REGULATORY SHAMING AND THE PROBLEM OF CORPORATE CLIMATE OBSTRUCTION

SHARON YADIN*

This Article examines the rationales and justifications for regulatory climate shaming—a nascent approach to climate policy involving the governmental publication of information regarding corporate contributions to climate change, with the aim of generating public pressure on companies to comply with climate change norms. Regulatory climate shaming is employed by national and subnational regulators inside and outside the United States through tools such as naming-and-shaming lists and rankings, environmental databases, climate labels, and corporate disclosure obligations. Generally, regulation by shaming is considered controversial, as it involves public condemnation and targets corporate reputation. However, this Article's main argument is that regulatory climate shaming is an important tool that can and should be utilized by regulators not only for inducing compliance with climate change norms but also for fighting crucial meta-regulation problems like corporate climate obstruction. Building on regulatory shaming theory and climate obstruction scholarship, this Article offers a normative theory of regulatory climate shaming and discusses the ways in which shaming can fight climate denial, climate washing, and other climate obstruction practices employed by the fossil fuel industry and other industries.

* Associate Professor of Law, Yezreel Valley College School of Public Administration and Public Policy; Research Fellow, University of Haifa Faculty of Law. This Article was presented at the Changing Faces of Business Law and Sustainability Symposium, hosted by the UConn Business and Human Rights Initiative, the Penn State Center for the Business of Sustainability, and the College of Business at Oregon State University, at the public policy and behavioral change lecture series, hosted by the Hebrew University of Jerusalem School of Public Policy and Governance, at the Corporate Responsibility and Liability in Relation to Climate Change Conference, hosted by Utrecht University, and at the Annual Science and Environment Conference, hosted by the Israeli Society of Ecology and Environmental Sciences. I thank the participants for helpful comments, especially Sarah Dadush, David Orozco, Dan Cahoy, Jeffrey Boles, Inara Scott, Eyal Peer, Elizabeth Kennedy, Lindsay Sain Jones, Dana Muir, Enrique Guerra-Pujol, Ruth Jebe, Omer Shiloni, Shmuel Yerushalmi, Adi Partoush, Clemens Kaupa, and Lucas Roorda. I also thank Roy Shapira, Christian Leuz, Odelia Minnes, Anna Uster, Ruth Amir, and Menachem Ben-Sasson for insightful comments and discussions. Finally, I would like to thank the editors of Volume 60 of the *Harvard Journal on Legislation*.

I. Introduction

At the heart of this article is a nascent regulatory approach that I shall refer to as "regulatory climate shaming." I use the term "regulatory climate shaming" to mean the conveyance of information and/or messages to the public by governmental administrative bodies regarding corporate behavior that contributes to climate change.[1] Regulatory climate shaming is designed to induce corporate compliance with climate change laws and regulations and encourage the adoption of responsible climate business practices through public pressure. This practice, typically employed by national and subnational regulators in the executive branch inside and outside the United States,[2] utilizes companies' sensitivity to their environmental reputation as well as the growing public concern about the devastating implications of climate change to affect corporate behavior.[3]

While the idea of shaming, especially by the state, is somewhat controversial, I will argue that regulatory shaming should be used by regulators, alongside other regulatory tools, to mitigate climate change. Namely, I will contend that regulatory climate shaming is an important tool, not only for inducing corporate compliance with climate change norms and "beyond compliance"[4] practices, but also for fighting critical meta-regulation problems relating to corporate climate obstruction, such as climate denial, climate washing,[5] and insufficient command-and-control tools.[6] In this arti-

---

[1] While largely focused on negative publications, regulatory shaming mechanisms may also include the provision of positive information by, for example, highlighting good practices or using ranking and scoring mechanisms in which some companies are graded low while others are ranked high. This type of mechanism is sometimes referred to as "naming and faming." *See, e.g.*, Karen Yeung, *Government by Publicity Management: Sunlight or Spin?*, 2 Pub. L. 360, 374–75 (2005). This will also be discussed in Part II.

[2] In theory, regulatory climate shaming can also be deployed by international regulatory bodies. However, such regulation falls outside the scope of this article.

[3] A new Pew Center survey of 16,000 people in 17 countries found that a majority of respondents, especially young adults, are now greatly concerned about climate change, and are willing to make lifestyle changes in response. *See* James Bell, Jacob Poushter, Moira Fagan & Christine Huang, *In Response to Climate Change, Citizens in Advanced Economies are Willing to Alter How They Live and Work*, Pew Rsch. Ctr. (Sep. 14, 2021), https://www.pewresearch.org/global/2021/09/14/in-response-to-climate-change-citizens-in-advanced-economies-are-willing-to-alter-how-they-live-and-work [https://perma.cc/6SC7-3DYD]; *see also* David M. Konisky, Llewelyn Hughes & Charles H. Kaylor, *Extreme Weather Events and Climate Change Concern*, 134 Climatic Change 533, 539 (2016); Llewelyn Hughes, David M. Konisky & Sandra Potter, *Extreme Weather and Climate Opinion: Evidence from Australia*, 163 Climatic Change 723, 731–36 (2020).

[4] Generally, "beyond compliance" (or "above compliance") refers to the adoption of non-binding norms, above and beyond the mandatory legal standards set in laws, rules, and regulations.

[5] Climate washing refers to intentionally misleading climate-related actions, including campaigns, statements, labeling, advertisement, and reports, such as unsubstantiated "net-zero" (referring to no emissions or balanced emissions) labels on companies' products. *See infra* notes 209–11, 225–27 and accompanying text.

[6] Command-and-control refers to prohibiting rules coupled with either civil or criminal coercive sanctions. *See, e.g.*, Bronwen Morgan & Karen Yeung, An Introduction to Law and Regulation: Text and Materials 80 (2007); *see also* Darren Sinclair, *Self-*

cle, I use the term climate obstruction to refer to any illegitimate, deceptive corporate activity that aims to impede or disrupt climate legislation and regulation.[7]

The climate change crisis, or the "climate breakdown" as some refer to it,[8] is currently one of the world's greatest challenges, with environmental, social, financial, health, and security implications that cannot be overstated.[9] It is regarded as a "super wicked problem,"[10] which poses far-reaching and wide-ranging threats to an extremely broad and complex web of interests and rights. These characteristics require a multi-layered regulatory strategy that harnesses a variety of tools and approaches and includes innovative, out-of-the-box solutions alongside traditional command-and-control and economic incentives. In addition to its theoretical contribution, this Article aims to pave the way for future policy advances in a field that is currently in urgent need of regulatory innovation.[11]

It is now well established that since the industrial revolution, the earth's temperature has risen markedly, mostly due to the extensive burning of fossil fuels such as oil, coal, and natural gas, which release gases into earth's atmosphere that create a "greenhouse effect."[12] While fossil fuels play a central role in our daily lives, dramatic reductions in greenhouse gas emissions and a shift toward clean energy[13] are urgently needed.[14] However, in-

---

Regulation Versus Command and Control? Beyond False Dichotomies, 19 L. & POL'Y 529, 534 (1997) (discussing command and control in environmental regulation).

[7] "Climate obstruction" often refers to various types of actions aimed at influencing the public, media, and political arenas in order to curb climate action. *See* CLIMATE SOC. SCI. NETWORK, CSSN PRIMER 2021:1: THE STRUCTURE OF OBSTRUCTION: UNDERSTANDING OPPOSITION TO CLIMATE CHANGE ACTION IN THE UNITED STATES 1 (2021), https://www.cssn.org/wp-content/uploads/2021/04/CSSN-Briefing_-Obstruction-2.pdf [https://perma.cc/7R46-BMT5]; *see also* Núria Almiron & Jose A. Moreno, *Beyond Climate Change Denialism: Conceptual Challenges in Communicating Climate Action Obstruction*, 55 ÁMBITOS 9, 12–15 (2022) (explaining that "climate obstruction" is a much more accurate and encompassing concept than "climate denial").

[8] *See, e.g.*, DAVID MICHAELS, THE TRIUMPH OF DOUBT: DARK MONEY AND THE SCIENCE OF DECEPTION 181 (2020) (explaining that the term "climate change" is too soft and passive, not reflecting the grave implications of global warming properly).

[9] *See generally* ANDREW E. DESSLER, INTRODUCTION TO MODERN CLIMATE CHANGE 146–66 (3d ed. 2022).

[10] *See* Richard J. Lazarus, *Super Wicked Problems and Climate Change: Restraining the Present to Liberate the Future*, 94 CORNELL L. REV. 1153, 1159–61 (2009) (analyzing climate change under the "super wicked problem" public policy framework, which relates to problems that entail enormous interdependencies, uncertainties, circularities, and conflicting stakeholders).

[11] Contemporary climate change regulatory failures are discussed in Part II.

[12] *See* William Moomaw, Francis Yamba, Masayuki Kamimoto, Lourdes Maurice, John Nyboer, Kevin Urama & Tony Weir, *Renewable Energy and Climate Change*, *in* RENEWABLE ENERGY SOURCES AND CLIMATE CHANGE MITIGATION 161, 168–72 (Ottmar Edenhofer, Ramón Pichs Madruga, Youba Sokona, Kristin Seyboth, Patrick Matschoss, Susanne Kadner, Timm Zwickel, Patrick Eickemeier, Gerrit Hansen, Steffen Schlömer & Christoph von Stechow eds., 2011), https://www.ipcc.ch/site/assets/uploads/2018/03/SRREN_Full_Report-1.pdf; MARK MASLIN, CLIMATE CHANGE: A VERY SHORT INTRODUCTION 2 (4th ed. 2021).

[13] "Clean energy" refers to energy produced by technologies that are based on natural sources, such as sun, wind, and water, or on other renewable energy sources. *See, e.g.*, LEAH CARDAMORE STOKES, SHORT CIRCUITING POLICY: INTEREST GROUPS AND THE BATTLE OVER

ternational and national regulatory efforts on the climate change front have mostly failed so far,[15] and so the search for effective mitigation tools continues. Indeed, corporate climate obstruction has played a major role in this regulatory failure.[16]

Against this backdrop, a new, promising tool utilizing corporate reputation and public opinion is emerging—climate regulation by shaming companies. Generally, regulatory shaming—though not always framed as such by policymakers[17]—is a growing practice deployed by governmental administrative authorities all over the world in various forms, fields, and sectors.[18] It has shown promise in areas related to climate change, such as public health and environmental protection, as well as in other regulatory fields.[19] In the arena of climate change regulation, however, shaming tactics are at a relatively preliminary stage, as regulators are beginning to utilize tools such as climate labels, financial and consumer disclosure rules on climate risks, and databases that allow users to view companies' emissions data. Regulators are also publicizing the names of firms that are noncompliant with climate change laws and regulations and rank companies in "shame lists," based on factors including companies' contributions to climate change.[20] In addition,

---

CLEAN ENERGY AND CLIMATE POLICY IN THE AMERICAN STATES 13 (2020). *See generally* DANIEL J. FIORINO, THE CLEAN ENERGY TRANSITION: POLICIES AND POLITICS FOR A ZERO-CARBON WORLD (2022); Todd S. Aagaard, *24/7 Clean Energy*, 94 U. COLO. L. REV. (forthcoming 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4112599 [https://perma.cc/NZL2-7VH4].

[14] *See* NICK JELLEY, RENEWABLE ENERGY: A VERY SHORT INTRODUCTION 2 (2020).

[15] *See infra* notes 46–47 and accompanying text.

[16] *See infra* Part IV.

[17] *See* Judith van Erp, *Naming Without Shaming: The Publication of Sanctions in the Dutch Financial Market*, 5 REGUL. & GOVERNANCE 287, 294–95 (2011); Sharon Yadin, *Shaming Big Pharma*, 36 YALE J. ON REGUL. BULL. 131, 134 (2019).

[18] *See generally* Judith van Erp, *Shaming and Compliance*, *in* THE CAMBRIDGE HANDBOOK OF COMPLIANCE 438, 439 (Benjamin van Rooij & D. Daniel Sokol eds., 2021) (giving examples of various forms of regulatory naming and shaming, and stating that it is an increasingly common practice); Sharon Yadin, *Regulatory Shaming*, 49 ENV'T L. 407 (2019) (conceptualizing "regulatory shaming" and giving examples of shaming from various regulatory fields in the United States, such as labor law, occupational safety, environmental protection, and competition in pharmaceuticals); Matthew S. Johnson, *Regulation by Shaming: Deterrence Effects of Publicizing Violations of Workplace Safety and Health Laws*, 110 AM. ECON. REV. 1866 (2020) (empirically examining the effectiveness of regulation-by-shaming employed by the U.S. Occupational Safety and Health Administration); Ruth Plato-Shinar, *Shaming by Bank Regulators—Methods and Applications*, *in* THE LEGAL ASPECTS OF SHAMING: AN ANCIENT SANCTION IN THE MODERN WORLD (Guy Seidman & Meital Pinto eds., forthcoming Sep. 2023), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4192317 [https://perma.cc/MF4P-FM4Q] (discussing naming and shaming practices executed by banking regulators through various publications of violations); Albert J. Meijer & Vincent Homburg, *Disclosure and Compliance: The 'Pillory' as an Innovative Regulatory Instrument*, 14 INFO. POLITY 263 (2009) (surveying "pillory" disclosure schemes, which aim to activate stakeholders and cause corporate reputational harms, in fields such as food safety, labor, and environmental regulation in Europe).

