The role and effectiveness of climate commissions in engaging the public on climate change in the UK

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A B S T R A C T

Against the backdrop of a fragmented and evolving governance landscape, this paper examines how effective climate commissions are in engaging the public to co-produce local climate action in the UK. Climate commissions are emerging amid heightened concerns regarding the top-down style of policymaking on climate change and resource-constrained local authorities. However, less is known about how they engage the public who are pivotal for climate action, both in signalling greater ambition from governments and through their own mitigation and adaptation efforts. This paper draws on qualitative interviews with an array of individuals both inside and outside climate commissions in the UK, and utilises Cash's theoretical framework of 'salience, legitimacy and credibility' to assess how effective climate commissions are in engaging the public to co-produce local climate action. The findings indicate a discernible chasm between commissions and the broader public. Equally however, they provide hopeful perspectives into the effect that more collaborative engagement, that speaks to local concerns and leverages local knowledge, would have on commissions' 'salience, legitimacy and credibility' and, additionally, the legitimacy of local authorities. Moreover, they suggest that deeper collaboration with local networks of community groups, who are not yet represented on commissions, could foster more sustained climate action. It concludes by considering the novel implications of these emergent insights for the Cash framework and what this means for commissions in their future engagement with the public.

1. Introduction

In the UK, the centralisation of power and lack of frameworks to guide coordinated action has left many local authorities in a state of ambiguity regarding climate action (CCC 2021; IPCC, 2019; Russell and Christie, 2021). Even where local authorities implement ambitious climate agendas, there remains a sense of uncertainty over how such agendas materialise in practice, contributing to an "implementation gap" (Yuille et al., 2021, p.15)". Simultaneously, the mainstreamed approach to climate policy entails limited input from citizens; the communication practices that exist between government, the scientific community, and the public most often "constrain" public engagement in the development and implementation of climate policy (Carvalho et al., 2017; CCC 2021). A preoccupation with this sort of technical governance and policy design has been to the detriment of equally important matters such as how much such proposed solutions be implemented and whether they are in fact appropriate for local contexts. Both these considerations necessitate looking beyond technical circles to account for

local level knowledge (Yuille et al., 2021). A growing body of literature suggests this is relevant at both a national and sub-national level in that integrating local voices into debates and discussions makes proposed solutions and policies more context-sensitive (Bremer et al., 2019; Larsen et al., 2012). Torfing (2021, p.3) argues that involving lay actors (citizens and local communities) could foster "innovative solutions to complex problems" whilst building joint ownership of policy which increases democratic legitimacy. Even in drastically different contexts, this holds pertinence; as Scobie et al. (2023) discusses regarding small island developing states, if governments are to craft suitable and effective climate change policies, they must listen to local communities to understand their needs, priorities, and constraints.

Against this complex backdrop, climate commissions (hereafter CCs) have emerged in the UK as independent, area-based forms of local climate governance, comprising partnerships working collaboratively with local authorities to drive action on climate change (PCAN 2023; Creasy et al., 2021). Their approach is consistent with the broader shift away from traditional top-down and state-centric approaches towards

more polycentric climate governance that originate in and reflect 'place' (Ostrom 2010, Zelli and van Asselt, 2013, Abbott, 2012). Notwith-standing the global resonance of this shift, the empirical focus of this study is the UK where local forms of climate governance that emphasise citizen involvement have become popular. This has been particularly prominent in the use of citizen assemblies and juries to increase public engagement and co-design recommendations for climate action. Within this context, CCs represent a new facet of this growing landscape. By bringing together individuals from the public, private, and civic/community sectors, they seek to harness the knowledge on the ground to "drive, guide, support and track climate action" (PCAN 2023) and act as independent evidence-based advisors, convenors of conver-sations, and facilitators of action (Table 1). Yet, ensuring there is enough capacity between those involved is essential particularly as involvement in commissions is voluntary.

As CCs are relatively new in the governance landscape, there is limited empirical analysis into how effective they are in bringing citizens together and collaboratively (as opposed to broader cross-sectorial stakeholders) working towards climate solutions. Thus, by means of a qualitative study this paper seeks to address this knowledge gap by investigating the: how effective are climate commissions in engaging the public to co-produce local climate action? Two principal research objectives have been formulated to assist in answering the research question and they inform the methodological approach and analysis:

1. *What evidence is there that climate commissions engage with the public including the noticeable gaps?*
2. *What value could public engagement bring to the commissions and local climate action?*

This paper adopts a broad definition of public engagement as "including any intervention aimed at communicating with or mobilising the public" (CPI 2021, p.8). However, in the context of climate com-missions, the notion of 'effectiveness' will be assessed through Cash's 'salience, legitimacy and credibility' framework (see Section 2.4).

2. Literature review

2.1. The need for public engagement in climate policy

The need for public engagement in policy conversations and decision-making has been documented by a plethora of scholars: it is seen by some as the right thing to do and instrumental in ensuring legitimacy or public trust (Lassen, 2011), and that it could help move societies beyond polarisations by fostering dialogue and the sharing of views between individuals (Fischer, 2009). In the context of climate change, public engagement could help build the public mandate for action, specifically for the policies and actions which are urgently needed (Willis, 2019; Howarth, 2020). As Willis (2018, p.1) contends, politicians understand the need for action on climate change but "it is not straightforward for them to make the case for it" as they lack a broad public mandate. The rapid policy decisions taken in response to the Covid-19 pandemic, which involved little consultation or engagement with citizens, may be an exception to this (Howarth, 2020). Nonetheless,

Table 1
Evolving role of CCs.

