

Citizens' Engagement and Carbon Neutral Nottingham 2028

January 2023

Matt Henn and Dena Arya

Department of Social and Political Sciences,
Nottingham Trent University

Carbon Neutral Nottingham 2028

Citizens' Engagement and Carbon Neutral Nottingham 2028

January 2023

Table of Contents

1. Executive summary	3
2. Introduction	5
2.1 Setting the context for Carbon Neutral 2028	5
2.2 Carbon Neutral Nottingham 2028	6
3. Methods	6
3.1 Recruitment.....	6
3.2 Data collection.....	7
3.3 Participant breakdown	8
4. Findings	9
4.1 Concerns about climate change	10
4.2 Taking action on climate change.....	12
4.3 National and local solutions to the climate change	15
4.3.1 Who is responsible?	15
4.3.2 UK Government policies to tackle climate change.....	17
4.3.3 Carbon Neutral Nottingham 2028.....	18
4.3.4 How NCC can make a difference	20
5. Conclusion and recommendations	23
5.1 NCC Responses to Recommendations of the 2021 Citizen's Engagement Report:	25
6. Research at Nottingham Trent University	26
7. Appendices	29
7.1 Focus Group Schedule	29
8. References	30

1. Executive summary

In recent years, citizens and policy makers have grown increasingly alarmed at the spread and deepening of the climate crisis. In thinking through how best to respond, there is an emerging understanding that collaboration between, and behavioural changes by, governments, businesses and also individual citizens is essential if the crisis is to be stemmed (United Nations Environment Programme, 2021).

This report contributes to an emerging body of evidence concerning UK *local level* interactions between individual citizens and powerholders concerning the climate emergency.

The research for the report was funded by Nottingham Trent University (NTU), and is part of a collaborative project led by a team of researchers at NTU and officers from Nottingham City Council (NCC). The project aims are to contribute to the shaping of *Nottingham's Carbon Neutral 2028 Charter* and its associated *Carbon Neutral Nottingham 2028 Action Plan* (CN28). It is part of an extended research programme which began in 2021 with Phase 1.¹ The current report presents an analysis of the findings from Phase 2 fieldwork using eight online focus groups with 36 Nottingham residents that were carried out between March and July 2022.

The key findings from the research with these Nottingham residents are as follow:

1. Residents expressed a broad range of concerns about the climate changes that they observed taking place locally, nationally, and globally. These included, for instance, the impact on the natural world, an urgent need for more educational programmes to raise

the levels of people's climate consciousness, as well as very localised issues such as how best to tackle transport pollution.

2. On the whole residents felt that it was everyone's responsibility to engage in developing climate change solutions - themselves, their communities, local and national government, and private industry.
3. All the residents participating in the focus groups reported that they were already taking conscious actions to support reducing their carbon footprint - either individually or collectively with others in their local communities.
4. However, many residents felt strongly that past and present governments (in the UK and globally), as well as private industry - in particular the fossil fuel industry - were the most at fault in causing climate change. There was also a general sense of frustration at what they perceived as a lack of urgency and insufficient systemic action taken by the UK Government.
5. By way of contrast with their views on central UK Government, residents were supportive of Nottingham's vision for carbon neutrality by 2028 (CN28). Although they were somewhat uncertain about the details of the plans, they expressed a strong desire to find out more - and importantly, to be kept informed and involved in the plans going forward.
6. The findings suggest that residents were passionate, motivated and eager to contribute in a variety of ways to

¹ Please contact Professor Matt Henn (email: matt.henn@ntu.ac.uk) for a copy of the earlier Phase 1 report.

address climate change issues in their local areas and across the city.

Our recommendations to NCC from this 2022 research mirror many of those discussed in the 2021 report. These 2022 recommendations are based on the contributions from participating residents, and offer suggestions for (i) how residents' views can be factored into CN28, and (ii) what NCC can do to further tackle climate change issues locally:

- 1. to invest resources into greater sharing of information about CN28 with local residents, and in a wider variety of formats, including e-newsletters, hardcopy information via post as well as in different languages;**
- 2. at a 'strategic' level, to move beyond consultation so that local citizens are involved in a more central way in the decision-making processes for CN28, possibly by developing a local residents' steering group;**
- 3. at an 'operational' level, to consider developing a programme for 'resident volunteers' to take part in the development of CN28 as well as other local activities to combat the climate emergency such as coordinating community meals and gardens;**
- 4. to support schools to develop educational programmes for children and young people about local climate change issues.**

Whilst these four key recommendations remain the same as those set out in the 2021 report, the greatest shift in perceptions by residents has been for an

approach that gives less focus on individual action; instead, they expressed more of a desire for systemic shifts in the operations of NCC in terms of civic engagement in the shape and direction of Carbon Neutral Nottingham 2028 action planning. The inclusion of marginalised voices has been echoed more strongly in this year's report; in the years that lead up to 2028, we would encourage NCC to continue to reflect on how to engage such groups and their voices - so that they become active participants on our journey to a carbon neutral Nottingham by 2028.

2. Introduction

2.1 Setting the context for Carbon Neutral 2028

As the climate catastrophe continues to deepen into the 2020s, there has been a marked drive amongst citizens, activists and other stakeholders to mobilise to raise awareness around the multiple social and ecological crises that are resulting (Arya and Henn, 2021). However, despite such mobilisation, international governance on the climate has created only relatively limited space for legitimate democratic decision-making to take place outside of (primarily national) electoral contests (Agger, 2021).

Whilst there are tensions between powerholders and citizens on the matter of inclusive democratic practices, there are also deliberative processes that are being developed collaboratively with the purpose of creating understandings that may lead to collectively addressing environmental issues (Friant, 2019; Dryzek and Stevenson, 2011). This has recently been emphasised by Sir Robert Watson in the 2021 UN report 'Making Peace with Nature', where it is noted that the climate emergency requires collaboration between, and behavioural changes by, governments, businesses and individual citizens (United Nations Environment Programme, 2021).

Although such citizen/elite engagement is evident at national and international levels, we know relatively little about *local level* interactions between individual citizens and powerholders concerning the climate emergency.

Since March 2019, *Climate Emergency UK* (2022) records show that 409 local authorities (78%) across the UK have declared a climate emergency; they have published carbon neutral commitments

and action plans – with some incorporating the views of their citizens into these designs. The impact of these plans is difficult to measure, as many are in their early stages and there is limited scholarship on the various UK local authority-led initiatives progressing across the country.

Two examples which have been given particular attention in the literature are [Leeds City Council's Climate Change Citizens' Jury](#) and [Oxford City Council's Citizens Assembly on Climate Change](#). Research examining these two cases indicate that the outcomes of such deliberative processes are fundamentally dependent on the aims with which they are developed, the point at which citizens are included in the design and decision-making, and how the forums themselves are designed (Bryant and Stone, 2020).

Evaluations of these and other such forums indicate that there are some emerging benefits from these citizen engagement processes. In particular, it is claimed that they help to deepen trusting relationships between local authorities and residents which is crucial to realising any meaningful solutions regarding climate change issues (Howarth et al, 2020). Furthermore, whilst the primary aim of both the Oxford and Leeds initiatives were to develop plans to help mitigate the worst local level effects of the climate emergency, each also offered spaces for citizens to more deeply engage with, and gain knowledge, understanding and insights about, the issue.

Despite the relative successes of such "*mini-publics*" (which usually take the form of citizen juries and assemblies), research suggests that there is relatively little evidence of wider groups of citizens directly shaping local climate-related policy making (Ross et al., 2021; Wells et al., 2021). Ultimately, studies emphasise a need for more expansive citizen

engagement in the form of “*maxi publics*” (Itten and Mouter, 2022) - where the public at large may not necessarily be involved directly in deliberative and policy-shaping forums, but where they may engage in ongoing public discussion beyond deliberative mini-publics.

