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SiteChar

Characterisation of European CO_2 storage

Deliverable N° D8.3
Public Outreach Activities

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Content

Executive Summary

This deliverable describes the task of making available generic and site-specific information about the SiteChar activities regarding the site explorations to the general public as well as to the local public at the Scottish site and at the Polish site. Generic and site-specific information have been made available to the general and local public through specific sections on the SiteChar website. Information meetings were held on location at the Polish site and at the Scottish site. The information meetings were held about one month after the focus conferences that have been described in D8.2 [1] and shortly before the repeated survey measurements that will be described in D8.4. At the information meetings, the participants in the Focus Conferences were given the opportunity to present findings from their “Positioning Paper” that was published as part of D8.2. Only the Polish participants actually used this opportunity. Generally, interest in the information meeting was much lower in the UK than in Poland. Findings at both sites indicated that trying to establish input for an advisory board that would monitor the ongoing site characterisations and eventual project development on behalf of the local public would be preliminary. It was therefore decided and approved not to issue such advice.

1 Introduction

This deliverable describes the task of making available generic and site-specific information about the SiteChar activities regarding the site explorations to the general public as well as to the local public at the Scottish site and at the Polish site. Full texts can be found in Appendices I (English) and II (Polish).

Generic as well as site-specific information has been made available to the general and local public through specific sections on the SiteChar website. These activities are reported in chapter 2. Locally, information meetings have been held at the Polish site (chapter 3) and at the Scottish site (chapter 4). A conclusion is provided in chapter 5.

2 Report of public website information

The website information designed for the general public partly consisted of general information on CCS and partly of site-specific information. To make the information easily accessible to the public, a separate entrance to the public section was created at the SiteChar project website www.sitechar-co2.eu that was directly accessible from the homepage, in both Polish and English.

Informing the general public on complex technologies in general as well about specific project plans is a delicate task. Research has identified a multitude of factors that should be taken into account when doing so. It is beyond the scope of this deliverable to describe them all here but the key message of these studies is that the effects of communication on CCS are ultimately the result of the interplay between many factors such as message source, reported organizational motives for CCS, and message content [2, 3, 4]. Here we focus on information features of general importance to online communication on CCS.

The main assumption underlying this task was that communication on CCS should enable the lay public to develop their own well-considered opinion on the technology. Development of well-considered opinions is essential to a constructive public debate, since uninformed opinions are unstable and worthless for predicting future support for CCS [5]. To this end, the most important features of communication are objectivity, balance in pro and con arguments, and transparency regarding the sources and interests behind the information [3]. It is therefore important to be explicit about the aim of the information, the organisations that were involved in writing the information, and their interest in the project. Furthermore, research shows that information is most positively perceived when coming from multiple sources with different interests. Therefore, the website texts written for SiteChar explained who is involved in the SiteChar project, who is financing the project, its aims, and its expected benefits. To make the reader aware of all dominant perspectives on CCS, several links were provided to external information sources such as NGOs.

Another important factor to take into account is the knowledge level of the average member of the general public. For the general public Carbon Capture and Storage is still a relatively new topic, and several international studies have shown that in many countries knowledge levels are still relatively low compared to other energy-related technologies and have not increased over the past few years [6]. Therefore, we decided to provide some basic information on CO_2 and on Carbon Capture and Storage on the SiteChar website.

Apart from general insights, the content of the pages was also based on results obtained from the social site characterisation activities within SiteChar [1, 7]. Preliminary interviewing results for example indicate that local stakeholders ask lots of technical questions, such as: What does site characterization entail? Which activities will be undertaken? What will I notice of these? These and other questions were addressed in the website information. Finally, the web pages were used to announce upcoming public awareness activities such as the focus conferences and the information meetings. After the focus conferences had been held, the positioning papers were published on the SiteChar website.

Objective, balanced and transparent information is more likely to be understood and processed by members of the general public visiting the website. However, this does not necessarily mean that they will be persuaded by the benefits of the technology. Increasing knowledge among the general public in the way suggested above is a prerequisite for an informed societal debate about CCS, but opinions about the technology are shaped by many more factors than just knowledge [6, 8, 9].

3 Report of the Polish Information Meeting

The aim of the information meeting was to inform the local public about the CCS technology, possibility of CO_2 storage in the region and to present the "Positioning paper of the focus conference participants on CO_2 capture and storage technology (CCS)" [1] and its importance for the Polish climate strategy. Independent Institute for Environmental Issues (UfU) was responsible for the organization of the information meeting in Poland. In the preparation of the meeting UfU worked closely with the participants in the focus conferences that have been reported on in D8.2 of this Work Package.

3.1 Location

The information meeting took place on 25th June 2012 in Góra and was open to everybody taking interest. The meeting was held in Góra as it is a capital city of the district Góra in Lower Silesia, which in the SiteChar project, together with communities Rawicz and Bojanowo, was defined as the research site Załęcze & Żuchlów. This site was claimed as one of the strategic locations for the upcoming CO_2 injection program at the national level in Poland. It is also representative of sites in Polish Lowland, which offer a series of natural gas reservoirs with CO_2 storage potential. The venue of the information meeting about the CCS technology was General Sylwester Kaliski Comprehensive School. This location had been recommended by the focus conference participants.

3.2 Preparation

The preparations for the information meeting started immediately after the focus conference. The organizers invited 10 experts from politics, industry, eNGOs and research, who are engaged in the topic of CCS technology in Poland. Three experts accepted the invitation (see Table 1) and two experts agreed to prepare short presentations explaining the CCS technology (Czesław Rybicki) and its development in Poland (Adam Wójcicki). There was no representative from the Polish Oil and Gas Company (PGNiG), who holds the concession for natural gas exploration from Załęcze und Zuchlów fields.

Table 1. Experts who participated in the information meeting in Poland.

Organisation	Expert
Ministry of Economy	Elżbieta Wróblewska Senior Specialist in the Energy Department
Polish Geological Institute	Adam Wójcicki Main Coordinator of the CO_2 Sequestration Project
AGH University of Science and Technology	Czesław Rybicki, D.Sc. Department of Gas Engineering

Invitations were also issued to 13 policy makers, 5 of whom accepted the invitation and attended the information meeting (see Table 2).

Table 2. Local policy makers who participated in the information meeting in Poland.