Independent evidence-based advisor	Providing impartial, robust evidence and advice to influence policy and monitor the delivery and progress of climate action
A convener of conversations	Bringing together disparate organisations and individuals to take action on addressing climate change in their cities
A facilitator of action	Beyond convening, creating the spaces that enable action

(Source: PCAN Report 2023, p.21)

Table 2
Understanding salience, legitimacy, and credibility.

Salience	"Facilitating connectivity to the logics of daily practice"
Legitimacy	"Improving diversity of views and concerns whereby all interested and affected should have the feeling their vision is taken into account."
Credibility	"Ensuring trust in the scientific and technical quality of foresight knowledge."

(Source: Tuinstra et al. 2015, p.6)

sustaining such strict measures over a long period would have been challenging without obtaining broad consent. The lesson for climate change, Howarth (2020, p.1112) argues, is for the state to not assume "limited room for manoeuvre" but work with citizens to "explore what is possible".

Similarly, engaging more individuals in the policy process at the early stages will enhance the legitimacy of a policy or action (Dryzek & Goodin 2006) and enable decisions of bodies "might be more widely respected" the more they conspicuously engage a representative group of citizens (ibid, p233). Even if all individuals do not agree with the outcome, giving them the opportunity to voice their opinion and share their concerns increases the chances that they see the process and outcome as fair and legitimate (Tyler and Blader, 2000; Carpini et al., 2004). In using the outputs of these deliberative processes, decision-making can become more effective in that it speaks to its end-users and "catalyse the speed and ambition" of the changes required to meet mitigation and adaptation climate commitments (Howarth et al., 2022; Kythreotis et al., 2019). Yet to do so, many practitioners argue that we must move beyond engagement where individuals are simply consulted, to a form of co-production where individuals can help frame the problem, deliberate, collaborate, and co-own the process such that conversations and outputs reflect lived experiences (Cloutier et al., 2014; Corburn, 2007; Bremer et al., 2019). By contrast, when local authorities use consultations to plan adaptation, Cloutier et al. (2014, p.462) argue that it is often to "validate, improve and legitimise" their already-determined prognosis of the most significant concerns, rather than to directly involve citizens in the co-production of those plans.

Wyborn et al. (2019, p.320) conceive co-production as the "processes that unite ways of knowing" and similarly, Jasanoff (2004) sees it as focusing on the numerous ways through which the world is known and represented. Howarth et al. (2022, p.3) articulate the need to see it as a process, emphasising the 'co-' in co-production and how this material-ises through various actors coming together and cooperating; whilst the ability of co-production to deliver "attuned and digestible outputs'' is important, it should not be the exclusive focus and only goal. Other scholars (Bremer et al., 2019; Klenk et al., 2017; Wakeford & Pimbert 2001) argue that other things, such as learning and a sense of empow-erment, are simultaneously co-produced which is significant in moti-vating individuals to care and take individual action on climate change in their day-to-day lives. Turnhout et al. (2020) add a caveat to this literature, articulating how unequal power relations between actors can undermine the ability of co-production to achieve its stated objectives of empowerment and societal transformation.

Despite such observations, co-production with citizens offers a promising alternative to the information-deficit model which certainly has a role to play but has been critiqued as it assumes a rigid view of the individual as needing to be educated to perceive the world more like professionals and scientists (Murunga, 2022; Corburn, 2007, CPI 2021). It treats local knowledge with scepticism, viewing it as parochial and "condemned to the neighbourhood" when, in fact, knowledge in and of itself is reflective of "social practices, identities, norms, conventions…" (Corburn, 2007, p.152). Consequently, such knowledge could offer valuable insights to ensure solutions are place-based and socially rele-vant (PCAN 2023).

2.2. Public engagement in climate change through deliberative democratic processes

There has been a recent proliferation in the number of citizen assemblies and juries in the UK, serving as platforms to increase public participation and engagement in climate change decision-making (Howarth et al., 2021; PCAN 2023). Often referred to as 'mini-publics', these participatory forms of governance are usually commissioned by a body with decision-making authority such as national or local governments and consist of randomly selected citizens that are "small enough to be genuinely deliberative" (Wells et al., 2021, p.4). Whilst assemblies comprise dozens to several hundreds of people, juries are much smaller and therefore a more cost-effective approach (Shared Future 2019). In Wells et al.'s (2021) recent study, they find that the recommendations from both the Oxford Citizen Assembly on Climate Change and Leeds Climate Change Citizen Jury were taken up by the respective city councils, however only insofar as each council referenced already existing or planned actions in the relevant areas. Hence, it was argued that these mini publics played more of an indirect role by providing a mandate for existing policies rather than "truly empowering citizens in decision-making" (Wells et al., 2021, p.12). As conveyed, the chosen structure of the assembly and jury, whether it be selecting from a list of pre-assigned questions or more open dialogue, determined whether citizens played a consultative role or that of a more genuine engagement role (Wells et al., 2021).