A key additional issue raised in the literature is the need to pay close attention to the principles of equality, diversity and inclusion when recruiting to such citizen engagement initiatives and deliberative forums. It is vital to reach out to the broad range of voices across local communities to ensure that all citizens (especially those from relatively ‘marginalised’ and ‘lesser-heard’ groups) have the opportunity to engage in - and potentially inform and shape - local climate-related policy making (Font and Smith, 2013).

2.2 Carbon Neutral Nottingham 2028

This report outlines research funded by Nottingham Trent University (NTU), as part of a collaborative project led by a team of researchers at NTU and officers from Nottingham City Council (NCC). The research is part of a co-designed impact-led project aimed at contributing to the shaping of *Nottingham’s Carbon Neutral 2028 Charter* and its associated [Carbon Neutral Nottingham 2028 Action Plan](#) (CN28). It is part of an extended research programme which began in 2021 with Phase 1.² The current report presents an analysis of the findings from Phase 2 fieldwork carried out with Nottingham residents between March and July 2022.

The importance of this project is that it attempts to capture and articulate the

² Available from Professor Matt Henn (email: matt.henn@ntu.ac.uk).

environmental concerns of Nottingham citizens and indicates how best to factor these into climate-related policy making in Nottingham. With this in mind, the research programme has three key aims, which are to:

1. examine and articulate the climate-related views and behaviours of the city’s residents,
2. provide the means by which Nottingham citizens (aged 16 and older) can be encouraged to engage with the local democratic process on environmental sustainability issues;
3. identify how their views can be input into local government climate policy processes and solutions.

This report also presents resident-generated recommendations for NCC in terms of how the local authority might move forward with their plans for further public engagement as outlined in the CN28 action plan.

3. Methods

3.1 Recruitment

Recruitment of Nottingham residents was carried out by NCC’s Carbon Reduction Projects and Policy service working with the local authority’s *Division of Environment and Sustainability*. Formal and informal recruitment took place both internally and externally by NCC through existing channels, with signposting at the following events and networks:

- In conversations with visitors to [Green Light in the City](#);
- University of Nottingham [Sustainability Action Week](#) event;

- Local community and civic action groups (e.g., Black and Asian Minority Ethnic (BAME) communities, LGBTQ+ residents and groups, and Muslim Women’s groups);
- [Nottingham College](#) and [Bilborough College](#).

Online signposting included:

- CN28 Twitter and Facebook, as well as NCC’s Carbon Reduction and Energy Services Twitter;
- *My Nottingham* Facebook and Twitter;
- Occasional posts on NCC LinkedIn;
- Regular shares by Councillor Sally Longford – NCC Portfolio Holder for Energy, Environment and Waste Services;
- Regular inclusion in update emails from NCC’s Leader and Deputy Leader;
- CN28 monthly newsletter and Growing Nottingham newsletter;
- Direct emails to several local groups and organisations such as Nottingham Pakistan Centre, Nottingham Disabled Peoples Movement, Nottingham Refugee Forum and others;
- Messages distributed through NCC Neighbourhood Development Officers;
- Messaging distributed through *Nottingham Citizens* group.

Most residents who took part in the project focus groups reported that they heard about the opportunity through the following online recruitment channels:

- NCC’s *My Nottingham* newsletter which is emailed out to residents;
- Eventbrite;
- Social media channels (e.g., Facebook, Twitter);
- Direct contact of residents by local activist groups (e.g. Extinction Rebellion).

As with the earlier Phase 1, recruitment for this Phase 2 of the research programme was conducted online. In future research, we would recommend additional in-person /face-to-face recruitment to, and running of, these focus groups. We would anticipate that this would help to extend the reach of the project to any residents who are not regular or confident users of online methods of communication. This may help to maximise the level of engagement with a fuller range of diverse voices and marginalised groups from across the city.

3.2 Data collection

The methods for this Phase 2 research involved qualitative fieldwork in the form of focus groups. An NTU specialist Research Assistant with experience in conducting research into people’s environmental attitudes and behaviours ran the focus groups.

The focus groups were conducted using an online video conferencing platform (Microsoft Teams). In line with ethical considerations, participants were asked to complete consent forms and were given detailed information about the project in advance of the focus groups.

Participants engaged in discussions in a variety of ways to suit their needs, contributing to online verbal discussions and/or via the online chat function. Once the focus groups were completed, the saved chat and recorded discussions were transcribed, and the video files were

subsequently deleted³. The data were analysed, and findings are outlined below.

3.3 Participant breakdown

The focus group participants were all residents of Nottingham or Nottinghamshire. They came from a wide range of backgrounds. Many were in paid work and from various sectors such as education, research, health policy and business. Other participants were members of the Nottingham Youth Parliament or in a small number of cases, members of local political parties. Amongst the attendees, there were also some retired community members – many of whom had lived in the city or county for decades; there were also younger residents, some of whom were relative newcomers to the area.

Whilst the age profile of the research participants was relatively broad, it should be noted that the voices of several demographic groups of citizens were under-represented - particularly those from lower socio-economic groups, BAME/racialised minority groups and those living within the Nottingham City Centre NG1 postcode area. Residents who were already involved or had a pre-existing interest in environmental issues were relatively prominent within the focus groups, and in some cases were already taking conscious steps to engage in environmentally sustainable behaviours - either individually, as business owners or

as members of community groups or other civil society groups.

Overall, 36 Nottingham residents attended eight focus groups:

Five mixed focus groups⁴:

- One of these mixed focus groups included three young people aged 16-24 who were members of the Nottingham Youth Parliament
- One female only group⁵
- One male only group

The demographic breakdown of the residents attending the focus groups was:

Gender breakdown:

- 15 males (42%)
- 21 females (58%)
- 0 non-binary people

Age breakdown:

- Four residents aged between 16-24 (11%)
- Two residents aged between 25-34 (6%)
- Eight residents aged between 35-44 (22%)
- Nine residents aged between 45-54 (25%)
- Eight residents aged between 55-64 (22%)
- Five residents aged 65+ (14%)

Ethnicity breakdown:

- White English, Scottish, Welsh, Northern Irish, or British: 25 (69%)
- White other: 6 (17%)
- Asian or Asian British: 1 (3%)

³ All transcripts were anonymised to protect participants' identities and to ensure confidentiality. Names used in this report are aliases. All transcripts are now securely uploaded to the Nottingham Trent University Datastore.

⁴ A mixed group is defined as including Nottingham citizens of any age from 16+, any ethnicity, any gender and coming from any postcode area.

⁵ This group was drawn from two smaller focus groups.

- Black, African, Caribbean, or Black British: 2 (6%)
- Mixed ethnicity: 1 (3%)
- Did not respond/ no information: 1 (3%)

Education and employment breakdowns:

- School/ college/ university (full time education): 4 (11%)
- Full time employment: 11 (31%)
- Part time employment: 9 (25%)
- Self-employed: 3 (8%)
- Retired: 3 (8%)
- Unemployed: 2 (6%)
- Did not respond /no information: 4 (11%)

Postcode breakdown (NG)⁶

- NG1 (Nottingham city centre) - 1 resident;
- NG2* (Nottingham city centre, Colwick Park, Sneinton, The Meadows, West Bridgford) - 4 residents;
- NG3* (Carlton, Sneinton, St Ann's, Mapperley) 5 residents;
- NG4* (Gedling Village, Netherfield, Carlton, Colwick) - 1 resident;
- NG5 (Sherwood, Arnold, Bestwood, Carrington, Top Valley, Rise Park) - 5 residents;
- NG6* (Bulwell, Old Basford, Bestwood Village, Highbury Vale, and Bestwood St Albans) - 2 residents;
- NG7 (New Basford, Forest Fields, Hyson Green, Radford, Lenton) - 4 residents;
- NG8 (Aspley, Wollaton, Whitemoor, Bilborough, Strelley) - 2 residents;
- NG9* (Beeston, Stapleford, Lenton Abbey, Chilwell, Trowell, Bramcote) - 4 residents;

⁶ Participants were recruited from a wide variety of Nottingham postcode areas including inner-city and outer-city areas, reflecting a broad socio-demographic mix.

