UK Research and Innovation

Summary report: Public attitudes on clean growth

A Sciencewise Programme Social Intelligence Report Summary

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Summary Report

This report summarises the findings and conclusions of a full Social Intelligence Report (*Public Attitudes on Clean Growth*).

It presents – in summary form – public views and attitudes toward clean growth and related topics and technologies, as listed below. This report aims to support policy-makers in developing future deliberative dialogue and public engagement activities to support policy development by providing an up-to-date baseline of our current understanding of public attitudes in this area.

The Department for Business, Energy and Industrial Strategy (BEIS) defines 'clean growth' as "growing our national income while cutting greenhouse gas emissions". As clean growth is a very broad topic, the primary focus was on public views on responses to climate change, and energy and power sources in the UK; in addition, there is a low level of public awareness towards the term 'clean growth'. Therefore, the conclusions presented below refer, in several cases, to climate change in general rather than clean growth.

1. There is a broad level of public agreement on the existence of climate change, and the (at least partial) human influence on it. However, there is notably less agreement on the seriousness of the consequences of climate change.

Recent literature on public attitudes toward climate change demonstrates broad awareness of its importance, its existence, and (at least partially) the role of humans as a cause of it. There is also a consensus that climate change concerns have *not* been exaggerated.[1] The consequences of climate change (i.e. their seriousness) is now the more divisive discussion in the UK, rather than its *existence*. However, there is broad disagreement as to how climate change can be mitigated, and many options for mitigation (e.g. increased government regulation) attract considerable public negativity.[2]

Research published by the National Centre for Social Research (NatCen) in 2018 observed three top-line issues regarding climate change:[3]

1. Most people think that climate change is at least partly caused by humans
2. The young and educated are more worried about climate change
3. There is a lack of optimism about reducing climate change

Older and less-educated respondents were typically less worried about climate change and believed its consequences would be less severe. Expanding on the second top-line issue (that the young and educated are more worried about climate change), previous research has found that younger age

[1] YouGov, 2018. *Have climate change concerns been exaggerated?*
[2] Campbell & Kay, 2014. 'Solution aversion: on the relation between ideology and motivated disbelief'. *Journal of Personality and Social Psychology*, vol.107, no.5, pp.809-824.
[3] NatCen, 2018. *British Social Attitudes 35: Climate Change*.

groups, those with a higher educational level, and those in higher socio-economic grades exhibit more pro-environmental attitudes.[4]

The first top-line issue – a widespread belief that climate change is at least partly caused by humans – reflects the results of a similar Ipsos MORI study published in 2017, in which 84% of UK respondents acknowledged that human activity was at least partly responsible for climate change.[5] They also reflect the European Social Survey's report on European Attitudes to Climate Change and Energy; 93.6% of UK respondents agreed that the climate was probably/definitely changing, while 91% believed that climate change was (at least partly) caused by human activity.[6]

2. Public awareness of 'clean growth' remains consistently low; the term itself is not widely known. The effectiveness of future public engagement may be influenced, to a considerable degree, by the level of public awareness and knowledge of 'clean growth'.

Despite its significance within UK governmental strategy, public awareness of the term 'clean growth' remains consistently low. The December 2018 wave of the BEIS Public Attitudes Tracker found that 82% of the public had not heard of the term before the survey.[7] Establishing public attitudes on clean growth is therefore limited at this stage by the fact that a vast majority of UK citizens have little or no knowledge of the term.

This is an important consideration for any public engagement efforts. Another consideration is that public knowledge of 'clean growth' differs considerably according to location, household income, 'social grade' and (to a lesser extent) the gender of the respondent. This is highly relevant to the ways in which public engagement on clean growth should be designed, communicated and targeted.

3. Public awareness of clean growth varies according to demographic and socioeconomic factors, as shown by the BEIS Public Attitudes Tracker. It is likely that the effectiveness of future public engagement will depend on its capacity to appeal to different social groups, and tailor its approach accordingly.

Those more likely to claim awareness of 'clean growth' included men (21%, compared with 15% of women) and those in 'higher' or 'intermediate' managerial, administrative and professional roles (23%, compared with 13% for semi-skilled and unskilled manual workers, state pensioners, casual and lowest grade workers, and those who were unemployed with state benefits). The term was also more likely to be familiar to those with household incomes of £50,000+ (28%, compared with 15% for those under £16,000) and those living in London (28%, compared with 8% for the North East).

[4] Ipsos MORI, 2016. *COP21: Putting the climate agreement into action: do the public support it?*
[5] Ipsos MORI, 2017. *Have we had enough of climate experts? Does it matter?*
[6] European Social Survey, 2018. *European Attitudes to Climate Change and Energy*, p.4.
[7] BEIS, 2018. *Public Attitudes Tracker December 2018 Survey*, p.6.

4. There is a widespread desire among the public for leadership and direction on climate change mitigation; leadership from businesses, but most notably from Government. There is a considerable public desire for decisive, ambitious, and ethical action.