The 2016–2018 Irish Citizens' Assembly has been widely heralded as a success in terms of both its engagement of a diversity of voices and impact on public policy (Devaney et al., 2019), exemplifying what is possible through a potential "systemisation of deliberation" (Farrell et al., 2018, p.120). Through its processes, individuals with limited initial knowledge became "enlightened" on salient issues (Kythreotis et al., 2019, p.7). Unlike the Oxford and Leeds Assemblies, the recommendations of the Irish Assembly were taken up by a special parliamentary committee and incorporated into the government's 2019 Climate Action Plan (Devaney et al., 2019). The transparent selection process helped guarantee the Assembly's "input legitimacy" whilst its organisation according to a "learn-hear deliberate" orientation ensured its "throughput legitimacy" (Devaney 2019, p.144). However, the author notes the lack of personal testimonies and experiences used in the process relative to the scientific evidence and consequently advocates for the greater inclusion of personal storytelling in future citizens' assemblies (Devaney 2019). Personalising these deliberative spaces could uncover "local idiosyncrasies" (Klenk, 2017, p.10) and in doing so foster a more imaginative and constructive reassessment by actors of alternative ways to achieve their goals (Yuille et al., 2021).

2.3. Climate commissions and public engagement

There is some literature which begins to paint a picture of commissions' current engagement with the public, although arguably it cannot be used to make all-encompassing claims as commissions are unique in how they operate. Overall, CCs in the cities of Edinburgh, Belfast and Leeds for example, are seen as filling a "niche that was missing in each of the three cities" by helping materialise net-zero goals and taking the action necessitated by each city's climate emergency declaration (CAG 2023, p.6). Leeds however was observed as being the only one out of the three assessed that successfully built the capacity of both citizens, organisations, and CCs (CAG 2023). This in part reflects the fact that Leeds ran a Climate Change Citizens Jury through which "the majority of people became engaged and recognised the role they can play" (CLC Climate Emergency Update 2020). It was not without criticism however, as some participants felt their participation was tokenistic, there was an overrepresentation of white middle-class males, and the process rubber-stamped existing actions rather than encouraging more nuanced perspectives (CAG 2023). The nature of the recruitment process for the commissions themselves was perceived as leading to "skewed

representation" and particularly an overrepresentation of business interests (CAG 2023, p.34).

Iyola (2022) also shows that public engagement may materialise through the working groups of commissions. In Norwich, the community engagement empowerment work group aims to facilitate and influence action in the community. Local voluntary and community organisations are among one of the "main audiences" and the working group can use its position to provide information about climate change or experts on particular subject matters (Iyola, 2022, p.12). However, it was observed that creating a central coordinating hub would prevent duplication of efforts and activities and promote better cooperation (Iyola, 2022, p.12). In any event, resource constraints, including funding and time, were consistently cited as barriers to the effectiveness of commissions (CAG 2023; PCAN 2023; Iyola, 2022). Beyond this evidence however and to the author's knowledge, there is no broad level study that specifically addresses public engagement in commissions, so this paper seeks to contribute to this literature gap.

2.4. Theoretical orientation & justification

The research presented in this paper and its subsequent analysis is informed by Cash's model of 'salience, legitimacy and credibility' (Cash and Belloy, 2020; Cash et al., 2002). Resonating with what was discussed in 2.1, Cash's model asserts that public engagement through co-production can guarantee that 'salience, legitimacy and credibility' are established in the eyes of various audiences which, in turn, makes knowledge *more* trustworthy and makes users *more* likely to act on it (Cash and Belloy, 2020, p.9). In short, it becomes more "actionable knowledge" (Cash and Belloy, 2020, p.9).

In this paper, Cash's theoretical framework is explored beyond its traditional application of if/how knowledge is (co)produced, translated, and used, and more in terms of the salience, legitimacy, and credibility of public engagement through climate commissions. The use of the framework in this way is justified on two grounds.

Firstly, the three-fold criteria - salience, legitimacy, and credibility - are used as a lens through which to examine public engagement in the context of climate commissions and, specifically, operationalise the notion of effectiveness stipulated in the research question (Cash et al., 2003; Kunseler et al., 2015). In other words, does engagement materialise in a way that establishes salience, legitimacy, and credibility? As argued by Bremer et al. (2019, p.45) these principles promote "high quality interaction and dialogue" and can assure trust in processes and outputs ultimately leading to greater action by end-users (Cash & Belloy 2022). In the context of CCs, end-users constitute any group the commission may be attempting to influence, from local authorities, to individuals, to community groups. This is significant as it is at this grassroot and local level where a large share of the action is required to meet mitigation targets and where adaptation needs to occur (CCC 2021). Notwithstanding this theoretical positioning, the methodology was designed in such a way to accommodate the potential emergence of factors that could be considered caveats to Cash's model or invite new ways of thinking about the model.