[19] *See* sources cited *supra* note 18. I discuss regulatory shaming scholarship in greater length in Part II. Studies are also starting to point to the effectiveness of disclosure schemes relating to firms' greenhouse gas emissions. *See infra* note 123.

[20] Examples of regulatory climate shaming are discussed at greater length in Part II.

regulators release "climate faming" information relating to companies[21] that join voluntary climate programs (which can indirectly shame non-participating firms).[22]

Despite an increasing need for a normative evaluation of regulatory climate shaming in light of its gradual proliferation and ongoing development,[23] the literature on the topic is scarce.[24] Shame, shaming, and guilt have been discussed in the social and behavioral science literature in the context of various environmental issues, usually without focusing on climate change.[25] Studies that did examine climate shaming survey diverse types of actors who function as shamers and/or shaming targets.[26] Types of shaming discussed in the literature include shaming undertaken by the international community, the media, and nongovernmental organizations ("NGOs") to pressure states to commit to and achieve ambitious goals for the reduction of

---

[21] While the main purpose of "naming and faming" tactics is to encourage firms to go beyond compliance, and the main purpose of labels and other disclosure schemes is to support decision-making on an individual level or promote general environmental transparency, these government communications may also carry implicit shaming messages. For example, firms that are excluded from praising messages may be indirectly shamed. Companies that are forced to label their product as contributing to climate change may also be shamed in the sense that the information can potentially damage their reputation and invite relevant shaming communities to apply pressure on such companies to alter their business models. This point will be discussed in Part II.

[22] These programs are run by private sector organizations or by governmental regulators like the EPA and the U.S. Department of Energy. Generally, voluntary climate programs aim to encourage companies to commit to standards that are above what is required by law, usually in exchange for reputational benefit. *See* Lily Hsueh & Aseem Prakash, *Incentivizing Self-Regulation: Federal vs. State-Level Voluntary Programs in US Climate Change Policies*, 6 REGUL. & GOVERNANCE 445, 445 (2012). *See generally* Daniel J. Fiorino, *Performance Track Places Trust in the Carrot over the Stick*, 10 ENV'T. QUALITY MGMT. 9 (2001); ASEEM PRAKASH & MATTHEW POTOSKI, THE VOLUNTARY ENVIRONMENTALISTS: GREEN CLUBS, ISO 14001, AND VOLUNTARY ENVIRONMENTAL REGULATIONS (2006); VOLUNTARY PROGRAMS: A CLUB THEORY PERSPECTIVE (Matthew Potoski & Aseem Prakash eds., 2009).

[23] *See infra* Part II.

[24] *But see infra* note 123 (surveying studies on the effectiveness of mandatory climate reporting obligations imposed on firms).

[25] *See* SARAH E. FREDERICKS, ENVIRONMENTAL GUILT AND SHAME: SIGNALS OF INDIVIDUAL AND COLLECTIVE RESPONSIBILITY AND THE NEED FOR RITUAL RESPONSES 39–44 (2021) (discussing individual feelings of guilt and shame pertaining to various environmental concerns, not necessarily purposely induced by another party). *See generally* JENNIFER JACQUET, IS SHAME NECESSARY? NEW USES FOR AN OLD TOOL (2015) (focusing on guilt and shame employed on an individual level, for example through voluntary product eco-labels).

[26] *See generally, e.g.*, Jennifer Jacquet & Dale Jamieson, *Soft but Significant Power in the Paris Agreement*, 6 NATURE CLIMATE CHANGE 643 (2016) (discussing climate shaming between nations through mechanisms of international pledges to cut greenhouse gas emissions); Elisa Aaltola, *Defensive Over Climate Change? Climate Shame as a Method of Moral Cultivation*, 34 J. AGRIC. & ENV'T ETHICS 6 (2021) (focusing on climate shaming of individuals); Dustin Tingley & Michael Tomz, *The Effects of Naming and Shaming on Public Support for Compliance with International Agreements: An Experimental Analysis of the Paris Agreement*, 76 INT'L ORG. 445 (2022) (discussing naming and shaming between countries based on their international pledges to cut greenhouse gas emissions); Inara Scott, *The Trouble with Boycotts: Can Fossil Fuel Divest Campaigns Be Prohibited?*, 57 AM. BUS. L.J. 537 (2020) (discussing nongovernmental organization divestment campaigns against investments in fossil fuels).

greenhouse gas emissions,[27] and climate shaming performed by individuals who are "flight shaming"[28] and "meat shaming"[29] one another.[30] Governmental regulation of climate change by shaming corporations, however, remains underexplored.[31]

To address this gap in research, I will normatively evaluate climate shaming as a regulatory tactic and examine its theoretical underpinning. Building on regulatory shaming theory and climate obstruction scholarship, I will offer several justifications and rationales for regulatory climate shaming. These will underscore the compatibility, relevance, and necessity of the shaming approach, especially in response to manipulative corporate practices and their devastating implications.

While moral arguments supporting shaming could be made based on the manipulative behavior of the oil and gas companies and other indus-

---

[27] For example, the Paris Agreement—a landmark climate change agreement signed by almost all world nations—is based on negative reputational consequences for states that fail to fulfill their pledges to cut greenhouse gas emissions. *See* Jacquet & Jamieson, *supra* note 26, at 643; *see also* Dan Clark, Sam Joiner & Steven Bernard, *How Each Country's Emissions and Climate Pledges Compare*, FIN. TIMES (Jan. 18, 2023), https://www.ft.com/content/9dfb0201-ef77-4c05-93cd-1e277c7017cf [https://perma.cc/4CMY-DMXB] (ranking states' emissions and pledges); *Countries*, CLIMATE ACTION TRACKER (Feb. 2023), https://climateactiontracker.org/countries [https://perma.cc/8FX8-8PZX] (rating governments' climate policy responses by categories ranging from "critically insufficient" to "almost sufficient"). However, naming and shaming of countries is often regarded as ineffective in inducing emission reductions and the adoption of other measure that can mitigate climate change. *See, e.g.*, Albert C. Lin, *Making Net Zero Matter*, 79 WASH. & LEE L. REV. 679, 711 (2022).

[28] One of the most familiar climate campaigns, launched by the then-fifteen-year-old Greta Thunberg, has prompted the phenomenon known as flight shaming, in which people, especially public figures, are publicly disgraced for their contribution to the global carbon emissions problem through taking flights. *See* Mucha Mkono & Karen Hughes, *Eco-Guilt and Eco-Shame in Tourism Consumption Contexts: Understanding the Triggers and Responses*, 28 J. SUSTAINABLE TOURISM 1223, 1223 (2020).

[29] *See, e.g.*, FREDERICKS, *supra* note 25, at 171 (describing feelings of guilt and shame associated with everyday activities adversely impacting the environment, such as driving and eating meat). Generally, the animal agriculture industry is responsible for an estimated 14.5% of global greenhouse gas emissions due to land clearing for pasture, feed production, manure, and the methane emitted by the animals. *See* Oliver Lazarus, Sonali McDermid & Jennifer Jacquet, *The Climate Responsibilities of Industrial Meat and Dairy Producers*, 165 CLIMATE CHANGE 29, 30 (2021).

[30] Generally, climate shaming of individuals is considered ineffective as each individual's contribution to climate change through various everyday activities is extremely small in comparison to contributions by large fossil-fuel companies. *See, e.g.*, JEREMY MOSS & PERSEPHONE FRASER, PRAC. JUST. INITIATIVE, AUSTRALIA'S CARBON MAJORS REPORT 3 (2019) (showing that the annual total of greenhouse gas emissions produced by Australia's leading carbon major is equivalent to the estimated emissions of 25 million Australians for the same period).

[31] Behnam Taebi and Azar Safari have studied corporate climate shaming by the government, but they have focused on shaming based on corporate performance in voluntary climate programs operated by industry or intergovernmental bodies. *See generally* Behnam Taebi & Azar Safari, *On Effectiveness and Legitimacy of 'Shaming' as a Strategy for Combatting Climate Change*, 23 SCI. & ENG'G ETHICS 1289 (2017). In this Article, however, I study a broader conceptual framework.

tries,[32] I will focus on more pragmatic arguments that are based on promoting climate regulation effectiveness and efficiency. Namely, I will discuss the ways in which corporate climate change denial and climate washing practices impede endeavors to slow climate change and argue that these corporate practices should be given more attention by regulators, especially through shaming.

One of the main arguments put forward in this Article is that shaming as a regulatory strategy is highly suitable for offsetting corporate climate obstruction practices. Specifically, I will contend that since regulatory shaming harnesses credible information sharing by the government and publicly assigns liability to industries and companies that often deny it or shift it elsewhere,[33] it is a suitable tool for combating corporate disinformation and deception. I will further argue that regulatory shaming is highly suitable for fighting climate washing—a practice focused on corporate reputation enhancement—by leveraging corporate reputational vulnerabilities and disseminating reliable information on corporate climate performance.

This Article further shows that shaming is an adequate and necessary regulatory response to successful corporate efforts to thwart command-and-control climate regulation. In this regard I argue that, since industries are using delaying tactics to impede hard-law climate regulation, regulators are justified in developing alternative soft-law tools, such as shaming, which rely on social norms, are relatively inexpensive, and can deliver results promptly.

This Article is organized as follows: Part II presents an overview of regulatory climate shaming schemes that are currently being developed and implemented in various forms and jurisdictions. Part III provides a conceptual framework of regulatory climate shaming, anchored in regulatory shaming theory. This part also provides prominent examples of regulatory shaming schemes that have been successfully implemented in fields closely related to climate regulation, such as public health and general environmental regulation. Part IV develops a normative theory of regulatory climate shaming based on rationales and justifications relating to corporate climate obstruction, such as climate denial and climate washing.

---

[32] *Cf. infra* note 162 and accompanying text.

[33] *See, e.g.*, Geoffrey Supran & Naomi Oreskes, *Rhetoric and Frame Analysis of ExxonMobil's Climate Change Communications*, 4 One Earth 696, 711 (2021) (discussing shifting liability to consumers).

II. Climate Regulation by Shaming Companies: An Emerging Practice

The eight years between 2015 and 2022 were the warmest on record.[34] Scientists are in virtually complete consensus on the anthropogenic nature of global warming, which is attributed mainly to the burning of fossil fuels such as coal, oil, and natural gas.[35] This process releases gasses such as carbon dioxide into Earth's atmosphere, producing a "greenhouse effect," trapping radiation from the sun and resulting in global rises in temperature.[36] As a result, the global mean temperature in 2022 was around 1.15 degree Celsius above pre-industrial levels.[37] Without immediate large-scale reductions in greenhouse gas emissions, which are mostly produced by corporations,[38] global warming is predicted to climb to two degrees Celsius above pre-industrial levels by 2040, and persist for centuries.[39]

While these rises in temperature may sound small, the consequences are huge. "Climate change" refers to systemic long-term changes in climatic elements such as temperature, precipitation, and winds that manifest in extreme weather events.[40] These worrying phenomena hold serious implications for humanity, in addition to the threats posed to biodiversity and the integrity of natural ecosystems.[41] They are predicted to lead to increased

---

[34] Press Release, World Meteorological Org., Past Eight Years Confirmed to Be the Eight Warmest on Record (Jan. 12, 2023), https://public.wmo.int/en/media/press-release/past-eight-years-confirmed-be-eight-warmest-record [https://perma.cc/BEY4-WCPP].

[35] *See generally* Working Grp. I, Intergovernmental Panel on Climate Change, Climate Change 2021: The Physical Science Basis (Valérie Masson-Delmotte, Panmao Zhai, Anna Pirani, Sarah L. Connors, Clotilde Péan, Yang Chen, Leah Goldfarb, Melissa I. Gomis, J.B. Robin Matthews, Sophie Berger, Mengtian Huang, Ozge Yelekçi, Rong Yu, Baiquan Zhou, Elisabeth Lonnoy, Thomas K. Maycock, Tim Waterfield, Katherine Leitzell & Nada Caud eds., 2021), https://report.ipcc.ch/ar6/wg1/IPCC_AR6_WGI_FullReport.pdf.

