



CATO-2 Deliverable WP5.2-D02

Progress report on the first year of WP5.2 “Framing effects in communication about CCS”

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1 Executive Summary

This document contains the progress report on the first year of the CATO-2 WP5.2 project “Framing effects in communication about CCS”. The project started on February 1st and PhD student Gerdien de Vries started on March 15th 2010. First, De Vries got familiar with relevant literature on (factors that influence) public perceptions and acceptance of CCS, and on the topic of framing. In May/June 2010, a first study was conducted to test the quality of newly developed measures, and to examine how framing an industrial organization’s motive to invest in CCS affects perceived corporate “greenwashing” (i.e., “strategically trying to build public support by spinning corporate actions as being environmentally friendly”; Laufer, 2003). Follow up studies were conducted in September and December 2010. In all three experiments, participants were presented with communications about the motive(s) of a fictitious industrial organization to invest in CCS. The type of motive that was communicated by the organization was varied systematically (i.e., manipulated) to examine the impact of frames in communications on perceived corporate greenwashing. Results show that participants perceived significantly more corporate greenwashing when the organization framed its investment in CCS as being driven by concern for the natural environment (i.e., planet frame), as compared to when the organization communicated an economic motive (i.e., profit frame). Importantly, participants expected greenwashing also in the absence of communications. Currently, De Vries is writing a paper about these studies to submit to a peer-reviewed scientific journal, and plans to present at the Environment 2.0 conference in September 2011 (see “Presentations submitted”).

In January 2011, De Vries has started to design the first experiment of the second line of research (for a detailed description of the three different lines of proposed research, see WP5.2-D01), which involves framing effects with regard to the advantages and disadvantages associated with CCS. That is, there are multiple advantages and disadvantages associated with implementation of CCS, but organizations need to consider which ones, and how many, they communicate to the public. Organizations may be tempted to emphasize as many advantages possible (i.e., the more the better) and as few disadvantages as possible to persuade members of the general public to accept the technology (cf. Basu & Palazzo, 2008; Druckman & Bolsen, 2009). Based on insights in social psychology, however, we propose that organizational communications that emphasize multiple advantages may be less effective (e.g., due to the so-called dilution effect) than communications that only emphasize a single yet important advantage. The first experiment on this topic is aimed at identifying factors that determine the strength of different advantage and disadvantage frames, and serves as a pretest to determine the qualities of frames to be used in the next experiments. Data are collected in March 2011.

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Document Change Record

(this section shows the historical versions, with a short description of the updates)

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2 Applicable/Reference documents and Abbreviations

2.1 Applicable Documents

(Applicable Documents, including their version, are documents that are the “legal” basis to the work performed)

	Title	Doc nr	Version date
AD-01a	Beschikking (Subsidieverlening CATO-2 programma verplichtingnummer 1-6843	ET/ED/9078040	2009.07.09
AD-01b	Wijzigingsaanvraag op subsidieverlening CATO-2a programma verplichtingenr. 1-6843	CCS/10066253	2010.05.11
AD-01c	Aanvraag uitstel CATO-2a verplichtingenr. 1-6843	ETM/10128722	2010.09.02
AD-02a	Consortium Agreement	CATO-2-CA	2009.09.07
AD-02b	Consortium Agreement	CATO-2-CA	2010.09.09
AD-03a	Toezegging CATO-2b	FES10036GXDU	2010.08.05
AD-03b	Besluit wijziging project CATO-2b	FES1003AQ1FU	2010.09.21
AD-04	Program Plan	CATO2-WP0.A-D.03	2010.12.07

2.2 Reference Documents

(Reference Documents are referred to in the document)

	Title	Doc nr	Issue/version	date
RD-01	Progress report including detailed description of planned research for WP 5.2	CATO-2-WP5.2-D01-REP	1	2010.08.31

2.3 Abbreviations

(this refers to abbreviations used in this document)

SP	Sub-program
WP	Work Package
EB	Executive Board
N/A	Not applicable
CCS	Carbon dioxide capture and storage
CSR	Corporate social responsibility

3 Progress report on the first year of WP5.2

Reporting period: March 15th 2010 - March 14th 2011
Work Package: 5.2
Title: Framing effects in communication about CCS
WP leader: Prof. Dr. Naomi Ellemers, Leiden University
SP leader: Dr. Dancker Daamen, Leiden University
Participants: Leiden University, NUON

Main objectives of WP5.2

The objective of WP5.2 “Framing effects in communication about CCS” is to examine whether framing of communications provided by an organization can improve the perceived credibility and trustworthiness of the organization and information provided. This objective will be pursued by examining (1) how framing communications about CCS activities in terms of Corporate Social Responsibility (CSR) affects the image of the organization in question, and (2) how gain-frames vs. loss-frames affect public responses to CCS activities. These issues will be examined by a combination of experimental studies and a survey-type study.

With regard to the first issue (framing of CCS activities in terms of economic benefits vs. benefits for Corporate Social Responsibility, CSR), a survey study will examine current views of the general public with respect to the perceived relation of CCS activities of specific organizations with economic concerns on the one hand and CSR concerns on the other. These perceived concerns will in turn be related to the perceived trustworthiness and credibility of communications and decision-making of the organization in question. Several experiments will be carried out to examine the effectiveness of potential interventions aimed at improving the corporate image by framing their CCS activities in different ways.

The second issue will be examined with similar procedures. This research will assess the extent to which the general public currently tends to perceive CCS activities in terms of gains (e.g., focusing on potential benefits of CO₂ capture) or losses (e.g., focusing on potential risks of CO₂ storage), and how this relates to their acceptance of decision outcomes and willingness to support CCS activities. Experimental studies will systematically examine the effects of providing different frames (i.e., focusing on CO₂ capture vs. storage, and focusing on potential gains vs. losses more generally) on the willingness of the general public to support CCS activities. Note that this research concerns proposed research; adjustments may be made depending on progressed insights and outcomes of the studies.

