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Sustainability or Profitability? How Communicated Motives for Environmental Policy Affect Public Perceptions of Corporate Greenwashing

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ABSTRACT
Companies in the energy sector face a dilemma regarding how to communicate their environmental policies to the public. Communicating that environmental policies and activities are motivated by concern for the environment could elicit positive reactions, but may also lead to accusations of corporate greenwashing – the idea that companies deliberately frame their activities as 'green' in order to look environmentally friendly. The results of three experiments demonstrate that people easily suspect greenwashing when an energy company invests in environmental measures. Importantly, suspicions of corporate greenwashing are reduced by acknowledging economic motives instead of communicating environmental motives for such investments. Suspicion of strategic organizational behavior mediates the effect of communicated motive on perceived corporate greenwashing. This indirect effect occurs primarily among people who are not by nature very skeptical about organizational communications in general. These findings highlight the need to think carefully about how to communicate corporate environmental policies to the public. Copyright © 2013 John Wiley & Sons, Ltd and ERP Environment

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Introduction

OVER A DECADE AGO, BRITISH PETROLEUM (BP) ANNOUNCED ITS DECISION TO 'GO GREEN'. THIS WAS A UNIQUE EVENT in the energy industry at that time. Besides introducing a new green logo, BP launched an expensive publicity campaign to show its concern for the environment and to communicate its investment in environmental measures (Muralidharan *et al.*, 2011). However, not everybody was convinced that BP was truly concerned about the environment (LeMenestrel *et al.*, 2002). Since the launch of the Go Green campaign, environmentalists kept on challenging BP's activities and messages, and corporate credibility was low (García, 2011). In 2008, BP even received Greenpeace's 'worst greenwash' award for announcing its

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†Dancker Daamen unexpectedly passed away on September 27, 2012. He was of great value to this research and will be missed dearly.

commitment to alternative energy sources while at the same time allocating 93% of its total investment fund to the development and extraction of fossil fuels (BP wins 'Emerald Paintbrush' award, 2008). Thus, the Go Green campaign only seemed to have backfired. This is in contrast to the finding that positive information about a firm's corporate social responsibility (CSR) may have a positive effect on corporate reputation (Alniacik *et al.*, 2011) and may even lead to attainment of external awards for good environmental performance (Hassan and Ibrahim, 2012).

In this paper, we examine when and why people might respond negatively to energy companies that engage in CSR activities in the environmental domain. More specifically, we report a series of three experiments designed to determine how the motive that energy companies communicate for investing in environmental measures affects public perceptions of 'corporate greenwashing'.

Corporate Greenwashing

Corporate greenwashing refers to the idea that a company deliberately frames its activities as 'green' in order to look environmentally friendly (Laufer, 2003). It can take many different forms. For instance, a company may provide the public with disinformation in order to repair or shape its reputation (Laufer, 2003), or it may publish an environmental promise without living up to it (i.e. talking the talk without walking the walk; Vos, 2009). However, instead of lying outright, corporate greenwashing is typically associated with a gap between rhetoric and reality; the truth about CSR is sometimes bended, overstated, or misrepresented in public communications (Vos, 2009). An energy company that emphasizes the need to invest in alternative energy technologies, while it is in fact only allocating a fraction of its budget to this cause, may be seen as an example in this regard.

Regardless of the company's intentions, in the end it is all about whether or not people *perceive* corporate greenwashing. People may suspect corporate greenwashing when it is absent by objective criteria, and vice versa. When a company engages in greenwashing, but people do not perceive it as such, harmful consequences might not come off. However, when people suspect greenwashing, a range of detrimental consequences may occur including consumer protest and boycott, and financial loss for the company (Polonsky, 1995; Polonsky and Rosenberger, 2001).

The literature on corporate greenwashing tends to be theoretical rather than empirical in nature and it mainly focuses on the consequences rather than the antecedents of greenwashing. Therefore, we seek to identify causal relationships between how companies communicate their environmental engagement to the public and how people perceive these companies in terms of corporate greenwashing. We specifically focus on energy companies because these are the types of organizations that run the greatest risk of being accused of greenwashing when communicating about environmental policies. That is, the public typically regards these companies as profit-focused polluters rather than as environmentalists (Muralidharan *et al.*, 2011). People may find it hard to believe that energy companies adopt environmental policies out of sincere concern with the planet in view of their primary goal of producing energy by burning 'dirty' fossil fuels.