Name	Position
Tadeusz Pawłowski	Mayor of Rawicz
Józef Zuter	Mayor of Bojanowo
Krzysztof Synoracki	Vice-starost of Rawicz District
Magdalena Skiba	Head of Environmental Protection Department in City and Community Office in Góra
Klaudia Atrachimowicz	Representative of Niechlow community

The information meeting was open to the public. To inform local residents about the meeting the organizers wrote an article in 'Życie Powiatu' (local newspaper) about the SiteChar project and the focus conference results, and invited the citizens to the information meeting. Information about the meeting was also published on the website of the Góra community, the website of the Mayor of Rawicz (Tadeusz Pawłowski) and at the UfU and SiteChar project websites (see Table 3). Announcements were also posted on the information boards in some of the villages in the area. Furthermore, the focus conference participants invited their families, neighbours and friends to the meeting. To draw attention of the local media to the information meeting, UfU also sent the positioning paper along with an invite to the meeting to five local newspapers and one local radio station. Two journalists from 'Panorama Leszczynska' and 'Gazeta ABC' participated in the information meeting. See Appendix C for an overview of publicity for the Polish information meeting.

Table 3. Overview of announcements of the information meeting in Poland

Where?	What?
'Życie Powiatu' (local newspaper)	Article about SiteChar, focus conference and information meeting
Website of Góra community	Information about the information meeting; invitation
Website of the Mayor of Rawicz (Tadeusz Pawłowski)	Information about the information meeting; invitation
SiteChar project website	Information about the information meeting
UfU website	Information about the information meeting
Information boards in the villages in the area	Announcement about the information meeting

3.3 Course of the information meeting

About 40 citizens, guests and experts participated in the information meeting. The time schedule for the day is given in Table 4.

Table 4. Time schedule of the Polish information meeting.

Information meeting on
carbon capture and storage technology (CCS) in Poland
25. June 2012

General Sylwester Kaliski Comprehensive School
Armii Polskiej 15a
56-200 Góra Śląska

17.00 – 17.10	**Greeting**	
17.10 – 17.20	General presentation of the Sitechar project	Marta Kaiser (UfU)
17.20 – 17.35	Introduction to the CCS technology	Czesław Rybicki (AGH)
17.35 – 17.50	Development of the CCS technology in Poland	Adam Wójcicki (PIG)
17.50 – 18.10	Statement of the citizens on CCS Presentation of the position paper	Focus conference participants
18.10 – 18.15	Statement of the government	Elżbieta Wróblewska (Ministry of Economy)
18.15 – 18.20	Statement of the industry	PGNiG
18.20 – 18.25	Statement of the local policy makers	Tadeusz Pawłowski (Mayor of Rawicz) Józef Zuter (Mayor of Jemielno)
18.25 – 19.00	Discussion with the public	
19.00	**Farewell**	

3.3.1 Expert presentations

The meeting started with a short introduction about UfU and the SiteChar project. Next, Czesław Rybicki from AGH University of Science and Technology gave a presentation explaining features

of CO_2 and the process of carbon capture and storage (CCS). Then, Adam Wójcicki from the Polish Geological Institute provided an overview of the CCS research and development in Poland.

3.3.2 Presentation of the focus conference results by participants

After the experts' presentations three participants of the focus conference presented the "Positioning paper of the focus conference participants on CO_2 capture and storage technology (CCS)" [see 1]. The residents read the text and gave their statements on the focus conference, CCS technology and citizens' involvement in the decision making processes. In their opinion currently there are too many open questions regarding risks, benefits to the region, costs and government position to opt for CCS. The participants stressed that they would like to be involved in the future project planning. They also evaluated the focus conference method as a very good tool for opinion forming which should be involved in the official decision making processes not only for CCS but also generally in projects related to the local infrastructure.

3.3.3 Stakeholder statements on CCS technology

In the next part of the meeting the invited stakeholder from politics, research and industry were invited to share their view on the participants' positioning paper and CCS technology in general. Elżbieta Wróblewska from the Ministry of Economy, who represented the Polish government, emphasized that Poland will need to adopt CCS technology to fulfil EU agreements on reducing CO_2 emissions. She admitted that CCS is a new and expensive technology but that Poland should invest in its development. There was no statement from the industry. In the opinion of the local policy makers the CCS technology is still an "unknown field" and they do not feel they can give a clear statement in favour or against the technology. Tadeusz Pawłowski, mayor of Rawicz, mentioned that the water reservoirs for Rawicz are located on top of the Załęcze gas field, and that a CO_2 leak could therefore have catastrophic consequences for the region. The local decision makers do not believe in the government's promise that the communities will get a high profit from the CCS projects. They have heard it too often and then nothing happened. In their opinion it's too early to discuss about CCS project in the area. The communities have currently other problems, like the opening of the brown coal mine in the region (citizens and local governments are against it).

3.3.4 Discussion

After the statement round there was a lively discussion in which the following questions were asked:

- Is there really a project?
- If there is no project, why has this meeting been organized? Is this not too early?
- Has the test drilling already started? (Some of the citizens had seen cars with drilling machines in the area, however this was probably drilling equipment for a nearby shale gas operation)
- In this region there are Natura 2000 areas, will they be protect when the CCS project will be planned and realised?

The organisers also discussed with the participants how to involve local citizens in decision making processes and what can be done to encourage citizens to participate for example in information meetings. The majority of participants were of the opinion that the local citizens are not very active, because there is no tradition of public participation in decision making processes. For this reason, to gain residents attention on some topic, first something bad must happen, for example ‘when they will have sparkling water in the tap’.

4 Report of the UK Information Meeting

The Scottish public information meeting was held in Elgin, Moray in September 2012. The meeting was held in Elgin as it is the largest town in Moray, and the administrative centre being home to the local council. The aim of the meeting was to share the results of the Focus Conference with the wider Moray community, including presentation of the positioning paper. Scottish Carbon Capture and Storage (SCCS) was responsible for organisation of the information meeting in Scotland, and worked with Moray Council to bring the meeting together.

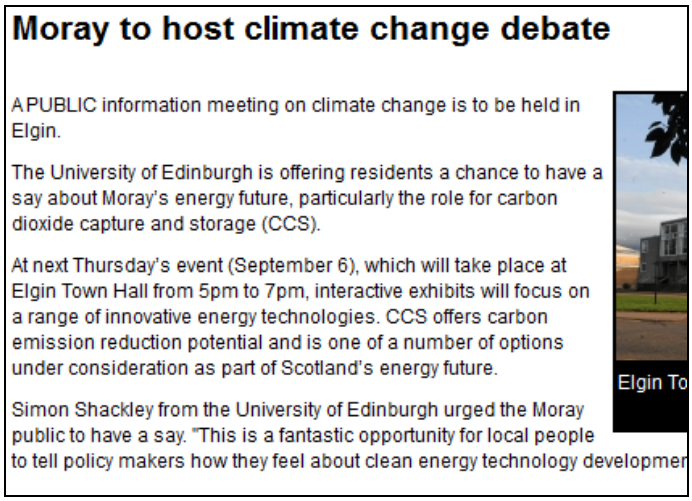
4.1 Location

The information meeting took place on Thursday 6 September from 5-7pm. As mentioned above, Elgin was chosen as the venue for the meeting as it is the administrative centre of Moray – whilst there are no plans to store CO_2 onshore in the UK, Elgin is the largest town in a region closest to the sub-sea area with geology suitable for the storage of CO_2. Elgin Town Hall was used as the venue for the information meeting. The town hall was chosen on the recommendation of Moray Council, who arranged for the booking of the hall and also provided catering.

