Strategy Build Back Greener*. [online]. Available at: <https://rsnonline.org.uk/images/rural-lens/net-zero-strategy-rural-lens-review.pdf> [Accessed July 2022].