ClientEarth's *Climate Snapshot* survey made several observations regarding institutional responsibility for climate change policy. For example, more than three in five respondents felt that the government was not doing enough in preparing for and adapting to climate impacts. Moreover, almost half of respondents believed it would be acceptable for UK citizens to take the government to court if it failed to keep its Paris Agreement pledges.[8]

These findings reflect the EPCC projects' observation of high levels of support for the 2015 Paris Agreement, and public support for sanctions on countries that refuse to be part of it.[9] They also support the results of a recent YouGov survey, in which the majority of respondents felt that the UK Government was not doing enough to tackle climate change.[10] The *Climate Snapshot* also found that investment in renewable energy and reducing industry emissions were the most popular UK Government policy recommendations. Seven in ten respondents also believed that fossil fuel companies should help pay for damage caused by extreme weather events.[11]

Moral and ethical concerns ("procedural and distributive justice") have been described as central to public attitudes on energy sources, rather than financial circumstances alone.[12] This reflects the findings of a Sciencewise-supported project on community-scale approaches to delivering (and engaging citizens with) low carbon technologies. It is also highly significant that "while the public are largely supportive" of a transition to a low-carbon energy system, "trust in the government and energy companies to be able to deliver it is currently low".[13]

There is a strong moral/ethical element within public perceptions toward other aspects of clean growth and climate change mitigation, such as greenhouse gas removal (GGR). Themes of 'fairness' and 'equity' are a key example, particularly with respect to risks and benefits (i.e. if they are perceived to be unequally-distributed). Public perceptions of how the world 'should' look in the future (and, by extension, their personal values) are highly influential in public engagement on GGR methods.[14]

[8] ClientEarth, 2018. *ClientEarth's Climate Snapshot*.
[9] European Perceptions of Climate Change (EPCC), 2017. *Topline findings of a survey conducted in four European countries in 2016*, p.37.
[10] YouGov, 2018. *Renewable UK Survey Results*.
[11] ClientEarth, 2018. *ClientEarth's Climate Snapshot*.
[12] UK Energy Research Centre (UKERC), 2019. Executive Summary: *Paying for energy transitions: public perspectives and acceptability*.
[13] Energy Research Partnership, 2014. *Engaging the public in the transformation of the energy system*, p.4.
[14] Ibid, p.86.

5. Public engagement activities on climate change have thus far focused on individual or societal responsibility (for present circumstances and solutions), rather than the responsibilities of Government.

As energy companies and government are perceived to have the means and power to effect major change, citizens typically assign them primary responsibility for energy transition costs. In cases where citizens *are* prepared to make an active contribution to climate change mitigation, neither energy companies nor government are especially trusted to match this contribution. This factor is highly significant, since public willingness to contribute depends on it. [15]

It is also important to point out that the means to effect change can, in some cases, lie outside the capacity of individual/society responsibility. For example, on the topic of alternative heating systems, a single household would not be able to switch to hydrogen if the wider area was being supplied with natural gas. Thus, there is a key role to be played by government (in leading and facilitating the transition) and suppliers (in organising and undertaking the transition) in many respects.

6. Existing critiques of public engagement on clean growth frequently recommend a more holistic approach from Government.

BEIS launched the first ever 'Green Great Britain Week' in October 2018. The week-long series of events (15-19 October) aimed to showcase the UK's leading role in responding to climate change, as well as marking ten years since the Climate Change Act. The Green Great Britain Week involved businesses and civil society groups across the country with the aim of spreading awareness of clean growth, and showing climate change mitigation to be a shared endeavour.

This approach to climate change mitigation as a shared endeavour is consistent with the recommendations for a 'joined-up approach' that occur frequently in the literature on this topic. The Government may also benefit from a greater acknowledgement of public awareness of clean growth (or lack thereof) in its own public engagement efforts, in order to maximise their effectiveness.

A recent report from the UK Energy Research Centre stated that the transition to a low carbon energy system is a social and technical challenge that will not be achieved without the meaningful engagement of wider society.[16] It also concluded that a broader, 'joined-up' approach to public engagement with energy was needed, in order to build on major advances in the theory and practice of participation in recent years.

[15] UK Energy Research Centre (UKERC), 2019. Executive Summary: *Paying for energy transitions: public perspectives and acceptability*.
[16] UK Energy Research Centre (UKERC), 2017. *Public engagement with energy: broadening evidence, policy and practice*.

7. These critiques also stress the importance of clear consumer benefits to public engagement efforts, based on tangible results rather than more general environmental benefits. For much of the public, climate change is consistently viewed as distant or 'abstract'.

