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

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

> 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. (Stansbury 2011, p. 4)

Like many other forms of corporate misconduct, greenwashing has been on the agenda of activists for a long time before it received the attention it deserves from the academic community(e.g., Bruno 1992). Greenwashing describes "any communication that misleads people into adopting overly positive beliefs about an organization's environmental performance" (Lyon & Montgomery 2015, p. 225). 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. One major strategy that managers can pursue is to disclose only positive information about the environmental performance of the company, and withhold bad news (Lyon & Maxwell 2011). To date, research has been published on this and other types of greenwashing across different industries and on various regional scales (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 fact that it is necessary to control for the industry indicates that there are important processes taking place across the two levels of industry and organizations. 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 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 and cross-level processes (such as Hardy & Maguire 2020, Maguire & Hardy 2009).

To empirically demonstrate the role of cross-level processes for greenwashing, this research makes use of a longitudinal dataset on pipeline safety and spills. 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, this research expands the greenwashing literature. The empirical analysis reveals how pipeline operators use the language of engineering and technology to divert attention from general safety issues and an industry-wide failure to reduce spill frequency and volumes, and build an image of safety and controllability. 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 role of industry-level actors such as the API, and an industry-wide propensity to greenwash also has clear 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).[1]

[1] 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)."

References

Bruno, K. (1992). *The Greenpeace book of greenwash* (Tech. Rep.). Greenpeace. Retrieved from https://research.greenpeaceusa.org/?a=view&d=4588

Du, X. (2015). How the Market Values Greenwashing? Evidence from China. *Journal of Business Ethics*, *128*(3), 547–574. Retrieved from http://dx.doi.org/10.1007/s10551-014-2122-y doi: 10.1007/s10551-014-2122-y

Hannigan, T., Haans, R. F. J., Vakili, K., Tchalian, H., Glaser, V., Wang, M., ... Jennings, P. D. (2019). Topic Modeling in Management Research: Rendering New Theory from Textual Data. *Academy of Management Annals*, annals.2017.0099. Retrieved from http://journals.aom.org/doi/10.5465/annals.2017.0099 doi: 10.5465/annals.2017.0099

Hardy, C., & Maguire, S. (2020). Organizations, Risk Translation, and the Ecology of Risks: The Discursive Construction of a Novel Risk. *Academy of Management Journal*, *63*(3), 685–716. Retrieved from http://journals.aom.org/doi/10.5465/amj.2017.0987 doi: 10.5465/amj.2017.0987

Kassinis, G., & Panayiotou, A. (2018). Visuality as Greenwashing: The Case of BP and Deepwater Horizon. *Organization & Environment*, *31*(1), 25–47. Retrieved from http://journals.sagepub.com/doi/10.1177/1086026616687014 doi: 10.1177/1086026616687014

Kim, E.-H., & Lyon, T. P. (2015). Greenwash vs. Brownwash: Exaggeration and Undue Modesty in Corporate Sustainability Disclosure. *Organization Science*, *26*(3), 705–723. Retrieved from http://pubsonline.informs.org/doi/10.1287/orsc.2014.0949 doi: 10.1287/orsc.2014.0949

Lyon, T. P., & Maxwell, J. W. (2011). Greenwash: Corporate Environmental Disclosure under Threat of Audit. *Journal of Economics & Management Strategy*, *20*(1), 3–41. Retrieved from http://doi.wiley.com/10.1111/j.1530-9134.2010.00282.x doi: 10.1111/j.1530-9134.2010.00282.x

Lyon, T. P., & Montgomery, A. W. (2015). The Means and End of Greenwash. *Organization & Environment*, *28*(2), 223–249. Retrieved from http://journals.sagepub.com/doi/10.1177/1086026615575332 doi: 10.1177/1086026615575332

Maguire, S., & Hardy, C. (2009). Discourse and Deinstitutionalization: the Decline of DDT. *Academy of Management Journal*, *52*(1), 148–178. Retrieved from http://journals.aom.org/doi/10.5465/amj.2009.36461993 doi: 10.5465/amj.2009.36461993

Marquis, C., Toffel, M. W., & Zhou, Y. (2016). Scrutiny, Norms, and Selective Disclosure: A Global Study of Greenwashing. *Organization Science*, *27*(2), 483–504. Retrieved from http://pubsonline.informs.org/doi/10.1287/orsc.2015.1039 doi: 10.1287/orsc.2015.1039

Ramus, C. A., & Montiel, I. (2005). When Are Corporate Environmental Policies a Form of Greenwashing? *Business & Society*, *44*(4), 377–414. Retrieved from

http://journals.sagepub.com/doi/10.1177/0007650305278120 doi: 10.1177/0007650305278120

Reyers, B., Folke, C., Moore, M.-L., Biggs, R., & Galaz, V. (2018). Social-Ecological Systems Insights for Navigating the Dynamics of the Anthropocene. *Annual Review of Environment and Resources*, *43*(1), 267–289. Retrieved from https://www.annualreviews.org/doi/10.1146/annurev-environ-110615-085349 doi: 10.1146/annurev-environ-110615-085349

Seele, P., & Gatti, L. (2017). Greenwashing Revisited: In Search of a Typology and Accusation-Based Definition Incorporating Legitimacy Strategies. *Business Strategy and the Environment*, *26*(2), 239–252. doi: 10.1002/bse.1912

Stansbury, J. (2011). *Analysis of Frequency, Magnitude and Consequence of Worst-Case Spills From the Proposed Keystone XL Pipeline* (Tech. Rep.). University of Nebraska–Lincoln Water Center. Retrieved from https://engineering.unl.edu/downloads/civil/Worst-case-Keystone-spills-report-dis.pdf

Testa, F., Miroshnychenko, I., Barontini, R., & Frey, M. (2018). Does it pay to be a greenwasher or a brownwasher? *Business Strategy and the Environment*, *27*(7), 1104–1116. Retrieved from http://doi.wiley.com/10.1002/bse.2058 doi: 10.1002/bse.2058