EUROPEAN COMMISSION
DG RESEARCH

SEVENTH FRAMEWORK PROGRAMME
THEME 5 - Energy

ENERGY.2010.5.2-1: CCS - storage site characterisation

Collaborative Project– GA No. 256705

SiteChar

Characterisation of European CO_2 storage

Deliverable N° D8.1
Qualitative and quantitative social site Characterisations

Executive Summary

This document contains a summary of deliverable D8.1 which is part of the SiteChar project: http://www.sitechar-co2.eu, Work Package 8.

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Executive Summary

Introduction
At local level, public support has proven crucial to the implementation of CO_2 capture and storage (CCS) demonstration projects. Whereas no method exists to guarantee public acceptability of any project, a constructive stakeholder engagement process does increase the likelihood thereof. Social site characterisation can be used as an instrument to plan and evaluate a process of active and constructive local stakeholder engagement in a prospective CCS project. Social site characterisation runs parallel to technical site characterisation. It roughly consists of a formative research phase to get acquainted with the area followed by a series of public information and engagement activities based on the outcomes of the first phase. This deliverable presents results from the first phase for the social site characterisations of a prospective CCS site in Poland (onshore) and the UK (offshore).

Research overview
The research consisted of a qualitative and a quantitative part. The qualitative part consisted of (1) a description of relevant social site characteristics such as local history; (2) interviews with relevant local stakeholders; (3) a media analysis of local newspapers. The quantitative part of the social site characterisation consisted of surveys using representative samples to characterise the local population. The following topics were investigated:

- Relevant aspects of the local context in which future CCS projects may take shape;
- Relevant developments in the area that may affect the opinion of local CCS plans;
- The most important and trusted organisations and stakeholders which should be considered for further involvement in public engagement activities;
- The most effective (preferred and trusted) communication channels that should be considered for information provision on CCS in general and local CCS;
- The local level of awareness and knowledge of CCS;
- Presence of misconceptions on CCS, CO_2, and related concepts;
- Questions and concerns about CCS;
- Expectations of local CCS plans;
- Media attention to CCS and its characteristics (e.g. arguments used).

Results and implications
Below is a summary of relevant results, focusing on the similarities found between both sites.

- *Relevant aspects of the local context*. At both sites lack of employment is seen as one of the main local problems. Climate change is not a salient issue, but environmental protection is. This is partly related to tourism where it concerns nature reserves that are also used for recreational purposes.
- *Relevant developments.* Both sites have touristic areas and are planning to further exploit these. Care should be taken that CCS is not (perceived to be) interfering with these initiatives. Purity of drinking water is important to both areas. Furthermore, at the Polish site a drinking water reservoir is located on top of one of the two gas fields that are in view for possible CO_2 storage. This is likely to be a discussion topic in future contact with the local public.
- *Trusted information sources.* The present research provides suggestions for stakeholders that are seen as trustworthy by the local community and information sources that are favoured by people in the local community for obtaining information about regional developments. One clear finding was that the internet is a popular and trusted medium among the general local

public. Therefore the use of the SiteChar project website for dissemination of public information is recommended.

- *Local level of awareness and knowledge of CCS.* At both sites, the awareness of CCS in general as well as of possible local CCS plans is low. Knowledge is low at both sites as well, although local UK stakeholders appear relatively well-informed. Results imply that apart from site-specific information on CCS, general information on CCS and its wider context (CO_2, climate change) will have to be provided to the local public and local stakeholders.
- *Presence of misconceptions on CCS, CO_2, and related concepts*. At both sites the local inhabitants hold some misconceptions concerning CCS, for example that its purpose would be 'to protect the ozone layer' or 'disposal of waste'. These should be addressed in public engagement activities and information.
- *Questions and concerns about CCS.* At both sites the local stakeholders asked many questions about risks of CCS, in particular leakage of CO_2. Thus in line with expectations from previous research the risks of CCS will be a prominent topic, in particular the health and environmental impacts. Possible risks will have to be addressed and discussed openly, taking into account low knowledge levels and misperceptions about CCS, CO_2, and climate change.
- *Expectations of local CCS plans.* In both regions the expectations of local CSS plans for the region are positive. At the UK site, it is expected that CCS will bring jobs to the region and will improve the local economy. In future public outreach, management of these expectations may be necessary. At the Polish site, it is less clear what the positive expectations of CCS are based on. Local CCS plans are considered highly relevant, but at the same time people do not appear to have a clear image of what CCS may and may not bring to the region.
- *Media attention to CCS and its characteristics (e.g. arguments used).* The media debate is more extensive in the UK than in Poland but in both countries media attention is mainly positive. In Poland the main arguments used in favour of CCS are that it is climate friendly and that it enables continued use of coal. A perceived downside is that it is costly. Opponents to CCS contest its safety. In the UK, the main arguments used in favour of CCS are related to enterprise and not so much to climate change. CCS is depicted as creating a new industrial sector with significant opportunities for new job creation.

Future activities

The present research is a first step to the planning of local public engagement activities and evaluation of these activities to be undertaken by members of the SiteChar consortium at both sites in the near future. Several public engagement activities have been planned: (1) the setup of public information websites on generic and site-specific CCS, (2) A local 'Focus Conference' to be held in March and April 2012, (3) information meetings, and (4) a survey to evaluate the results of the public engagement activities. Furthermore, the research team will try to provide input for the establishment of an Advisory Board that can follow the developments on behalf of the local public.

General implications for CCS in the EU

Although there are general 'best practice' approaches to social site characterisation which clearly describe the steps to follow, the implementation of each step should be tailored to the area in question. As the present deliverable shows, local circumstances may strongly differ across countries. Furthermore, doing proper social site characterisation requires intensive interaction between members of the public engagement team. Social site characterisation guidelines and toolkits recommend that such a team preferably has a multidisciplinary background, however, multidisciplinary teams also need more time to understand and come to terms with one another. This should be taken into account when planning a social site characterisation process.

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