[36] *See* Maslin, *supra* note 12, at 2.

[37] *See* World Meteorological Org., *supra* note 34.

[38] *See generally* Peter C. Frumhoff, Richarde Heede & Naomi Oreskes, *The Climate Responsibilities of Industrial Carbon Producers*, 132 Climatic Change 157, 160 (2015); *see also* Richard Heede, *Tracing Anthropogenic Carbon Dioxide and Methane Emissions to Fossil Fuel and Cement Producers, 1854–2010*, 122 Climatic Change 229 (2014) (presenting a quantitative analysis of historic fossil fuel production from 1854 to 2010 and attributing most emissions to ninety "carbon majors"); Lisa Benjamin, Companies and Climate Change: Theory and Law in the United Kingdom 5 (2021) (surveying data regarding corporate greenhouse-gas emissions, especially in Anglo-American countries and by multinational corporations).

[39] *See* Working Grp. I, *supra* note 35, at 182–84.

[40] *See* Dessler, *supra* note 9, at 4–5.

[41] *See* Dale Jamieson, *The Nature of the Problem*, *in* The Oxford Handbook of Climate Change and Society 38, 42 (John S. Dryzek, Richard B. Norgaard & David Schlosberg eds., 2011). *See generally* Working Grp. II, Intergovernmental Panel on Climate Change, Climate Change 2022: Impacts, Adaptation and Vulnerability (Hans-Otto Pörtner, Debra C. Roberts, Melinda M.B. Tignor, Elvira Poloczanska, Katja Mintenbeck, Andrés Alegría, Marlies Craig, Stefanie Langsdorf, Sina Löschke, Vincent Möller, Andrew Okem & Bardhyl Rama eds., 2022), https://report.ipcc.ch/ar6/wg2/IPCC_AR6_WGII_FullReport.pdf; Jessica Wentz, *Climate Change Attribution Science and the Endangered Species Act*, 39 Yale J. on Regul. 1043 (2022).

water shortages, hunger and malnutrition, spread of infectious diseases, migration, conflicts over resources, poverty, and mortality.[42] Many "climate refugees" are already being forced out of their homes due to sea rise, desertification, drought, hurricanes, and tsunamis attributed to the climate crisis.[43] Mitigating climate change is therefore of crucial importance to public health, food and housing security, infrastructure integrity, economic stability, national security, and various other fundamental aspects of our lives.[44] Human rights, such as the rights to life, health, property, housing, food, water and sanitation, and a healthy, safe, and ecologically intact environment, may also be severely harmed by climate change.[45]

However, the climate crisis has not yet been met with effective responses by governments.[46] Climate policies worldwide are far from on-track in order to prevent global warming from reaching a goal of no more than 1.5 degrees Celsius above pre-industrial levels.[47] In order to meet this goal, significant reductions in greenhouse gas emissions (of about fifty percent) are required by 2030, and achieving net-zero greenhouse gas emissions[48] is re-

---

[42] *See* MASLIN, *supra* note 12, at 64–89.

[43] *See* JOHN R. WENNERSTEN & DENISE ROBBINS, RISING TIDES: CLIMATE REFUGEES IN THE TWENTY-FIRST CENTURY 9 (2017); *see also* Ingrid Boas, *Debate 8: Climate Migration: 'Climate Mobility' Is a Proper Subject of Research and Governance*, *in* DEBATING CLIMATE LAW 206, 206 (Benoit Mayer & Alexander Zahar eds., 2021) (stressing that policymakers must pay attention to the problem of "climate mobilities").

[44] *See generally* Susanne C. Moser & Lisa Dilling, *Communicating Climate Change: Closing the Science-Action Gap*, *in* THE OXFORD HANDBOOK OF CLIMATE CHANGE AND SOCIETY (John S. Dryzek, Richard B. Norgaard & David Schlosberg eds., 2011).

[45] *See* Nicola Pain, *Debate 6: Human Rights: Human Rights Law Can Drive Climate Change Mitigation*, *in* DEBATING CLIMATE LAW 145 (Benoit Mayer & Alexander Zahar eds., 2021); *see also* DAVID R. BOYD, UNITED NATIONS GEN. ASSEMBLY, REPORT OF THE SPECIAL RAPPORTEUR ON THE ISSUE OF HUMAN RIGHTS OBLIGATIONS RELATING TO THE ENJOYMENT OF A SAFE, CLEAN, HEALTHY AND SUSTAINABLE ENVIRONMENT 5 (2019).

[46] *See* Alan Boyle & Navraj Singh Ghaleigh, *Climate Change and International Law Beyond the UNFCCC*, in THE OXFORD HANDBOOK OF INTERNATIONAL CLIMATE CHANGE LAW 26, 27 (Kevin R. Gray, Richard Tarasofsky & Cinnamon P. Carlarne eds., 2016) (stating that international climate agreements and national climate policies continue to disappoint); ROSEMARY LYSTER, CLIMATE JUSTICE AND DISASTER LAW 49–103 (2015) (describing the failures of international climate negotiations). *See generally* ANDREW E. DESSLER & EDWARD A. PARSON, THE SCIENCE AND POLITICS OF GLOBAL CLIMATE CHANGE: A GUIDE TO THE DEBATE (3d ed. 2019) (describing the challenges of promoting national and international climate regulation in recent years); Bryan H. Druzin, *The Coming Collapse of the Paris Climate Agreement*, HARV. J. ON LEGIS. ONLINE (Aug. 16, 2017), https://harvardjol.com/2017/08/16/the-coming-collapse-of-the-paris-climate-agreement/ [https://perma.cc/BPS3-T6HA].

[47] *See* JAN BURCK, THEA UHLICH, CHRISTOPH BALS, NIKLAS HÖHNE & LEONARDO NASCIMENTO, CLIMATE CHANGE PERFORMANCE INDEX, RESULTS: MONITORING CLIMATE MITIGATION EFFORTS OF 60 COUNTRIES PLUS THE EU – COVERING 92% OF THE GLOBAL GREENHOUSE GAS EMISSIONS 3–5 (2022); *see also* DESSLER & PARSON, *supra* note 46, at 32 (describing the acceptable global warming goals in today's international arena). These standards are mostly based on the scientific reports of the Intergovernmental Panel on Climate Change, the UN body tasked with assessing the science related to climate change. *See, e.g.*, Boyle & Ghaleigh, *supra* note 46, at 27.

[48] That is, achieving an overall balance between emissions produced and emissions removed—for example, through carbon capture technology.

quired by 2050.[49] Yet according to recent scientific predictions, at the current rate of emission reductions, the earth's temperature is expected to rise well above the 1.5-degree-Celsius threshold.[50] This situation is due in no small part to past and continued contributions by the fossil fuel industry and other industries.[51]

Against this backdrop, regulatory climate shaming is emerging as a new method to combat climate change.[52] Regulatory climate shaming is taking on various forms in various jurisdictions, from naming-and-shaming tactics to labeling, disclosing, informing, and reporting obligations, as well as "naming and faming."

Examples of regulatory climate shaming schemes include the publication of names of companies that have breached their cap-and-trade[53] obligations in European countries such as Germany, France, the United Kingdom, Spain, and the Netherlands.[54] The United Kingdom Environment Agency additionally publishes information regarding civil penalties imposed under various climate change laws, regulations, and voluntary climate change agreements made between the Agency and specific industries.[55] For example, the Agency's database specifies the company name, the penalty imposed, and a description of the infringement.[56]

---

[49] *See* Michael Grubb, Chukwumerije Okereke, Jun Arima, Valentina Bosetti, Ying Chen, James Edmonds, Shreekant Gupta, Alexandre Köberle, Snorre Kverndokk, Arunima Malik & Linda Yanti Sulistiawati, *Introduction and Framing*, *in* WORKING GRP. III, INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, CLIMATE CHANGE 2022: MITIGATION OF CLIMATE CHANGE 151, 174 (Priyadarshi R. Shukla, Jim Skea, Andy Reisinger, Raphael Slade, Roger Fradera, Minal Pathak, Alaa Al Khourdajie, Malek Belkacemi, Renée van Diemen, Apoorva Hasija, Géninha Lisboa, Sigourney Luz, Juliette Malley, David McCollum, Shreya Some & Purvi Vyas eds., 2022), https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_FullReport.pdf.

[50] *See Glasgow's 2030 Credibility Gap: Net Zero's Lip Service to Climate Action,* Climate Action Tracker (Nov. 9, 2021), https://climateactiontracker.org/publications/glasgows-2030-credibility-gap-net-zeros-lip-service-to-climate-action [https://perma.cc/XD8R-NVAG]; *see also* WORLD ENERGY OUTLOOK 2021, INT'L ENERGY AGENCY 3 (2021), https://www.iea.org/reports/world-energy-outlook-2021 [https://perma.cc/GN7Z-KYFT]; *Emissions Gap Report 2021*, UNITED NATIONS ENV'T PROGRAM (Oct. 26, 2021), https://www.unep.org/resources/emissions-gap-report-2021 [https://perma.cc/YAP6-UVV2].

[51] *See infra* Part IV.

[52] *See infra* Part III.

[53] "Cap-and-trade" refers to a mechanism that allows businesses and other organizations to emit up to a specified amount of greenhouse gas emissions and also to purchase unused allowances from other businesses and organizations, enabling the buyer to emit more than its original allowance and creating a market for greenhouse gas emissions. *See* Ann E. Carlson, *Designing Effective Climate Policy: Cap-and-Trade and Complementary Policies*, 49 HARV. J. ON LEGIS. 207, 209 (2012).

[54] *See, e.g.*, The Greenhouse Gas Emissions Trading Scheme Order 2020, SI 2020/1265, art. 49 (UK); *cf.* Council Directive 2003/87, art. 16(2), 2003 O.J. (L 275) 32, 37 (EC).

[55] *See* Climate Change Civil Penalties, data.gov.uk (Oct. 12, 2022), https://data.gov.uk/dataset/13c0893a-049a-4608-9f9b-7f268a71f15a/climate-change-civil-penalties [https://perma.cc/BGM4-BPFL].

[56] *See, e.g.*, *Climate Change Civil Penalties*, data.gov.uk (May 23, 2022), https://environment.data.gov.uk/portalstg/home/item.html?id=3b6567e11ba544a28461657152a25dfc [https://perma.cc/U5KB-WQRD].

Other forms of shaming are also being developed by the Bank of Israel's Banking Supervision Department, which plans not only to impose climate change disclosure obligations on Israeli banks based on their financial exposure to polluting firms but also to grade them accordingly and publicize the ranking.[57] In addition, the Israeli Ministry of Environmental Protection currently scores and rates companies according to their environmental performance and risk level, also taking into account their participation in voluntary climate programs.[58] Criteria for scoring include the level of pollution, waste production methods, use of hazardous materials, regulatory violations, proximity to populated areas and water sources, and voluntary compliance, for example through environmental disclosure mechanisms, environmental streamlining, and use of environmental management systems. According to the Ministry's scoring methodology, companies' voluntary compliance, including through climate programs, can offset their adverse environmental data and improve their total score. These rankings are then posted on the Ministry's website and social media accounts and circulated as press releases.[59] Each company's detailed score and data, including participation and non-participation in voluntary climate programs, are also published on the Ministry's website.

Regulators are also experimenting with climate labeling, a policy that mandates companies to give consumers and other relevant stakeholders information relating to the impacts of the production, distribution, and use of a good or service on climate change, for example by using a simple carbon footprint indicator presented at the point of purchase.[60] This form of shaming can not only educate and help inform consumers but also induce public pressure on firms and motivate them to improve their business practices. For example, the Swedish Energy Agency recently began requiring energy companies to place labels on fuel pumps, displaying company-specific climate impact ratings for different fuels.[61] In a similar vein, the municipality of Cambridge, Massachusetts has passed a city ordinance that mandates the clear labeling of all fuel pumps, stating that burning gasoline, diesel, and ethanol has major consequences for human health and the environment, in-

---

[57] *See* Shani Ashkenazi, *Yair Avidan: We Will Oblige Banks to Report How Exposed They are to Climate Risks and Polluting Companies*, GLOBES (Dec. 19, 2021), https://www.globes.co.il/news/article.aspx?did=1001395102 [https://perma.cc/QB5K-B65P].

[58] *See Environmental Impact Index: Annual Reports*, MINISTRY OF ENV'T PROT. (2020), https://www.gov.il/en/Departments/publications/reports/environmental_impact_index_annual_reports [https://perma.cc/Q9P8-L6X7].