Secondly, focusing on saliency and legitimacy can have a positive normative impact by advancing equity and justice which is relevant in the context of climate change (Cash and Belloy, 2020; Corburn, 2007). That is, climate change is an inherently distributional issue which affects individuals unevenly. Yet those most disproportionately affected are typically those excluded from climate-related conversations and decision-making processes (Cash and Belloy, 2020). In practice, representation can be difficult so Corburn (2007) argues that intermediaries, an institution or agent, can be a useful means by which to champion local interests and concerns. Equally significant, assuring salience and legitimacy makes processes more trustworthy and more likely that they are followed up by action (Cash et al., 2020). As stated by Cash (2020, p.8), "without legitimacy, knowledge is unlikely to be trusted". Similarly, Dryzek (2005, p.234) alludes to this in his work, maintaining that

legitimacy is assured not just through elections but by the relative responsiveness of public policy to the "weight of discourses in the public sphere". Credibility is no doubt imperative but, as the literature makes clear, a policy built on high technical and scientific knowhow does not alone render it more trustworthy and more actionable (Cash et al., 2002). In fact, problems constantly described and conceptualised in technocratic terms can make them more abstract and less relevant for the context implicated (Creasy et al., 2021).

3. Methodology

3.1. Research design & sampling

A qualitative research study was designed by conducting semi-structured interviews with seventeen participants, including both members and non-members of CCs, to capture a diversity of perspectives regarding their effectiveness at engaging with the public. The use of semi-structured interviews facilitates the emergence of "rich data" by allowing for a more "thoughtful or unexpected" commentary on the research topic (Braun & Clarke 2013, p.6). A purposive sampling strategy was adopted whereby individuals with a direct connection to or involvement in CCs were contacted via email for interviews (Silverman, 2014). Adopting a snowball approach, interviewees recommended other individuals who were subsequently contacted which enabled the sampling pool to expand and evolve over the course of the research journey (Braun & Clarke 2022). Given the number of CCs across the UK, data collection did not reach a point of saturation at which there were "no new or surprising insights" (Knott et al., 2022, p.2) but the interviews nonetheless offer a variety of "perceptions and interpretations" which Knott et al. (2022) see as more important than striving for as many participants as possible. In any event, the concept of saturation is contested; according to Braun and Clarke (2021) it is inconsistent with the values of reflexive research wherein meaning is interpreted rather than excavated, rendering judgements about how much data is 'right' fundamentally subjective.

3.2. Interviews & data analysis

The interview questions were designed in accordance with the two research objectives and covered several key themes. These included: (i) the structure and role of the commission, (ii) the nature of public engagement in the commission presently, (iii) the extent to which increasing engagement in some way would increase the commissions salience, (iv) the extent to which increasing engagement in some way would increase the commission's legitimacy and (v) the extent to which increasing engagement in some way would increase the commission's credibility. The latter three, which became the questions, sought to elicit responses directly linked to the Cash model which allowed for a more insightful reflection on the model in the context of CCs whilst also uncovering gaps or caveats to it. The questions asked to those not directly affiliated with commissioners (non-commissioners) were designed to mirror these questions.

Table 3
Table of participants, coded to ensure anonymity (see Appendix for definitions of roles).

Interviewees by CC	Interviewees by role
Lincoln; 5	Chair/Co-Chair (*Chair*); 4
Edinburgh; 1	Commissioner (*Com*); 8
Norwich; 3	Secretariat (*Sec*); 1
Surrey; 1	
Essex; 2	
Leeds; 1	
Not part of a CC/non-members (Pub)	
Lincoln; 3	
Norwich; 1	
Total: 17	

To ensure anonymity and confidentiality, all interviews were coded (Table 3), recorded and transcribed using OtterAi, an online transcription service, and later replayed to ensure their accuracy. To establish the current nature of public engagement in commissions, an inductive approach based on Attride Stirling's (2001, p.389) 'thematic network' was adopted whereby basic themes were identified and eventually filtered into a smaller number of organising themes and finally global themes which are "make sense of clusters of lower-order themes". Equally, in keeping with the theoretical framework, the data analysis also adopted a deductive approach whereby responses relating to the questions of 'salience, legitimacy and credibility' were elicited from the transcripts and organised accordingly to convey the frameworks relevance and significance. Analysing the data manually in this way was preferable as the overarching themes were effectively pre-determined by the Cash framework.

3.3. Limitations

Regrettably, the temporary dissolution of key commissions and low response rate from commissioners changed the intended course of the research and rendered the sample size less than the original target. Despite this, the analysis is structured and positioned to directly address this by bringing together all the voices, rather than organising them based on their respective commission. Justifiably, such organisation wouldn't lend itself to a fair analysis given the imbalanced number of interviewees from each commission. In a different vein, the use of the Cash framework may also be viewed as a limitation in light of the plethora of other frameworks available through which to examine public engagement. Nonetheless, as was established in the previous section, it is still a useful lens through which to explore this topic particularly as it can simultaneously advance equity and justice in the climate change space if marginalised or vulnerable populations are allowed to have a "seat at the table" (Cash and Belloy, 2020, p.8).

4. Results and discussion

The structure and activities of CCs vary from commission to commission. Whilst all seek to represent individuals from public, private and civic sectors, some are structured with distinct working groups / streams with specific focus areas (e.g. transport, community engagement) whilst others have a more fluid membership and working structure. Public engagement approaches also vary and the activities mentioned include public consultation (usually co-ordinated by local authority), workshops with the pubic and with existing community groups on various topics (e. g. available energy funding schemes, doughnut economics), citizens juries and face-to-face conversations with the public. In this section, we draw out and discuss the findings in relation to engagement, both in terms of the gaps and potential opportunities.

