A Couple of Spills a Year, That's Normal? Learning and Greenwashing in the Pipeline Industry

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Abstract

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Chapter 3: The Green Black Gold Blues. Diffusion of greenwashing in the pipeline industry

> '[W]e are building a pipeline that is state of the art and will be the safest pipeline ever build.' – TransCanada President & CEO Russ Gerling on the Keystone Pipeline[1]
>
> Although pipeline technology has improved, new pipelines are subject to proportionally higher stress as companies use this improved technology to maximize pumping rates through increases in operational pressures and temperatures, rather than to use this improved technology to enhance safety margins. – Excerpt from a technical report that challenges the environmental impact assessment for the Keystone Pipeline (Stansbury 2011, p. 4)

For decades, activists have called out corporations for not walking the talk. In 1992, Greenpeace warned that the most powerful corporations' rhetorics mostly serve to distract the public, while these corporations fight off liability and accountability in the judiciary and legislative arena (Bruno 1992). To describe this phenomenon of corporations building a false green image, grassroot movements have coined the term "greenwash". Greenwashing describes "any communication that misleads people into adopting overly positive beliefs about an organization's environmental performance" (Lyon & Montgomery 2015, p. 225). Generally, corporate communication with stakeholders is driven by their goals and interests. For instance, what corporations stay quiet about is as important as or more important than what they do disclose (Kim & Lyon 2015). Hence, what corporations say cannot be taken at face value. The greenwashing literature researches this problem with regard to environmental performance. The most common style that has been explored in the literature is disclosure of only positive information on environmental performance and withholding of bad news (Lyon & Maxwell 2011). To date, research has focused on different types of greenwashing, their prevalence, and performance implications for corporations (Kassinis & Panayiotou 2018, Marquis, Toffel, & Zhou 2016, Ramus & Montiel 2005, Seele & Gatti 2017).

The existing research shows that greenwashing is a phenomenon that plays out not only at the level of individual organizations. In empirical research, to control for industry effects has become the norm (e.g., Du 2015, Marquis et al. 2016, Ramus & Montiel 2005, Testa, Miroshnychenko, Barontini, & Frey 2018). The necessity to control for the industry indicates that there are important processes taking place within industries. Standards and research insights that are shared across an industry can act as templates for greenwashing, and organizations copy each other's greenwashing strategies. The greenwashing literature has yet to cover these processes. Under the watchful eye of stakeholders, entire industries

[1] `https://youtu.be/ctx0H8XR51s?t=127`, accessed 2020-08-23.

such as mining, agriculture, or the energy sector have come under suspicion across the board and need to constantly put in efforts to legitimize their business models. In cases such as these, industry could even surpass organizational factors as a predictor for greenwashing. Hence, a discussion is overdue on the question: *How does the industry affect organization's propensity to greenwash?*. Assisting with this question can other literature on inter-industry processes (such as Hardy & Maguire 2020, Maguire & Hardy 2009).

To empirically demonstrate how industry-specific greenwashing strategies are diffused, this research turns to an industry where greenwashing has taken a very peculiar form. The pipeline industry uses the veil of engineering to present itself as safe, and pipeline technology as perfectly controllable, despite pipeline spills being a regular occurrence in the US. The public repository of the Pipeline and Hazardous Materials Safety Administration (PHMSA) holds data on both individual operators' pipeline miles and the volume of crude and refined petroleum transported. Further, the repository offers a description of and quantitative data on each minor and significant pipeline spills that has occurred in the US. The analysis of text data for this research relies on Natural Language Processing (NLP)–specifically, Topic Modeling–to determine spill causes and technology trends (Hannigan et al. 2019). The descriptions of individual spills reveal the shortcomings that individual operators exhibit in terms of pipeline safety. This data is matched with text data on pipeline safety strategy obtained from annual reports or, where available, safety reports. Annual or safety reports provide insight into the strategic plans and actions of operators. Next, data on headquarter location and executives' connections (BoardEx) surfaces networks within the industry. Finally, documents by industry-level actors such as the American Petroleum Institute (API) or the PHMSA unearth the latest industry trends. Greenwashing is given where non-substantive industry trends, rather than the operator's safety problems, determine individual operators strategic plans and action. By using operators' spill frequency and volume over time, we can ensure that effective measures are not accidentally flagged as non-substantive.

By researching greenwashing in the pipeline industry in the form of non-sustantive strategic plans and actions in the pipeline industry, this research expands the greenwashing literature. The empirical data reveals the flow of information within the industry, and the contribution of intra-industry networks to greenwashing. Greenwashing in the form of engineering and technology-centric communication also represents an addition to the literature. This form of greenwashing is particularly insidious, because an observer needs to first penetrate a layer of engineering and technology lingo, before the underlying issue can be surfaced. The addition of this form of greenwashing to the literature could help direct attention to other industries that have developed sophisticated forms of greenwashing which may be impossible for laymen to discern. Polluting industries that make intense use of new technologies are likely candidates to exhibit this form of greenwashing, for example chemistry, engineering, and construction. Exposing the role of industry-level actors such as the API, and an industry-wide propensity to greenwash also has relevance outside academic circles. Where the industry plays a role in greenwashing, policy makers and activists that seek to reign in greenwashing need to take a more systemic view, and target industry-level actors, or industries as a whole. On a related note, this unique cross-level research, which spans from the industry down to individual spills, also contributes to the

literature on social-ecological systems (Reyers, Folke, Moore, Biggs, & Galaz 2018).[2]

[2] More recently, the need for cross-level research has also been voiced repeatedly during the ARCS Online Seminar Series and Ivey Sustainability Salon. For instance, at the Ivey Sustainability Saloon session on July 16, 2020, Tima Bansal to Nicholas Poggioli: "If the firm is at one level, one could argue that the eco-system is a different level in which many actors interact. And, arguably, Sustainable Development is a macro-level concept (system of actors)."

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