[59] *See id.*; *see also* MINISTRY OF ENV'T PROT., FACEBOOK, https://www.facebook.com/svivaministry [https://perma.cc/225Y-UT5M].

[60] *See* Khan M. R. Taufique, Kristian S. Nielsen, Thomas Dietz, Rachael Shwom, Paul C. Stern & Michael P. Vandenbergh, *Revisiting the Promise of Carbon Labelling*, 12 NATURE CLIMATE CHANGE 132, 132 (2022).

[61] Miranda Bryant, *Swedish Fuel Retailers Required to Display Eco-labels at Pumps*, GUARDIAN (Oct. 1, 2021), https://www.theguardian.com/world/2021/oct/01/swedish-fuel-retailers-required-to-display-eco-labels-at-pumps [https://perma.cc/Y24D-MSXS].

cluding contributing to climate change.[62] In addition, French car manufacturers are now required by regulations to disclose each vehicle's carbon-emissions class and to include in their advertising a message that encourages people to prefer public transport and cycling to driving when possible.[63]

Other forms of climate shaming can be found in climate reporting obligations. For example, the U.S. Securities and Exchange Commission is considering a new regulatory framework that would require companies to issue detailed climate risk disclosures regarding issues such as companies' greenhouse gas emissions, climate-related risk management processes, impacts of climate risks on companies' financial statements and business operations, and companies' level of reliance on fossil fuels.[64] Regulators around the world are currently considering, or have already taken, similar steps.[65] This type of disclosure may mandate car manufacturers, for example, to state in their filings that their reputation and stock price may be harmed due to greenhouse gas emissions from their vehicles.[66] Regulators outside of the financial disclosure landscape are also taking an interest in the climate shaming approach. A good case in point is a new French law mandating that

---

[62] *See* CAMBRIDGE, MASS., MUN. CODE § 8.12.010 (2021).

[63] *See* Claire Parker, *France Says Car Ads Must Come with a Caveat: Walk, Bike or Take Public Transit Instead*, WASH. POST (Jan. 5, 2022), https://www.washingtonpost.com/world/2022/01/05/france-car-ads-alternatives [https://perma.cc/TE8S-EY83] (describing the new regulations and reporting on industry reactions to the regulations as stigmatizing the automobile industry). Car manufacturers have to mention one of three messages: "[f]or short trips, opt for walking or cycling," "[c]onsider carpooling," or "[u]se public transportation for everyday trips." *Id.* Advertisers are also required to include the hashtag #SeDeplacerMoinsPolluer (Move and Pollute Less), referencing the governmental campaign on the issue. *See* Arrêté du 28 décembre 2021 pris pour l'application de l'article D. 328-3 du code de la route [Order of December 28, 2021 for the Application of Article D. 328-3 of the Highway Code], JOURNAL OFFICIEL DE LA RÉPUBLIQUE FRANÇAISE [J.O.] [OFFICIAL GAZETTE OF FRANCE], Dec. 29, 2021, p. 107 (issued in accordance with Loi 2019-1428 du 24 décembre 2019 d'orientation des mobilités [Law 2019-1428 of December 24, 2019 on the Orientation of Mobility], JOURNAL OFFICIEL DE LA RÉPUBLIQUE FRANÇAISE [J.O.] [OFFICIAL GAZETTE OF FRANCE], Dec. 26, 2019, p. 12).

[64] *See* Statement, Comm'r Allison Herren Lee, SEC, *Public Input Welcomed on Climate Change Disclosures* (Mar. 15, 2021), https://www.sec.gov/news/public-statement/lee-climate-change-disclosures [https://perma.cc/7JU2-62ZP]. Publicly traded firms are currently subject to a general SEC disclosure regulation on material risks, including environmental risks, and a guidance on climate-related risks. *See* Sarah E. Light & Christina P. Skinner, *Banks and Climate Governance*, 121 COLUM. L. REV. 1895, 1942–43 (2021).

[65] *See generally* Financial Sector (Climate-related Disclosures and Other Matters) Amendment Act 2021 (N.Z.); Press Release, *Dep't for Bus., Energy & Indust. Strategy, HM Treasury, The Rt Hon John Glen MP & The Rt Hon Greg Hands MP, UK to Enshrine Mandatory Climate Disclosures for Largest Companies in Law* (Oct. 29, 2021) (U.K.), https://www.gov.uk/government/news/uk-to-enshrine-mandatory-climate-disclosures-for-largest-companies-in-law; Fin. Stability Bd., Progress Report on Climate-Related Disclosures 10–12 (2022), https://www.fsb.org/wp-content/uploads/P131022-2.pdf [https://perma.cc/2WLZ-XWUK] (surveying climate disclosure requirements and guidelines in twenty-four jurisdictions, including the United States and United Kingdom).

[66] Such a statement has already been made by Ford, for instance. *See* Andrew Ramonas, *SEC Boosts Climate Disclosure Scrutiny Before Reporting Mandate*, BLOOMBERG L. (Jan. 19, 2022), https://news.bloomberglaw.com/securities-law/sec-boosts-climate-disclosure-scrutiny-before-reporting-mandate [https://perma.cc/682R-B7B3].

phone operators and internet providers publish their policies for reducing greenhouse gas emissions.[67]

Shaming is also taking place through environmental databases, which have become a common feature in countries' regulatory policies. For instance, the U.S. Environmental Protection Agency's ("EPA") "Facility-Level Information on GreenHouse gases Tool" ("FLIGHT") database enables users to view data in maps, tables, charts, and graphs for individual facilities or groups of facilities, and to compare emission trends over time.[68] FLIGHT provides data reported to the EPA mainly by large emitters and fuel and industrial gas suppliers.[69] Similarly, the European Industrial Emissions Portal shows, among other things, the greenhouse gas emissions of individual facilities across Europe, using maps and graphs that highlight emission trends over time.[70]

Climate faming tactics are also emerging. A good case in point is the EPA's Methane Challenge program, which aims to encourage oil and natural gas companies to reduce emissions of the greenhouse gas methane by committing to apply best management practices recommended by the Agency and to develop implementation plans for emission-reducing technologies.[71] In exchange, reputational gains are offered to companies that participate in the program through stories in prominent newspaper publications, industry journals, and posts on the Agency's webpage.[72] Those companies that are left out of such positive advertisements may suffer reputational harms.

These regulatory policies incorporate elements of corporate shaming. The next section provides the relevant theoretical background, focusing on regulatory shaming scholarship—a small but growing literature in the social sciences[73]—and lays down the key conceptual components of regulatory cli-

---

[67] *See* Loi 2021-1485 du 15 novembre 2021 visant à réduire l'empreinte environnementale du numérique en France [Law 2021-1485 of November 15, 2021 Aimed at Reducing the Environmental Footprint of Digital Technology in France], JOURNAL OFFICIEL DE LA RÉPUBLIQUE FRANÇAISE [J.O.] [OFFICIAL GAZETTE OF FRANCE], Nov. 16, 2021, p. 14.

[68] *See Facility Level Information on GreenHouse Gases Tool (FLIGHT)*, EPA, https://ghgdata.epa.gov/ghgp/main.do [https://perma.cc/L9YG-YPCU].

[69] In general, facilities that directly emit 25,000 metric tons of carbon dioxide equivalent or more per year are required to submit annual reports to the EPA. In addition, suppliers of certain products that would result in greenhouse gas emissions if released, combusted, or oxidized are required to report. *See* Brian C., *About the GHG Reporting Program*, EPA (Sept. 2013), https://ccdsupport.com/confluence/display/ghgp/About™he+GHG+Reporting+Program [https://perma.cc/8F48-ABKN]; *Learn About the Greenhouse Gas Reporting Program (GHGRP)*, EPA (Jan. 10, 2023), https://www.epa.gov/ghgreporting/learn-about-greenhouse-gas-reporting-program-ghgrp [https://perma.cc/8PL7-PQT4].

[70] *See Welcome to the European Industrial Emissions Portal*, EUR. ENV'T AGENCY, https://industry.eea.europa.eu [https://perma.cc/8ULU-6XUL]. The information is provided under Directive 2010/75/EU of the European Parliament and the Council on Industrial Emissions.

[71] *See Methane Challenge Program*, EPA (Aug. 2022), https://www.epa.gov/natural-gas-star-program/methane-challenge-program [https://perma.cc/MH2S-UCXP].

[72] *See Methane Challenge Partner Commitments*, EPA (Jan. 31, 2023), https://www.epa.gov/natural-gas-star-program/methane-challenge-partner-commitments [https://perma.cc/UHB9-FJJ5].

[73] *See* sources cited *supra* notes 17–18.

mate shaming. It also surveys research providing evidence of successful regulatory shaming schemes implemented in fields closely related to climate regulation, such as public health and general environmental regulation.

III. Regulatory Shaming Theory and the Regulatory Climate Shaming Framework

The word "shaming" is often used in the media, especially on social media, to refer to cases in which a private person is publicly exposed by another for inappropriate social behavior or an unseemly personal characteristic.[74] "Regulatory shaming" is different in that it refers to situations in which shaming is undertaken by an administrative authority as part of a regulatory strategy.[75] It applies to any intentional publication, performed or ordered by regulators, of information regarding companies' legal, ethical, business, or social misbehavior that is designed to harness public opinion and leverage corporate reputational sensitivities in order to achieve a regulatory goal.[76]

Regulatory shaming refers to the publishing of details of corporate misdeeds in a manner that conveys a negative message to the public about misbehaving corporations. Such shaming aims to encourage corporations to adjust their behavior in accordance with certain public interests.[77] These public interests may include public safety and health, consumer protection and competition in markets, and environmental protection. Like other types of regulation, regulatory shaming is aimed at correcting market failures, such as informational asymmetries and negative externalities, as well as advancing desired social goals.[78]

Regulatory shaming publications may address illegal, inappropriate, or immoral corporate activities, as well as adverse corporate characteristics.[79] More specifically, the publicized information may refer to compliance, noncompliance, or above-compliance pertaining to administrative, civil, criminal, or corporate social responsibility ("CSR")[80] norms.[81] Regulatory sham-

---

[74] *See, e.g.*, Kate Klonick, *Re-Shaming the Debate: Social Norms, Shame, and Regulation in an Internet Age*, 75 Md. L. Rev. 1029, 1034 (2016); Kristine Gallardo, *Taming the Internet Pitchfork Mob: Online Public Shaming, the Viral Media Age, and the Communications Decency Act*, 19 Vand. J. Ent. & Tech. L. 721, 727 (2017).

[75] *See* Yadin, *supra* note 18, at 409.

[76] *See id.* at 410.

[77] *See id.* at 409.

[78] *See id.* at 420.

[79] *See id.*

[80] CSR refers to a firm's consideration of issues beyond economic and legal requirements, often rooted in social expectations of it. *See* Jeremy Moon, Corporate Social Responsibility: A Very Short Introduction 4 (2014).

[81] *See generally* Sharon Yadin, *Saving Lives Through Shaming*, 9 Harv. Bus. L. Rev. Online 57 (2019) (arguing that the Occupational Safety and Health Administration should expand its regulation-by-shaming policy to encourage businesses to adopt voluntary safety norms).

ing can also focus on other aspects of corporate activities, such as business practices, performance in markets, or customer satisfaction.[82] Often, shaming publications include a combination of these types of information; they may also target one or more companies.

Regulatory shaming rests on John Braithwaite's definition of shaming,[83] which does not necessarily require the shaming target to experience inner feelings of shame and can rely solely on external processes. Because corporations are artificial entities, regulatory shaming is instead founded on corporate sensitivity to reputational gains and losses,[84] not on inflicting emotional harm.[85] The goal is often to impose on the firm in question multi-layered costs, which exceed the damages that might be suffered as a result of traditional penalties or monetary fines and thus to better incentivize companies to comply with regulatory norms.[86] In other cases, the objective is to induce corporations to adopt voluntary CSR policies.

Regulatory shaming should be differentiated from other types of expressive regulatory actions, since it is often presented, regarded, or misunderstood as mere disclosure or transparency.[87] However, no single regulatory act of information sharing consists exclusively of either shaming or promoting transparency. Rather, some forms of regulatory publications have a greater element of shaming than others.[88] Indeed, regulatory shaming is closely related to such actions as informing, disclosing, warning, educating, and facilitating transparency.[89] The information's presentation is important for assessing its shaming potential.[90] For example, product labels can educate

---

[82] *See generally* Yadin, *supra* note 18 (analyzing the Food and Drug Administration's blacklist of pharmaceutical companies based on the number of complaints received from competitors in the generic drug industry regarding uncompetitive practices).

[83] JOHN BRAITHWAITE, CRIME, SHAME, AND REINTEGRATION 100 (1989) ("Shaming means all social processes of expressing disapproval which have the intention or effect of invoking remorse in the person being shamed and/or condemnation by others who become aware of the shaming.").