- NG10* (Grantham, Mansfield, Newark, Nottingham, Sleaford, Southwell, Sutton-In-Ashfield) - 1 resident;
- NG21 (Brick-kiln End, Lidgett, Edwinstowe, Blidworth Bottoms, Gorsethorpe, Kings Clipstone, Rainworth, Haywood Oaks, Blidworth, Clipstone) - 1 resident;
- No information given - 6 residents.

The postcode breakdown identifies where people live. However, a small number of the participants work or study in the city of Nottingham despite not living within the city boundaries (signified by *); given their direct connection with the city, they were eligible to attend the focus groups.

4. Findings

In this section we report the main findings from the research, including summaries of key themes and issues emerging from the groups.

Each of these bullet-pointed themes and issues are then illustrated using a small number of (italicised) direct quotes from the participants as they responded to questions co-designed by the research team at NTU and NCC.⁷ These quotes are reported verbatim from the focus groups. Unless otherwise specified, they are used only in cases where they were *typical* of the views expressed and were broadly agreed by others participating in the discussion groups.

As the quotes are reported verbatim, there may be grammatical errors; as is usual practice when reporting the findings from focus groups, we have not attempted to

⁷ Please refer to Section 7.1 in the Appendix of this report which includes the main questions asked by the researchers.

correct for any such errors. The only amendments to the quotes are where we use either “[...]” to signify that we have edited-down the text, or where we add words within a quote using “[word/s inserted]” to explain and/or clarify context. Where ‘...’ is used, this means that it was not possible to hear exactly a word (or words) stated by a participant in the focus group recording.

4.1 Concerns about climate change

At the beginning of each focus group, we asked participants to share what words or feelings came to mind when thinking about the environment. In response, residents expressed a broad range of concerns about climate change observed as taking place at local, national, and global levels. These included, for instance, the impact on the natural world, an urgent need for more educational programmes to raise the levels of people’s climate consciousness, as well as very localised issues such as how best to tackle transport pollution. There was also a focus on different socio-economic issues which residents considered were playing a significant role in how they could engage with these issues – especially the cost-of-living crisis and poverty more generally. The following points summarise the various concerns and issues that participants raised in the focus groups.

- Generally, residents were apprehensive about the consequences of climate change. They tended to give particular focus to the mass extinction of animals and the loss of biodiversity, globally:

Climate change is actually really scary, and I don't think a lot of people have sort of like, nobody's waking up to think like, if this doesn't change now, we're way behind schedule, but if we don't do something now, we're going to get to a point where it's literally too late. And then I'll feel part of the problem if I haven't at least done something to try and help. So yeah, that's why I'm here.

One of my big concerns is you know, biodiversity collapse, and things around kind of deforestation.

So the things that concern me, biodiversity [...] the reduction in biodiversity and again, on a national UK level about the lack of care about our biodiversity, and those issues. And that will therefore impact on your climate, and people's health.

- Residents tended to feel that there was a lack of awareness about climate change issues. A small number of the participants advocated for more science-based education to raise peoples’ awareness:

I'm on quite a few Facebook groups, full of people who are incredibly concerned about the environment, but they really don't know much sort of science about it. And especially when you get to complicated stuff, like I don't know, plastics, or zero waste [...] So how you balance those sorts of concerns across a wide range of things, people need to have a much better sort of science background.

There's an awful lot of lack of education over what needs to be done, what can be done, what services there are, what's possibly available. Grants that

are available, there's just such a massive lack of knowledge.

I don't know if [councils] have any sort of influence over education, but I think we really need to be doing more for our young people at school, around (a), educating them about the climate change issue, but (b), educating them about how to live more sustainably you know. What fresh food is, how to prepare fresh food, how to prepare healthy food. You know, those sorts of things, because they're really key.

- Whilst climate change concerns were a priority for most of the focus group participants, social and economic inequalities were also discussed as a barrier to engaging with solutions:

There's a huge inequality crisis, you only have to look at the problems with the bills we have going on for now, for energy, to see how that could play out. If we then ask people to say, hey well look, you also need to put solar panels on your roof, you also need to insulate your house, you need to put in a heat pump. It's sort of, well where's the money coming from for all of these things?

First, I think that what I said about homelessness, yeah it correlates the climate change, because I think if we are not equals, so if someone is homeless, how should they care about anything like climate for example? So it's the same as comparing developing and developed countries. If your country is at war, if you don't have food to eat, then of course you're not going to be bothered about carbon emissions. So that's about it.

- At the same time, residents spoke at length about issues related to the cost-of-living crisis. Some articulated these social concerns as climate justice issues that needed to be addressed alongside carbon neutrality:

There are a lot of people who just can't afford to do what's required to make their homes more carbon friendly.

If you're suffering food poverty or fuel poverty, or things like that, then you know, you don't have the luxury to take necessarily green measures [...] And in Nottingham [...] there's quite a high level of deprivation of how you get to those households who don't have equality of service or access. So, because they've got other things to worry about, or they can't get some of these sort of things.

There's a direct link between investment in insulation and healthcare, reduction of healthcare costs, reduction of fuel poverty, reduction of dependency on fuel imports, greenhouse gas emissions obviously. This is all interlinked.

- Many residents expressed considerable concerns about pollution and air quality in Nottingham. Several emphasised the need for NCC to consider taking further and faster action with respect to transport to address this matter. However, these participants also acknowledged the considerable resourcing challenges underlying this problem:

We get the pollution from the Derby Road and from the Ring Road. And on still days in summer, it is pretty bad. When you walk up to those roads, I mean you just breathe in the fumes.

And I don't see why we can't bring in some sort of tax on vehicles, heavily polluting vehicles. [NCC] could do a congestion charge like London, or some other cities, I don't know, or a pollution charge. But I think those things the city ought to consider, and that would vastly improve the environment, and help to achieve the Carbon Neutral by 28.

So [NCC's] attempts to get to being Carbon Neutral by 2028 does seem realistic, I'm surprised that they can't do more to stop the heavily polluting vehicles going through the city.

I've had a chat with the chap from the council last week, when I complained about air pollution and stuff. [...] people are as concerned as I am, and very concerned and things are happening. But it just, it's very slow. And then of course it all depends on money, and there's no money. There's going to be even less money if this conflict [in Ukraine] gets worse you know, we don't know what's going to happen in the future.

- Many residents were apprehensive about how climate change will impact the lives of future generations, globally:

I've got children, and I have anxiety over what their future will be, and how much of a future they have. And I see the anxiety that they have, over what they're going to be able to achieve in a lifetime, and how much of a lifetime they're going to have.

Because Carbon Neutrality is going to be affecting our kids and our kids' kids, and our kids' kids' kids. Where at the moment you've got such issues in

areas which are affecting people here and now [...] like period poverty, like kids going home hungry, not being able to eat. Going to school in the same clothes for a week, not being able to wash their clothes, stuff like that. [...] So we need to deal with the issues now before we deal with issues that are going to happen in 20 years.

- A small number of the focus group participants expressed some unease with the UK Government's actions that placed restrictions on young people – serving to undermine the efforts of this generation to act on climate-related matters:

Young people are very smart, they have a lot of ideas, and they understand young people. But when it comes to ideas, they're quite good at them to be fair [...] at the moment, I'd say the government, because they're taking away the greatest asset, which is talking. Because they're taking away the funding for people to be able to talk to young people.

[Young people] might have, they don't necessarily have a choice at that age, because they're given what they get.