Indeed, research shows that the effectiveness of engaging in CSR activities to gain the favors of the public depends on the apparent functional fit between the type of activity and the company's core business (Yoon *et al.*, 2006; Alcañiz *et al.*, 2010; Melo and Garrido-Morgado, 2012). As Yoon *et al.* (2006) suggest, the likelihood that engaging in CSR activities creates a favorable company image reduces when companies with bad reputations (e.g. companies in the tobacco and energy industries) engage in activities in the domain of the company's core business. In their research, people evaluated a (fictitious) cigarette manufacturer more negatively when it indicated financial support for cancer research than when it indicated support for environmental protection. This result suggests that consumers regard a company's positive action (supporting cancer research) as insincere when it conflicts with the consequences of the company's core business (producing cigarettes). In a similar vein, people may suspect greenwashing when an energy company invests in environmental measures because, at first sight, this investment seems to conflict with the consequences of the company's core business (i.e. producing energy by burning fossil fuels).

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Communicated Motives and Suspicion of Strategic Behavior

One strategy for energy companies to address public perceptions of greenwashing is to explicitly indicate the motive underlying their investments. Organizations can have a range of different motives for their involvement in (environmental) CSR activities (Ellen *et al.*, 2006; Babiak and Trendafilova, 2011). These motives are often classified into two primary categories: public-serving motives and firm-serving motives (Forehand and Grier, 2003). Public-serving motives reflect organizational concern for the collective interest (e.g. conservation of the natural environment), where firm-serving motives reflect concern for benefits for the organization itself (e.g. maximizing company profit).

Energy companies might be inclined to communicate their environmental policies in terms of concern for the environment (i.e. a public-serving motive) in order to convey a sense of environment responsibility. However, given the company's core business, people may be suspicious about the truthfulness of this claim; they may doubt the company's authenticity and start to suspect ulterior motives (Hilton *et al.*, 1993; Fein, 1996; Forehand and Grier, 2003; Yoon *et al.*, 2006).[1] That is, the motives of energy companies are generally inferred to be firm-serving instead of public-serving (Terwel *et al.*, 2009a; Spangler and Pompper, 2011), so people easily suspect that even though the company communicates an environmental motive, it is actually primarily interested in enhancing the corporate image, eliciting publicity, and satisfying its customers. Suspicion of such strategic behavior could lead people to view the company as less sincere (Campbell and Kirmani, 2000; Terwel *et al.*, 2009a) or even deceitful (Chan *et al.*, 2006). In short, people may regard the communication of environmental motives as rhetoric rather than reality. Accordingly, we predict that people are likely to perceive greenwashing when an energy company communicates an environmental motive for its investment in environmental measures.

On the other hand, we propose that expressing an economic motive for this investment is a more fruitful way for an energy company to avoid being perceived as greenwashing, because this should activate less suspicion. After all, energy companies are expected to act upon economic motives and, therefore, the communication of such motives (e.g. profit maximization by trading CO_2 emissions) is probably seen as a plausible and truthful reason to invest. Therefore, we hypothesize:

> Hypothesis 1: *People perceive less greenwashing when an energy company communicates an economic motive for its investment in environmental measures than when it communicates an environmental motive.*

> Hypothesis 2: *Suspicion of strategic behavior mediates the effect of communicated motive on perceived corporate greenwashing.*[2]

Dispositional Skepticism

In this paper, dispositional skepticism refers to an individual's general tendency to doubt the credibility of various forms of organizational communication (Ford *et al.*, 1990; Obermiller and Spangenberg, 1998; Forehand and Grier, 2003). Clearly, people differ in the extent to which they are skeptical. The more skeptical people are, the more they generally doubt the credibility of organizational communications (regardless of their contents). So-called skeptics will always be suspicious about true motives when they are confronted with organizational communications. Accordingly, for skeptics we do not expect that the perception of corporate greenwashing depends on the communicated motive. This implies that the predicted indirect effect of

[1]Forehand and Grier (2003) coined the term situational skepticism for this 'momentary state of distrust of an actor's motivations'.
[2]Perceived greenwashing and suspicion of strategic behavior are related concepts, but it is relevant to differentiate between the two. After all, one can suspect strategic behavior but not perceive greenwashing.