Progress

Gerdien de Vries was appointed as a PhD student on WP5.2 on March 15th 2010. In the first few months, she got familiar with relevant literature on (factors that influence) public perceptions and acceptance of CCS, and on the topic of framing. In May/June 2010 she conducted a first experiment for the first research line. This experiment was designed to test the quality of newly developed measures, and to examine how framing an industrial organization’s motive to invest in CCS affects perceived corporate greenwashing—defined as “strategically trying to build public support by spinning corporate actions as being environmentally friendly” (Laufer, 2003). Follow up studies were conducted in September and December 2010.

In all three experiments, participants were presented with communications about the motive(s) of a fictitious industrial organization to invest in CCS. The type of motive that was communicated by

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the organization was varied systematically (i.e., manipulated) to examine the impact of frames in communications on perceived corporate greenwashing. Results show that participants perceived significantly more corporate greenwashing when the organization framed its investment in CCS as being driven by concern for the natural environment (i.e., planet frame), as compared to when the organization communicated profit or legal requirements as motives for its investments.

Importantly, participants expected greenwashing also in the absence of communications.

These experiments suggest that public perceptions of corporate greenwashing can be prevented by framing the organization's involvement in CCS in terms of profit maximization.

Currently, De Vries is writing a paper about these studies to submit to a peer-reviewed scientific journal. She has further written an abstract for the Environment 2.0 conference in Eindhoven in September 2011 (see "Presentations submitted" page 8).

In January 2011, De Vries has started to design the first experiment of the second research line (for a detailed description of the three different lines of proposed research, see WP5.2-D01), which involves framing effects with regard to the advantages and disadvantages associated with CCS. That is, there are multiple advantages and disadvantages associated with implementation of CCS, but organizations need to consider which ones, and how many, they communicate to the public. Organizations may be tempted to emphasize as many advantages possible (i.e., the more the better) and as few disadvantages as possible to persuade members of the general public to accept the technology (cf. Basu & Palazzo, 2008; Druckman & Bolsen, 2009). Based on insights in psychology, however, we propose that organizational communications that emphasize multiple advantages may be less effective (e.g., due to the so-called dilution effect) than communications that only emphasize a single yet important advantage. The first experiment in this line of research is aimed at identifying factors that determine the strength of different (dis)advantage frames, and serves as a pretest to determine the qualities of frames to be used in the next experiments. Data are collected in March 2011.

References

- Basu, K., & Palazzo, G. (2008). Corporate social responsibility: A process model of sensemaking. *Academy of Management. The Academy of Management Review*, 33, 122-136.
- Druckman, J. N., & Bolsen, T. (2009). Framing, motivated reasoning, and opinions about emergent technologies. *Unpublished paper*.
- Laufer, W. S. (2003). Social accountability and corporate greenwashing. *Journal of Business Ethics*, 43, 253-261.

Key decisions taken (go - no go)

None

Main problems encountered (delays, ...)

None

Changes in workplan?

None

Patents applied for

None

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Organizational aspects

This PhD project is supervised by Prof Dr. Naomi Ellemers (promotor) and Dr. Bart Terwel (co-promotor).

Internal WP meetings held (results?)

Weekly WP5.2 meetings are held at Leiden University in which the progress of, and next steps in the project are discussed within the research group (De Vries, Ellemers, Terwel – occasionally accompanied by Daamen, Ter Mors, and/or Koot)

Relevant meetings with external parties (results?)

Personnel changes

Deliverables due

Deliverable	Title	Due date	Status/remark
CATO2-WP5.2-D01	Progress report on first half year of this PhD project (including detailed description of planned research written by senior researchers)	31/Aug/2010	Report delivered on August 31, 2010. Public.
CATO2-WP5.2-D02	Progress report on the first year of this PhD project	15/Mar/2011	Report delivered on March 15, 2011. Public
CATO2-WP5.2-D03	Paper on: Framing effects in communication about CCS	31/Aug/2011	Public
CATO2-WP5.2-D04	Paper on: Framing effects in communication about CCS	Year 3	Public
CATO2-WP5.2-D05	Paper on: Framing effects in communication about CCS	Year 4	Public
CATO2-WP5.2-D06	PhD thesis on: Framing effects in communication about CCS	Year 5	Public

Workshops held, or expected

In the previous year, De Vries has attended several symposia, seminars and conferences. In June 2010, she attended the 5th National CCS Symposium in Utrecht. In September 2010, she attended the 10th International Conference on Greenhouse Gas Control Technologies (GHGT 10) in Amsterdam. In November 2010 she went to the seminar “Communicating Green” in Brussels, and in December 2010 to the national conference of the Association of Social Psychological Researchers (ASPO) in Enschede.

De Vries also became a member of The Kurt Lewin Institute (KLI). The KLI offers a 4-year inter-university teaching and training program in the field of social and organizational psychology. PhD students following this program participate in specialist and general courses throughout the 4-year period.

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Presentations held: where, when, which subject?

N/A

Presentations submitted

An abstract was to Environment 2.0: The 9th biennial conference on Environmental Psychology, 26-28 September 2011, in Eindhoven. The title of the abstract is "How Frames in Communications affect Perceptions of Corporate Greenwashing" and concerns the results of the experiments on how framing an industrial organization's motive to invest in CCS affects perceived corporate greenwashing.

Presentations accepted: where, when, which subject?

N/A

Interviews given: where, when, published?

N/A

Papers submitted: title, journal, date

N/A

Papers accepted: title, journal, date

N/A

Need for actions / decisions by CATO management or Steering Committee

None