This mindset – of climate change as a *distant* phenomenon – has repercussions for the public's moral position on this topic, and the degree to which this can be expected to change. Markowitz and Shariff identify a consistent trend across the research on this topic; that the more socially or temporally distant (e.g. faraway communities or future generations, respectively) the perceived victims of climate change, the less the public feels a moral obligation to act.[17] The basis for this trend is the difficulty in feeling intuitive, emotional reactions to phenomena that are perceived as distant and/or unconnected. Achieving action in this context "requires cold, cognitively demanding and ultimately relatively less motivating, moral reasoning."[18]

Addressing this perspective, an EPCC study emphasised a need to "explicitly localise climate change and its impacts for people, in order to motivate them to act".[19] The study asked if respondents had 'moral concerns' about climate change. In the case of the UK, "respondents reported experiencing hope (20%), fear (19%) and outrage (20%) to similar degrees, reflecting a more ambivalent mix of emotional reactions to climate change" than participants in France or Germany.[20]

The EPCC study also found that while most people in the UK were worried to some extent about climate change, very few expressed a high degree of worry.[21] YouGov research found a majority of UK respondents to be 'somewhat' (rather than 'very') concerned about climate change,[22] a low level of concern in comparison to the rest of Europe. Similarly, a smaller proportion of UK respondents (53%) described climate change as a 'very serious problem' than the EU28 average (69%).[23]

Nevertheless, there are indications that this mindset of climate change being distant and (perhaps resultingly) 'not very' worrying may be changing. The EPCC found that, alongside ambivalence toward climate change, "people are increasingly 'joining the dots' between periods of extreme weather and climate change".[24] For this reason the EPCC advocated public engagement focused on sharing experiences of (increasingly apparent) extreme weather in the UK,[25] to 'localise' climate change and address public attitudes of 'distance' (see Section 6; 'general recommendations').

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[17] Markowitz & Shariff, 2012. 'Climate change and moral judgement'. *Nature Climate Change*, vol.2, no.4, p.245.
[18] Ibid, p.244.
[19] European Perceptions of Climate Change (EPCC), 2017. *Topline findings of a survey conducted in four European countries in 2016*, p.19.
[20] Ibid, p.20. As the study points out, emotions such as "outrage and guilt are based on moral evaluations; outrage implying that others are seen as culprits whereas guilt results from self-blame".
[21] Ibid, p.36.
[22] YouGov, 2018. *Are you concerned about climate change?*
[23] TNS, 2015. *Global problems - where does climate change rank?*
[24] European Perceptions of Climate Change (EPCC), 2017. *Six Recommendations for Public Engagement*, p.5.
[25] See Demski et al., 2017. 'Experience of extreme weather affects climate change mitigation and adaptation responses'. *Climatic Change*, vol.140, no.2, pp.149–164. The authors discuss the relationship between direct experience of flooding and the prominence of climate change as a source of emotional response. See also:

8. The more visible aspects of climate change (such as extreme weather conditions)[26] are recommended throughout the available research as a basis for public engagement, since it encourages the public to consider climate change as 'local' and immediate.

The European Perceptions of Climate Change (EPCC) project found a clear majority of respondents, across Europe, believing that climate change was at least partly caused by human activity.[27] However, NatCen results suggest that relatively few citizens agree with the Intergovernmental Panel on Climate Change's (IPCC) conclusion that climate change is *primarily* caused by humans.[28] In addition, UK respondents typically did not view climate change and environmental issues as priorities. They saw issues such as immigration, unemployment, the economy, and the EU referendum as much more urgent. Moreover, despite climate change being acknowledged as an *immediate* threat, it was typically seen to primarily affect other countries.[29]

Extreme changes in weather were the most commonly-cited effects of climate change in *ClientEarth's Climate Snapshot*. There was also significant worry about the future of food and water supplies, as well as conflicts, national security risks and immigration caused by climate change.[30] This supports YouGov findings that Britons are less likely now than in 2012 to blame drought on the actions of water companies, and more likely to focus on climate change as the cause.[31]

The Government has displayed an awareness of the link between extreme weather and climate change discussed in the previous section; specifically, the importance of discussing this link within future public engagement initiatives. In describing the "major risks that will be exacerbated by climate change, such as flooding and overheating", the Government acknowledged the engagement potential of "embedding climate change impacts and adaptation more strongly as an inherent consideration within the existing awareness raising activities of individual departments."[32]

Fischer & Knutti, 2015. 'Anthropogenic contribution to global occurrence of heavy-precipitation and high-temperature extremes'. *Nature Climate Change*, vol.5, pp.560-564. For a discussion of the frequency of extreme weather occurrences (and human influence on this trend), see: Met Office. *How is climate linked to extreme weather?*

[26] Though modelling suggests such events may become more common, tracing particular extreme weather events to climate change remains problematic and contentious; see 'Public attitudes on climate change and decarbonisation'.

[27] European Perceptions of Climate Change (EPCC), 2017. *Topline findings of a survey conducted in four European countries in 2016*, p.36.

[28] IPCC, 2013. *Climate Change 2013: the Physical Science Basis*.

[29] European Perceptions of Climate Change (EPCC), 2017. *Topline findings of a survey conducted in four European countries in 2016*, p.36.

[30] ClientEarth, 2018. *ClientEarth's Climate Snapshot*.

[31] YouGov, 2018. *Britons increasingly likely to blame climate change for 'drought'*.

[32] HM Government, 2015. *Government response to the Committee on Climate Change: Progress on Preparing for Climate Change*, p.23.