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communicated motive on perceived corporate greenwashing through suspicion of strategic behavior (as stated in Hypothesis 2) is moderated by dispositional skepticism toward organizational communications. Thus, we hypothesize:

Hypothesis 3: *Dispositional skepticism toward organizational communications moderates the indirect effect of communicated motive on perceived corporate greenwashing through suspicion of strategic behavior.*

Overview of the Current Research

We have designed three experiments to test our hypotheses. All three experiments use the same experimental setup, in which participants learn about an energy company that invests in the development of a CO_2 emission reduction technology. The first experiment examines to what extent people perceive greenwashing when the energy company communicates an economic motive, an environmental motive, or no motive for its investment (Hypothesis 1). The second experiment aims to replicate the findings of Experiment 1 and further examines whether suspicion of strategic behavior mediates the effect of communicated motive on perceived corporate greenwashing (Hypothesis 2). The third experiment examines the proposed moderating role of dispositional skepticism toward organizational communications (Hypothesis 3). In short, we aim to show that the type of motive that energy companies communicate to explain their investments in environmental measures has a conditional, indirect effect on perceived corporate greenwashing (see Figure 1 for a schematic representation).

Experiment 1

Method

Participants and design. Seventy-nine undergraduate students from Leiden University participated in this experiment. They were allocated to one of three experimental conditions (communication: environmental motive, economic motive, and no motive). Participants received either €1 or course credits for their participation.

Procedure. Participants first received general background information on energy production, CO_2 emissions, and the effect of CO_2 on climate change. Furthermore, they were informed about the existence of CO_2 capture and storage technology (CCS) and were given a short description of this technology. In a nutshell, this technology involves the capture of CO_2 in fossil fuel power plants and the subsequent storage of this CO_2 in deep geological formations, both onshore and offshore. By implementing CCS, significant reductions in CO_2 emissions can be achieved, which is why CCS is currently considered as a strategy to mitigate climate change. After having read the general information, participants were informed that the energy company Baptiste Oil and Gas invests in the development of CCS. In reality, Baptiste Oil and Gas was a fictitious company made up to test our hypotheses. That is, we used a fictitious instead of a real company in order to prevent distortion of the results due to pre-existing brand perceptions

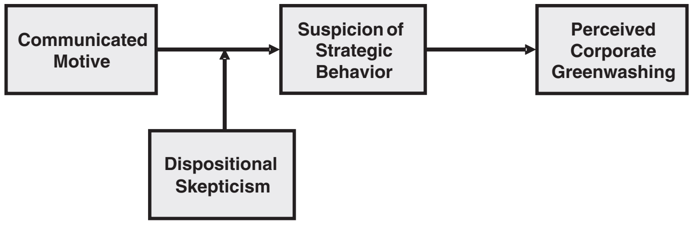

Figure 1. Dispositional skepticism moderating the indirect effect of communicated motive on perceived corporate greenwashing through suspicion of strategic behavior

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(Aggarwal, 2004; Wagner *et al.*, 2009). After participants had received some bogus background information about Baptiste Oil and Gas, we presented them with the company's website. This website contained the manipulation of the company's motive for investing in CCS. We created a website because companies often use websites as a communication channel for CSR communications (Tagesson *et al.*, 2009). For participants in the environmental motive condition, the website read:

> *'Baptiste Oil and Gas invests in the development of CCS because this is in line with our corporate social responsibility policy. If we do not invest in this technology now, the amount of CO_2 in the atmosphere will continue to increase, causing the mean temperature on earth to rise. This has several negative effects for humankind and nature, like disturbance of the present ecosystems, extinction of some plant- and animal species, and a rising sea level, with all its consequences. By implementing CCS on a large scale, less CO_2 will be emitted into the air, which makes it possible to prevent the aforementioned ecological problems. In short, we invest in the development of CCS because of the natural environment.'*

For participants in the economic motive condition, the website read:

> *'Baptiste Oil and Gas invests in the development of CCS because we expect to profit from it in the long run. By being involved in the development of this technology, we gain important knowledge and experience. In the future, we can export this expertise. This will have beneficial effects on our turnover. Also, we expect to enhance our profit by trading our emission rights, the so-called emissions trade. Firms have the right to emit a certain amount of carbon dioxide. By using CCS, Baptiste Oil and Gas will emit almost no carbon dioxide but remains the rights to emit it. Therefore, we can sell our rights to other companies in order to enable them to emit more carbon dioxide than they are entitled to. In short, we invest in the development of CCS because of the profit.'*

Participants in the control condition did not read a motive for the company's investment in CCS. After the manipulation, we measured perceived corporate greenwashing by the item 'To what extent do you think that Baptiste Oil and Gas aims to improve its reputation by presenting itself as an environmentally friendly organization?' (1 = *not at all*; 7 = *very much*). Furthermore, to assess the adequacy of the manipulation, all participants were asked to indicate the motive that Baptiste Oil and Gas communicated on its website by checking one out of four answers: (1) I did not read why Baptiste Oil and Gas invests in CCS, (2) Baptiste Oil and Gas invests in CCS to make a profit, (3) Baptiste Oil and Gas invests in CCS out of concern for the natural environment, or (4) Baptiste Oil and Gas invests in CCS because of legal obligations to reduce CO_2 emissions. Nineteen participants in the control condition correctly indicated that they did not read any motive. Eighteen participants in the economic motive condition correctly indicated that the motive was to make a profit. Twenty participants in the environmental motive condition correctly indicated that the motive was concern for the environment. Twenty-two participants failed to indicate the communicated motive correctly. Their responses were excluded from the analysis reported here to ensure the most reliable results and conclusions (although the results were virtually identical when the responses of these participants were included in the analysis). Finally, participants were debriefed, paid, and thanked for their participation.

