Carbon Capture & Storage (CCS) and public engagement: expert and public views

Dimitrios Xenias and Lorraine Whitmarsh
Cardiff University, Psychology, Cardiff, United Kingdom (xeniasd@cf.ac.uk)

Despite its use in industrial processes for decades, CCS remains an unfamiliar technology for most publics. It is therefore important to foster top-down and bottom-up acceptance of large scale CCS. However, low awareness, public concerns (e.g., long-term viability, safety) as well as favourability (greenhouse gas reduction); differences between CCS in principle and at proposed sites, are factors influencing acceptance of these technologies. Ambivalence is still prevalent amongst the public, while clear opposition or support only account for a minority of views (Whitmarsh et al., 2015).

Experts are expected to have better understanding of CCS and its risks and benefits than general publics; e.g. one study (Shackley et al., 2007) explored views of European energy stakeholders (industry, government, environmental NGOs, researchers, academics and politicians) who all showed broad support for CCS and identified few risks. At the same time, Weber (2010) argues that such disparities are due to different processing styles between public and experts.

In a previous round of interviews we canvassed the views of international experts (N=13) with previous experience in public engagement with CCS. In a subsequent expert survey (N=99) we collected quantitative and qualitative data from experts. Our interviews identified a small number of recurrent issues, including: (a) lack of political leadership on CCS; (b) lack of public knowledge on relevant technologies and (c) difficulty communicating why CCS is necessary. Although most experts agreed on the importance of public engagement, their views divided between ‘why’ engage and ‘how’ to do this. Our survey findings reinforced the interviews findings: public support was seen as important for CCS roll-out (72%), though lower than political support and funding. Local public was expected to experience most risks, while global public would experience most benefits; whereas local business is seen to benefit more than global. Experts were overwhelmingly positive that CCS benefits outweigh risks, and were confident that CCS will play a major role in climate change mitigation.

Now in the final step of this research, these findings were expanded on and triangulated in a follow-up public survey, which will benefit those involved with public engagement with CCS. The comparison of expert and public views and contrasts on comparable aspects of CCS perceptions identified important discrepancies between the two audiences, and informs communications and engagement strategies targeted to address the shortcomings of current approaches.