4.2 Taking action on climate change

All the residents participating in the focus groups reported that they were already taking conscious actions to support reducing their carbon footprint. The following list provides an overview of the broad array of activities that they were already taking - individually and collectively - to act on climate change.

- Re-using and recycling plastic;

- Not buying from supermarkets where possible;
- Composting and rewilding/ gardening/ growing fruit and vegetables;
- Making their gardens more wildlife-friendly;
- Taking part in community gardens;
- Planting trees;
- Reducing meat consumption or adopting vegetarian or vegan diets;
- Using public transport, cycling and walking where possible;
- Desire to use or own electric cars;
- Not travelling by aeroplane;
- Up-cycling, recycling or taking part in repair cafes or skill exchange groups;
- Repairing household items rather than buying as new;
- Donating to environmental causes, taking part in local initiatives like Notts Green Awards or volunteering;
- Some residents spoke about their membership of, and/or participation in, environmental groups or other political and social action groups to help engage with actions to mitigate the climate crisis;
- Often residents would use the focus group space to share information about activities, organisations, and ways in which to engage in individual and collective actions locally to tackle climate change issues;
- A small number of residents expressed the view that they would like to see supermarkets act more ethically and to use less plastic packaging.

There are some initiatives which happen to you, which means you can't opt out, or it's very hard to opt out. Or it makes it very easy for you to access these sorts of things. Like recycling. So for example you know, it's a kind of social norm now that you have two bins, and that they get collected at different times. [...] So that's one

thing that I do is, reuse, recycle and all that gubbins.

We get involved in recycling projects, like the Repair Café. So I've been involved in repairing people's clothes, and we've done some upcycling of clothes. And we do a lot of repairing [...] someone does electrical goods, so that saves throwing things away. Yeah, I think over the last few years, I've just become more aware of not just throwing things away and buying new.

Well I live on the fourth floor of a flat, and what I would love to be able to do is grow food, my own vegetables, my own salad whatever. And also I'd plant loads of trees if I had a nice big garden [...] I'd just go and plant trees in parks [...] but obviously you can't just walk into a public council owned park and just start planting stuff.

- Many residents recognised that there were key factors impacting on how they might engage with climate-related issues. Some mentioned infrastructure, resources and also socio-economic barriers that were impinging on, and limiting, their carbon reduction choices.

It comes down to capitalism to a large extent - you know, profit making.

My concern is that the way the capitalist model works, and I find myself becoming more Left as I wake up every morning. The whole of our country, the whole of our economy, and the Western economy is based on consumption.

I'm not a fan of the Tory Party anyway, but I'm certainly not a fan of the current administration. And it's

greenwashing [...] The Prime Minister, he can bullshit for the world really. But you know, [...] that's the problem with politics, it's full of self-imagery.

- Some of the focus group participants felt that these economic and infrastructure-related issues needed to be addressed by national government, not only by local authorities:

It's mostly on [national] governments and on businesses that are actually those that have the most, the financial implements I would say.

Well it's very easy to pontificate to, in front of a large audience, to say how much you are for climate change, and you're wanting to get more people on this band wagon. And then you climb into your government paid-for Bentley, or private jet. You can't have both, I'm sorry; you have one or the other.

- Those residents who cycled - as well as many who did not cycle - emphasised safety concerns and what they considered to be a lack of appropriate cycle lanes throughout the city. Many wanted to see NCC do more to improve roads for cyclists and to introduce additional cycle schemes to encourage more people to cycle:

I would love some proper cycle routes. We've just got bits here and there. And just to make it easier to walk and cycle round the city, yeah.

I ride a bike, but I'm scared to ride my bike in some places in the city [...] it's

like, there's a bike lane and then there's not, and then you're in a place where you can't even cross the road as a pedestrian without having to sort of run you know [...] and I'll go onto the pavement sometimes because I'm in places where it's just not safe for cyclists.

During the lockdown you know, everyone went out on their bikes because there was no cars on the road, so they weren't afraid.

I cycle on the pavement, because I have been cut up on my bike so many times on the roads.

- Several participants did not consider that electric cars were a suitable long-term solution, given that these vehicles use lithium batteries⁸ and require charge points that are connected to the main electricity grid:

I know they are popularising this Carbon Neutral, but some of the new things they're offering, they are not quite environmentally friendly. For example, electric cars, what about the batteries, what they are produced from? How much electricity do you use to produce them? [...] Also these wind turbines as well, do we know how much oil they use actually to oil them, so they can, so they are not be stuck you know, so they can continue to turn?

Things like electric cars, I mean we've got one, but we're quite concerned about the lack of infrastructure, and the lack of investment that goes into

⁸ For instance, Friends of the Earth (2012) claim that lithium extraction harms the soil, causes air contamination, and damages water

supplies - creating an environmental justice issue in the local communities where it is mined.

that. And many other things to do with becoming climate neutral.

4.3 National and local solutions to the climate change

4.3.1 Who is responsible?

In discussions around responsibility and climate change solutions, residents spoke about a range of stakeholders, including themselves, their communities, local and national government, and private industry. The following section summarises views expressed regarding (i) culpability in terms of the consequences of climate change, as well as (ii) who should take the lead in initiating climate change solutions.

- On the whole residents felt that it was everyone's responsibility to engage in developing climate change solutions:

I mean I think that the only way that we're going to solve the ecological crisis is through a combination of individual and collective action. You know, it's going to require responsibility on the part of the individual.

You know, there is definitely a kind of personal responsibility aspect to it. You know, we all do need to be aware, and you know, we need to get ourselves educated, and we need to help education as I've said, really early on, and make the right sort of decisions.

It is everyone's [responsibility] obviously, but if you can't do it, then it's actually the responsibility of people who actually have the power to change things, to actually change these things.

- However, many acknowledged that there are groups who have more responsibility and have more power to enact solutions to tackle climate change issues – especially the UK Government and large corporations:

I feel like it definitely is the government's responsibility, but I also feel like the government should take their responsibility to catch the insanely rich in this country

Well overarching it has to come [...] from government. [...] Because it's got to come as legislation and the government and law makers can do that. [...] unfortunately, the people with the clout who the current government will listen to are those who are not necessarily for environmental improvements

The big players are responsible. They've got the power, they've got the money, they've got the teams, they've got the groups, they've got all the tools and equipment that they need to make it happen. They can set the example, and we can follow.

It's all the councils, it's the government, it's the energy suppliers, it's the water companies, it's the recycling companies, it's the big supermarket chains, it's all of them.

- Many residents felt strongly that past and present governments (in the UK and globally), as well as private industry - in particular the fossil fuel industry - were the most at fault in causing climate change:

Coca-Cola and their plastic bottles and what have you, it should be their

responsibility. They are the ones making the billions out of it, they should be required to have some sort of a process in place to make sure these things are recycled or reused [...] otherwise, it's too big a responsibility for the individual, isn't it? And that's the way they've got away [...] making us feel guilty because we don't recycle.

You know, there is definitely a kind of personal responsibility aspect to it. [...] But ultimately, like that is all a drop in the ocean. It really kind of grates [...] you get like kind of advertisements, someone like Ariel going, wash on a cold cycle, you'll save enough Co² for the equivalent to 20 car trips or something. It's like, well screw you, you're a massive like kind of petrochemical company. You should be talking about change; you should be looking at what you can do to make changes.

I mean look at the profits that BP and Shell have made in the last month [...] And government should be putting more pressure [...] like Barclays bank for example, where they invest their money, and currently they're quite invested in fossil fuels. They could stop doing that, and they could completely divest away.

You know, there's been a massive redistribution of wealth into the hands of the top 1% over the last three or four decades. And I think you know, they are, they represent the entrenched interests, they represent the oil and gas lobby, they represent the lack of progress on renewable energies on targets you know, at the international level at various climate conferences and so on.