Results

Perceived corporate greenwashing. Analysis of variance (ANOVA) with communicated motive as the between-subjects variable and perceived corporate greenwashing as the dependent variable revealed a significant effect, $F(2,\ 54) = 15.52$, $p < .001$, $\eta^2_{\text{partial}} = .37$. Participants who read an environmental motive ($M = 5.50$, SD = 0.83) or no motive ($M = 5.79$, SD = 0.71) perceived significantly more corporate greenwashing than participants who read an economic motive ($M = 3.56$, SD = 2.06).

Experiment 2

The results of Experiment 1 suggest that people tend to perceive corporate greenwashing when they learn about an energy company that invests in environmental measures. In support of Hypothesis 1, Experiment 1 further shows that communicating an economic motive reduces perceived greenwashing (relative to when no motive is

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communicated), but that communicating an environmental motive neither reduces nor increases perceived greenwashing. Experiment 2 aims to examine whether suspicion of strategic behavior mediates the effect of communicated motive on perceived corporate greenwashing (Hypothesis 2).

Method

Participants and design. Fifty-seven undergraduate students from Leiden University were allocated to one of two experimental conditions (communication: environmental motive vs. economic motive) and received either €1 or course credits for their participation. Those who had participated in Experiment 1 were not allowed to participate in Experiment 2.

Procedure. The procedure was largely similar to the procedure of Experiment 1. Differences were that the measure of perceived greenwashing was extended in order to enhance its reliability, the control condition was omitted, and items were included to assess suspicion of strategic behavior. To assess the adequacy of the manipulation, participants were asked to indicate the motive that Baptiste Oil and Gas communicated by checking one out of four answers. The first three answers equaled the answers from Experiment 1 (i.e. no motive, economic motive, environmental motive). The last answer differed: 'Baptiste Oil and Gas invests in CCS to make a profit as well as out of concern for the natural environment.' Twenty-three participants in the economic motive condition correctly indicated that the motive communicated by the company was to make a profit and twenty-three participants in the environmental motive condition correctly indicated that the communicated motive was concern for the environment. Eleven participants failed to indicate the communicated motive correctly. Again, the data of these participants were excluded from the analyses reported here, but the results were virtually identical when these cases were included in the analyses.

Measures

Perceived corporate greenwashing. We added two items to the measure used in Experiment 1 to create a three-item scale ($\alpha = .83$): 'I think Baptiste Oil and Gas aims to improve its reputation by presenting itself as an environmentally friendly organization' (1 = *totally disagree*; 7 = *totally agree*); 'To what extent do you think Baptiste Oil and Gas has a hidden agenda?' (1 = *not at all*; 7 = *very much*); 'I think Baptiste Oil and Gas pretends to be more environmentally friendly than it actually is' (1 = *totally disagree*; 7 = *totally agree*).

Suspicion of strategic behavior. We assessed suspicion of strategic behavior with four items ($\alpha = .79$). Participants had to indicate to what extent they thought Baptiste Oil and Gas invested in CCS because the company: '...thinks that consumers expect the company to do that', '...wants to have a positive image', '...intends to get publicity', '...hopes to get more clients' (1 = *totally disagree*; 7 = *totally agree*). Principal component analyses with a Varimax rotation showed that suspicion of strategic behavior and perception of corporate greenwashing represented different constructs. The items loaded on two separate components explaining a total variance of 68.3%. The eigenvalue of the first component (suspicion of strategic behavior) was 3.61; the eigenvalue of the second component (perceived corporate greenwashing) was 1.18.

Results

Perceived corporate greenwashing. We conducted an ANOVA with communicated motive as the between-subjects variable and perceived corporate greenwashing as the dependent variable, which revealed a significant effect, $F(1, 44) = 11.11$, $p = .002$, $\eta^2_{\text{partial}} = .20$. Consistent with Hypothesis 1, participants who read an environmental motive perceived more corporate greenwashing ($M = 4.96$, $SD = 0.94$) than participants who read an economic motive ($M = 3.65$, $SD = 1.63$).

