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Power to the people

Emily Cox suggests that to meet our decarbonisation goals, CO₂ removal technologies are needed at scale. Targets are no longer enough – we need significant financial support, as well as mechanisms that can systematically build trust and dialogue across all parts of society

A **N EXPERT** on public perceptions of CO₂-removal technologies, Emily Cox (Cardiff University, UK) is hopeful that the UK can meet its decarbonisation goals – an incredible community is working to meet the challenge and, despite the pandemic, we have an extremely strong public mandate for climate action in the UK. That said, Emily is concerned because the UK is currently falling far short of its own targets.

“The Net Zero report by the Committee on Climate Change contains one of the scariest tables I’ve ever seen, showing the measures needed to meet net zero versus the progress so far in 2017. For example, by 2050 we need to sequester via carbon capture and storage 100% of industrial emissions; in 2017, the amount sequestered was 0%. It’s the same story in nearly every sector. Promises and targets have not been followed up with delivery. The narrative of the UK as a ‘climate leader’ is full of holes, and it will be much more difficult to encourage other countries to make drastic cuts at this year’s Conference of the Parties (COP26) if the UK doesn’t have a way of meeting its own targets.”

A major challenge is the lack of financial incentive for long-term storage of the CO₂ that we capture.

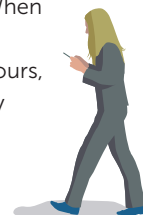
“The CO₂ needs to be stored on very long timescales, but doing this doesn’t currently confer a financial benefit. More permanent CO₂ storage solutions need financial support, and currently there is no sufficient mechanism for doing that. We also need to remember that it is usually society who pays for this stuff (directly or indirectly), and therefore implementing these policies requires public buy-in. I’m not sure we’re doing enough to capitalise on the incredibly high level of support for addressing climate change.

Fighting misinformation

Misinformation and lack of trust is another concern that we must combat with public engagement.

“In the UK, trust in scientists is quite high on average, but this average figure masks the emerging polarisation within it. I worry that people are being left behind – feeling as though no one cares about their concerns and being caught up by misinformation that appears more convincing and less distant than scientists do. For example, our work indicates that the controversy over fracking in the UK may have reduced people’s trust in subsurface energy technologies, which in turn might make it more difficult to develop and site techniques such as enhanced geothermal energy and carbon capture and storage.

“I like to think that we’re moving towards increased understanding of the importance of deliberation. When given the time to deliberate a complex topic over several hours, non-experts can be incredibly insightful, but I don’t think this message has permeated the whole of the scientific community. Our work has shown that experts in the field of CO₂ removal tend to perceive the public in a negative way, as a barrier to overcome. We need to recognise that the public also plays a role as enablers of the low-carbon transition.”



Building engagement

“A large and well-publicised national engagement process could help to improve transparency and trust. A great start would be a Citizen’s Assembly process for deciding the pathway we wish to take, including the role of CO₂-removal and geoscientific technologies within that, as well as the trade-offs people are willing to make, in a way that is perceived as fair, just and inclusive. But such an approach must commit to tangible action, because giving society a ‘pseudo voice’ is just as bad as giving no voice at all.

“I want the whole of society to have the opportunity to participate in this conversation. After all, we as a society determine policy mandates (through our votes), pay for innovation (through our taxes), create markets for new products, and will ultimately live alongside the technologies that we use to meet our decarbonisation goals.” **G**



EMILY COX

Dr Emily Cox is a Research Associate at Cardiff University, UK, working on environmental policy and social psychology. She is an expert on public perceptions, policy and

ethics of CO₂ removal technologies, including CO₂ sequestration via enhanced weathering.

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