- Some residents recognised that climate solutions needed to take into consideration the more vulnerable members of society. These participants claimed that not everyone was able to engage in schemes such as home insulation or updating their boilers - measures which were considered to be neither affordable nor accessible for many Nottingham people. Many participants urged NCC to investigate additional options to support residents interested in accessing such schemes:

I've been researching getting an electric boiler. I would love to do that, I've just made an enquiry for a brochure. But I get the feeling, it might be quite expensive, I don't know. And I just thought it would be nice if there was some sort of help facility, funding, to see that happen. And I can't help feeling, if that's the direction we have to go in, that there should be more going on out there to help people get there.

My house is dreadful, and I desperately need to insulate it. I can't afford to do that. And then when I got the voucher for the green homes scheme, and that was brilliant, but then the way they do it is so, I believe deliberately bureaucratic, that I couldn't use it [...] they were basically running some form of cartel, they just increased their prices further.

The people in terms of climate justice, the people in Nottingham who will suffer most, even if the council have given them £5,000 for solar panels, they still can't afford to use it.

I have some money, not enough to afford to install lots of things, but not less so that I get funding for it. And I

think accessibility to everyone, in as many areas as possible, I think is really important.

4.3.2 UK Government policies to tackle climate change

By and large, residents were critical of the UK Government's approach to addressing and tackling climate change. This was further compounded by the lack of trust that people had in national government policy making which they felt needed to be much more proactive than was currently considered to be the case. Related to this, there was a general sense of frustration at what they perceived as a lack of urgency and insufficient systemic action taken by the Government, nationally.

- Many residents felt that the UK Government had 'failed' at the COP26 negotiations in Glasgow in 2021, pointing to what they considered as a lack of action on fracking and the fossil fuel industry:

I think in terms of the national governments, I think a lot of it comes back to taxation, and the need to make you know... a lot of the wealth in this country is appropriated by big business you know, that's no great news to anybody.

I think in terms of the national governments [...] And I think you know, they are, they represent the entrenched interests, they represent the oil and gas lobby, they represent the lack of progress on renewable energies on targets you know, at the international level at various climate conferences and so on.

So I think efforts so far, by the policy makers of this country are lacklustre at best. [...] And we had COP recently, and that was a great chance for us to be real leaders, and to bring in some real policies that could really have some sort of large and lasting change. Such as you know, kind of committing to leaving all fossil fuels in the ground you know, no more oil in this country, no more fracking in this country.

I think you know, things like COP have proved that it is really just kind of all words and no action that we've had so far.

- Linked to this, some felt that UK Government policy making did not consider the marginalisation of particular communities locally, nationally, and globally:

Our government [is] quite like [a] business, and essentially, they say that they are decarbonising industry etc. But I think that's probably the biggest one, where I don't see anything happening. And what they've got here is just high-level waffle rather than actual stuff that's going to get done.

I think people measuring their carbon footprint is, it's an exercise that can help [...] But I don't think, it's not going to change anything unless there's a political movement to basically to stop, to sanction these countries, these companies.

There's a lot of green washing going on, and yeah, I feel like, again this comes, the idea of the national versus the local [...] what could a local government do to sanction for example, I don't know, whatever, coca cola whatever, or some big corporation

that causes a lot of pollution around the world.

- Residents had mixed views about the role of central UK Government in local environmental initiatives in Nottingham. Often, they wanted NCC to have more autonomy over the decisions made for local people on issues concerning climate change.

I think overall, the council are restricted by the state, by our government, our national government. [...] we don't live in a time period too far away from when local councils have gone against what governments have told them to do. And it's a risk, but it's something that probably is going to need to happen.

- A small number of residents spoke about the importance of both national government and local authorities focusing on business buildings rather than private homes to reduce emissions - in particular heritage sites and buildings:

But fundamentally, [if] we sort our buildings out, residential and commercial in this country, that's going to make a massive amount of difference. And yet we don't seem to be doing it.

⁹ Many residents mentioned a desire for more deliberation and bottom-up decision-making rather than what they perceived as simple one-way communication of information. Regarding

4.3.3 Carbon Neutral Nottingham 2028

By way of contrast with their views on central UK Government, residents were supportive of Nottingham's vision for carbon neutrality by 2028. Although they were somewhat uncertain about the details of the plans, they expressed a strong desire to find out more - and importantly, to be kept informed about, as well as involved⁹ in, the plans going forward.

However, although very positive about CN28, there was some considerable scepticism with respect to what NCC could achieve because of financial constraints and other obstacles faced by the local authority.

- Many residents wanted to see the CN28 plans include greater levels of consultation with Nottingham communities, in particular those more marginalised groups. They also wanted to see information shared with more diverse communities and in more accessible formats, such as hardcopy formats posted to residents in different languages:

I think it's really important for Nottingham then to have the true picture from as wide a range of residents as possible. And if that's doing it in a different way you know, not doing it on [Microsoft] Teams, because you've got to go in physically, then that's what has to be done.

A lot of people just wouldn't... they're not likely to read the CN28, they won't

the CN28 action plan, many wanted to have workshops provided by the council to discuss the directions and goals of the city's carbon neutral plan.

even know its existence. So how can you achieve what you want to achieve? You've got to educate and support.

- There was a strong desire from residents that the council engage with the local community as an 'asset' that would benefit the further development of the CN28 delivery plans, such as setting up citizens' assemblies:

There are loads and loads of things that we could be doing, but historically, as a city, as a local authority, we've got a history of being patronising and centralising [...] And one of the legacies of shortcomings in Nottingham, is that as a local authority, it doesn't do partnerships at all well. It invites us to do our own things, so to reduce our own footprint, but if we want to do it collectively, and in partnership with them, things disappear very quickly into direct control.

You need to have everybody onboard first. So then that comes back to our Citizens' Assemblies you know, it's getting people onboard first, getting all the stakeholders, figuring out what are the issues, and then coming up with a solution that addresses those you know. Rather than just sticking something in place and annoying people.

- There was recognition, particularly from those residents who owned local businesses, that more businesses needed to be involved in the delivery of CN28. Furthermore, some residents suggested that NCC should offer residents incentives to make their homes more energy efficient to support

CN28, particularly around insulation, solar panels and boilers:

I mean I know they've given out funding for solar panels, but again, it's not going to be enough. Then there's never going to be enough, you're never going to have enough money to be able to fund what the country needs, let alone what Nottingham city needs.

But I feel like, the other thing I wanted to say was like, I feel like community wealth building is probably the best solution here [...] for example councils mandating themselves to hire local contractors for building you know, for shops, for consultancies etc. By doing that, you keep the money within, you keep the money in the city, and it goes round and round. [...] But it's also a really good idea for reducing your carbon footprint, because once you start supporting local businesses, the miles that food or goods have to travel, gets reduced as well.

Because we're paying Veolia to get rid of our waste by incinerating it. So why aren't we paying the local business that by virtue of its own existence, reduces the amount of waste. Why aren't we paying them a set little subsidy for every time you know, for every time they make a sale?

- Residents felt that for the CN28 plans to be successful, they needed more support from central government. Many recognised that at the time of the research in the early summer of 2022, NCC was in a relatively 'complex' and precarious financial position, and there was some concern expressed that the local authority would not be able to meet the goals set out in the CN28 Action Plan:

I think it's a great aspiration, and I think it's a fantastic thing for Nottingham to have nailed its colours to [CN28]. My current view is that it's entirely superficial, and I struggle with the fact that they've seemed to be promoting it as something they're doing Nottingham-wide, when actually, it's only council-wide.

Well one of the problems is, the City Council has so little money. So they can't address any of the issues that the various people who are joining this forum have mentioned. And they're having to, well sack people, to meet their budget. They're constrained at every way, and so until there's some sort of change in the funding from central Government in London to the provinces, it's hard to see what development can be made.