4.2 Preparation

An invitation to the public meeting was extended to all of the Focus Conference participants, all local councillors and a number of local community groups such as the Moray branch of the Green Party and the Moray Firth Partnership. A story about the meeting and inviting local citizens to attend appeared in two local newspapers, the Northern Scot[1] and the Press and Journal, during the week preceding the meeting. The meeting was also advertised on the Moray council website. See Appendix D for an overview of publicity for the Scottish information meeting.

[1] http://www.northern-scot.co.uk/News/Moray-to-host-climate-change-debate-28082012.htm



Moray to host climate change debate

A PUBLIC information meeting on climate change is to be held in Elgin.

The University of Edinburgh is offering residents a chance to have a say about Moray's energy future, particularly the role for carbon dioxide capture and storage (CCS).

At next Thursday's event (September 6), which will take place at Elgin Town Hall from 5pm to 7pm, interactive exhibits will focus on a range of innovative energy technologies. CCS offers carbon emission reduction potential and is one of a number of options under consideration as part of Scotland's energy future.

Simon Shackley from the University of Edinburgh urged the Moray public to have a say. "This is a fantastic opportunity for local people to tell policy makers how they feel about clean energy technology developmer

Elgin To

Unfortunately, despite several invitations and reminders, none of the Focus Conference participants were able to attend the meeting – although some of them did send their apologies. Therefore, Dr Leslie Mabon from SCCS agreed to present the outcomes of the positioning paper at the information meeting. Two local councillors also agreed to give short presentations – Cllr Fiona Murdoch formally welcomed the guests and gave some local context, and Cllr Graham Leadbitter explained how he saw CCS fitting into a broader context of climate change and environmental issues.

Outreach materials (posters, rock samples, geological maps, microscopes, 'carbon game') were brought to the venue from the SCCS store. Additional materials and experiments to explain CO_2 and CCS were borrowed from the Scottish Earth Science Education Forum. These were set up in the town hall prior to the meeting, so that attendees could look at them before the meeting formally opened.

4.3 Course of the Information meeting

The meeting agenda is shown in Table 5. In total a dozen local citizens attended the meeting. None of these people had had any previous involvement in the SiteChar project and had all heard about the meeting from the newspaper or email invitations. Most of these people attended because they had some interest in the topic of climate change and energy and were keen to find out more information about CCS. In addition to the local councillors who gave presentations, several other local councillors also came along. A representative from the Moray Firth Partnership was also present.

Table 5. Time schedule of the Scottish information meeting.

Time/ Duration	Process	Speaker	Other/Material
17:00 15 min	**Greeting, Tea& Coffee**		Tea/coffee and interactive exhibits
17:15 5 min	**Introduction**	Cllr Fiona Murdoch	Welcome of the guests. Introductory statement on the local context.
17:20 15 min	**Project background**	Rhys Howell, University of Edinburgh	What is CCS? Why CCS is being proposed in Scotland? Do we need this technology in Scotland? If not CCS then what? When CCS will be put in to practice in Scotland?
17:35 5 min	**Statement of the local politician**	Cllr Graham Leadbitter	Why are these issues important for Moray? Would CCS be good for the region?
17:40 15 min	**Presentation of the citizens' positioning paper**	Leslie Mabon, University of Edinburgh	Role of the public by the decision making. Conclusions of the Focus Conference participants: What they think about CCS in our area.
17:55 65 min	**Q&A followed by discussion at the buffet table**		Buffet table and interactive exhibits

4.3.1 Presentations

An overview of the presenters is given in Table 5.

Cllr Fiona Murdoch formally opened the meeting, and gave some background information on the energy situation in Moray. She explained that CCS came on the back of a number of applications for the construction of onshore wind farms, some of which had been the subject of considerable local controversy. She also acknowledged that there were a range of opinions within the community on the value of various low-carbon energy options, and on the extent and severity of anthropogenic climate change.

Rhys Howell from SCCS then explained the process of CCS and its underpinning rationale in terms of climate change mitigation. He briefly explained the full process – capture, transport and storage – before going on to explain the role that CCS could play in meeting Scotland's climate change mitigation targets.

The fact that there were no concrete plans for offshore CO_2 storage in the Moray area – but that the underlying geology was potentially suitable for such storage – was explained.

Cllr Graham Leadbitter gave a statement broadly supportive of CCS and low carbon energy. He focused on people's relationship to the natural environment around them, using the example of picking up litter to illustrate the value and importance of treating the natural world around us with respect. He acknowledged that there were a range of opinions with regard to climate change, but that a move to 'cleaner' energy was an inherently good thing to do – and something that the Moray area could benefit from economically.

Dr Leslie Mabon (SCCS) then presented the outcomes from the positioning paper on behalf of the participants. Before doing so, he introduced the SiteChar project and also explained the importance of good-quality public engagement in deciding which low-carbon energy options were most suitable. Three key conclusions from the positioning paper were focused on: (a) something has to be done to curb climate change – doing nothing is not an option; (b) CCS has the potential for climate mitigation and also economic benefits; (c) there is concern that CCS could divert attention from renewables, and that there may be as yet unknown long-term risks.

Table 6. Presenters at Scottish information meeting.

Presenter	Organisation	Topic
Cllr Fiona Murdoch	Moray Council	Welcome/local context
Rhys Howell	SCCS	Climate change and CCS
Cllr Graham Leadbitter	Moray Council/SNP	CCS and its benefits for Moray
Dr Leslie Mabon	SCCS	Present position paper/SiteChar

4.3.2 Discussion

There was a more formal question and answer session following the presentations, then plenty of time for informal discussion over food and drink. It transpired that a number of citizens were frustrated with the development of energy technologies, particularly wind and biomass, in the region and felt that developers were forcing these projects upon them. Others were open to the idea of further developments in the region, including CCS, if it could be shown that developing

these technologies was in the region's interest – particularly in terms of economic benefits. Pragmatically, there was a feeling that whichever technology could provide the most cost effective low carbon energy should be pursued.

The issue of public participation in decision making came up, particularly in the informal discussions. Some participants were keen to ask the organisers for advice on how they could respond to or challenge planning decisions made in their community, explaining they felt the process was too complicated and unclear for ordinary members of the public to engage with. Others expressed slight concern that – on the basis of what they had heard in the media – CCS in the North Sea was a 'done deal' and that public consultation at this stage would not do much to change it.

Questions were asked about who would have long-term liability for a CO_2 storage site, and about how much it would cost to build, operate and insure a CCS project. There was also a vocal minority of climate sceptics who did not believe that any climate mitigation activities were justified, and thus that CCS served no purpose. The more sceptical members of the audience were very keen to point out perceived weaknesses in the climate science and political processes under decarbonisation, and came well prepared with large volumes of material to support their arguments.