Suspicion of strategic behavior. An ANOVA with communicated motive as the between-subjects variable and suspicion of strategic behavior as the dependent variable also revealed a significant effect, $F(1, 44) = 13.81$, $p = .001$, $\eta^2_{\text{partial}} = .24$. Participants suspected more strategic behavior after reading an environmental motive ($M = 5.54$, $SD = 0.83$) than after reading an economic motive ($M = 4.26$, $SD = 1.43$).

Mediation. Following the procedure specified by Baron and Kenny (1986), we performed regression analyses to test the hypothesis that suspicion of strategic behavior mediates the effect of communicated motive on perceived corporate greenwashing (Hypothesis 2). We first assessed the effect of communicated motive on perceived greenwashing. As shown before, this effect was significant ($\beta = .45$, $p = .002$). Mediation further requires an effect of communicated motive on suspicion of strategic behavior (i.e. the proposed mediator). This effect was significant as well

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(β = .49, p = .001). Mediation also requires an effect of suspicion of strategic behavior on perceived corporate greenwashing (controlling for the effect of communicated motive). This effect was significant (β = .42, p = .005). The final requirement for mediation is that the effect of the independent variable (i.e., communicated motive) on the dependent variable (i.e. perceived corporate greenwashing) disappears or is significantly reduced when taking into account the effect of the mediator (i.e., suspicion of strategic behavior). The effect of communicated motive on perceived corporate greenwashing disappeared when the effect of suspicion of strategic behavior was taken into account (β = .24, p = .096). The magnitude of the indirect effect was significant (Sobel z = 2.28, p = .022), indicating mediation.

This finding was supported by the bootstrapping approach to test for mediation (Preacher and Hayes, 2008). This approach uses resampling of raw data to estimate the confidence interval (CI) of the indirect effect. We used 10 000 resamples (bias corrected and accelerated intervals) and obtained a 95% confidence interval that did not include zero (lower CI = .233; upper CI = 1.166). Thus, in support of Hypothesis 2, the results of both regression and bootstrap analyses indicate that suspicion of strategic behavior mediated the effect of communicated motive on perceived corporate greenwashing (Figure 2).

Experiment 3

The previous experiments show that people perceive more corporate greenwashing when an energy company communicates an environmental motive than when it communicates an economic motive. This effect is mediated by suspicion of strategic behavior. Experiment 3 tests whether dispositional skepticism toward organizational communications moderates the indirect effect of communicated motive on perceived corporate greenwashing through suspicion of strategic behavior (Hypothesis 3).

Experiment 3 uses a similar procedure as in the previous studies, but with one important modification: the motives communicated by Baptiste Oil and Gas were extended by an explicit denial of the alternative motive (e.g. '...we invest in CCS because we care for the natural environment, not because we intend to profit from it'). We included this further specification because people may interpret communications as incomplete if alternative motives are not mentioned. It is possible that people (falsely or not) infer motives other than the one communicated. They may well suspect ulterior motives (i.e. firm-serving motives) when an energy company communicates an environmental motive for its investment in environmental measures, but remains silent about whether economic considerations also play a role. Similarly, when the company merely communicates an economic motive for the investment, people might think that the investment reflects at least some environmental concern as well. Therefore, Experiment 3 aims to determine whether or not it makes a difference to explicitly deny the alternative motive.

Method

Participants and design. Fifty-eight undergraduate students from Leiden University were allocated to one of two experimental conditions. In one condition, an environmental motive for investing in CCS was provided and an economic motive was denied. In the other condition, an economic motive was provided and an environmental

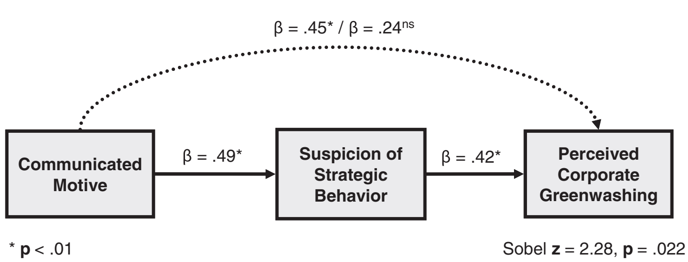

Figure 2. Suspicion of strategic behavior mediating the effect of communicated motive on perceived corporate greenwashing in Study 2

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motive was denied. Those who had participated in Experiment 1 or Experiment 2 were not allowed to participate in Experiment 3. Participants received either €1 or course credits for their participation.