[The CN28 Action Plan] was very comprehensive, it covered a lot of the innovative approaches, and even things like capturing carbon, which is you know, very subject of [...] the thing that I thought was missing, was funding for individuals in their homes, to do more. Because that's going to be one of the biggest carbon footprints there is. And there are a lot of people who just can't afford to do what's required to make their homes more carbon friendly. But apart from that, I thought it was a really good paper.

So basically there's not funding you know, I know everybody knows that the council are in a great amount of debt. But you know, there's almost like, there's this intention of where it's been driven by a very small team, with very little money behind it, or investment. So it's almost like the two don't necessarily meet, in terms of

what the ambition is versus the capacity, and investment.

4.3.4 How NCC can make a difference

Residents were passionate about engaging in information-sharing, of co-creation of the city's carbon neutral policies, and of taking part in climate-related action planning. Their views implied that there was considerable scope for NCC to do more to support residents to make a difference. A number of ideas were offered by the focus group participants concerning such issues as transport, green-spaces, and education which they felt should be priorities for the NCC.

- Many residents spoke of the importance of climate education as part of a programme of carbon-reduction solutions that NCC should focus on – especially for children and young people:

I think that there's more education that needs to go out, but it needs to be done in a positive manner [...] I've got two children, one's 24; he's 'green' right the way through, he thinks about absolutely everything, won't buy anything unless it's sustainable [...] But my 19-year-old just said, what's the point, I'm not going to live past 40, I might as well just enjoy myself. So he's got a fatalist view [...] that's where education comes in. Like no, actually we can make changes if we do a little bit, each of us, if we manage to change policy, if we push for things to happen.

- A small number of residents expressed a desire to see NCC engage more with schools to get children and young people involved in recycling and in environmentally-friendly activities, in growing their own food, and also in general awareness-raising.

So I think yeah, there's something that Nottingham can do, definitely as a city can do [...] The city could lead on doing things within the city schools, or whatever they've got authority over.

I think that the only way that we're going to solve the ecological crisis is through a combination of individual and collective action, like [...] the schools getting involved, and things like that you know, to promote more sustainable approaches really you know. And having projects like rewilding projects you know, back into the city.

- Overall, residents felt that NCC should do more to create green spaces for the wider community, including community growing and gardening areas:

And not everything costs a massive amount of money does it? You can do small little thing[s], you can create a community garden; grow vegetables together you know, there's so many solutions that don't cost a lot of money.

It'll be interesting how the redevelopment of Broadmarsh continues, it'd be lovely to see more green spaces there, and open vistas to the Castle. And it can transform the City of Nottingham, and attract so many more people to the city, and it could revitalise it.

- A small number of residents felt that there should be more joined-up bus routes to encourage more use of public transport instead of car use. Linked to this, they suggested that bus fares should be reduced to make them more accessible to people:

Well I would love to take the bus, but the bus route isn't available for where I need to go, so I have to take my car.

When they took away the number 90 bus [...] And that to me is a big thing, is the transport, is that you're stopping half the city, and anyone visiting the city from Mansfield or the north, or whatever, all have to come out of Victoria Centre. So how are you going to get them to the other side?

- Generally, residents thought that NCC should do more to take the lead in setting the infrastructure as well as providing support through subsidies and other mechanisms to encourage local businesses to operate in more environmentally-friendly ways:

So I want Nottingham to introduce a low, ultra-low emission zone. One, in terms of making clean air, but also in terms of discouraging car use, and just making you know, just encouraging people out of their car onto public transport. In terms of public transport, I want the tram network to be extended, I want it to be larger, I want to go out further, I want to go to more places. Encouragement of ownership of bicycles or e-bicycles with council grants. I'm sure it's possible.

- Energy-related questions were raised in most of the discussions. Some participants felt that there should be

better support to enable residents to share energy through saving co-operatives. One idea that achieved support from others in the same focus group was to install solar panels on school roofs:

Okay, who's responsibility is it to put things right? Mine I think, I've always felt that that was down to me. But it can't be me on my own. [...] We have to change the system within which my electricity surpluses can be shared. I could, I think technically, I could give it to one of my neighbours, but if I gave it to two, I'm a criminal.

- Generally, residents wanted to see better waste management by residents and the local authority collection including food recycling:

People round here don't even recycle properly. You've got the Asda bag for life in the recycling bin, or in the green bin. And you think, don't people realise that's like 150 years of something that that will take to break down in landfill

I mean what would be great would to be a food waste [-based] electrical plant [...] will be really good to have a plant that's run on food waste. Because they had such a bad experience with Robin Hood Energy.

How the Nottingham recycling service will not take soft plastics, creating a whole new range of problems for us to collect those and take them elsewhere to get them recycled.

I suppose you know, sort of specific issues would be things like waste. So recycling, and things like you know.

It's all the councils, it's the government, it's the energy suppliers,

it's the water companies, it's the recycling companies, it's the big supermarket chains, it's all of them.

- Residents were strongly supportive of subsidised home insulation schemes across Nottingham - although one resident felt that there was not enough support for those not on benefits to access these schemes:

I am currently researching solar panels, air source heat pumps. I am pleased that there is the £5,000 grant I think, for air source heat pumps. It upsets me that as a full time worker, with a semi decent income, that I won't get, I've never been offered funding for solar panels. That because I'm not on benefits, that I need to make that investment myself.

- A small number of residents spoke about regionalising food supply systems to ensure that there is more local produce available:

The other things that we should do, is pinch [ideas] from other parts of Europe, that already are investing in more regionalised food supply systems, that link towns with the agricultural communities surrounding them. And massively reduce the carbon footprint of food, which you can do. [...] These are things that don't require central government to cough up more money, but do require local government to reach out and make connections that return investments to the sort of future that we'd like our kids to have.

- There was also acknowledgement that local residents needed to be mobilised

to engage with the CN28 strategy - and may need to be encouraged to do so. A small number of residents expressed the view that there was a need for NCC to create more incentives to promote individual environmental behaviour changes, especially for young people:

And young people aren't going to change unless one, they're incentivised, or two, it's going to benefit them financially. Not saying all young people, but a big proportion of young people aren't going to change because they don't see the importance of it, unfortunately.

- Overall, residents wanted to see stronger community engagement to meet the aims of the Carbon Neutral Nottingham 2028 Action Plan – especially with more marginalised communities:

I think again, part of this conversation is, the people who are involved in those conversations are not those marginalised. [...] You know, going to older marginalised groups, younger ones, going into Radford, St Anne's, Hyson Green, and just going, right let's condense this to a half hour, but giving those people. Otherwise we're not going to get a fair representation, and again, it's us imposing.

Yeah, I think a lot of, both the opportunity and also a potential barrier is, the lack of community engagement. You know, we talked a lot about delivering on a strategy you know, you can't do that without buy-in from the people who it's aimed at, which are the citizens of Nottingham and the surrounding areas.

I wholeheartedly concur that sort of a bottom-up approach is needed for participation to get people to feel more interconnected with the move.

And I think we have to ask the City Council to be the ones who open the door on game changing ideas. Because it has to be, we have to come up with something more visionary. And I think if you open those doors you know, the people here tonight will walk through them with visionary ideas, as will loads of others. We won't be short of them, but the council have to fling open those doors.

The council in Nottingham, if they wanted to get a message out to everyone in this city, they could do that pretty easily. They have a direct line to the newspapers, they could you know, they could put up signs everywhere. They could do that pretty easily and pretty cheaply.

5. Conclusion and recommendations

An opportunity that emerges from our findings is that Nottingham residents who took part in the focus groups were passionate, motivated and eager to contribute in a variety of ways to address climate change issues in their local areas and across the city. Many of those taking part in the research were enthusiastic about engaging in social and environmental issues that impact their communities – and they were looking for ways to participate. This appetite could be channelled into future collaborative projects that centre on the ambitions of CN28.