5 Conclusions

At the information meetings, the participants in the Focus Conferences were given the opportunity to present findings from their “Positioning Paper” that was published as part of D8.2. Eventually only the Polish participants used this opportunity. Generally, interest in the information meeting was much lower in the UK than in Poland. Furthermore, findings at both sites indicate that trying to establish input for an advisory board that would monitor the ongoing site characterisations and eventual project development on behalf of the local public would be preliminary. It was therefore decided and approved not to issue such an advice.

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Appendix A: Full text of public information pages – English

A.1 About SiteChar

A1.1 What is SiteChar?

SiteChar is a European research project about CO_2 storage. SiteChar started in January 2011 and will last 3 years.
Central to the SiteChar project is examining the technical, economic and societal requirements for a company to be allowed to store CO_2 underground.
To this end, at five sites in different areas of Europe it is investigated whether the site would be suitable for storing CO_2 in the future. Based on these investigations, SiteChar aims to provide a general method for evaluating whether sites are suitable for CO_2 storage.
The SiteChar research program is dedicated to studying the sites and their characteristics. The SiteChar program is independent from decisions on CO_2 storage at the selected sites.

A1.2 Who is involved in SiteChar?

Coordinated by IFP Energies Nouvelles, SiteChar brings together another sixteen partners from research, industry and the consultancy sector ten EU countries:
Denmark: GEUS
France: IFP Energies Nouvelles
Germany: GFZ, UfU
Italy: ENEL, OGS, UniRoma1-CERI
the Netherlands: ECN, TNO
Norway: Statoil, SINTEF-PR
Poland: AGH, PGNiG
Sweden: Vattenfall
UK: IMPERIAL, NERC, Scottish Government
SiteChar also involved Scottish Carbon Capture and Storage as contracted delivery partner.
The backgrounds of these partners include the fields of geology, geochemistry, flow simulation, geomechanics, applied mathematics, economics, sociology and communication.

A1.3 Who is paying for SiteChar?

SiteChar is funded within the 7th Framework Programme of the European Community for research, technological development and demonstration activities.
SiteChar has a total budget of €5 million, €3.7 million of which is a European Commission grant.
The remaining funding comes from Industry (ENEL, PGNiG, STATOIL, Vattenfall, Veolia Environnement), the Scottish Government, from the national governments of the partners in SiteChar (co-financing), and partners' own resources.

A1.4 Who will benefit from SiteChar?

The objective of SiteChar is to provide a methodology for the preparation of CO_2 storage license applications, incorporating all the technical and economic data, as well as social acceptability. This methodology is being designed for further use by storage site operators and regulatory bodies.

A1.5 What will SiteChar do for me?

Public acceptability of CO_2 capture and storage is a very important issue. SiteChar addresses this issue in various ways and welcomes your input. More information about our activities can be found on the Public Participation page.

A.2 CO_2 capture and storage

A2.1 What is CO_2?

An explanation of what CO_2 is can be found here.

A2.2 What is CO_2 Capture and Storage (CCS)?

CO_2 capture and storage (CCS) involves collecting CO_2 produced by using fossil fuels in power generation and industrial activities and then storing it away for a long time (thousands of years) in underground geological formations.
The major application for the CCS technology is in reducing CO_2 emissions from power generation from fossil fuels, principally coal and gas. However, CCS can also be applied to industries that generate a lot of CO_2 in manufacturing and chemical processes such as cement, iron and steel production, petrochemicals, oil and gas processing and others.
Once captured, the CO_2 has to be purified and compressed for transportation and storage. The CO_2 is then transported to a suitable geological formation where it is injected, with the aim of isolating it from the atmosphere for good. Sometimes it is possible to store the CO_2 directly under the source site. Where this is not the case, pipelines will mostly be used. The CO_2 can also be compressed into a liquid form and transported by ship or truck.
Using many of the techniques already employed by the oil and gas industry, the compressed CO_2 can be injected into deep rock formations below the Earth's surface. There are three main types of storage sites: oil and gas reservoirs, unmineable coal beds and deep saline formations. The CO_2 can be trapped under a sealed rock layer, or in the pore spaces of rock (at least 800m deep in order for the correct pressure and temperature conditions to exist). The same natural trapping mechanisms have already kept huge volumes of oil, gas and CO_2 underground for millions of years.

A2.3 What problem does CO_2 capture and storage aim to solve?

The aim of the CCS technology is to prevent the greenhouse gas CO_2 being emitted to the atmosphere. In recent decades, the amount of CO_2 in the atmosphere has sharply increased. According to scientist from the international research assessment platform for climate change IPCC, man-made CO_2 emissions by burning fossil fuels (oil, gas and coal) are a main cause of

average temperature rise in earth, and the main cause of temperature increase over the past 100 years, which is in turn causing our climate to change.
The European Commission aims to limit the temperature rise to 2 degrees Celsius. This means that the worldwide CO_2-emission by the year 2050 must be reduced by 50 to 85 per cent than in 2000. However the use of fossil fuels is only expected to rise in years to come, as a result of a worldwide increase in energy demand. Therefore, reducing CO_2 emissions will be a major challenge calling for a suite of solutions. CO_2 capture and storage could be one of these solutions. However, as is the case for every possible solution, there are different views on its acceptability.
More details on the effects of CO_2 in the atmosphere can be found here.

A2.4 Do we need CO_2 capture and storage?

There is little debate about the necessity for measures to reduce CO_2 emissions. However, it is still unclear which strategies and technologies will bring us there. CCS could be one of them and the debate is ongoing on its advantages and disadvantages.
What do you think about CO_2 capture and storage? Find out about opportunities for getting involved in the discussion at the public participation page.

A2.5 More information about CO_2 Capture and Storage

Research networks:

- The European Network of Excellence on the Geological Storage of CO_2
- Global CCS Institute
- IEAGHG
- Natural Environment Research Council
- NETL - FAQ database

Governmental organizations:

- IPCC
- European Commission - FAQ page

NGOs:

- Bellona
- Greenpeace
- WWF

Research organizations:

- World Resources Institute
- Scottish Carbon Capture & Storage
- British Geological Survey

Industry:

- European Technology Platform for Zero Emission Fossil Fuel Power Plants (ETP-ZEP)
- European CCS network – FAQ page
- NACCSA

Reports stating that CCS is necessary:

- IEA (International Energy Agency)
- ECF (European Climate Foundation) – Power Perspectives 2030 – On the road to a decarbonised power sector.

Reports stating that CCS is not necessary:

- Greenpeace – Energy Revolution.
- Ecofys/WWF – Energy Report.