Procedure. The procedure was largely similar to the procedure used in Experiment 1 and Experiment 2. Participants first received background information which was followed by the manipulation of the motive that Baptiste Oil and Gas communicated for investing in CCS. We manipulated the communicated motive in the same way as in the previous experiments, but this time the alternative motive was denied. So, in the environmental motive condition, Baptiste Oil and Gas stated to invest in CCS because of the environment (i.e. the environmental motive) and not to make a profit (i.e., denial of the alternative motive). In the economic motive condition, it stated to invest in CCS to make a profit and not because of the environment. Next, we assessed perceived greenwashing, suspicion of strategic behavior, and dispositional skepticism toward organizational communications. Finally, participants were debriefed, paid, and thanked for their participation.

To check the adequacy of the manipulation, participants were asked to indicate the motive Baptiste Oil and Gas communicated for investing in CCS: (1) 'Baptiste Oil and Gas invests in CCS to make a profit and not because of the natural environment', or (2) 'Baptiste Oil and Gas invests in CCS out of concern for the natural environment and not because of the profit'. Twenty-eight participants in the economic motive condition (with denial of an environmental motive) indicated that Baptiste Oil and Gas communicated to invest in CCS to make a profit and not because of the environment. Twenty-six participants in the environmental motive condition (with denial of an economic motive) indicated that Baptiste Oil and Gas communicated to invest in CCS out of concern for the environment and not to make a profit. Four participants failed to indicate the communicated motive correctly. The responses of these four participants were not included in further analyses, but the results were virtually identical when these cases were included in the analyses.

Measures

Perceived corporate greenwashing. We measured perceived greenwashing with the same three items as in Experiment 2 ($\alpha = .72$).

Suspicion of strategic behavior. We measured suspicion of strategic behavior with the same four items as in Experiment 2 ($\alpha = .82$).

Dispositional skepticism. We measured dispositional skepticism toward organizational communications by means of four items based on the scale of Obermiller and Spangenberg (1998) ($\alpha = .91$): 'Organizational communications are a reliable source of information", "In general, organizational communications present a true picture', 'I think that organizational communications are generally truthful', and 'I feel I have been accurately informed after viewing most organizational communications' (1 = *completely disagree*; 7 = *completely agree*). Scores were reverse coded so that higher scores represent higher dispositional skepticism.

Results

Perceived corporate greenwashing. We conducted an ANOVA to assess the effect of communicated motive on perceived corporate greenwashing, which revealed a significant effect, $F(1, 52) = 27.54$, $p < .001$, $\eta^2_{partial} = .35$. Participants perceived less greenwashing when Baptiste Oil and Gas communicated an economic motive ($M = 3.43$, SD = 1.51) than when it communicated an environmental motive ($M = 5.17$, SD = 0.79). This result yields further support for Hypothesis 1.

Suspicion of strategic behavior. We further conducted an ANOVA to assess the effect of communicated motive on suspicion of strategic behavior, which revealed a significant effect as well, $F(1, 52) = 15.32$, $p < .001$, $\eta^2_{partial} = .23$. Participants in the environmental motive condition suspected more strategic behavior ($M = 5.87$, SD = 0.69) than participants in the economic motive condition ($M = 4.61$, SD = 1.50).

Dispositional skepticism. We also checked for potential differences between conditions regarding dispositional skepticism toward organizational communications. We did not expect a difference because dispositional skepticism is a stable trait and unlikely to be affected by the motive Baptiste Oil and Gas communicated. This expectation was supported by the ANOVA, which revealed no difference between conditions, $F(1, 52) = 0.55$, $p = .461$, $\eta^2_{partial} = .01$ ($M_{econ} = 4.34$, SD = 1.17; $M_{env} = 4.56$, SD = 0.98).

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Mediation. We performed a series of regression analyses to examine whether suspicion of strategic behavior mediated the effect of communicated motive on perceived greenwashing. As the results above already showed, communicated motive affected both perceived greenwashing ($\beta = .59$, $p < .001$) and suspicion of strategic behavior ($\beta = .48$, $p < .001$). In addition, suspicion of strategic behavior had a significant effect on perceived corporate greenwashing (controlling for the effect of communicated motive) ($\beta = .44$, $p < .001$). The effect of communicated motive on perceived greenwashing remained statistically significant, but was significantly reduced ($\beta = .38$, $p = .002$). The magnitude of this indirect effect was significant (Sobel $z = 2.70$, $p = .007$), indicating (partial) mediation. This finding was supported by a bootstrapped mediation analysis (Preacher and Hayes, 2008) using 10000 resamples (bias corrected and accelerated intervals), which revealed a 95% confidence interval that did not include zero (lower CI = .222; upper CI = 1.170). Thus, in further support of Hypothesis 2, the results of both the regression and bootstrap analyses indicate that the effect of communicated motive on perceived corporate greenwashing was mediated by suspicion of strategic behavior (Figure 3).

