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IMPLICATIONS OF THEORY OF PARTICIPATION FOR UNDERSTANDING THE CHALLENGES AND PROCESSES ASSOCIATED WITH DECARBONIZING THE UK BY 2050

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ABSTRACT----------
Climate change remains one of the most urgent global challenges, with severe consequences including droughts, extreme weather events, and displacement. The transition to a low-carbon economy is widely recognized as essential for mitigating these effects. This paper explores the United Kingdom's pathway toward decarbonization, emphasizing the importance of public participation through democratic innovations like mini publics. The theory of participation involves engaging the public in policy formation and environmental decision-making. By examining mini publics such as citizens' assemblies, this study highlights their role in enhancing public engagement and fostering acceptance of climate policies. The benefits of mini public include diverse viewpoints, improved cooperation between experts and citizens, and greater adherence to regulations. However, limitations exist, including challenges in achieving true representativeness, potential manipulation of expert testimonies, and the risk of recommendations being ignored by policymakers. Balancing the strengths and weaknesses of participatory approaches is vital to driving effective and inclusive decarbonization efforts in the UK.

KEYWORDS: *Decarbonization, Mini Public, Theory of Participation, Public Participation, Climate Policies.*

INTRODUCTION

In both politics and science, it is generally recognized that addressing global warming and climate change is one of the most pressing issues the planet is currently facing. The Intergovernmental Panel on Climate Change (IPCC) concluded in its report that the "warming of the climate system is unequivocal" and that the "human effect on the climate system is clear" based on various research findings (IPCC 2015). The level of greenhouse gases has increased in the recent past due to increased human activities that have made the earth's temperature rise significantly. The rise in temperatures has major consequences. For example, it causes droughts, storms, ocean acidification, heat waves, and the melting of ice resulting in health problems, food insecurity, flooding, and displacement of people. Therefore, climate change is not only an environmental challenge but a threat to humanity. As such, our actions should be towards decarbonizing to mitigate the rise of temperature.

Experts and lawmakers widely agree that a transition to a low-carbon society is needed to combat climate change. Therefore, the United Kingdom has developed a transition pathway towards a low carbon economy (Strbac et al., 2019) which aims at reducing greenhouse gases by 2050 against a 1990 baseline. The pathway also aims at reducing the demand for industrial energy but simultaneously creating job opportunities and raising productivity. To have a low carbon economy, there should be a proper understanding and willingness to change as well as obeying the mitigation rules by the public. The UK government, through the participation approach, has introduced a range of democratic innovations that improve opportunities for citizens to contribute to public deliberation and participatory governance. Through the participatory approach, the UK has developed ways of reducing the production of greenhouse gases in the earth's atmosphere. Despite the theory of participation assisting in the decarbonization process by the UK, other

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people have come up with some critiques against the theory. This essay will therefore address the following. What is the theory of Participation? What is participation in transition and its implication? Also, the essay will critically evaluate mini publics in terms of their merits and limitations or criticisms in the decarbonization processes by the UK.

What is Theory of Participation?

The theory of participation in simple terms means public participation. It is a process that entails the inclusivity of the public in the formation of policies, and decision-making about climate change or issues related to the environment. For about two decades now, the theory of participation has become the main tool used by several sectors of the economy as a platform for policy and decision making, science and technology, spatial planning, environmental development, and more recently climate change (Devine-Wright, 2016). Also, the term public participation is related to public engagement which entails different ways of educating the public for example raising awareness through campaigns, consulting the public through deliberate discussions, and engaging the public through protest activities or petition signing (Walker et al. 2010).

The introduction of public participation was facilitated by the United Nations law to allow the public to access information and participate in decision-making for the betterment of the environment (Smith et al., 2020). The law also allowed public access to justice on matters concerning the environment. Currently, forty- six countries, especially in Asia and Europe have adopted this policy of public participation (United Nations 2014). According to Collins and Evans (2003), citizen engagement arose from a lack of confidence in the credibility of professional contributions to environmental decision-making. Devine-Wright (2016) further claims that public engagement was implemented because of a positive value placed on lay knowledge, with the goal of incorporating it into structured decision-making or policy development processes, as well as a lack of public knowledge regarding environmental issues.

Public participation has resulted in the formation of low carbon energy technologies and other measures to decarbonize through the act called Participation in Transition.

Participation in Transition and its Implications

Bringing transitions to sustainability is considered a primary global (United Nations, 2012). Due to factors such as global climate change, energy security, inequality, and social-economic challenges, it has become particularly crucial in the energy domain (Hammond and Pearson, 2013). The United Kingdom targets an 80% cut in carbon emissions by 2050 (HM Government, 2009) and the sustainability transitions have emerged to steer energy system change and other social-technical domains (Smith et al., 2020).

Participation in transition has demonstrated the need for sustainability and low carbon transitions. Thus, it provides a new view on public participation in sustainable and low-carbon transitions, focusing on the processes on sites of decision making, emphasis on domestic settings, and focuses on sites of situated protest to open up public participation to change social-technical systems.