A.3 Public Participation

Part of the SiteChar project is dedicated to advancing public awareness and helping people form their own opinion about ongoing selection of a place where a CCS project might occur. To this end some general and specific information on CCS will be made available on the SiteChar website. Furthermore, we organize several local public participation activities: A citizens' conference and an information meeting.
This part of the work is led by social scientists from the Energy Research Centre of the Netherlands ECN and the Independent Institute for Environmental Issues UfU in Germany, and also involves social scientists from the Scottish Carbon Capture and Storage. Other parties who contribute to the work are the project leader IFP Energies Nouvelles, AGH University of Science and Technology and Polish Oil and Gas company PGNiG to assist the work at the Polish site, and the Scottish Government to assist the work at the UK site.

For the general public, we provide information about the CO_2 capture and storage technology. For the local publics near the research sites, we actively encourage and welcome public awareness and opinion development at two sites: The North Sea Moray Firth site in the UK and the Zalecze & Zuchlow site in Poland.

At these two sites, community representatives and the local public are being informed about the research and are involved in discussions about CO_2 capture and storage technology by a citizens' conference and an information meeting. The objective of this part of the project is to identify and develop good methods for involving the local population in the process of project development. To this end, the local public is being given opportunities to form an informed opinion concerning CO_2 capture and storage and to discuss the issues arising with the researchers and with experts. Results of the research at the two sites will be used to develop recommendations for public engagement at other sites throughout Europe.

The research method we use to develop the public participation activities is called Social site characterisation. If you wish to learn more about this method or if you are interested in the research results, please visit the Social site characterisation page.

A3.1 Citizens' Conference

The Citizens' Conference was held during two weekends in March and April 2012. Its aim was to enable a group of citizens to develop an informed opinion on carbon capture and storage (CCS).
The group involved in the conference consisted of 11 participants, residents of the Moray area in Scotland. A recruitment firm had recruited these participants to ensure representativeness in terms of age, gender and employment as much as possible.

The Citizens' Conference was held in two phases. During the first weekend in March 2012, participants received the opportunity to familiarize themselves with the scientific, technical and social aspects of CCS technology. To this end, several experts were invited to give presentations on the scientific, political and industrial perspectives on CCS and discuss these with the citizens. In the second weekend in April 2012 the focus was on having citizens develop and write down their own opinion on CCS in the form of a positioning paper.

The result of two weekends of deliberation is a written statement (positioning paper) about CO_2 capture and storage that represents the group's view on the technology. This document will be used to inform the process of site characterization as well as further public engagement activities, amongst others an information meeting to be held by the end of August 2012 in Scotland.
The Citizens' Conference was also held in Poland in parallel to the Scottish Focus Conference. The main difference between the events in discussion content was that the discussion in Poland focused on conditions for acceptability of a possible CCS project in the area rather than on national level. Download the English translation of the Polish positioning paper here.

A3.2 Information Meeting

By the end of August 2012 we will organize an information meeting in the Moray area. During this meeting, citizens from the region will present their positioning paper as written on the citizens' conference. The positioning paper is a personal statement on CCS in Scotland by the participants in the citizens' conference. Invitees to the meeting will include representatives of local, state, industry and science.

A3.3 Social Site Characterization

The term Social Site Characterisation describes the process of collecting and incorporating information about stakeholder views and about socio-economic, political and cultural characteristics of a particular area. A definition by the inventors of the term can be found at the website of *The Global CCS institute.*
This page also contains a link to a report from the CSIRO in Australia describing application of Social Site Characterisation. The authors of this report have also written a short article about Social Site Characterisation which can be downloaded here.

Applied to SiteChar, phase one of the Social Site Characterisation has been completed. To investigate local circumstances relevant to the start-up of local CO_2 capture and storage, we have conducted four different but related research activities:

- Firstly, we have collected information on relevant social site characteristics such as the local economy, jobs, community characteristics, history, etc., especially when these aspects come to influence the realisation of large infrastructural or industrial operations.
- Secondly, we have conducted a media analysis of local newspapers to see if and how stakeholders refer to CO_2 capture and storage technology.
- Thirdly, we have conducted interviews with relevant local stakeholders.
- Fourthly, we have conducted a survey among a sample from the local public to measure awareness, knowledge and perceptions CO_2 capture and storage.

Download a summary of the report
Download the full report (English)

A.4 Contacts

Contact for the public: info@sitechar-CO_2.eu
Press contact:
Anne-Laure de Marignan (IFP Energies nouvelles)
Tel.: +33 01 47 52 62 07
a-laure.demarignan@ifpenergiesnouvelles.fr

Appendix B: Full text of public information pages – Polish

B.1 O projekcie SiteChar

B1.1 Co to jest SiteChar?

SiteChar jest europejskim projektem badawczym zajmującym się składowaniem CO_2. Projekt rozpoczął się w styczniu 2011r. i potrwa przez najbliższe 3 lata.
Głównym zadaniem projektu SiteChar jest ocena wymagań technicznych, ekonomicznych i społecznych, które muszą zostać spełnione przez firmy, które chcą uzyskać pozwolenie na składowanie CO_2 pod ziemią.

W tym celu, w pięciu różnych częściach Europy prowadzone są badania mające na celu ocenę przydatności wytypowanych do składowania CO_2 struktur geologicznych. Na podstawie tych badań SiteChar stworzy ogólną metodologię do oceny potencjalnych miejsc składowania.
Program naukowy projektu SiteChar ukierunkowany jest na badanie potencjalnych składowisk CO_2 i ich charakterystykę. Projekt jest realizowany niezależnie od decyzji w sprawie składowania CO_2 w wytypowanych miejscach.

B1.2 Kto bierze udział w projekcie SiteChar?

Projekt, koordynowany przez IFP Energies nouvellesIFP Energies nouvelles łączy kolejnych szesnastu partnerów z dziedziny badań i przemysłu, jak również sektora konsultingowego, z dziesięciu krajów UE:
Dania: GEUS
Francja: IFP Energies Nouvelles
Niemcy: GFZ, UfU
Włochy: ENEL, OGS, UniRoma1-CERI
Holandia: ECN, TNO
Norwegia: Statoil, SINTEF-PR
Polska: AGH, PGNiG
Szwecja: Vattenfall
Wielka Brytania: IMPERIAL, NERC, Rząd Szkocji
Dania: GEUS
Francja: IFP Energies Nouvelles
Niemcy: GFZ, UfU
Włochy: ENEL, OGS, UniRoma1-CERI
Holandia: ECN, TNO
Norwegia: Statoil, SINTEF-PR
Polska: AGH, PGNiG
Szwecja: Vattenfall
Wielka Brytania: IMPERIAL, NERC, Rząd Szkocji
W prace w projekcie SiteChar zaangażowane jest również Szkockie Centrum CCS (Scottish Carbon Captura and Storage, w skrócie SCCS)

Partnerzy projektu posiadają niezbędną wiedzę i zaplecze naukowo-badawcze z dziedziny geologii, geochemii, symulacji przepływu, geomechaniki, matematyki stosowanej, ekonomii, socjologii i komunikacji.