Despite the positivity and passion with which residents approached the discussions, there were far greater concerns expressed by residents compared to the 2021 Phase 1 of the research programme. In particular, these concerns centred on broader issues such as resource constraints and the general lack of funding for local carbon neutral initiatives, as well as diminishing autonomy from central government. These issues were perceived by residents as presenting major challenges to achieving Nottingham's carbon-neutral ambitions. It was clear that residents were very supportive of the CN28 Action Plan. However, there was also a fair degree of scepticism expressed concerning how CN28 would be achieved in such a short time-frame.

Overall, there was less of a focus on what individual residents could do to reduce carbon emissions and more attention given to the power imbalances between UK Government, Nottingham City Council and local residents. There was a strong sense expressed by many residents of the need for considerably more action and leadership from national and global institutions, agencies and corporations – this was articulated by several participants as a desire for some degree of systemic change.

Generally, participants commented that they would have liked to have been involved in a more comprehensive conversation about how to develop and action Nottingham's CN28 plans – including further engagement in the research programme that informs this particular report. There was an appetite for more workshops and involvement in more deliberative decision-making processes where they could learn about, engage with, and help shape CN28 as it evolved over the

period leading-up to the target date of 2028.

In the previous 2021 Phase 1 of the research programme, there was a noticeably higher participant take-up rate compared to this 2022 Phase 2 round of focus groups. In 2021 although the resources for the research project only allowed for four focus groups, 31 participants attended across those groups. In 2022 with double the resources and eight focus groups, 36 participants took part across the eight groups. Recruitment in 2022 proved to be considerably more challenging, along-side a high dropout rate and lower than expected registration rate. This was despite offering prospective participants more flexibility in terms of dates and times of day to participate in the discussions.

Furthermore, the 2022 Phase 2 research was not fully successful in reaching out to secure participation of different groups of participants to reflect the diverse nature of voices from across the city.

Groups that were under-represented within the discussions included those from racialised minorities, young people, unemployed residents, and those living within the city-centre NG1 postcode area. In general, there was an over-representation of white participants, retired people, business owners, environmental workers, academics, civil servants and other such professionals – and this was also acknowledged by the focus group participants themselves. There were also a small number of residents (six in total) attending the 2022 focus groups who had also taken part in the 2021 project. There were requests made by several participants that NCC reflect on methods to recruit and engage particular marginalised groups who are often excluded from such conversations in

community engagement research projects - groups who tend to experience the greatest consequences of climate change issues.

It is important to note that this recruitment issue is not unique to this particular research programme; indeed, it remains a major challenge that is discussed at length within the literature on deliberative democratic practices and processes¹⁰. Community engagement is both a science and an art - identifying effective ways to work with more diverse groups in future Phases of this research programme will require further reflection. For instance, while the most recent 2021 Census confirms that Black and Asian Minority Ethnic (BAME) groups comprise 35% of the local Nottingham population (Nottingham Insight, 2021), only 8% of the participants recruited to this research project were from this community. We would suggest that for future research, particular attention is given to the recruitment of a broader and more inclusive set of voices to more closely represent different resident groups across the city. In this way, the most marginalised members of our community would become involved in the change-making processes taking place as part of Carbon Neutral Nottingham 2028.

¹⁰ For instance, it is often recognised in the literature that the way in which citizens are engaged is reflected in the kinds of groups who take part (Hoyle and Cottril, 2022; Bua and Escobar, 2018). Excluded and marginalised groups require considerable relationship-building, time and financial resource if they are to more directly engage with the research.

5.1 NCC Responses to Recommendations of the 2021 Citizen's Engagement Report:

As part of the 2021 Phase 1 of this research programme, data driven recommendations were offered to NCC by the NTU research team. **Table 1** outlines NCC's active engagement with those recommendations.

Our recommendations to NCC from this 2022 research Phase 2 mirror many of those discussed in the 2021 report. These 2022 recommendations are based on the contributions from participating residents, and offer suggestions for (i) how residents' views can be factored into CN28, and (ii) what NCC can do to further tackle climate change issues locally:

- 1. to invest resources into greater sharing of information about CN28 with local residents, and in a wider variety of formats, including e-newsletters, hardcopy information via post as well as in different languages;**
- 2. at a 'strategic' level, to move beyond consultation so that local citizens are involved in a more central way in the decision-making processes for CN28, possibly by developing a local residents' steering group;**
- 3. at an 'operational' level, to consider developing a programme**

Elsewhere in the wider literature, self-selection processes have also been acknowledged to be a feature of recruitment methods that use online platforms, with certain groups over-participating while others under-participate (Young, 2001; Smith and Wales, 2000; Ross et al., 2020).

for 'resident volunteers' to take part in the development of CN28 as well as other local activities to combat the climate emergency such as coordinating community meals and gardens;

4. to support schools to develop educational programmes for children and young people about local climate change issues.

Whilst these four key recommendations remain the same, the greatest shift in perceptions by residents has been less of a focus on individual action, and instead more of a desire for systemic shifts in the operations of NCC in terms of civic engagement in the shape and direction of Carbon Neutral Nottingham 2028 action planning. The inclusion of marginalised voices has been echoed more strongly in this year's report; in the years that lead up to 2028, we would encourage NCC to continue to reflect on how to engage such groups and their voices so that they become active participants on our journey to a carbon neutral Nottingham by 2028. We recognise this as an opportunity rather than a challenge - to strengthen CN28 by:

- helping facilitate greater participation of residents from mixed backgrounds of education, ethnicity, employment and socio-economic status in future research;
- developing links with minority groups in Nottingham who may not have pre-existing involvement in climate change issues, with a particular focus on ethnic minorities;
- engaging young people below the age of 18 in research to ensure that youth voice is part of future CN28 delivery plans;

- running more focus groups and other qualitative bottom-up research sessions in the future to allow residents to engage in more in-depth discussions;
- creating a strategy to keep residents involved in discussion with NCC and each other beyond the research. This could be an email group, or even a social media page where different opportunities and activities could be shared by both NCC and city residents.

6. Research at Nottingham Trent University

This research represents the first stage of an ongoing project into local citizens' engagement with [Carbon Neutral Nottingham 2028](#), directed by Nottingham Trent University's [Professor Matt Henn](#) with the support of Dena Arya. The project links with the Nottingham Trent University School of Social Sciences' *Centre for Policy, Citizenship and Society* and with [NTU's Sustainable Futures research theme](#). The project complements the research team's ongoing research relationship with Nottingham City Council via the [Intergenerational Partnerships](#) project which considers citizens' engagement with local democracy.

To find out more about this project and related research, please contact [Professor Matt Henn](#) at Nottingham Trent University (email: matt.henn@ntu.ac.uk).

Table 1: Nottingham City Council’s engagement with the 2021 Phase 1 of the research programme.

