



16th International Conference on Greenhouse Gas Control Technologies **GHGT-16**

23-27th October 2022, Lyon, France

Engaging the public with CCUS: reflection on a European project approach

Elisabeth Dütschke^{a*}, Sven Alsheimer^a, Raquel Bohn Bertoldo^b, Ana Delicado^c, Vicki Duscha^a, Silvia German^d, Lila Gonçalves^d, Lena Kappler^a, Sergi López-Asensio^d, Claire Mays^b, Christian Oltra^d, Marc Poumadère^b, Ana Prades^d, Sabine Preuß^a, Jussara Rowland^c, Luisa Schmidt^c, Fernanda de Mesquita L. Veloso^e

^aFraunhofer ISI, Breslauer Str. 48, 76139 Karlsruhe, Germany

^bInstitut Symlog, 262, rue Saint-Jacques, 75005 Paris, France

^cInstituto de Ciências Sociais da Universidade de Lisboa, Av. Prof. Aníbal de Bettencourt, 9 1600-189 Lisboa, Portugal

^dSociotechnical Research Centre (CISOT), CIEMAT, Mòdul de Recerca A, MRA-123, Plaça del Coneixement, Universitat Autònoma de Barcelona, 08193 Bellaterra (Barcelona), Spain

^eFrench Geological Survey, BRGM, 3 av. Claude-Guillemin, 45060, Orléans, France

Abstract

While CCUS technology is (still) largely unfamiliar to the broad public in Europe, CCUS implementation projects have encountered a lack of societal support in several contexts and in some regions. Currently, under the impression of rising concern around climate change and increasing ambitions to mitigate climate change, CCUS is considered to be an important technological option to reach the goals of the Paris Agreement. However, it can only fulfill its potential contributions if it is driven forward by societal stakeholders and accepted or at least tolerated by societies. This has also been termed the social license to operate. Thus, it is important to design CCUS projects in a way that they are in constant exchange with societal stakeholders and engage the public.

The aim of this poster is to share our approach for such an engagement and participation process that is implemented as part of two sequential research projects on CCUS. The two projects are both funded under the European Union's (EU) Horizon 2020 research program. The first one, Strategy CCUS (2019-2022), develops strategic development plans for eight regions in South-East Europe; the second, PilotSTRATEGY (2021-2026), partly builds on the first project; PilotSTRATEGY aims at enabling three of the eight regions to start developing their storage resources concretely and to support two further regions in continuing to explore CCUS as an option. Figure 1 below provides a map showing the initial eight regions from the StrategyCCUS-project as well as the further selections from these eight for PilotSTRATEGY. Both projects were designed in a way that they integrate geological, technical and economic research with social sciences, with a focus on the regional level.

From a conceptual point of view, our social science approach combines academic research to enhance the knowledge on societal perceptions of CCUS with direct interaction activities with society and its stakeholders. Content-wise the focus moved from broadly exploring social acceptance to more specifically engaging the regional communities during the progress of the two projects. We designed explorative phases and well as engagement activities for a constant dialogue between the research projects and (regionally affected) societies.

One important element in this process is that regional stakeholder committees were set up in all regions under study over the lifetime of both projects. In these committees, the research consortium meets and establishes contacts to regional stakeholders. In the first phase during StrategyCCUS, the focus was to engage with industry but also with

NGOs and associations as well as policy makers. In the second phase, in PilotSTRATEGY, the emphasis is on including a broader range of societal stakeholders from the relevant regions.

The StrategyCCUS-project further included an exploration of the expectations of regional, national and European stakeholders based on semi-structured interviews. The findings from these interviews informed the design of a survey study in two of the countries. The survey includes representative population samples (n>4500) on the national and the regional level in France and Spain and explores current levels of awareness and acceptance as well as influencing factors on CCUS perceptions.

PilotSTRATEGY builds on the activities from StrategyCCUS. Engaging societies in the research process is a dynamic and challenging process. Thus, the current second phase also includes a reflexive process within the consortium: The project consortium cooperatively developed a project manifesto to discuss implicit expectations of partner institutions and researchers involved as well as our understanding of our role and the project's role in relation to developing CCUS in the region. Its society-directed activities started with an analysis of the policy framework in the countries under study and examined its alignment with the European level. In parallel, profiles of the regions were developed based on a document analysis. Currently ongoing is a media-analyses as well as a series of interviews with societal stakeholders. These steps aim at getting to know the regions on a detailed level and to anticipate their possible expectations for CCUS development. Based on these activities a concept will be developed and implemented to engage the local public for the remaining lifetime of the project. A monitoring of public opinion will be implemented by conducting repeated surveys among the local public. At the end of PilotSTRATEGY recommendations will be provided for future engagement activities if CCUS is developed further in these regions. On the poster, we will provide an overview on our concept, our objectives and the methodologies foreseen to achieve them. We will critically reflect in how far our concept has been successfully contributed to the objectives at the current stage and give an outlook on remaining activities.

Keywords: CCUS; engagement; public acceptance;



Figure 1 Overview on the regions under study