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Origins and consequences of public trust : towards an understanding of public acceptance of carbon dioxide capture and storage

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Origins and consequences of public trust:

Towards an understanding of public acceptance
of carbon dioxide capture and storage

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Preface

This thesis is the result of four years of research that has been carried out as part of CATO, the Dutch national research program on carbon dioxide (CO₂) capture and storage (CCS) technologies. A range of organizations participate in this program, including environmental NGOs, organizations from the oil and gas industry, electricity companies, government bodies, and scientific institutions. These organizations, which I will refer to as “CCS stakeholders”, consider large scale implementation of CCS a key strategy to mitigate climate change. In addition to research on the technological issues surrounding CCS, it is recognized within the CATO program that research on public perceptions and acceptance of this technology is of crucial importance. That is, public acceptance is imperative in order to avoid the situation that millions of euros are invested in development of a technology that, in the end, cannot be employed because of public opposition to implementation of the technology in society. The social psychological research within the CATO program therefore examines factors that are relevant to establish and predict future public acceptance of CCS.

This thesis focuses on the role of public trust in CCS stakeholders with regard to public acceptance of CCS. It consists of four chapters.¹ Chapter 1 paints a picture of climate change and the importance of CCS in mitigating it, followed by a discussion of the origins of public trust as well as potential ways to instigate trust in the general public. Additionally, this chapter provides an overview of the main research results and an integrative discussion of the value and implications of the research. The remaining three chapters (Chapters 2, 3, and 4) contain more detailed reports of the empirical work carried out on the origins of public trust and the relationship between public trust in CCS stakeholders and public acceptance of CCS. More specifically, Chapter 2 focuses on how indicators of organizational integrity and organizational competence affect people’s sense of trust in organizations as well as on how people’s trust affects their tendencies to go along with or oppose organizational positions regarding CCS. Chapter 3 focuses on organizational motives and organizational communications in order to develop an

¹ Chapters 2, 3, and 4 are based on papers that have either been published or that have been submitted for publication. As a consequence thereof, these chapters can be read independently from each other and some overlap exists between the introductory sections of these chapters.

understanding of why some CCS stakeholders are trusted more than others and how these organizations can instigate trust through communication. Chapter 4 addresses the issue of how characteristics of the political decision-making process regarding implementation of CCS affect people's trust in CCS decision makers and their acceptance of the decisions made.