B1.3 Kto płaci za projekt SiteChar?

Projekt SiteChar finansowany jest w ramach 7 Programu Ramowego Wspólnoty Europejskiej w dziedzinie badań, rozwoju technologicznego i demonstracji7 Programu Ramowego Wspólnoty Europejskiej w dziedzinie badań, rozwoju technologicznego i demonstracji.
Projekt dysponuje budżetem w wysokości 5 mln €, z których 3.7 mln € finansowane jest z dotacji Komisji EuropejskiejKomisji Europejskiej.
Pozostała część funduszy pochodzi od partnerów przemysłowych (ENEL, PGNiG, STATOIL, Vattenfall, Veolia Environnement), Rządu SzkocjiPozostała część funduszy pochodzi od partnerów przemysłowych (ENEL, PGNiG, STATOIL, Vattenfall, Veolia Environnement), Rządu Szkocji, rządów krajów pochodzenia partnerów projketu SiteChar (współfinansowanie) oraz zasobów własnych partnerów.

B1.4 Kto skorzysta z projektu SiteChar?

Celem SiteChar jest wypracowanie metodologii przygotowywania wniosków o pozwolenie na składowanie CO_2, obejmującej wszystkie dane techniczne i ekonomiczne, a także akceptację społeczną.akceptację społeczną. Metodologia ta będzie przeznaczona do dalszego wykorzystania przez operatorów składowiska i organy nadzorujące.

B1.5 Jakie korzyści przyniesie mi projekt SiteChar?

Akceptacja społeczna dla wychwytywania i składowania CO_2 jest bardzo ważna. Projekt SiteChar analizuje tą kwestię na różne sposoby i zachęca do uczestnictwa w dyskusji. Więcej informacji o naszej działalności można znaleźć na stronie Zaangażowanie społeczne.

B.2 Wychwytywanie i składowanie CO_2

B2.1 Co to jest CO_2?

Wyjaśnienie czym jest CO_2 można znaleźć tutaj.

B2.2 Na czym polega wychwytywanie i składowanie CO_2 (an ang. Carbon Capture and Storage, CCS)?

Technologia wychwytywania i składowania CO_2 (CCS) polega na gromadzeniu CO_2 powstającego przy produkcji energii elektrycznej w skutek spalania paliw kopalnych, jak również ze źródeł przemysłowych, a następnie jego długoterminowego (tysiące lat) składowania w podziemnych formacjach geologicznych.

Głównym zastosowaniem dla technologii CCS jest redukcja emisji CO_2, powstałych w procesie wytwarzania energii elektrycznej z paliw kopalnych, głównie węgla i gazu. Jednakże technologia ta może być stosowana również w wielu gałęziach przemysłu, generujących duże ilości CO_2, tj. w

przetwórstwie, przemyśle chemicznym, cementowniach, hutach stali, przemyśle petrochemicznym oraz przy przetwarzaniu ropy naftowej i gazu ziemnego i innych.

Wychwycony dwutlenek węgla musi zostać oczyszczony, a następnie sprężony i przetransportowany do miejsca składowania, gdzie jest on zatłaczany w odpowiednie formacje geologiczne w celu skutecznego i trwałego izolowania go od atmosfery. Czasami możliwe jest składowanie CO_2 bezpośrednio w pobliżu źródła emisji. Jeżeli nie ma takiej możliwości, CO_2 musi być przetransportowany, głównie za pomocą rurociągów. CO_2 może także zostać sprężony do postaci płynnej i przewieziony drogą morską lub lądową (transport kołowy).

Wykorzystując techniki, stosowane już wcześniej w przemyśle naftowym i gazowniczym, sprężony CO_2 może być zatłaczany do głębokich formacji geologicznych, znajdujących się pod powierzchnią Ziemi. Istnieją trzy główne rodzaje składowisk, są nimi: złoża ropy naftowej i gazu ziemnego, nienadające się do eksploatacji pokłady węgla oraz głębokie formacje solankowe. CO_2 może być uwięziony pod warstwą skał uszczelniających lub w porach skalnych (na głębokości co najmniej 800 m, dla zapewnienia odpowiednich warunków ciśnienia i temperatury dla składowania CO_2). Te same naturalne mechanizmy pułapkowania już od milionów lat umożliwiają gromadzenie się olbrzymich ilości ropy naftowej, gazu ziemnego i dwutlenku węgla pod powierzchnią ziemi.

B2.3 Jaki problem ma rozwiązać technologia CCS?

Celem technologii CCS jest zapobieganie emisji gazu cieplarnianego, jakim jest dwutlenek węgla (CO_2), do atmosfery. W ostatnich dekadach ilość CO_2 w atmosferze drastycznie wzrosła. Według naukowców stowarzyszonych w Międzyrządowym Zespole do spraw Zmian Klimatu (ang. Intergovernmental Panel on Climate Charge, w skrócie IPCCIPCC) emisje dwutlenku węgla powstałe w wyniku działalności człowieka, w szczególności spalania paliw kopalnych (węgla, ropy, gazu), są główną przyczyną wzrostu średniej temperatury na Ziemi i postępującego od ponad 100 lat globalnego ocieplenia, które przyczynia się do zmian klimatu.

Celem Komisji Europejskiej jest ograniczenie wzrostu temperatury do 2 stopni Celsjusza. Oznacza to, że do roku 2050 na całym świecie należy zmniejszyć emisję CO_2 od 50% do 85%, w porównaniu do roku 2000. Jednakże w najbliższych latach, na skutek wzrastającego zapotrzebowania na energię, wzrastać będzie także zużycie paliw kopalnych. W tej sytuacji redukcja emisji CO_2 będzie ogromnym wyzwaniem wymagającym zastosowania nowych rozwiązań. Jednym z nich może okazać się technologia wychwytywania i składowania CO_2. Jednak, podobnie jak w przypadku innych nowych rozwiązań, istnieją różne poglądy na temat możliwości zastosowania tej technologii.
Więcej informacji na temat oddziaływania CO_2 na atmosferę można znaleźć pod adresem:
http://www.netl.doe.gov/technologies/carbon_seq/FAQs/carbondioxide5.html

B2.4 Czy technologia CCS jest potrzebna?

Niewiele jest dyskusji na temat konieczności wprowadzenia mechanizmów na rzecz ograniczenia emisji CO_2. Nadal nie wiadomo także, jakie strategie i technologie miałyby być w tym celu

zastosowane. CCS może być jedną z nich, dlatego też aktualnie prowadzona jest debata na temat wad i zalet tej technologii.

Co myślisz o wychwytywaniu i składowaniu CO_2? Dowiedz się więcej o możliwości zaangażowania się w dyskusję na stronie Zaangażowanie społeczne.