Secondly, it leads to the multiplicity of possible forms of participation. There is a likelihood of having more views from different people which can assist in good and proper decision-making about decarbonization. Also, participation in transition offers a platform for a variety of ways of thinking about changes in the system thus giving room for more analysis. Lastly, it offers room to analyze the political change of the system.

Four different low carbon energy transitions have emerged in the United Kingdom because of public participation (nakićenović, 1996). These cases are associated with the approaches of understanding public participation in energy transition such as practice theory, social movement theory, grassroots- innovation, and public participation deliberate. In specific and wider energy systems, each approach has its theoretical way of exploring these forms of participation. This relational approach has helped open the notion of public participation in transitions and has extended beyond deliberation to many forms of public participation. In the UK the main form of public participation that is used in the decarbonization process is mini publics.

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The use of Mini Publics in the UK

Mini publics have contributed significantly to advocating the decarbonization process in the UK. It is inspired by democratic ideals and the principles of social science. Mini publics have been held in countries like UK, USA, Denmark, Canada, France, New Zealand, and Argentina (Breckon et al., 2019). A mini public is made up of several citizens who are selected at random (Smith et al., 2020). The main idea that facilitates the selection of members is that all individuals who are affected by a catastrophe like climate change have an equal chance of being selected for the mini-

publics, and the population is adequately represented. Age, gender, ethnicity, disability, income, religion, and education are among the factors that are used to select individuals for the mini public.

There are various types of mini publics namely: citizens' juries, consensus conferences, planning cells, deliberative polls, and citizens' assemblies. The citizens' assemblies are the most recent, and radical. They seek to have a public view on issues such as climate change and decarbonization. Mini-publics work in five steps. The steps include planning and recruitment, the learning phase, the deliberative phase, the decision-making phase, and follow-up (Cossutta et al., 2021). However, the standard and legality of mini publics are dependent upon some requirements such as fairness of witnesses, broader public participation in the process, lack of political party involvement, and transparent process (Devaney et al., 2020; Farrell et al., 2019).

The role of Mini Publics in Decarbonization in the UK

The contribution of mini-publics to public engagement is enormous on the low-carbon emission agenda in the UK. Firstly, the recommendations that arise from mini publics have been proven to command high public acceptance (Elstub and Escobar, 2019). This is because of the variety of viewpoints considered, the inclusion of professionals from reliable sources, how partakers are selected, and the productive nature of the arguments. Mini publics also allow free and equal participation between citizens in a context of mutual respect and understanding (John et al., 2009). This suggests that involving mini publics in the decarbonization process or the low carbon economy transition will lead to citizens and lawmakers accepting the recommendations that would arise from it. For example, after the Oxford Citizens' Assembly on Climate Change in 2019, the town council accepted the recommendations made during the assembly and developed a Sustainability Strategy and Action Plan outlining how the council and city could achieve net-zero emissions by 2030 by increasing the energy efficiency of new homes and community buildings, reducing transportation emissions, and so on. Based on the recommendation a Climate Emergency Budget of £18 million as well as £1 million in operating funds was created, to implement the Sustainability Strategy. This sum is in addition to the £84 million now being invested in Oxford to address the climate emergency. This has again contributed to changing the structure of the Council by forming a cross-departmental commission to help coordinate the response to climate change. This suggests that any similar approach implemented in other parts of the UK has the potential to reach the net-zero goal sometime before 2030.

Also, the level of contact or cooperation between experts and citizens is improved by mini publics. Mini publics escape the common challenges with certain public hearings and gatherings, such as a lack of opportunity to hear from different perspectives on how to mitigate climate change or how people can better respond to the UK's decarbonization mechanisms, thanks to expert mechanism architecture and facilitation (Escobar and Elstub 2017). This means that if the UK implements more mini-publics in the decarbonization processes or transformation route to a low-carbon economy, people will be more aware of their positions in helping the country meet the net-zero goal.

Furthermore, mini publics are one of the most effective ways to encourage citizens to follow laws and regulations. Since participants are recruited within the citizens and the selection is done in a way that participants are selected from different age groups and localities, they are more likely to show open-mindedness (Niemeyer, 2013). Participants are also likely to have little vested interest or involvement with both the subject or circumstance and the government, hence there is less conflict of interest. This gives the citizens the impression that their colleagues would behave in their best interests by making sound recommendations or endorsing government programs. This means that if the government implements the decisions made by participants during mini-public participations, people will enthusiastically accept them.

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Moreover, mini-publics are often seen as a means of resolving the immanent complications and contentiousness of climate change whilst still offering lawmakers a procedure that can provide legality for any bold legislative reforms that might be anticipated, as it provides enough time for stakeholders and the general public to deliberate on the issue at hand whilst also identifying possible solutions (Parkinson, 2004; Renwick et al., 2018).

Finally, mini publics give participants ample time to absorb facts by reading summaries of recent research, scholarly journals, or quizzing world-renowned experts (Escobar and Elstub 2017). This way, participants or residents may have complete confidence in the evidence provided by experts and can rely on it to formulate their suggestions. This means that by incorporating mini publics into the UK decarbonization mechanism, people and researchers would have access to a wealth of data on the severity of climate change and the need for the UK to decarbonize, resulting in citizens having faith in the climate change facts and proposals that have already been conveyed to them. In this way, their ability to follow the government's policy would be very strong.