[84] *See generally* Roy Shapira, *The Challenge of Holding Big Business Accountable*, 44 CARDOZO L. REV. 203 (2022) (discussing reputational-based corporate deterrence).

[85] *See* Yadin, *supra* note 18, at 446–47.

[86] *See id.* at 441.

[87] *See supra* note 18 and accompanying text.

[88] *See* Yadin, *supra* note 18, at 427–30. Soft forms of regulatory shaming are sometimes discussed in the literature as "targeted transparency," referring to mandated public disclosure by corporations of standardized, comparable information regarding specific products or practices to further a defined public purpose. *See* ARCHON FUNG, MARY GRAHAM & DAVID WEIL, FULL DISCLOSURE: THE POLITICS, PERILS AND PROMISE OF TARGETED TRANSPARENCY 6 (2007); *see also* Elena Fagotto & Mary Graham, *Full Disclosure: Using Transparency to Fight Climate Change*, 23 ISSUES SCI. & TECH. 73 (2007) (proposing mandated disclosure of corporate greenhouse gas emissions and utilizing transparency approach that aims to mobilize public opinion and inform choice).

[89] *See* Yadin, *supra* note 18, at 427.

[90] *See, e.g.*, Sharon Yadin, *Government Regulation by Eco-Shaming Corporations: Balancing Effectiveness and Fairness*, *in* THE LEGAL ASPECTS OF SHAMING: AN ANCIENT SANCTION IN THE MODERN WORLD (Meital Pinto & Guy Seidman eds., forthcoming 2023) (manuscript at 15–23) (suggesting a typology of regulatory eco-shaming practices based on

and warn consumers, as well as shame companies, depending on the design of the labels and the use of elements like scores and condemning statements.

While in general, transparency can be achieved by all forms of governmental publications, regulatory shaming usually focuses on condemning specific firms for their behavior, with the aim of inducing public action or response. Governmental transparency is usually focused on promoting administrative accountability, fostering public trust in the government, and preventing corruption in government,[91] whereas regulatory shaming primarily aims to advance regulatory goals, such as protecting a public interest, protecting a social value or right, and correcting market failures. Most if not all shaming publications promote administrative transparency, but only a small portion of governmental publications aim to shame private organizations as a regulatory tactic.

Regulatory shaming can be thought of as a form of crowdsourcing—a mechanism that harnesses the wisdom and numbers of the crowd, mostly through digital platforms, to solve various problems and perform various tasks.[92] Unlike the classic governmental regulation model, which relies on a relatively small number of civil servants to inspect, review, investigate, litigate, and sanction under a constrained budget, the crowdsourced model of regulatory enforcement relies on "the crowd" to sanction misbehaving firms.[93] Private sanctioning is performed in this way by many individuals who decide what and who is worth shaming and to what extent, based on, among other things, the initial information published by the regulator.[94] Usually, for the shaming sanction to succeed, many individuals need to respond to the initial publication, otherwise corporations will have a low incentive to improve performance.

Evidence of regulatory shaming can be found in various administrative actions, policies, and initiatives. Some regulatory shaming activities have

---

their shaming level, and a set of differential procedural rules to be applied in accordance with the type of shaming scheme).

[91] *See, e.g.*, Jeffrey R. Boles, *Documenting Death: Public Access to Government Death Records and Attendant Privacy Concerns*, 22 CORNELL J.L. & PUB. POL'Y 237, 240, 243 (2012) (discussing the goals of the Freedom of Information Act).

[92] *See generally* Martin Lodge & Kai Wegrich, *Crowdsourcing and Regulatory Reviews: A New Way of Challenging Red Tape in British Government?*, 9 REGUL. & GOVERNANCE 30 (2015) (analyzing the U.K. experience with crowdsourcing regulatory reform and rulemaking); Victòria Alsina & José Luis Martí, *The Birth of the CrowdLaw Movement: Tech-Based Citizen Participation, Legitimacy and the Quality of Lawmaking*, 40 ANALYSE & KRITIK 337 (2018); Sharon Yadin, *The Crowdsourcing of Regulatory Monitoring and Enforcement*, 17 L. & ETHICS HUM. RTS. (forthcoming 2023) (on file with author); David Orozco, *The Use of Legal Crowdsourcing ("Lawsourcing") to Achieve Legal, Regulatory, and Policy Objectives*, 53 AM. BUS. L.J. 145 (2016).

[93] *See* David Orozco, *Compliance by Fire Alarm: Regulatory Oversight Through Information Feedback Loops*, 46 J. CORP. L. 97, 107–09 (2020) (discussing monitoring and enforcement actions carried out by governmental regulators and the associated costs).

[94] Indeed, shaming is often unpredictable in its magnitude and effects, which may grow out of all proportion to the original misdeed. There are, however, administrative procedures that can be put in place to mitigate this effect. *See* Yadin, *supra* note 90 (manuscript at 21–22).

only just begun to emerge,[95] while others are more established.[96] However, regulatory shaming actions are becoming a trend in the regulatory landscape.[97] For instance, the U.S. Occupational Safety and Health Administration ("OSHA") regularly tweets about corporate occupational safety violations that resulted in employee illness, injury, or death, naming the responsible companies.[98] These announcements are also posted on OSHA's homepage and circulated to its newsletter subscribers.[99]

OSHA's announcements often condemn the poor ethics of specific employers and their low level of commitment to worker safety. For example, one announcement stated that "[the company's] history of safety violations continues, putting employees . . . at risk of serious injuries," "[the company's] 10th inspection since 2011 yields $1.9M in penalties," and "[the company's] extensive list of violations reflects a workplace that does not prioritize worker safety and health."[100] OSHA's former administrator, Dr. David Michaels, stated that these "reporting requirements will 'nudge' employers to prevent worker injuries and illnesses to demonstrate to investors, job seekers, customers and the public that they operate safe and well-managed facilities."[101] OSHA also offers a digital platform that enables users to search by geographical area for enforcement data relating to safety viola-

---

[95] In a recent example, Israel required retailers to put signs on shelves indicating the international (low) prices presented to consumers next to the local (high) prices of toiletry products. This policy led to some eight percent decrease in prices. *See* Itai Ater & Or Avishay-Rizi, Price Saliency and Fairness: Evidence from Regulatory Shaming 25 (May 27, 2022) (unpublished manuscript), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4121331 [https://perma.cc/7CCJ-VYD9].

[96] A case in point is the EPA's open public registry of factories' chemical pollution, known as the Toxic Release Inventory. Many consider this facility-based and firm-based online database on toxic chemical releases, established in the mid-1980s, a highly effective and successful shaming mechanism. *See* Archon Fung & Dara O'Rourke, *Reinventing Environmental Regulation from the Grassroots Up: Explaining and Expanding the Success of the Toxics Release Inventory*, 25 Env't Mgmt. 115 (2000).

[97] *See supra* note 18 and accompanying text; *see also* Ray Pawson, *Evidence and Policy and Naming and Shaming*, 23 Pol'y Stud. 211, 212 (2002).

[98] *See* Yadin, *supra* note 81, at 58.

[99] *See* Occupational Safety & Health Admin., https://www.osha.gov [https://perma.cc/29M7-4B4R]; *see also QuickTakes*, Occupational Safety & Health Admin., https://www.osha.gov/as/opa/quicktakes/ [https://perma.cc/J7JJ-YK62]; *News Releases*, Occupational Safety & Health Admin., https://www.osha.gov/news/newsreleases [https://perma.cc/K3JD-K2K9].

[100] *See* News Release, Occupational Safety & Health Admin., Aluminum Manufacturing Company's History of Safety Violations Continues, Putting Employees at Camden County Facility at Risk of Serious Injuries (July 21, 2017), https://www.osha.gov/news/newsreleases/region2/07212017 [https://perma.cc/LFK5-UWEP].

[101] *See* News Release, Occupational Safety & Health Admin., OSHA's Final Rule to 'Nudge' Employers to Prevent Workplace Injuries, Illnesses (May 11, 2016), www.osha.gov/news/newsreleases/national/05112016 [https://perma.cc/9DUD-5KFS]; *see also* News Release, Occupational Safety & Health Admin., Statement on Updates to OSHA's Recordkeeping Rule by Assistant Secretary for Occupational Safety and Health Dr. David Michaels (Sept. 11, 2014), https://www.osha.gov/news/newsreleases/statement/09112014 [https://perma.cc/5WCP-MNV9].

tions that incurred penalties, through an interactive map.[102] Other OSHA tweets are positive in nature, addressing companies that have voluntarily joined one of the agency's cooperative programs.[103]

Regulators also publish league tables, ratings, and scores of regulated corporations based on performance. For example, the U.S. Department of Health and Human Services provides a searchable platform on its website which rates nursing homes based on a five-star scale that reflects recent health inspection results, staff-resident ratios, and clinical data.[104] OSHA produces and publishes an "incident rate," which measures the safety levels of employers so that comparisons can be made between them.[105] Another federal agency, the Food and Drug Administration, has published a "blacklist" of pharmaceutical companies that the agency claims act unethically in the markets or fail to meet regulatory requirements.[106]

Shaming methods are massively enhanced in the digital age, in which sophisticated yet very accessible, low-cost, and simple-to-operate online platforms—such as social media, websites, and mobile applications—allow regulators to reach large audiences in a matter of seconds while also targeting specific communities.[107] In this manner, shaming is considered an efficient means of norm enforcement because it is extremely cheap relative to other enforcement strategies such as criminal, administrative, or civil sanctions. While shaming is sometimes subject to manipulation by corporations,[108] generally, it can enrich many agencies' enforcement pyramids,[109] which may lack efficient tools to deal with major new challenges.

---

[102] *See* Enforcement Cases with Initial Penalties of $40,000 or Above, OCCUPATIONAL SAFETY & HEALTH ADMIN., https://www.osha.gov/enforcement/toppenalties/bystate [https://perma.cc/9S8J-HNFE].

[103] *See, e.g.*, @OSHA_DOL, TWITTER (Mar. 27, 2019, 10:15 AM), https://mobile.twitter.com/OSHA_DOL/status/1110908111232163841 [perma.cc/C3XR-CERK].

[104] *See About Nursing Home Compare Data*, MEDICARE.GOV, https://www.medicare.gov/nursinghomecompare/Data/About.html [https://perma.cc/ F9J5-7ZCY].

[105] *See Establishment Specific Injury & Illness Data (OSHA Data Initiative)*, OCCUPATIONAL SAFETY & HEALTH ADMIN., https://www.osha.gov/pls/odi/establishment_search.html [https://perma.cc/N8C4-PTYU] ("An incidence rate of injuries and illnesses is computed using the following formula: (Number of injuries and illnesses X 200,000) / Employee hours worked = Incidence rate.").

[106] *See Reference Listed Drug (RLD) Access Inquiries*, FDA, https://www.fda.gov/Drugs/DevelopmentApprovalProcess%20/HowDrugsareDevelopedandApproved/ApprovalApplications/AbbreviatedNewDrugApplicationANDAGenerics/ucm607738.htm [https://perma.cc/7XHY-NQDT].

[107] *See* Sharon Yadin, *E-Regulation*, 38 CARDOZO ARTS & ENT. L.J. 101, 104 (2020); *see also* Meijer & Homburg, *supra* note 18, at 268; Andrea A. Curcio, *Painful Publicity – An Alternative Punitive Damage Sanction*, 45 DEPAUL L. REV. 341, 343 (1996).

[108] *See, e.g.*, Deborah Wilson, *Which Ranking? The Impact of a 'Value-Added' Measure of Secondary School Performance*, 24 PUB. MONEY & MGMT. 37, 43–44 (2004) (explaining that the complexity of the U.K. education system leaves room for schools to try and "game the system" in order to simply improve their league table position. If schools are ranked according to academic achievements, for instance, they exclude weak students from admission or from certain courses or exams, instead of allocating academic resources that would help weak students improve); Lavender Yang, Nicholas Z. Muller & Pierre Jinghong Liang, *The Real Effects of Mandatory CSR Disclosure on Emissions: Evidence from the Greenhouse Gas*

Regulatory shaming has also proven effective in reducing consumer prices,[110] hospital waiting times,[111] food illness,[112] and occupational safety incidents,[113] and in improving school and hospital performance.[114] For instance, a recent study found that OSHA's press releases shaming companies for their violations have led other companies in the same sector or geographical area as the shamed entity to improve their compliance, resulting in fewer occupational injuries.[115] According to the study, a single OSHA press release may be equivalent, in terms of improvement in compliance, to more than 200 inspections.[116]

In the field of environmental regulation, research has indicated that managers care about and react to changes to their social license in ways that improve both compliance and "beyond compliance."[117] Generally, "social

---

Reporting Program 1–2 (Nat'l Bureau of Econ. Rsch., Working Paper No. 28984, 2022), https://ssrn.com/abstract=3880217 [perma.cc/G8E8-UC9J] (showing that firms that own multiple plants reduce greenhouse gas emissions in plants covered by mandated disclosure while increasing emissions in plants that are not covered by such disclosure rules).