4.1. The engagement gap

4.1.1. The passive nature of engagement

For many commissions, public engagement has largely taken the form of outreach activities and workshops with knowledge dissemination cited as one of the key aims. For some interviewees (*Com8, Com1*), engagement was about spreading awareness of climate change and the commission which was deemed essential before individuals can be expected to assume a more active role in the sense of holding local authority accountable. In a similar vein, another (*Com4*) saw engagement as emulating somewhat of a *"reasonably conventional model"* whereby individuals were put in the community with the knowledge and expertise to share information and link people to funding schemes. A range of workshops were hosted by one commission with pre-existing community groups but (*Sec1*), *"it was more the public listening to what the commission had to say"*.

Notwithstanding the need for awareness raising, one member of the

public commented that in general *"there needs to be more doing…rather than sitting passively and receiving information, looking at stats, watching videos" (Pub1)*. Another suggested that it needs to move away from an *"information-deficit model"* to a stance of recognition of the resources on the ground and multiplicity of groups already working in the space who need to be supported or where collaboration could flourish (*Com 3, Com4*). This supports the argument made by Corburn (2007) against the information-deficit model; whilst information dissemination is necessary to a degree, it fails to acknowledge the significance of other local insights that, when invited to be shared in a more participatory manner, could lead to a greater sense of empowerment (Massey 2004).

End-user consultations conducted by local authorities were also cited as a means of public engagement (*Sec1, Com8*). One interviewee explained how councils usually engage in public consultation after consulting the commission when a more final draft of a strategy or policy is written (*Sec1*). Whether such consultations have been used as a substitute for other forms of engagement cannot be ascertained but some doubted their value and potential benefits (*Com3, Com6, Chair4, Chair2*). They tend to consistently engage the same demographic of people, seldom reaching the circles where feedback may be more valuable (*Com6*). Moreover, whilst the line can be blurry, consultation is not really engagement because *"engagement means you go somewhere where the people are…and you talk their language, and you give them the freedom to say what they want…" (Com3)*. This resonates with what Cloutier et al. (2014) argue to be the dominant use of consultations as legitimisation and validation tools such that they seldom widen the debate to consider other views and concerns.

"Whilst it is meaningful to a degree, it doesn't really engage people because that takes time, and you just don't do that through a website with a bunch of multiple-choice questions on it." (Chair4)

Some expressed the need to work more closely with active community groups and other grassroot organisations but acknowledged this was a work in progress and not something they felt had been effectively tackled (*Com8, Pub2, Chair1, Chair4*).

4.1.2. Overrepresentation of the 'Usual Suspects'

Interviewees provided valuable insights into (1) the composition of commissions and (2) their external engagement as frequently dominated by the 'usual suspects'; white, middle-class individuals who have the time and inclination to attend meetings and events (*Com3, Com6, Com7, Pub4, Sec1*). Conversely, people of colour can feel excluded from the climate conversation just because *"traditionally it has been the realm of white middle-class people" (Pub1)*. One interviewee outside of a commission, who is affected by a physical disability, expressed feeling marginalised from the conversations particularly when the message is often focused on active travel without due consideration for individuals like herself; *"I can feel excluded from the conversation because its 'don't drive, walk everywhere' and the reality of that is that any disabled person who wants to be part of the conversation, there are so many hurdles…" (Pub1)*. However, another interviewee (*Chair2*) felt their commission was not *"just a group of elite stakeholders"* and commented on the presence of a commissioner with a disability and youth commissioners. Nonetheless, lack of diversity in commissions more broadly was something frequently mentioned which aligns with the findings of the papers discussed in Section 2.3 (Creasy et al., 2021; Iyola, 2022; CAG 2023). For some, this can also translate into a lack of awareness of the commission, not just amongst the public but other climate and non-climate groups who do not feel the commission is actively seeking them out (*Pub1, Pub3, Pub4*).

"There is a certain inevitability about who you're likely to see. And you know there's a sense of the usual suspects loyally and repeatedly turning up." (Chair1)

"At the moment there are too many people that are excluded let's be honest…" (Com3)

Viewed through the Cash lens, if there are limited opportunities for individuals to be included in the conversations and for the framing of those conversations to be around pertinent matters, it poses a challenge for commissions' salience and legitimacy (Cash & Belloy 2022). Similarly, lack of knowledge of the commission can manifest into an individual feeling of its lack of relevance (*Com3*). In this way, commissions run the risk of perpetuating the dominant two-tier approach to decision-making where individuals are excluded and consequently not compelled or empowered to act (*Com3, Com4*).