B2.5 Więcej informacji o technologii CCS

Ministerstwo Środowiska
Geologiczna sekwestracja CO_2 dla zmian klimatu:
http://www.mos.gov.pl/g2/big/2011_07/39a62ecbc694b894e515a08357b2ab1e.pdf.
Działania ministerstwa środowiska w celu rozpoznania struktur geologicznych dla podziemnego składowania dwutlenku węgla:
http://www.mos.gov.pl/g2/big/2009_08/e83e155d4a74ba448ff66d41002bcebf.pdf

Ministerstwo Gospodarki
Kierunki rozwoju czystych technologii węglowych:
http://www.mg.gov.pl/files/upload/11425/Kierunki%20Rozwoju%20CTW%20w%20Polsce.pdf.
Państwowy Instytut Geologiczny
Fundacja demosEuropa - Centrum Strategii Europejskiej
Polska Platforma Czystych Technologii Węglowych
Fundacja Bellona
Polska Konfederacja Pracodawców Prywatnych Lewiatan

B.3 Zaangażowanie społeczne

Część projektu Sitechar poświęcona jest pogłębianiu świadomości społecznej i wspieraniu obywateli w kształtowaniu ich opinii na temat technologii wychwytywania i składowania CO_2 (CCS) i procesu jej wdrażania. W tym celu na stronie internetowej projektu SiteChar, zostaną udostępnione informacje na temat technologii CCS. Ponadto, organizowane będą spotkanie i konferencje mające na celu informowanie obywateli, a także zwiększenie ich udziału w procesach decyzyjnych, dotyczących CCS.

Te zadania realizowane są przez socjologów z Holenderskiego Centrum Badań nad EnergiąHolenderskiego Centrum Badań nad Energią (Energy Research Centre of the Netherlands, w skrócie ECN) i Niezależnego Instytutu ds. Ochrony ŚrodowiskaNiezależnego Instytutu ds. Ochrony Środowiska (Independent Institute for Environmental Issues, w skrócie UfU) w Berlinie, a także przez naukowców z zakresu nauk społecznych ze Szkockiego Centrum CCSSzkockiego Centrum CCS (Scottish Carbon Capture and Storage, w skrócie SCCS). Inne instytucje, które biorą udział w socjalnej części projektu SiteChar to: lider projektu IFP Energies Nouvelles IFP Energies Nouvelles oraz wspierające pracę w Polsce - Akademia Górniczo-HutniczaAkademia Górniczo-Hutnicza w Krakowie (AGH) i Polskie Górnictwo Naftowe i Gazownictwo (PGNiG)Polskie Górnictwo Naftowe i Gazownictwo (PGNiG), a także Rząd SzkocjiRząd Szkocji wspomagający badania w Szkocji.

Dla ogólnej opinii publicznej udostępniamy informacje na temat technologii wychwytywania i składowania CO_2. Osoby zainteresowane tematem CCS i naszym projektem zachęcamy do zadawania pytań i dzielenia się swoimi sugestiami, za pośrednictwem formularza kontaktowego. Pragniemy zaprosić mieszkańców regionów znajdujące się w pobliżu potencjalnych składowisk CO_2, będących przedmiotem badań w projekcie SiteChar w Polsce- okolice Załęcza i Żuchlowa i w Wielkiej Brytanii- The Noth Moray Firth w Szkocji, do aktywnego uczestniczenia w naszych działaniach oraz do wyrażania opinii i zadawania pytań na temat projektu i technologii CCS. W obu tych miejscach, zarówno przedstawiciele społeczności lokalnej jak i obywatele zostaną poinformowani o prowadzonych badaniach i zaangażowani w dyskusje na temat technologii wychwytywania i składowania CO_2.

Socjalna część projektu poświęcona jest identyfikacji i opracowaniu efektywnych metod wspierających aktywny udział mieszkańców w procesie decyzyjnym, dotyczącym realizacji projektów lokalnych. W tym celu przedstawiciele społeczności lokalnej otrzymają możliwość wyrobienia sobie opinii na temat technologii wychwytywania i magazynowania CO_2 oraz omówienia kwestii, związanych z tą technologią a także projektem SiteChar, z naukowcami i ekspertami z różnych dziedzin. Wyniki badań, zarówno z Polski jak i z Wielkiej Brytanii, będą wykorzystane do opracowania zaleceń dotyczących zaangażowania społecznego dla innych projektów realizowanych w Europie. Badania w części socjalnej projektu opierają się na założeniach metody badawczej zwanej charakterystyką społeczną regionu. Jeśli chcesz dowiedzieć się więcej na temat tej metody lub jeśli jesteś zainteresowany wynikami badań wejdź na stronę Charakterystyka społeczna regionu.

B3.1 Konferencja obywatelskia

Konferencja obywatelska odbyła się podczas dwóch weekendów w marcu i kwietniu 2012 roku. Jej celem było wypracowanie świadomej i opartej na faktach opinii grupy obywateli na temat technologii wychwytywania i składowania dwutlenku węgla (CCS). Podczas tego procesu centralną rolę odegrały kwestie postrzeganie szans i zagrożeń, jakie niesie ze sobą technologia CCS, jak również postulaty obywateli dotyczące akceptowalnych społecznie projektów CCS.

Grupę obywateli, biorących udział w konferencji obywatelskiej CCS, stanowiło 16 osób (8 kobiet i 8 mężczyzn), mieszkańców gmin Góra, Jemielno, Wąsosz, Niechlów, Rawicz i Bojanowo.

Konferencja obywatelska odbyła się w dwóch fazach. Podczas pierwszego weekendu w marcu 2012 roku, uczestnicy konferencji otrzymali możliwość zapoznania się z naukowymi, technicznymi i społecznymi aspektami technologii CCS. W drugi weekend w kwietniu 2012 roku mieszkańcy poznali różne punkty widzenia na technologię CCS, jak również sformułowali własną opinię na temat tej technologii, którą wyrazili w postaci rekomendacji. Do uczestnictwa w obu weekendach konferencji obywatelskiej zaproszeni zostali także eksperci z różnych środowisk naukowych, polityki, przemysłu i organizacji pozarządowych, którzy prowadzili wykłady i odpowiadali na pytania obywateli.

Wynikiem wielotygodniowego procesu formowania opinii w ramach konferencji obywatelskiej na temat technologii CCS jest, napisana własnoręcznie przez uczestników, rekomendacja , która

zostanie zaprezentowana opinii publicznej, jak również władzom lokalnym i państwowym, podczas spotkanie informacyjnego , które odbędzie się 25 czerwca 2012 roku w Górze Śląskiej.