[109] Under this approach, most identified with the work of Ayres and Braithwaite, regulators must develop a rich array of soft, mid-level, and hard (top of the pyramid) enforcement tools. *See generally* IAN AYRES & JOHN BRAITHWAITE, RESPONSIVE REGULATION: TRANSCENDING THE DEREGULATION DEBATE (1992).

[110] *See generally* Ater & Avishay-Rizi, *supra* note 95 (examining the effectiveness of a regulatory shaming policy that requires Israeli retailers to display international alongside local product prices).

[111] *See generally* Gwyn Bevan & Deborah Wilson, Does 'Naming and Shaming' Work for Schools and Hospitals? Lessons from Natural Experiments Following Devolution in England and Wales, 33 PUB. MONEY & MGMT. 245 (2013).

[112] *See generally* Miroslava Bavorova, Anica Veronika Fietz & Norbert Hirschauer, *Does Disclosure of Food Inspections Affect Business Compliance? The Case of Berlin, Germany*, 119 BRIT. FOOD J. 143 (2017) (demonstrating the effect of restaurant grading in Germany on improving compliance with food and hygiene regulations); Ginger Zhe Jin & Phillip Leslie, *The Effect of Information on Product Quality: Evidence from Restaurant Hygiene Grade Cards*, 118 Q.J. ECON. 409 (2003) (studying the Los Angeles County hygiene quality grade cards displayed in restaurant windows).

[113] *See, e.g.*, Matthew S. Johnson, *Regulation by Shaming: Deterrence Effects of Publicizing Violations of Workplace Safety and Health Laws*, 110 AM. ECON. REV. 1866, 1866 (2020); Allen H. Huang, Michael Shen, Chao Tang & Juanting Wang, The Effects of Regulatory Enforcement Disclosure: Evidence from OSHA's Press Release about Safety Violations 1 (Oct. 13, 2022) (unpublished manuscript) (on file with author) (showing that following OSHA's publication of naming-and-shaming press releases firms increase their safety measures); Hans B. Christensen, Eric Floyd, Lisa Yao Liu & Mark Maffett, *The Real Effects of Mandated Information on Social Responsibility in Financial Reports: Evidence from Mine-Safety Records*, 64 J. ACCT. & ECON. 284, 285, 289 (2017) (showing that a new regulatory requirement to disclose mine-safety records in SEC-registered firms' financial reports has led to an eleven percent decrease in mining-related citations and a thirteen percent decrease in injuries).

[114] *See, e.g.*, Wilson, *supra* note 108, at 37; Bevan & Wilson, *supra* note 111, at 245.

[115] *See* Johnson, *supra* note 113, at 1888.

[116] *See id.*

[117] *See* Neil Gunningham, Robert A. Kagan & Dorothy Thornton, *Social License and Environmental Protection: Why Businesses Go Beyond Compliance*, 29 L. & SOC. INQUIRY 307, 328 (2004); Albert Meijer, *Local Meanings of Targeted Transparency: Understanding the Fuzzy Effects of Disclosure Systems*, 35 ADMIN. THEORY & PRAXIS 398, 414 (2013). *See generally* Julie Doonan, Paul Lanoie & Benoit Laplante, *Environmental Performance of Canadian Pulp and Paper Plants: Why Some Do Well and Others Do Not?*, CIRANO (2002).

license" governs the extent to which corporations are constrained to meet societal expectations and avoid activities that society deems unacceptable, whether or not these expectations are embodied in the law.[118] In Indonesia, a study by the World Bank examined a government program that assigned color ratings to factories according to their general environmental performance.[119] The scheme included five colors, with a gold rating given to factories that achieved above-compliance standards, and a black rating to factories that pose a serious danger and made no attempt to control pollution.[120] Even before the assigned ratings were fully disclosed to the public, half of the black-rated plants successfully upgraded their status.[121] This result, along with similar studies in various other jurisdictions,[122] indicates high levels of responsiveness by industrial facilities to reputational sanctions in the environmental context.[123]

Building on regulatory shaming theory and on the emerging climate regulation policies discussed in the previous part, a regulatory climate shaming framework can be put forward. Regulatory climate shaming refers to the practice by national and subnational regulators of publicizing corporate actions, omissions, decisions, activities, and characteristics that are contributing, directly or indirectly, to climate change, with the purpose of inducing compliance and "beyond compliance" to climate change norms.

---

[118] *See* Gunningham et al., *supra* note 117, at 308.

[119] *See* Shakeb Afsah, Benoît Laplante & David Wheeler, *Controlling Industrial Pollution: A New Paradigm* 10 (World Bank Pol'y Rsch. Dep't, Working Paper No. 1672, 1996).

[120] *Id.*

[121] *See id.* at 11.

[122] *See* Yadin, *supra* note 90 (manuscript at 8–11) (surveying studies on corporate environmental reputation and disclosure regulation); Pietro Bonetti, Christian Leuz & Giovanna Michelon, *Internalizing Externalities: Disclosure Regulation for Hydraulic Fracturing, Drilling Activity and Water Quality* 9 (Nat'l Bureau of Econ. Rsch., Working Paper No. 30842, Jan. 2023), https://ssrn.com/abstract=4171246 [https://perma.cc/D7ME-5GQJ] (showing that various environmental indicators have improved following the implementation of new hydraulic fracturing disclosure mandates).

[123] Recent research has also indicated that mandatory disclosure of firms' greenhouse gas emissions leads to a decrease in firms' emissions. *See, e.g.*, Benedikt Downar, Jürgen Ernstberger, Stefan Reichelstein, Sebastian Schwenen & Aleksandar Zaklan, *The Impact of Carbon Disclosure Mandates on Emissions and Financial Operating Performance*, 26 Rev. Acct. Stud. 1137, 1139, 1156 (2021) (showing that firms have reduced emissions by eight percent following a 2013 U.K. disclosure mandate relating to greenhouse gas emissions by publicly listed firms); Sorabh Tomar, *Greenhouse Gas Disclosure and Emissions Benchmarking* 39 (Eur. Corp. Governance Inst., Fin. Working Paper No. 818/2022, 2022), https://ssrn.com/abstract=3448904 [perma.cc/E5KW-X2JP] (showing that U.S. facilities have reduced their greenhouse gas emissions by some eight percent following the introduction of the EPA mandatory greenhouse gas disclosure program); Valentin Jouvenot & Philipp Krueger, *Mandatory Corporate Carbon Disclosure: Evidence from a Natural Experiment* 3 (Geneva Fin. Rsch. Inst., Working Paper, 2019), https://ssrn.com/abstract=3434490 [perma.cc/V9DM-8R8G]; Tobias Bauckloh, Christian Klein, Thomas Pioch & Frank Schiemann, Under Pressure? *The Link Between Mandatory Climate Reporting and Firms' Carbon Performance*, 35 Org. & Env't 1, 2, 4 (2022) (pointing to improvements in carbon intensity following the introduction of the EPA's greenhouse gas mandatory disclosure rule and based on firms' social "license to operate").

This could include, for instance, creating a governmental public database with information on greenhouse gas emissions of companies and indications of emission increase or reduction over time; designing and implementing a carbon rating and labeling system for products and services; publicizing rankings of oil and gas companies according to indicators of their direct contribution to climate change through emissions; releasing messages condemning firms' irresponsible or manipulative climate practices; and lauding firms that are voluntarily reducing greenhouse gas emissions and adopting climate-friendly practices.

Generally, regulatory climate shaming can be used by administrative bodies such as regulatory agencies, governmental departments, and municipalities. It aims to encourage stakeholders to pressure firms via their social license, that is, to leverage the social approval and business appeal required by firms and their operations. The shaming targets within this framework are regulated private bodies: corporations, industries, businesses, organizations, facilities, and factories. These can encompass not only oil and gas companies but also the financial sector, the advertising industry, the automobile industry, and any other sector or organization that affects climate change, either directly or indirectly, as will be discussed in the next part. This is a very encompassing group, as it is hard to think of an organization that does not have some impact on climate change. The idea is that organizations that wish to avoid being named or presented as contributing to the climate crisis (or even as being insufficiently climate-friendly) by regulators, and then by subsequent shamers, will adjust their business policies so as to refrain from reputational (and subsequently financial) harms.

While climate change is perceived as a distant, unreal problem, a broad public awakening is currently gaining momentum as more and more people around the world are becoming aware, concerned, and even passionate about climate change.[124] The climate crisis evokes a multitude of emotions, including anxiety, anger, fear, sadness, hope, grief, loneliness, guilt, and shame.[125] This situation offers fertile ground for shaming strategies because for shaming to be effective, it must be able to grab people's attention and inspire them to take action.

Possible shamers and relevant stakeholders that could respond to regulatory shaming in this context include consumers, investors and sharehold-

---

[124] *See* Bell et al., *supra* note 3; *see also* Konisky et al., *supra* note 3, at 535; LISA BENJAMIN, AKRITI BHARGAVA, BENJAMIN FRANTA, KARLA MARTÍNEZ TORAL, JOANA SETZER & ARADHNA TANDON, CLIMATE SOC. SCI. NETWORK, CSSN RESEARCH REPORT 2022:1: CLIMATE-WASHING LITIGATION: LEGAL LIABILITY FOR MISLEADING CLIMATE COMMUNICATIONS 15 (2022) (discussing that corporations care about their climate reputations for various reasons).

[125] *See generally Janet K. Swim, Ezra M. Markowitz & Brittany Bloodhart, Psychology and Climate Change: Beliefs, Impacts, and Human Contributions*, *in* THE OXFORD HANDBOOK OF ENVIRONMENTAL AND CONSERVATION PSYCHOLOGY (Susan D. Clayton ed., 2012); *see also* Climate Emotions, BBC, https://www.bbc.com/future/columns/climate-emotions [https://perma.cc/A3XM-2FXW].

ers, environmentally aware citizens, businesses (such as suppliers and competitors), creditors (such as banks), employees, the media, other regulators, politicians, policymakers, NGOs, and plaintiffs. Regulatory climate shaming is meant to stimulate critical public discourse and media coverage; enable consumer action, such as boycotts; influence investor preferences; encourage climate litigation; inspire academic research; prompt regulatory action; advance political support for climate legislation; induce action by NGOs; and stimulate pressure by employees.

These types of shamers, stakeholders, shaming actions, and public responses may prompt companies to adjust their climate practices faster than do potentially years-long command-and-control enforcement actions or lawsuits filed by regulators.[126] As discussed in Part I, the climate crisis demands immediate action and results. Time is of the essence, and fundamental human rights are at stake, along with a multitude of health, security, environmental, financial, and welfare interests.[127] Regulatory climate shaming can nudge corporations to internalize their negative externalities associated with the climate crisis by posing immediate rather than delayed financial risks to companies. Put differently, while net-zero commitments, which generally relate to substantial reductions in greenhouse gas emission over a five- to thirty-year period, have been described as a "burn now, pay later" approach,[128] regulatory climate shaming may be considered a "burn now, pay now" approach. It inflicts relatively immediate reputational costs on companies for continuing business as usual despite the climate crisis.[129]

Additionally, regulatory climate shaming can prove especially useful in conveying a condemning message that expresses moral disapproval of cor-

---

[126] *See* CLIMATE CHANGE LITIGATION DATABASES, SABIN CTR. FOR CLIMATE CHANGE L., http://climatecasechart.com [https://perma.cc/9XET-9QC6] (database provided by the Sabin Center at Columbia Law School).

[127] *See supra* Part I.

[128] James Dyke, Robert Watson & Wolfgang Knorr, *Climate Scientists: Concept of Net Zero is a Dangerous Trap*, CONVERSATION (Apr. 22, 2021), https://theconversation.com/climate-scientists-concept-of-net-zero-is-a-dangerous-trap-157368 [https://perma.cc/K7B8-56EH].