4.1.3. Resources impacting extent of engagement

Insufficient resources were frequently mentioned as an explanatory factor to the lower levels of public engagement (*Com1, Com4, Com6, Com7, Chair2, Chair3, Chair4, Pub2, Sec1*). Similarly, when reflecting on the past few years of their commission, one interviewee noted that the inability of the commission to take more ambitious action was in part due to the lack of resources and *"the one thing that engaging the public would have taken were more resources" (Chair4)*. This relates to the ability of commissions to organise and host events, workshops, targeted engagement activities and deliberative forums such as Climate Assemblies or Juries, among various other things. Where resources from the government are hamstrung, there is a noticeable drive to source funding from private streams such as through universities (*Com1*).

Adding to this predicament, many passionate individuals affiliated with commissions are not paid for their work and are juggling multiple jobs which leaves them with limited time to dedicate to public engagement and outreach (*Pub1, Com4, Com8*). For instance, applying for grants takes considerable time and human resources, of which many commissions are in short supply (*Com8, Com4*). This lack of resources seems to be a reoccurring theme, even where the overall leadership and vision is strong, in the absence of funding and time engagement can only be so effective. Another interviewee also observed that invitations to attend workshops were often rejected because of a lack of time and other priorities (*Com7*).

4.2. Closing the engagement gap - perspectives on salience, legitimacy & credibility

4.2.1. Establishing salience

Notwithstanding the above, there was a recognised need to expand the circle of voices beyond the *"usual suspects"* (*Chair1, Pub2, Chair3, Com4*) who are already convinced of the need to act (*Chair1*). Commissions need to make the connection between their work and everyday lives in a way that engages individuals rather than simply appealing in generalised ways that are *"a bit ephemeral and not going to switch people into gear" (Chair1)*.

"I think it's no good being and being seen to be a bunch of well-meaning do-gooders if you haven't connected with people's concerns, because people will inevitably say I'm far too worried about X, Y and Z…" (Chair1)

When the conversations of commissions are viewed as *"too high up"* (*Pub1*), using technical language and centred around subjects which are not immediately relevant to citizens, it can perpetuate a view of climate change as a problem that individuals cannot really do anything about (Kythreotis et al., 2019; Fischer, 2009). One interviewee felt that commissions have effectively just become ways of managing the carbon emissions of a given territorial area on a spreadsheet (*Com4*). Conversely, bringing individuals into the conversation such that they are allowed to share their concerns and ultimately reframe the problem (e.g. as economic justice) could better drive action (*Com4*). This framing can, in turn, stimulate more "transformational engagement" and catalyse the speed and ambition of the changes required to meet collective mitigation and adaptation goals (Kythreotis et al., 2019, p.2). This echoes what Bremer et al. (2019) argue to be an additional benefit of collaborative co-production approaches as their ability to empower individuals to make individual change.

Practically speaking, various suggestions were put forward to enhance the commissions' salience. Rather than ad hoc membership, commissions could strategically ensure key concerns are represented

through individuals who already have strong connections with communities (*Com4, Com6*). This speaks to Corburn (2007) argument on the importance of 'intermediaries' who champion local knowledge and increase its standing in professional settings. There was also a perception that the commissions' salience could be enhanced indirectly via partnerships and close collaboration with community groups and grassroot organisations that are relatable and already trusted within communities and, in some cases, already doing quite a lot in the climate space (*Chair2, Sec1, Com4*):

"If it is going to be a voluntary thing then what you need is people that are already doing stuff in the communities…" (*Com4*)

4.2.2. Establishing legitimacy (and at multiple levels)

The Commission in the Eyes of Local Decision Makers

Some interviewees (*Chair4, Chair3*) saw enhanced public engagement as beneficial to increasing the legitimacy of the commission in the eyes of local decision-makers (by making it more inclusive and representative of diverse views and interests): (*Chair4*), *"if we're (the commission) making recommendations to organisations or politicians or local authorities, if you've got more public voice behind you then I actually think it gives you more weight and arguably we haven't had that…".* Ultimately, more diversity *"really would have given us a lot more legitimacy…. because you'd have had different perspectives coming in all the time"* (*Chair4*). To the extent that this diversity of input has a positive impact was alluded to by another interviewee who commented on how the Leeds Citizen Jury, orchestrated by the Leeds Climate Commission, was helpful in shaping the Council's Climate Plans (*Com6*). For others, legitimacy was not perceived as important as they would rather the commission be seen as an *"independent, authoritative"* body in the eyes of their principal audience, the council, whom they are directly trying to influence and be a 'critical friend' to (*Chair2*). As stated by one individual (*Sec1*):

"I don't want to sound sort of exclusionary or I've got some bias against the general public, but I think sometimes it is quite helpful when we've got experts on the climate commission…rather than if it was a more citizen assembly type thing, obviously not saying the public's views aren't important but might not necessarily carry as much weight as experts."

Implied here is the idea that public input has less influence than 'experts' who are better able to articulate the challenges and needed solutions. This stark contrast in responses, particularly the varying weight that the public hold in interviewees' eyes is indicative of the ongoing tension frequently expressed in the literature between expert/professional knowledge and local knowledge (Corburn, 2007; Creasy et al., 2021; Cloutier et al., 2014). Despite the pedestal experts tend to sit on (Wyborn et al., 2019), to reinforce Creasey et al.'s argument (2021, p.72) the local sphere holds a *"pivotal yet undervalued and under-resourced role within local governance"*. Arguably, if one of the primary roles of commissions is to influence local authority, they could be more influential if they tap into and leverage such knowledge (*Chair4*).

