Aims of the study
The first aim was to examine whether “not in my backyard” (NIMBY) sentiments can be anticipated at the initial stage when CO₂ storage locations have been selected and communicated to the public. The second aim was to shed light on the “psychological structure” of initial public reactions to CO₂ storage plans.

Method
Respondents first read about the relationship between energy production and climate change, the Dutch CO₂ emission reduction targets, and ways to reduce the amount of CO₂ emitted into the atmosphere (including CCS). Next, half of the respondents were informed about the existence of government plans to store CO₂ in a depleted natural gas field in their municipality (i.e., “onsite residents”), whereas the other half of the respondents were informed about plans to store CO₂ in depleted gas fields located elsewhere (i.e., “offsite residents”).

Results
1. Onsite residents and offsite residents were equally inclined (not) to protest against the CO₂ storage plans: M = 2.44 vs. M = 2.38 (measured on a scale from 1 = not at all inclined to 7 = very much inclined).

2. Inclination to protest was unrelated to concern about climate change: r = -.01 for onsite residents; r = -.11 for offsite residents.

3. For both onsite residents and offsite residents, trust in government was correlated with how they perceived the societal risks and benefits, which in turn was correlated with inclination to protest (see the figure on the left).

4. The “psychological structure” of initial reactions differed between onsite residents and offsite residents in terms of the weight they attached to perceived local safety risk: This factor was only correlated with inclination to protest among onsite residents (see the figure on the right).

Interested in more details about this research?

Related publications:


Acknowledgement. This work has been carried out in the context of CATO-2. CATO-2 is the Dutch national research program on CO₂ Capture and Storage technology (CCS). The program is financially supported by the Dutch government (Ministry of Economic Affairs) and the CATO-2 consortium partners.