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It's not only about safety: Beliefs and attitudes of 811 local residents regarding a CCS project in Barendrecht

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Abstract

In a recent article in the International Journal of Greenhouse Gas Control, Terwel et al. [1] presented the results of a large-scale attitude survey that was conducted to examine how residents of Barendrecht (a Dutch town located near Rotterdam) thought about plans for a local CCS demonstration project. This survey sheds light on factors that have played a role in shaping the local public's attitudes toward the proposed CCS project. The current paper highlights the main topics that were covered in the survey.

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1. The local public's beliefs and attitudes concerning a proposed CCS project in Barendrecht

In May 2010, we conducted an attitude survey designed to examine how the local public thought about a proposed CCS demonstration project in Barendrecht, the Netherlands. The survey was administered to a large sample of the Barendrecht population ($N = 811$) and was executed shortly before it was decided to cancel the project.

The aim of the survey was threefold. First, we aimed to determine local attitudes toward the proposed CCS project at this point in time. Second, we aimed to determine to what extent the proposed project was an important issue for the people of Barendrecht. And third, we aimed to determine which factors have played a significant role in shaping the local public's attitudes toward the proposed project.

The survey was done by telephone and was executed by professional interviewers from TNS-NIPO. In order to get an accurate picture of how Barendrecht residents thought about the proposed CCS project, the

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interviewers did not state at the beginning of the phone call that the interview was about this topic. Instead, respondents were told that the interview would be about “satisfaction with your neighborhood and a plan that is currently being discussed in the region that might add to or detract from your satisfaction with your neighborhood”. This way of introducing the survey prevented those residents with a strong opinion about the CCS project being overrepresented in the sample. After all, if respondents had been told at the beginning of the telephone interview that it was about the CCS project, then those who felt strongly involved in the topic would likely have participated in the study, while those who felt less involved might have been less likely to participate. In that case, the sample would have produced a distorted picture. We excluded this possibility by introducing the survey as a study into neighborhood satisfaction. After three questions about neighborhood satisfaction, the interviewer made clear to the respondents that further questions were about “the plan to capture, transport, and store CO₂ (or carbon dioxide) in the Barendrecht region”. This plan is here simply referred to as “the CCS plan”.

Issues that were covered in the survey are the following:

- Awareness of plans for the local CCS project
- Knowledge about basic aspects of the CCS project (e.g., the type and depth of storage reservoir)
- Attitudes toward the CCS plan
- To what extent the CCS plan was an issue for the people of Barendrecht
- Beliefs about aspects (and consequences of) the CCS plan (e.g., beliefs concerning the CCS plan in relation to climate change mitigation, the safety of CO₂ transport and storage, the likelihood that the plan would cause a fall in the value of houses in the region).
- The perceived influence of the parties involved (these parties include: the people of Barendrecht, the Barendrecht town council, project developer Shell, the Dutch government, Environmental Protection Agency Rijnmond)
- Perceptions of the decision-making process (perceived procedural fairness)
- Trust in the parties involved
- The possibilities of (and need for) obtaining information about the project

Rather than summarizing the results and implications of the survey here, we refer the reader to Terwel, ter Mors, & Daamen (2012), *International Journal of Greenhouse Gas Control*, 9, 41–51 (a copy can be requested from the first author). This article provides relevant background information about the project, a detailed description of the sample, method and results (including descriptive statistics, correlations, and a multiple regression analysis to examine which of the aforementioned factors were the most important predictors of overall attitude toward the CCS plan), and a discussion of the implications of the survey.

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References

- [1] Terwel, BW, ter Mors E, Daamen DDL. It's not only about safety: Beliefs and attitudes of 811 local residents regarding a CCS project in Barendrecht. *Int J of Greenh Gas Con* 2012;9:41–51.