The Commission in the Eyes of the Public

Engagement was also viewed as necessary to establish legitimacy of the commission in the eyes of the public (*Chair3, Pub1, Pub2*). While the public do not always use the language of 'legitimacy' to describe this issue, it was clearly important that commissions were seen to represent various stakeholders and interests rather than just being a *"bunch of self-appointed people"* (*Chair3*). Yet, whilst increased representation on the commission could theoretically enhance their legitimacy, some questioned where in reality individuals would choose to invest time and energy in such a group (*Com3, Com4, Pub2*).

The Commission in the Eyes of the Local Authority

In a different vein, some interviewees saw public engagement through the commission as a way to enhance the legitimacy of local authorities with respect to the actions they take on climate change, leading to greater climate ambition and reducing public resistance to implemented actions (*Chair3, Com8, Chair1, Com4, Com6*). Thus, whilst public legitimacy may not be a primary concern for some commissions

(*Chair2*), the inclusion and consideration of various concerns may indirectly improve the effectiveness of council actions and policies that commissions seek to influence. This is broadly consistent with Willis (2018) and Howarth (2020) who highlight that lower government ambition on climate action may be due to the perception that they lack public backing, despite polling indicating three-quarters of UK adults are worried about climate change (ONS 2022). Thus, they need a *"way of being constantly reassured that there is solid public support and indeed demand for more"* and one way to do that is by having a *"big groundswell of regularly demonstrated public opinion" (Chair3)*. Commissions could help fill this vacuum by acting as an independent *"transmission belt"* between citizens and elected authorities through mechanisms like a Citizens' Climate Assembly (*Chair4, Com4, Com6, Pub4*).

"I think that's one of the things where the public and the commission can kind of work in tandem to kind of push the council a bit further than it might otherwise have had the courage to go." (*Com4*)

An annual Citizens' Climate Assembly convened and coordinated with the help of the Commission could serve as a platform to amplify public opinion and demand (*Com8, Com6, Chair3*). It could then hold local authority accountable in the delivery of their policies (*Com8*). This accountability mechanism would help assure legitimacy as "when actors are dually accountable, they must take into account the interests, concerns and perspectives of both sides of the boundary" (Cash et al., 2002). Even in the eyes of "divided and sceptical publics" assemblies can help legitimate councils and their policies (Goodin and Dryzek, 2006, p.233). However, concerns were raised about Assemblies due to their high operational costs and some doubted their ability to drive change without the sufficient resources to translate opinions into actions (*Chair2, Chair3*).

4.2.3. Establishing credibility

There was favourable consensus regarding the capacity of public engagement to ensure credibility, that is trust in the scientific knowledge base that underpins climate change and ultimately the work of the commissions (Tuinstra et al., 2015; Cash and Belloy, 2020). When people are close to the science and ask questions, it can reshape the language in a way that makes the science more accessible and trustworthy (*Pub1, Pub2*). This can then have quite a profound diffusive effect if these individuals become *'lay advocates'*, feeding the science into their families and networks in a more authentic way (*Pub1*). In this regard the independence of commissions was perceived as an asset. When information originates from government, individuals might naturally approach it with a degree of scepticism whereas the presence of an independent body an arm's length away from government may instead enhance the effectiveness of the communication and people's receptiveness to it (*Sec1*).

Deliberative forums such as Citizens Assemblies can be effective methods by which to instil this trust of individuals in science (*Chair3*). When individuals are exposed to expert witnesses over the course of a few days, it can transform scepticism into acceptance of a particular scientific position or, even more, can move individuals from *"being accepting but not particularly well informed to being accepting and being very well informed"* (*Chair3*). Linking this with action, trust in science would *"hopefully"* translate into trust in the changes that people are being asked to make locally and the changes they've already seen (*Chair4*). This resonates with the broader theoretical model wherein involvement augments acceptance and trust in the science rendering individuals more receptive and open to change (Cash et al., 2002; Tuinstra et al., 2015).

5. Concluding discussion

5.1. Implications

The emergence of place-based climate governance models is reflective of, among other factors, the ineffectiveness of traditional

governance and a growing acknowledgement that effective climate policy must originate in and reflect place (Russell and Christie, 2021, Chan et al., 2015). There should therefore be opportunities in these models to hear the voices that need to be heard to set local priorities, particularly if they are going to be the recipients of these priorities. This research has explored the role of one such model in the UK, climate commissions, in engaging the public, through the lens of the Cash framework. The study makes a substantive knowledge contribution to how they engage as well as the opportunities that enhanced engagement could bring to commissions and local climate action more broadly.