[129] Indeed, studies have shown weak negative market responses, in terms of share price, to environmental infringements by publicly traded companies. *See, e.g.*, Jonathan M. Karpoff, John R. Lott, Jr. & Eric W. Wehrly, *The Reputational Penalties for Environmental Violations: Empirical Evidence*, 48 J.L. & ECON. 653, 655 (2005); Jacob Brady, Mary F. Evans & Eric W. Wehrly, *Reputational Penalties for Environmental Violations: A Pure and Scientific Replication Study*, 57 INT'L REV. L. & ECON. 60, 60–61 (2019); William McGuire, Ellen Alexandra Holtmaat & Aseem Prakash, *Penalties for Industrial Accidents: The Impact of the Deepwater Horizon Accident on BP's Reputation and Stock Market Returns*, 17 PLOS ONE, June 15, 2022, at 1, 5–10. However, these studies mostly relate to environmental rather than climate-related issues and analyze incidents and market behavior mainly from over a decade ago, at a time in which public sensitivities to environmental issues were weaker. Importantly, stock prices are only a partial, inaccurate indication of a firm's reputational sensitivity. Finally, in this Article I discuss corporate manipulation and deceit of stakeholders like consumers and investors (*see infra* Part IV), which studies have indicated to be especially relevant cases for effective reputational sanctioning. *See, e.g.*, Jonathan M. Karpoff, *Does Reputation Work to Discipline Corporate Misconduct?*, in THE OXFORD HANDBOOK OF CORPORATE REPUTATION 361, 362–63 (Timothy G. Pollock & Michael L. Barnett eds., 2012).

porate noncompliance to mandatory and voluntary climate norms. In this way, it differs from other climate regulation measures, which do not express society's disapproval of such corporate conduct. Tools, such as carbon taxing,[130] cap-and-trade,[131] and oftentimes even criminal prosecution, fail to convey the message that excessive greenhouse gas emissions are a social wrong. In effect, civil penalties or criminal fines usually result in companies, which naturally cannot be incarcerated, simply paying a price tag for their violations, without any further repercussions.[132]

A case in point is that of the "carbon majors," the (typically multinational) companies that emit the largest quantity of greenhouse gases. These companies are especially hard to deter through direct monetary sanctions relating to climate regulation infringements, which have an insignificant impact on their bottom line.[133] In contrast, regulatory climate shaming is fundamentally directed at conveying messages that condemn this type of corporate behavior as immoral and can therefore nudge firms to act in a socially and environmentally responsible manner, based on larger financial incentives. Instead of merely facing the possibility of paying a fine, regulatory climate shaming can potentially drive the fossil fuel industry and other industries to shut down or suffer tremendous losses. This can be the result of consumer boycott, public demand for stricter regulations, or inability to secure funds.

Still, the use of shaming by regulators is a highly controversial practice, incorporating public condemnation and targeting corporate reputations.[134] The next Part of this Article provides justifications and rationales that focus on advantages relating to the offsetting of corporate climate obstruction tactics, such as climate denial and climate washing. The discussion will show that regulatory climate shaming relies not only on conventional regulatory shaming justifications previously discussed in the literature, but also on justifications relating to problems outside (or above) the usual compliance/noncompliance equation.

---

[130] Carbon tax is an economic tool currently being implemented or considered by many jurisdictions worldwide to encourage individuals and companies to burn fewer fossil fuels (for example, by taxing petrol or oil refineries). *See, e.g.*, Nives Dolšak, Christopher Adolph & Aseem Prakash, *Policy Design and Public Support for Carbon Tax: Evidence From a 2018 US National Online Survey Experiment*, 98 PUB. ADMIN. 905, 906 (2020).

[131] *See* Carlson, *supra* note 53, at 216.

[132] *See, e.g.*, Jeffrey R. Boles, *Financial Sector Executives as Targets for Money Laundering Liability*, 52 AM. BUS. L.J. 365, 412 (2015) (explaining why monetary sanctions directed at financial institutions do not sufficiently deter money laundering).

[133] *See generally* Shapira, *supra* note 84 (discussing the various difficulties to regulate large firms).

[134] For instance, regulatory shaming may be regarded as unfair "mob justice" because the shaming sanction is so easily applied and can encourage public responses that can quickly spiral out of control, especially in the age of social media and mass-media platforms. *See, e.g.*, DANIEL J. SOLOVE, THE FUTURE OF REPUTATION: GOSSIP, RUMOR, AND PRIVACY ON THE INTERNET 101–02 (2007).

IV. Rationales and Justifications for Regulatory Climate Shaming: A Climate Obstruction Perspective

The fossil fuel industry, as well as other related industries, has engaged in climate obstruction tactics for years and continues to do so.[135] These tactics include well-orchestrated, decades-long denial campaigns, which extend to aggressive and manipulative lobbying, litigation, public relations activities, and climate washing methods, especially in the financial investments arena.[136] In this Part, I explain the mechanisms and devastating effects of these various obstruction tactics, and spotlight the ways in which shaming can counter these tactics and slow climate change. This Part shows that in addition to the conventional benefits and justifications of regulatory shaming, namely effectively and efficiently inducing compliance to laws and regulations and nudging firms to go "beyond compliance," regulatory climate shaming can also tackle meta-regulation problems like corporate climate obstruction.

The novelty of this analysis lies in the focus on indirect corporate contribution to climate change, rather than on direct contribution through greenhouse gas emissions or through investing in the fossil fuel industry or otherwise supporting it, which is currently the focus of climate change regulation. Building on the previous Parts, this Part develops a normative regulatory climate shaming theory that focuses on the strategic benefits of regulatory climate shaming, such as influencing climate change discourse and public perceptions. This Article therefore demonstrates that regulatory shaming—a tactic employed in various fields of regulation—entails additional, unique benefits in the context of climate change, and should be used by regulators to fight the climate crisis.

Specifically, I contend that climate shaming is a regulatory strategy that is highly suitable for offsetting various manipulative corporate practices, such as climate denial and climate washing. I show that these practices seek to set back climate change regulation efforts and legitimize a business-as-usual approach, indirectly exacerbating greenhouse gas emissions and the climate crisis. I assert that climate shaming is especially useful and suitable in the context of corporate climate obstruction because it publicly assigns blame and liability to industries and companies that often deny such blame or seek to shift it elsewhere, such as to consumers.[137] I further argue that regulatory climate shaming can counteract misleading corporate climate

---

[135] *See, e.g.*, Kristoffer Ekberg, Bernhard Forchtner, Martin Hultman & Kirsti M. Jylhä, Climate Obstruction: How Denial, Delay and Inaction Are Heating the Planet 44–45, 60–61, 120 (2022).

[136] *See id.* at 53.

[137] For example, one of the fossil fuel companies' climate denial messages focuses on blaming customers for their everyday energy demands and use and for putting their energy needs above the risks associated with climate change. *See* Supran & Oreskes, *supra* note 33, at 711–12.

statements and ratings, rendering climate washing a less appealing business strategy for firms.

I also argue that, given the success of the fossil fuel industry's deceptive lobbying and litigation activities directed against governmental efforts to regulate climate change through traditional methods (i.e., hard law),[138] alternative soft-law tools such as shaming can be especially relevant and justified. I also briefly demonstrate how regulatory climate shaming should be used to counter these practices and their adverse implications, highlighting further benefits of regulatory climate shaming.

It should be pointed out that the legal basis for regulatory shaming schemes in different areas, forms, and jurisdictions varies. Some policies are anchored in laws, some in rules or regulations, and some do not enjoy explicit statutory mandates at all. Certain regulators have put in place procedures that would ensure fairness toward targeted firms (for example, by removing the publications after a certain period or by giving companies a chance to view and comment on publications ex ante), while others have not yet developed such mechanisms.[139] The practice of regulatory shaming is therefore linked to principles of administrative authority, procedure, and discretion, as well as to issues such as companies' right to reputation, to free speech, and to property.[140]

Indeed, in some ways, this Article can be read as a possible response to doctrinal legal arguments raised in litigation or legislative processes regarding regulatory climate shaming, as it offers justifications and considerations that underscore the public interests and values that should be weighed against corporate rights and interests. However, my focus here is more theoretical in nature, aiming to explore the rationales and the unique advantages of climate shaming as a regulatory tool, especially from a climate obstruction perspective. By focusing on broad normative analysis rather than on the doctrinal side of specific regulatory shaming schemes or specific legal argu-

---

[138] *See infra* Section IV.C.

[139] For a discussion of these procedural mechanisms, see generally Yadin, *supra* note 90.

[140] *See, e.g.*, Eric J. Conn & Casey M. Cosentino, *Hot Off the Press: Two Attorneys Argue That OSHA's Enforcement Press Releases Violate the Federal Administrative Procedure Act*, EHS TODAY (Sept. 1, 2011), https://www.ehstoday.com/standards/osha/article/21905418/hot-off-the-press [https://perma.cc/S36V-ELPP] (discussing reputational harms, constitutional due process implications, and violations of the Administrative Procedure Act due to lack of statutory authority to shame); Nathan Cortez, *Regulation by Database*, 89 U. COLO. L. REV. 1, 63 (2018) (discussing litigation pertaining to the rating of nursing homes by the Department of Health and Human Services and subsequent reputational harms); Nathan Cortez, *Adverse Publicity by Administrative Agencies in the Internet Era*, 2011 BYU L. REV. 1371, 1374 (2011) (stating that most agencies lack agency authority to issue adverse publicity); Arthur G. Sapper, *OSHA Shaming and the Rule of Law*, 43 REGUL., Fall 2020, at 4, 5–6 (arguing that OSHA's shaming policy is unlawful and immoral, for example due to misleading terminology, demagoguery, and unauthorized sanctioning); Jeff Schwartz, *The Conflict Minerals Experiment*, 6 HARV. BUS. L. REV. 129, 141 (2016) (discussing an SEC naming and shaming rule that required companies to reveal in their filings their business reliance on conflict minerals, which was struck down by the D.C. Circuit Court of Appeals as infringing on the First Amendment rights of companies).

ments, I aim to advance regulatory shaming theory and contribute to climate change regulation and corporate climate obstruction scholarship, as well as to provide a theoretical and conceptual basis for the development of regulatory climate shaming policies.

A. Advantages in the Context of Dealing with Climate Denial

Climate change denial is the rejection of climate change science,[141] based on opinion, ideology, emotions, or interests.[142] In the context of the corporate world, climate change denial is a manipulative reputation- and regulation-management strategy that the fossil fuel industry and other related industries have adopted to ward off, impede, and prevent regulatory limitations and prohibitions on greenhouse gas emissions.[143]

Corporate climate denial is also designed to aid companies that contribute to the climate crisis to evade reputational harms, avoid public scrutiny and criticism, and prevent boycotts and other third-party behavioral changes that would reduce demand for their products and services.

The growing literature on climate change denial has identified several different types of common denial messages.[144] Most prominently, denial messages have focused for many years on undermining the scientific evidence of climate change by establishing a "the science is unsettled" narrative.[145] In this vein, some messages have denied the anthropogenic origins of climate change, pointing to nature itself instead as the culprit.[146] Other messages are concerned with minimizing or denying climate change effects and implications, framing the discussion on consequences of the climate crisis as alarmism.[147]

---

[141] I use the term "climate change science" here to refer inclusively to the scientific findings, analysis, estimations, predictions, and implications relating to climate change. These were briefly introduced in Part II.

[142] *See generally* HAYDN WASHINGTON & JOHN COOK, CLIMATE CHANGE DENIAL: HEADS IN THE SAND (2011); MICHAEL E. MANN & TOM TOLES, THE MADHOUSE EFFECT: HOW CLIMATE CHANGE DENIAL IS THREATENING OUR PLANET, DESTROYING OUR POLITICS, AND DRIVING US CRAZY (2016); KARI MARIE NORGAARD, LIVING IN DENIAL: CLIMATE CHANGE, EMOTIONS, AND EVERYDAY LIFE (2011).

[143] *See* William C. Tucker, *Deceitful Tongues: Is Climate Change Denial a Crime?*, 39 ECOLOGY L.Q. 831, 833, 845 (2012).

[144] *See* Miquel Rodrigo-Alsina, *Talking About Climate Change: The Power of Narratives*, *in* CLIMATE CHANGE DENIAL AND PUBLIC RELATIONS: STRATEGIC COMMUNICATION AND INTEREST GROUPS IN CLIMATE INACTION 103, 112 (Núria Almiron & Jordi Xifra eds., 2020); Núria Almiron, *Rethinking the Ethical Challenge in Climate Change Lobbying: A Discussion of Ideological Denial*, *in* CLIMATE CHANGE DENIAL AND PUBLIC RELATIONS: STRATEGIC COMMUNICATION AND INTEREST GROUPS IN CLIMATE INACTION 9, 12–13 (Núria Almiron & Jordi Xifra eds., 2020); WASHINGTON & COOK, *supra* note 142, at 11, 43–70.

[145] *See* Wes E. Henricksen, *Peddling Ignorance: A New Falsity Standard for Scientific Knowledge Fraud Cases*, 86 UMKC L. REV. 295, 313 (2017).