	Recommendation	Nottingham City Council Response	Date to be completed
1	<p>a. Help facilitate greater participation of residents from mixed backgrounds of education, employment and socio-economic advantage in future research.</p> <p>b. Develop links with minority groups in Nottingham who may not have pre-existing involvement in climate change issues, with a particular focus on ethnic minorities.</p>	We are currently carrying out in-depth stakeholder mapping, and through this feedback we will aim to identify socio-economic groups which may currently be underrepresented. This will be reviewed annually.	July 2022
2	Engage young people below the age of 18 in research to ensure that youth voice is part of future CN28 delivery plans.	We are seeking opportunities to engage young people across the city to raise awareness, generate ideas and promote behaviour change	Ongoing
3	Run longer sessions in future to allow residents to engage in more in-depth discussions.	This was directly addressed through increasing the duration of the focus group conversations. More widely, going forward we will investigate opportunities to facilitate more informal conversations, and how changes in the style and venue of meetings may facilitate this.	Ongoing
4	Create a strategy to keep residents involved in discussion with NCC and each other beyond the research. This could be an email group, or even a social media page where different opportunities and activities could be shared by both NCC and residents.	We are creating a CN28 Communications & Marketing Strategy and a CN28 Engagement Strategy, both of which will include various new opportunities for NCC sharing information with residents and facilitating conversations with each other. This work will look to build on and further the extensive existing CN28 communications channels.	July 2022

5	Invest resources into greater sharing of information about CN28 with local residents, and in a wider variety of formats, including e-newsletters, hardcopy information via post as well as in different languages.	We acknowledge that, at present, our CN28 published materials present a lot of complex information. We will investigate opportunities to create more inclusivity by creating simplified information resources, including CN28 on a page and 'easy to read' version.	December 2022
6		We acknowledge that, at present, there are limitations to the reach of our CN28 published materials. We will look to build accessibility into the assets we create to ensure we're engaging with the diverse citizens of Nottingham.	Ongoing
7	At a 'strategic' level, to move beyond consultation so that local citizens are involved in a more central way in the decision-making processes for CN28, possibly by developing a local residents' steering group.	We will investigate new engagement channels to develop new forms of democratic involvement.	December 2022
9	At an 'operational' level, to consider developing a programme for 'resident volunteers' to take part in the development of CN28 as well as other local activities to combat the climate emergency.	It is valuable to know that there is an appetite for citizens to become more involved through citywide networks. Therefore, we will consider how to raise profile of existing opportunities, such as NCC Green Guardians, and more clearly identify links to action towards CN28.	December 2022
9	Support schools to develop educational programmes for children and young people about local climate change issues.	Work with school leadership to understand the current extent of learning about climate issues in schools and colleges, identify opportunities and possible solutions.	December 2022

7. Appendices

7.1 Focus Group Schedule

INTRODUCTION

1. What made you decide to take part in this research?

CONCERN ABOUT THE ENVIRONMENT

2. For you, what words or feelings come to mind when you think about the environment?
3. Which of the environmental issues that we have spoken about so far are you most concerned about?

TAKING ACTION ON ENVIRONMENTAL ISSUES

4. Do you already do, or have you ever done anything to support the environment, either as part of a group or on your own?
 - a) What is it that you already do to support the environment?
 - b) Are there things you do in your local area to support the environment?
5. What has led you to change your behaviours to act in a more environmentally friendly way?
 - a) A well-known personality - e.g. Sir David Attenborough's TV series, or Greta Thunberg's activism
 - b) Something I read
 - c) discussions with friends/family/my children/grandchildren
 - d) Discussions at school or workplace

- e) Information/publicity from Nottingham City Council
- f) Something else

SOLUTIONS

6. Whose responsibility do you think it is to find solutions to local and global environmental issues?
7. What do you think of the UK Government's efforts to solve climate change?
8. What kinds of policies do you think should be in place to deal with environmental issues in the UK?
9. What about Nottingham as a city and the local area that you live in: What kinds of measures should be in place here to deal with environmental issues?
 - a) Do you know about Nottingham City Council's efforts to e.g. go carbon neutral by 2028?
 - b) What have you heard about it?
 - c) What do you think about it?
 - d) What could the council do in your local area to make a difference?

OUTRO / DEBRIEF

10. Is there anything you think about regarding the environment and Nottingham as a carbon-neutral city that we did not talk about today?
11. Are there any questions you think we should be asking other people that you were not asked as part of this discussion?
12. Do you have any feedback for us that we could do differently?

8. References

- Agger, A. (2021). Democratic innovations in municipal planning: Potentials and challenges of place-based platforms for deliberation between politicians and citizens, *Cities*, 117. <https://doi.org/10.1016/j.cities.2021.103317>
- Arya D., and Henn, M. (2021). COVID-ized Ethnography: Challenges and Opportunities for Young Environmental Activists and Researchers. *Societies*, 11(2):58. <https://doi.org/10.3390/soc11020058>
- Bryant, P., and Stone, L. (2020). Climate assemblies and juries: A people-powered response to the climate emergency. *Shared Future/PCAN*. Retrieved from: <https://sharedfuturecic.org.uk/wp-content/uploads/2020/08/Shared-Future-PCAN-Climate-Assemblies-and-Juries-web.pdf>
- Bua, A., and Escobar, O. (2018). Participatory-deliberative processes and public policy agendas: lessons for policy and practice, *Policy Design and Practice*, 1(2), 126-140. <https://doi.org/10.1080/25741292.2018.1469242>
- Climate Emergency UK (2022). Climate Action Plan Explorer. *My Society*. Retrieved from: <https://data.climateemergency.uk/councils/>
- Dryzek, J. S., and Stevenson, H. (2011). Global democracy and earth system governance. *Ecological Economics* 70(11):1865–1874. <https://doi.org/10.1016/j.ecolecon.2011.01.021>
- Friant, C. M. (2019). Deliberating for sustainability: lessons from the Porto Alegre experiment with participatory budgeting, *International Journal of Urban Sustainable Development*, 11(1), 81-99. <https://doi.org/10.1080/19463138.2019.1570219>
- Friends of the Earth. (2012). *Lithium*. Retrieved from: https://www.foeeurope.org/sites/default/files/publications/13_factsheet-lithium-gb.pdf
- Font J., and Smith G (2013) *The policy effects of participation: cherry-picking among local policy proposals?*, Bordeaux: Presented at ECPR General Conference. Retrieved from: <https://www.semanticscholar.org/paper/The-policy-effects-of-participation%3A-Cherry-picking-IESA-CSIC/96574997f0bf963b9ff0e20c19f6d34f87522ff9>
- Howarth, C., Bryant, P., Corner, A., Fankhauser, S., Gouldson, A., Whitmarsh, L., and Willis, R. (2020). Building a Social Mandate for Climate Action: Lessons from COVID-19. *Environmental & Resource Economics*, 76(4), 1107–1115. <https://doi.org/10.1007/s10640-020-00446-9>
- Hoyle, H., and Cottrill, W. (2022). *Beyond the 'Usual Suspects'? Co-Creating an Arboretum-Meadow with Diverse Communities: Stakeholder Priorities and Perceptions*. Available at SSRN: <https://ssrn.com/abstract=4168073> or <http://dx.doi.org/10.2139/ssrn.4168073>
- Itten, A, and Mouter, A. (2022). When Digital Mass Participation Meets Citizen Deliberation: Combining Mini- and Maxi-Publics in Climate Policy-Making. *Sustainability* 14(8): 4656. <https://doi.org/10.3390/su14084656>

Nottingham Insight. (2022). *Population*. Nottingham City Council. Available from: <https://www.nottinghaminsight.org.uk/population/>

Ross, A., Van Alstine, J., Cotton, M., and Middlemiss, L. (2021). Deliberative democracy and environmental justice: evaluating the role of citizens' juries in urban climate governance. *Local Environment*, 26(12), 1512–1531. <https://doi.org/10.1080/13549839.2021.1990235>

Smith, G., and Wales, C. (2000). Citizens' Juries and Deliberative Democracy. *Political Studies*, 48(1), 51–65. <https://doi.org/10.1111/1467-9248.00250>

United Nations Environment Programme (2021). *Making peace with nature: A scientific blueprint to tackle the climate, biodiversity and pollution emergencies*. Nairobi. <https://www.unep.org/resources/making-peace-nature>.

Wells, R., Howarth, C., and Brand-Correa, L. I. (2021). Are citizen juries and assemblies on climate change driving democratic climate policymaking? An exploration of two case studies in the UK. *Climatic Change*, 168(1-2), 5–5. <https://doi.org/10.1007/s10584-021-03218-6>

Young, I. M. (2001). Activist Challenges to Deliberative Democracy. *Political Theory*, 29(5), 670–690. <https://doi.org/10.1177/0090591701029005004>