Moderated mediation. We tested whether the indirect effect of communicated motive on perceived corporate greenwashing through suspicion of strategic behavior depends on the level of dispositional skepticism (the proposed moderator) by means of the bootstrapping procedure to test for moderated mediation (Preacher *et al.*, 2007; Preacher and Hayes, 2008). This bootstrap analysis (using 10000 resamples, and bias corrected and accelerated intervals), revealed a 95% confidence interval that did not include zero (lower CI = .254; upper CI = 1.161) and identified that the indirect effect was statistically significant ($p < .05$) for any value of dispositional skepticism $\leq$ to 5.5 on the scale ranging from 1 (low) to 7 (high). These results offer support for the conditional indirect effect as stated in Hypothesis 3, namely that the effect of communicated motive on perceptions of corporate greenwashing through suspicion of strategic behavior occurs under low or moderate (but not high) levels of dispositional skepticism toward organizational communications in general (Figure 1).

General Discussion

Energy companies investing in environmental measures might be inclined to motivate this investment by environmental concern because this may have a positive effect on corporate evaluations (Alniacik *et al.*, 2011; Hassan and Ibrahim, 2012). By doing so, they run the risk of being accused of corporate greenwashing (i.e. that a company deliberately frames its activities as green in order to look environmentally friendly), however. The detrimental effects of being perceived as greenwashing (consumer protest and boycott, financial loss) are relatively well-documented (Laufer, 2003; Polonsky, 1995; Polonsky and Rosenberger, 2001). The current experimental research is the first to explicitly examine when and why people perceive corporate greenwashing and, thereby, it contributes to the broader literature about the effects of engaging in CSR activities on consumer evaluations (Campbell and Kirmani, 2000; Forehand and Grier, 2003; Yoon *et al.*, 2006).

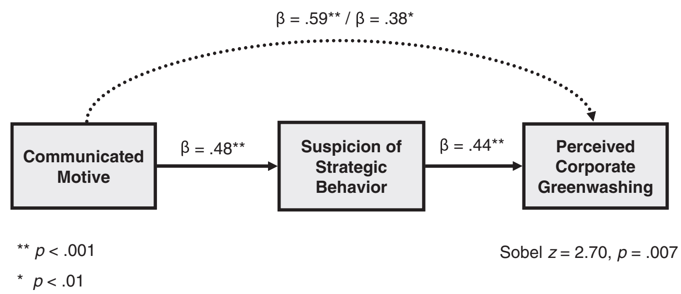

Figure 3. Suspicion of strategic behavior (partially) mediating the effect of communicated motive on perceived corporate greenwashing in Study 3

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We conducted a series of three experiments to systematically examine perceptions of corporate greenwashing in a situation where a (fictitious) energy company communicates its investment in the development of a CO_2 emission reduction technology to the public. In line with our hypothesis, the results consistently show that people perceive significantly less corporate greenwashing when an energy company communicates an economic motive for the investment than when it communicates an environmental motive. This effect persists if the company denies the alternative motive. Our research further demonstrates that the effect of communicated motive on perceived corporate greenwashing is mediated by suspicion of strategic organizational behavior. This is primarily true for those who are not by nature (i.e. as a dispositional trait) very skeptical toward organizational communications in general. So-called skeptics will always doubt the truthfulness of these communications, regardless of their contents.

Thus, people tend to suspect strategic behavior and, consequently, perceive greenwashing when an energy company communicates an environmental motive for its environmental policies. This is in line with the fact that the public generally expects energy companies to act upon firm-serving motives – profit maximization, image enhancement, public relations – rather than public-serving motives (Terwel *et al.*, 2009a; Spangler and Pompper, 2011). As a result, people easily suspect an energy company that communicates environmental (i.e. public-serving) motives to have ulterior motives (and thus to pretend to be greener than it actually is). By contrast, people suspect less strategic behavior when an energy company communicates an economic motive for investing in environmental measures, which is consistent with the idea that companies that express firm-serving (economic) motives are seen as relatively trustworthy (Terwel *et al.*, 2009a).