Critical Limitations of Mini Publics in participation in transition

One of the key goals of mini-publics is to allow participants to have a better understanding of a subject by including facts and testimonies from a variety of witnesses to assist the expert-citizen deliberations. These data and facts are critical in clarifying or explaining the knowledge gaps and challenges around climate change and decarbonization processes (Fung 2003) thus having a significant impact on citizens' opinion on the government's low carbon emission goal (Goodin and Niemeyer 2003; Thompson et al., 2015).

Despite the relevance of witnesses and facts in mini civic engagement, there is still a lot of confusion about what kind of evidence is better for informing deliberation, what attributes professional knowledge suppliers should have, and how to deliver the information. As a result, witnesses have been seen to manipulate facts and testimony to accomplish their goals (Böker and Elstub 2015). Roberts et al. (2020) observed that the witnesses who testified in the wind farm juries in Scotland were upset by the quality of the defense and testimony presented by their colleagues. The information given to them was unreliable, misrepresented, unconfirmed, and deceptive, according to them. If citizens become aware of this, they will lose faith in them and, as a result, will be less interested in public participation. Organizers of mini publics in the UK for the decarbonization process should perform pre-screening of witnesses' testimony before the event begins. According to Lansdell (2011), slide-vetting is one of the most effective methods for pre-screening material that would be exchanged by experts or witnesses, as well as ensuring that the experts complete their tasks.

Also, from a statistical standpoint, the number of individuals chosen to engage in mini publics is not many people to accurately represent the current opinions of all society. Participating citizens' views, according to Lafont (2015), are not indicative of popular opinion since their views are likely to change during the deliberation. This could make the rest of society feel left out of important decisions and outcomes that are now being discussed in the media and in government circles such as climate change and the need for the UK to decarbonize.

The credibility of mini publics is based on the idea that individuals selected at random will simulate the general population's education level, ethnicity, income, and age makeup, accurately representing the whole public. However, this is not always the case. In Ireland for example, members of Ireland's councils, are not compensated for their attendance (O'leary, 2019). Even though their travel expenses are paid, the Constitutional Convention does not provide childcare support. Consequently, the gathering fails to attract women between the ages of 25 and 40 leading to the underrepresentation of that section of the population. Furthermore, since most of the mini-publics take place on weekends, residents who work on weekends are often exempted, as well as those who are time-constrained and cannot attend all 10 to 12 weekends. This suggests that the recommendations that are raised through mini publics do not accurately represent the public as a whole (O'leary, 2019).

Sandover et al. (2021), reported in their research "Contrasting Views of Citizens' Assemblies: Stakeholder Perceptions of Public Deliberation on Climate Change" that there were concerns about the lack of rural Devon representation in the Citizen's Assembly owing to the recruitment process favoring densely populated areas in Devon thus leading to decisions that sideline rural voices.

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According to Sandover et al. (2021), stakeholders responsible for mini-public commissioning and members of the general community see representative politics as ineffective in addressing climate change because it depends on fixed periods, such as party campaign election cycles. However, because participants in mini publics are sometimes paid by the government, the state loses revenue if the process drags on indefinitely, while these funds may have been spent on more beneficial activities like the construction of local solar panels to bring solar electricity to a community, which will help minimize the area's carbon footprint. The fact that participants are compensated may raise voter suspicions, as citizens may believe that the government has bribed their colleagues to function in their favor, leading to people losing faith in civic involvement. People should be encouraged to enter mini publics voluntarily without receiving any monetary benefits.

Despite the numerous recommendations produced by mini publics for tackling topics such as climate change and decarbonization, lawmakers are responsible for putting the recommendations into action. Many of the mini publics that have taken place have been rendered useless as a result of the government's or lawmakers' failure or refusal to consider and implement the proposals that have been made (Geels et al., 2017). In the United Kingdom, there was a Citizens' assembly on climate emergency that was held at a national level in June 2019. The assembly proposed that there should be a faster move to low-carbon vehicles. Also, the government should invest in low carbon producing public transport. Other opinions were providing grants for businesses and individuals to purchase low carbon vehicles, the establishment of a car scrappage scheme, and advertisement restrictions on most polluting cars. The government should discourage the use of personal cars by imposing a charge on road use, closing roads to private cars, and car clubs thus encouraging the use of public transport. This can be achieved through the addition of new bus routines, subsidizing the cost of public transport, government control of public transport, investing in scootering activities, and increasing investments to make buses faster and more reliable (Monyei et al., 2019). However, after nearly two years following the citizen's assemblies, the government has yet to implement any of these proposals, and if this trend continues, the UK will be unable to achieve the net-zero goal by 2050.

CONCLUSION

Overall, the participation of the public is a crucial method for gathering and bringing public perspectives to decision-making on climate policies. It is an avenue to tackle the intrinsic complexities of climate change as well as granting politicians a process that will legitimize difficult policy changes that may be needed (Sandover *et al*., 2021). However, public participation should be employed cautiously and not radically to embrace democratic innovation while reducing uncertainty and risk.

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