5.2. Co-producing local climate action

The criticism and concerns raised in the interviews regarding commissions warrant a degree of reflection. Arguably they are not entirely unsurprising when one considers the frequently expressed challenges regarding public engagement, particularly the difficulties in engaging a truly diverse and representative demographic (CPI 2021). Perhaps they also reflect the fact that for some commissions, public engagement and/ or diverse representation within the commissions themselves was simply not a focus. Yet, despite the noticeable gaps that limit more "nuanced forms" of knowledge sharing, this paper suggests there are ample opportunities for commissions to play a stronger role in amplifying and engaging public voice (Creasy et al., 2021, p.69). This is not to overlook the successes of commissions thus far; rather, to suggest there is considerable potential for them to transcend that of simply being a 'critical friend' to council or, as one interviewee put it, find a *"middle ground"* between that of a 'critical friend' and public engagement (Com4). Enabling opportunities for a more personal framing of climate change that resonates with individual concerns, as well as for more interests and views to be represented, may better establish commissions' 'salience, legitimacy and credibility' in the eyes of various audiences, principally so to influence change and drive action (Cash et al., 2002). Specifically, mechanisms such as Climate Assemblies that could be co-ordinated by commissions, enhanced partnerships with groups at the micro level and/or making commissions in themselves more diverse could move 'engagement' as it is too often broadly conceived from an exclusively information-deficit model to a more hybrid model; one that capitalises on collaborative dialogue and where citizens are engaged from the beginning to help frame, shape and drive ideas (Carvalho et al., 2017; Cramer & Toff 2017).

Achieving this could lead to, firstly, a feeling of empowerment among individuals as when they are connected to the processes and can frame, shape and challenge conversations, it can render them less apathetic and more willing to act (Carvalho et al., 2017; Fischer, 2009). This "[simultaneous co-production]" (Bremer et al., 2019, p.43) materialises as a collaborative two-way dialogue where engaged individuals may become lay advocates in their own communities and empower their respective networks. Secondly, engagement could result in recommendations that more accurately reflect the local context, thereby to decisions by local authorities that are less susceptible to public backlash and have increased democratic legitimacy (Torfing, 2021). Ultimately, consent from the public is paramount if anything is to get done and thus, finding ways to reconcile this antagonism between local reimagining's and traditional methods of policy design is instrumental. These insights speak to the wider discourse emerging around the need for the systematic involvement of relevant and affected actors" in decision-making (Torfing, 2021, Scobie et al., 2023, IIED 2023). Whether manifesting as new democratic innovations or as modifications to existing governance structures, the imperative is clear: integrating diverse voices can foster more inclusive and effective policy and strengthen democratic governance.

Climate commissions could consider:
- Enabling more opportunities for a more personal framing of climate change within the commission.

(continued)

- The benefits of appointing intermediaries on the commission who have strong connections with communities and can ensure key concerns are represented and heard.
- Enhancing partnerships with groups at the micro-level, both community groups and environmental/climate change groups.
- Convening a climate assembly or jury which could act as a 'transmission belt' between the public and local authority and, equally, help hold local authority accountable.

5.3. Building on the Cash framework

Our findings have two clear implications for the Cash framework. These implications are not relevant to the model's traditional application but rather to Cash's conceptual ideas of the salience, legitimacy, and credibility of public engagement through climate commissions.

Firstly, this recurrent reference to commissions acting as a conduit between public and local authority adds a unique theoretical nuance to the model in that public engagement could help establish legitimacy at multiple levels and not just of the commission itself in the eyes of various audiences (Cash et al., 2002). This is not to imply that commissions would have to compromise their independence, but that regular engagement could benefit not just their own legitimacy but that of local authorities; this layering of legitimacy is not explicitly considered in the Cash model (Cash and Belloy, 2020). Theoretically speaking, if a local authority is drawing on the insights of commissions to inform their actions and those insights derive from an amalgamation of interests then, if acted on, those actions effectively become more legitimate. Notwithstanding the needed resources, commissions could help transmit this support in a more constructive way than council-coordinated consultations which both the literature and interviews doubted as a meaningful way of engaging the public (Kythreotis et al., 2019; Cloutier et al., 2014).

In a different vein, the gap between commissions and community groups or those working very closely with communities at the micro level suggests that a new criterion might be an appropriate addition to the framework: inclusivity. When considering the composition of commissions, it almost appears that citizens and community groups have been overlooked and still viewed as the audience to which climate action is imposed, questioning their legitimacy and credibility, and perpetuating the notion of a hierarchical and top-down approach to climate governance (Iyola, 2022; Dujardin, 2020; Willis, 2019). Alternatively, building horizontal relationships whereby these groups (or intermediaries for these groups) are brought into the conversation could lead to joined up thinking and enhance the effectiveness of commissions as facilitators of action, particularly when these groups have already garnered the trust of their micro networks. Incorporating this would slightly alter the framework such that it may instead read - "to drive action, co-production processes need to establish salience, legitimacy, and credibility and additionally be inclusive." In many ways, inclusivity is implicitly woven into the framework through 'salience' and 'legitimacy' but making it more explicit would better facilitate the engagement of community and grassroot groups of which their representation in commissions is currently lacking. Undoubtedly, it would further accentuate the salience and legitimacy of commissions where salience would be better achieved through stronger engagement with local groups.

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Data availability

Data will be made available on request.

Appendix: Role and definition of Climate Commission members

Role	Definition
Chair/Co-Chair	Often a local authority member, responsible for leading the commission
Commissioner	Help steer the direction of the commission, may be from the public sector/local authority, private sector, or community/civic sector.
Secretariat	Responsible for the administration of the commission (e.g. agenda setting, minute taking)
Local Authority	
Members of the Public	Not part of a climate commission

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