Importantly, our research suggests that it may be a useful strategy for energy companies to acknowledge economic considerations for engaging in sustainable activities or any CSR initiative in the environmental domain. At the same time, this seems to morally challenge those companies with genuine concern for the environment. After all, it may be better to be silent about this environmental concern in order to avoid being accused of corporate greenwashing. However, this in itself reflects some kind of strategic behavior. A solution for this moral challenge could be to express environmental concern, while acknowledging economic considerations as well. That is, companies with genuine environmental concern will also have an economic concern. Although it seems a good practice from a societal perspective to pursue sustainable initiatives that need not lead to financial gain (i.e., social stewardship), it is probably non-existing among energy companies because it is not a viable management approach under the current business and regulatory conditions (Dutta *et al.*, 2012). For companies that have both economic and environmental concern, it might be a better strategy to communicate these concerns simultaneously. People not only value pro-environmental actions, they also appreciate honesty (Terwel *et al.*, 2009a). This connects to the concept of 'shared value' positing that there is merit in bringing business and society back together (Porter and Kramer, 2011). However, further research is needed to confirm whether energy companies are indeed less likely to be seen as greenwashing when they communicate both environmental and economic motives for a green investment.

In terms of public policy, and specifically with regard to the reporting of environmental policies and initiatives, several issues are worth noting. As Melo and Garrido-Morgado (2012) point out, adopting environmental policies and initiatives is only one CSR dimension and how this tends to affect corporate reputation depends on the specific industrial sector of the company. That is, it seems that environmental performance damages corporate reputation in some sectors, but in other sectors (e.g. the resources industry and other industries with salient environmental issues) it can have a positive effect (similar findings are reported by Brammer and Pavelin (2006)). The current research suggests that the reputations of companies in the energy sector are unlikely to improve when such companies decide to *communicate* environmental motives for investing in environmental measures. Messages like these are easily perceived as rhetoric and might shift public attention away from the company's actual sustainable (and valued) actions, which is less likely to be the case when companies acknowledge that economic considerations play a role. After all, the public will understand that social stewardship is not an effective management strategy (Dutta *et al.*, 2012) and, hence, that companies pursue only sustainable and socially responsible initiatives that do not go at the direct expense of a company's interests. Considering that environmental motives are probably not the only reason for companies to invest in environmental measures, it seems advisable from a strategic perspective to be reticent in claiming purely altruistic motives in public communications in order to avoid being perceived as greenwashing.

In relation to this point, the standardization of corporate environmental reporting might reduce the chance of being perceived as greenwashing. Worldwide, many companies voluntarily report their environmental performances, but

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public policy about environmental reporting is not yet very widespread and formalized (Cerin, 2002; Kolk and Perego, 2010; see also 'Sustainability reporting fails to take off in the United States', 2012). If guidelines are developed and relevant regulations are observed, communications about environmental policies and initiatives might no longer be perceived as some kind of strategic behavior on the part of the company, but rather as compliance with public policy and, therefore, deemed more acceptable. In a related fashion, one of the reasons to invest in environmental measures aimed at reducing CO_2 emissions may be that a company is legally obliged to cut back its CO_2 emissions (Escobar and Vredenburg, 2011). Indeed, a large number of countries have committed themselves in international agreements (like the Kyoto protocol) to reduce their CO_2 emissions in an attempt to mitigate climate change. To this end, governments have developed legislation to be able to force energy companies to limit their CO_2 emissions. In order to comply with such legislations energy companies can decide to invest in technologies like CCS. If this is communicated to the public, a company is unlikely to be accused of corporate greenwashing.

Finally, the current research is relevant, albeit more indirectly, for the endorsement of the environmental measures and technologies by the public. That is, knowledge of corporate tactics can influence people's attitudes toward companies (Friestad and Wright, 1994) which, in turn, may influence whether or not people endorse the positions advocated by these companies. For instance, Terwel *et al.* (2009b) found that people became more negative about CCS when they placed little trust in the integrity of organizations that support the implementation of CCS. In a similar vein, when people believe that a company's investment in CCS is an act of greenwashing, this may not only affect reactions to the organization, but also attitudes to this climate change mitigation technology itself.

Conclusion

The current research shows that people typically tend to suspect corporate greenwashing when energy companies invest in environmental measures, but also that such suspicions can be reduced by acknowledging economic motives for such investments. People are much less likely to suspect strategic behavior – corporate actions aimed at image enhancement and public relations – when firm-serving (economic) rather than public-serving (environmental) motives are communicated. This indirect effect primarily occurs among people who are not by nature very skeptical toward organizational communications in general. Our findings highlight the need for companies in the energy sector to think carefully about how to communicate their environmental policies to the public; most people appreciate corporate social initiatives, but it backfires when communications about CSR activate suspicions of corporate greenwashing.

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