B3.2 Spotkanie informacyjne

25 czerwca 2012 roku o godz. 17.00 w auli Zespołu Szkół im. gen. Sylwestra Kaliskiego w Górze odbędzie się otwarte spotkanie informacyjne na temat technologii wychwytywania i składowania dwutlenku węgla (CCS). Podczas tego spotkania zaprezentowana zostanie rekomendacja , napisana własnoręcznie przez mieszkańców regionu, zawierająca opinię i zalecenia dotyczące m.in. zastosowania technologii CCS w regionie. W spotkaniu wezmą udział także przedstawiciele władz lokalnych, państwowych, przemysłu oraz nauki.

Napisana przez mieszkańców rekomendacja jest wynikiem wielotygodniowego procesu formowania opinii w ramach konferencji obywatelskiej na temat technologii wychwytywania i składowania CO_2 (CCS), która odbyła się w regionie w marcu i kwietniu 2012 roku.

B3.3 Charakterystyka społeczna region

Termin „charakterystyka społeczna regionu" opisuje proces zbierania i analizy informacji na temat opinii istotnych aktorów społecznych, jak również społeczno-gospodarczej, politycznej i kulturowej sytuacji danego obszaru. Definicję twórców tego terminu można znaleźć na stronie internetowej Globalnego Instytutu CCS.
Ta strona zawiera również link do raportu Instytutu Badawczo-Naukowego CSIRO z Australii. Raport zawiera opis zastosowania charakterystyki społecznej regionu. Autorzy tego raportu napisali również krótki artykuł na temat tej metody, który można pobrać tutaj.

Pierwsza faza projektu SiteChar dotycząca charakterystyki społecznej regionu została właśnie zakończona. W celu analizy lokalnych uwarunkowań istotnych dla uruchomienia lokalnego projektu wychwytywania i składowania CO_2, przeprowadziliśmy cztery różne, ale powiązane ze sobą, działania badawcze:

- Po pierwsze, zebraliśmy informacje istotne dla celów charakterystyki społecznej regionu takich jak dane dotyczące: lokalnej gospodarki, zatrudnienia, lokalnej społeczności, historii regionu itd., czyli przede wszystkim aspektów, które w istotny sposób mogą wpływać na realizację dużych inwestycji infrastrukturalnych i przemysłowych.
- Po drugie, przeprowadziliśmy analizę prasy lokalnej, by dowiedzieć się czy i w jaki sposób istotni aktorzy społeczni w regionie odnoszą się do technologii wychwytywania i składowania CO_2.
- Po trzecie, przeprowadziliśmy wywiady z przedstawicielami władz lokalnych, organizacji pozarządowych, przemysłu i społeczności lokalnej.
- Po czwarte, przeprowadziliśmy badanie opinii publicznej wśród reprezentatywnej grupy mieszkańców regionu, w celu określenia poziomu wiedzy i świadomości nt. wychwytywania i składowania CO_2, a także sposobu postrzegania tej technologii przez społeczność lokalną.

Pobierz całość raportu (wersja angielska)

B.4 Kontakt

Kontakt: info@sitechar-CO_2.eu
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Appendix C: News coverage Polish information meeting

Spotkanie informacyjne na temat technologii CCS.

MIESZKAŃCY TEŻ MAJĄ GŁOS

25 czerwca 2012 roku o godz. 17.00 w auli Zespołu Szkół im. gen. Sylwestra Kaliskiego w Górze odbędzie się otwarte spotkanie informacyjne na temat technologii wychwytywania i składowania dwutlenku węgla (ang. CCS, Carbon Capture and Storage). Podczas tego spotkania zaprezentowana zostanie rekomendacja, napisana własnoręcznie przez mieszkańców regionu, zawierająca opinię i zalecenia dotyczące m.in. zastosowania technologii CCS w regionie. W spotkaniu wezmą udział przedstawiciele władz lokalnych i państwowych, przemysłu i nauki.

Napisana przez mieszkańców rekomendacja jest wynikiem wielotygodniowego procesu formowania opinii w ramach konferencji obywatelskiej na temat technologii wychwytywania i składowania CO2 (CCS), która odbyła się w regionie w marcu i kwietniu 2012 roku. Celem konferencji obywatelskiej było wypracowanie świadomej i dobrze uzasadnionej opinii grupy obywateli na temat technologii CCS. Podczas tego procesu centralną rolę odegrały kwestie postrzegania szans i zagrożeń, jakie może nieść ze sobą technologia CCS, jak również postulaty obywateli dotyczące realizacji akceptowalnych społecznie projektów CCS.

Grupę obywateli, biorących udział w konferencji obywatelskiej CCS, stanowiło 16 osób (8 kobiet i 8 mężczyzn), mieszkańców gmin Góra, Jemielno, Wąsosz, Niechlów, Rawicz i Bojanowo.

Konferencja obywatelska na temat technologii CCS została przeprowadzona przez Niezależny Instytut ds. Środowiska w ramach europejskiego projektu SiteChar, którego głównym zadaniem jest ocena wymagań technicznych, ekonomicznych i społecznych, które muszą zostać spełnione przez firmy, które chcą uzyskać pozwolenie na składowanie CO2 pod ziemią. Projekt SiteChar finansowany jest w ramach 7 Programu Ramowego Wspólnoty Europejskiej w dziedzinie badań, rozwoju technologicznego i demonstracji.

Więcej informacji na temat spotkania informacyjnego i projektu SiteChar uzyskać można na stronie internetowej www.sitechar-co2.eu lub poprzez kontakt mailowy z Panią Martą Kaiser (marta.kaiser@ufu.de).

Marta Kaiser

Appendix D: News coverage UK information meeting

News

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Moray to host climate change debate

A PUBLIC information meeting on climate change is to be held in Elgin.

The University of Edinburgh is offering residents a chance to have a say about Moray's energy future, particularly the role for carbon dioxide capture and storage (CCS).

Elgin Town Hall is to host Thursday's Climate Change meeting.

At next Thursday's event (September 6), which will take place at Elgin Town Hall from 5pm to 7pm, interactive exhibits will focus on a range of innovative energy technologies. CCS offers carbon emission reduction potential and is one of a number of options under consideration as part of Scotland's energy future.

Simon Shackley from the University of Edinburgh urged the Moray public to have a say. "This is a fantastic opportunity for local people to tell policy makers how they feel about clean energy technology development in their area," he said.

The meeting is part of the European Union (EU) funded SiteChar project, which is working to understand what sites are suitable for CCS within the EU.

The geology under the Moray Firth is suitable for the underground storage of carbon dioxide – the major greenhouse gas causing climate change.

However, no proposal to undertake CCS in the inner Moray Firth has been developed as yet and the only proposals known of to date are 75 miles off-shore to the east of Aberdeen. The project is assessing a range of factors including geology, infrastructure, economics and society and seeks to determine whether these other factors – such as public opinion – are favourable for CCS development in the region.

No specialist knowledge is required and food and refreshments will be provided.