

This is an Open Access document downloaded from ORCA, Cardiff University's institutional repository:<https://orca.cardiff.ac.uk/id/eprint/104546/>

This is the author's version of a work that was submitted to / accepted for publication.

Citation for final published version:

Xenias, Dimitrios 2017. Public engagement with CCS: barriers, key issues and ways forward. Presented at: European Geosciences Union General Assembly 2017, Vienna, 23–28 April 2017. Geophysical Research Abstracts. , vol.19

Publishers page: <https://meetingorganizer.copernicus.org/EGU2017/EG...>

Please note:

Changes made as a result of publishing processes such as copy-editing, formatting and page numbers may not be reflected in this version. For the definitive version of this publication, please refer to the published source. You are advised to consult the publisher's version if you wish to cite this paper.

This version is being made available in accordance with publisher policies. See <http://orca.cf.ac.uk/policies.html> for usage policies. Copyright and moral rights for publications made available in ORCA are retained by the copyright holders.



## **Public engagement with CCS: barriers, key issues and ways forward**

Dimitrios Xenias

Cardiff University, Cardiff, United Kingdom (xeniasd@cf.ac.uk)

Although Carbon Capture and Storage (CCS) is recognised as a crucial transition technology to a low-carbon world, it has not been popular with the public or some governments (e.g. the UK). Also, 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.

In an exploratory round of interviews we canvassed the views of British, Dutch, German and Norwegian experts (N=13) with previous experience in public engagement with CCS. They identified barriers and drivers for CCS deployment and public engagement with CCS. Thematic analysis revealed 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. Emphasis on these barriers varied with the level of experts' engagement with the public. More interestingly, although most experts agreed on the importance of public engagement, their views divided between 'why' engage and 'how' best to do this.

In a subsequent expert survey (N=99) interview findings were reinforced: public support was seen as important for CCS roll-out (72%), though lower than political support and funding. The survey also showed that local public was expected to experience most risks, while global public will experience most benefits; whereas local business is seen to benefit more than global. Experts were overwhelmingly positive about CCS – risks outweigh benefits, and are confident that CCS will play a major role in climate change mitigation (along with reduced energy demand and renewables).

These findings will be expanded on and triangulated in a follow-up public survey which will benefit those involved with public engagement with CCS.