[146] *See* Rodrigo-Alsina, *supra* note 144, at 112; *see also* WASHINGTON & COOK, *supra* note 142, at xiii.

[147] *See* Rodrigo-Alsina, *supra* note 144, at 112.

Another common message claims that nothing can be done to mitigate climate change and so regulation is futile, thereby denying the possibility of climate change mitigation by emission reduction and, indirectly, the possibility of corporate responsibility as well.[148] Some climate denialists argue that science and technology will solve the problem eventually, so nothing should be done.[149] Others stress that it is wrong to go against humanity's progress and so reliance on fossil fuels must continue as usual.[150] These denial messages often use faulty arguments based on conspiracy theories, fake experts, misrepresentations, logical fallacies, and cherry-picked facts and scientific estimates.[151]

Climate change denial by oil and gas companies[152] has been going on for decades, ever since policymakers began to pay attention to scientific reports that pointed to the problem of global warming.[153] As climate change science and public perceptions have progressed, climate denial campaigns have adjusted. Five major oil and gas companies only recently accepted on record the general scientific premise of climate change, including the role of fossil fuels in the crisis.[154] Indeed, denial campaigns are currently shifting from denying the scientific basis of climate change to arguing about the uncertainty of climate change implications, the blame and contribution of consumers to the climate crisis, and the lack of urgency to take action to curb emissions.[155] At the time of writing, these and other varied climate change denial tactics are still being deployed by the fossil fuel industry and related industries.[156]

---

[148] *See id.*

[149] *See id.*

[150] *See id.*

[151] *See* WASHINGTON & COOK, *supra* note 142, at 43; Supran & Oreskes, *supra* note 33, at 696.

[152] A recent study suggests that electricity utilities have also engaged in climate change denial in the past decades. *See* Emily L. Williams, Sydney A. Bartone, Emma K. Swanson & Leah C. Stokes, *The American Electric Utility Industry's Role in Promoting Climate Denial, Doubt, and Delay*, 17 ENV'T RSCH. LETTERS, Sept. 1, 2022, at 1.

[153] *See* NAOMI ORESKES & ERIK M. CONWAY, MERCHANTS OF DOUBT: HOW A HANDFUL OF SCIENTISTS OBSCURED THE TRUTH ON ISSUES FROM TOBACCO SMOKE TO GLOBAL WARMING 146 (2010).

[154] *See* City of Oakland v. BP P.L.C., 325 F. Supp. 3d 1017 (N.D. Cal. 2018); Natasha Geiling, *City of Oakland v. BP: Testing the Limits of Climate Science in Climate Litigation*, 46 ECOLOGY L.Q. 683, 684 (2019). A similar partial recognition of climate change science is found in People v. Exxon Mobil Corp., No. 452044/2018, 2019 WL 6795771, at *2 (N.Y. Sup. Ct. Dec. 10, 2019).

[155] *See* Geiling, *supra* note 154, at 684; *see also* William F. Lamb, Giulio Mattioli, Sebastian Levi, J. Timmons Roberts, Stuart Capstick, Felix Creutzig, Jan C. Minx, Finn Müller-Hansen, Trevor Culhane & Julia K. Steinberger, *Discourses of Climate Delay*, 3 GLOB. SUSTAINABILITY, 2020, at 1, 3–4. Climate regulation delay rhetoric is discussed *infra* Part IV.C.

[156] *See* Supran & Oreskes, *supra* note 33, at 696–97 (describing shifts in ExxonMobil's climate denial tactics during the mid-2000s); *see also* BARBARA FREESE, INDUSTRIAL-STRENGTH DENIAL: EIGHT STORIES OF CORPORATIONS DEFENDING THE INDEFENSIBLE, FROM THE SLAVE TRADE TO CLIMATE CHANGE 230–71 (2020) (describing denial tactics still deployed by oil tycoons and by advocacy groups funded by the fossil fuel industry); Lamb et

The mechanism of corporate climate change denial is complex and vast. It is commonly deployed through lobbying firms, media consultancy firms, think tanks, public relations companies, and advocacy groups.[157] These organizations establish the narrative of denial, spread misinformation, and influence public opinion in favor of the fossil fuel industry.[158] Many organizations involved in such activity are covertly funded by the carbon majors to give the appearance of grassroot movements and bottom-up, objective civilian demands for governmental support of the fossil fuel industry.[159] Unlike conventional, legitimate lobbying efforts, which have become standard in today's business world, these organizations often operate without revealing the real interests and stakeholders they serve, nor their sources of funding.[160] Climate denial tactics are therefore manipulative in both substance and form.

It is thus unsurprising that some states are currently using consumer and investor protection laws to bring civil actions against prominent corporate climate deniers in the fossil fuel industry, alleging that climate change denial is fraudulent and misleading.[161] Some scholars even suggest that the practice of climate denial is so severe and immoral that it should be considered criminal. One such scholar is Ronald C. Kramer who argues that denial tactics employed by the fossil fuel industry are morally blameworthy, intentional, inexcusable harms that should be treated as "climate crimes."[162]

Climate change denial is often compared to the efforts of the tobacco industry to cover up and actively deny the devastating impacts of smoking on public health despite evidence to the contrary, including from their own

---

al., *supra* note 155, at 5 (discussing recent trends in denial messages and framing them as discourses of "climate delay").

[157] *See* Núria Almiron & Jordi Xifra, *Introduction*, *in* CLIMATE CHANGE DENIAL AND PUBLIC RELATIONS: STRATEGIC COMMUNICATION AND INTEREST GROUPS IN CLIMATE INACTION 1, 2–4 (Núria Almiron & Jordi Xifra eds., 2020).

[158] *See* MICHAELS, *supra* note 8, at 181–98; *see also* Almiron & Xifra, *supra* note 157, at 1–2; FREESE, *supra* note 156, at 230–71; MICHAEL E. MANN, THE NEW CLIMATE WAR: THE FIGHT TO TAKE BACK OUR PLANET 21–98 (2021).

[159] *See* FREESE, *supra* note 156, at 230–71.

[160] *See id.*

[161] *See, e.g.*, City of New York v. Chevron Corp., 993 F.3d 81, 86–88 (2d Cir. 2021). For more cases, see CLIMATE CHANGE LITIGATION DATABASES, *supra* note 126; Wes Henricksen, *Intended Injury: Transferred Intent and Reliance in Climate Change Fraud*, 72 ARK. L. REV. 713, 719 (2020); Chris Dolmetsch, *Exxon, Shell and Chevron Sued by NJ Over Climate Change*, BLOOMBERG (Oct. 18, 2022), https://www.bloomberg.com/news/articles/2022-10-18/exxon-shell-and-chevron-sued-by-new-jersey-over-climate-change [https://perma.cc/453R-7QSV].

[162] *See* RONALD C. KRAMER, CARBON CRIMINALS, CLIMATE CRIMES 60–61 (2020). For similar approaches, see generally Tucker, *supra* note 143. *See also* William C. Tucker, *The Big Lie: Is Climate Change Denial a Crime Against Humanity?*, 7 INTERDISC. J. HUM. RTS. L. 91, 97 (2012); Ryan W. Sypniewski, *The Truth Hurts: Applying the Criminal Provisions of Federal Securities Fraud Regulation to Exxon's Concealment of Climate Change Concerns*, 28 WIDENER COMMONWEALTH. L. REV. 223, 240–52 (2019) (arguing that corporations that engaged in climate denial can be prosecuted for committing securities law fraud).

data, internal reports, and scientific studies.[163] A famous 1969 internal memo from the R.J. Reynolds Tobacco Company noted that "doubt is our product since it is the best means of competing with the 'body of fact' that exists in the mind of the general public."[164] In a similar vein, the fossil fuel industry has implemented tactics of disinformation and science denial despite its knowledge of the environmental and public health implications of the burning of fossil fuels.[165] Newly discovered internal memos of the fossil fuel industry reveal that, by and large, the industry was aware of the basics of climate science as early as the 1950s.[166]

Climate denial by the fossil fuel industry has played and is still playing a major role in setting back climate change mitigation and adaptation efforts,[167] including by delaying and frustrating climate laws and regulations at both international and national levels. Climate denial tactics were and still are the main basis on which the industry relies when appealing to policymakers.[168]

Yet efforts to litigate climate denial cases in courts are mostly unsuccessful. In 2018, the New York Attorney General filed a lawsuit against ExxonMobil, one of the world's largest oil and gas companies, claiming that Exxon had executed a longstanding fraudulent scheme to deceive investors.[169] According to the State, the deceit entailed misleading representations regarding the projected financial and regulatory impacts of climate change on the company, which were based on assumptions Exxon knew were unsupported and unreasonable.[170] The State argued that Exxon had committed securities fraud and asked the court to order Exxon to cease making any further false or misleading statements, to disclose climate risks to investors, and to pay for damages and costs incurred by this fraud.[171] However, the trial court ruled that Exxon did not mislead investors, on the grounds that no reasonable investor would make investment decisions based on speculative

---

[163] *See* MICHAELS, *supra* note 8, at 181–98; *see also* JAMES LAWRENCE POWELL, THE INQUISITION OF CLIMATE SCIENCE 54–64 (2011); Supran & Oreskes, *supra* note 33, at 697. The courts held that the tobacco industry was fraudulent in its efforts to cover-up health hazards related to their product. *See* United States v. Philip Morris USA Inc., 566 F.3d 1095, 1150 (D.C. Cir. 2009).

[164] *See* DAVID MICHAELS, DOUBT IS THEIR PRODUCT: HOW INDUSTRY'S ASSAULT ON SCIENCE THREATENS YOUR HEALTH 11 (2008).

[165] *See* FREESE, *supra* note 156, at 230–71.

[166] *See* JOHN COOK, GEOFFREY SUPRAN, STEPHAN LEWANDOWSKY, NAOMI ORESKES & ED MAIBACH, GEORGE MASON UNIV. CTR. FOR CLIMATE CHANGE COMMC'N, AMERICA MISLED: HOW THE FOSSIL FUEL INDUSTRY DELIBERATELY MISLED AMERICANS ABOUT CLIMATE CHANGE 6 (2019), https://www.climatechangecommunication.org/america-misled [https://perma.cc/Q4P9-VPZ8].

[167] *See* FREESE, *supra* note 156, at 230–71.

[168] *See id.*; *see also* ORESKES & CONWAY, *supra* note 153, at 140–78.

[169] People v. Exxon Mobil Corp., No. 452044/2018, 2019 WL 6795771, at *2 (N.Y. Sup. Ct. Dec. 10, 2019).

[170] *See id.* at *4.

[171] *See id.* at *1.

assumptions of costs that may be incurred decades in the future with respect to unidentified future projects.[172]

In another recent case, filed in 2020, the State of Minnesota brought an action against several fossil fuel companies for climate change harms caused by publicly downplaying the threat of climate change and for their products' role in causing climate change.[173] Prosecutors argued that the companies' campaign of deception had led to the climate crisis.[174] Based on consumer fraud claims, they sought civil penalties, restitution for the State, and disgorgement of profits incurred by the unlawful actions and omissions of the Defendants.[175] Prosecutors further sought to hold the Defendants accountable for deliberately undermining the science of climate change.[176] The case is still being litigated.[177]

Not only do these kinds of climate denial lawsuits rarely succeed, but they also give fossil fuel companies a chance to actively continue their denial campaigns. A case in point is that of the fossil fuel companies' response to the action brought by the State of Minnesota, in which the Defendants wrote that the State seeks relief for "harms allegedly caused by emissions associated with the use of fossil fuels by billions of consumers around the world,"[178] echoing common denial messages.

Generally, the strategy of climate denial is far worse than conventional corporate noncompliance with regulation, and fundamentally different. However, it is often overlooked by regulators. Corporate climate denial transcends the standard corporate calculations of deciding whether to comply with legal rules,[179] and instead intentionally works to directly and deeply influence multiple stakeholders on a vast scale in order to maintain condi-

---

[172] *See id.* at *2. Derivative actions filed by shareholders on behalf of the company based on negligence in considering climate-related risks may also prove hard to establish. *See* Roy Shapira, *Mission Critical ESG and the Scope of Director Oversight Duties*, 2022 COLUM. BUS. L. REV. 732, 735–36 (2022).

[173] *See* Minnesota v. Am. Petrol. Inst., Civil No. 20-1636, 2021 WL 1215656, at *1–2 (D. Minn. Mar. 31, 2021).

[174] *See id.* at *1.

[175] *See id.*

[176] *See id.* at *1–2.

[177] In a similar vein, tort claims brought against oil and gas companies by states and municipalities are seeking compensation for damage caused by extreme weather events based on the companies' active role in climate denial. *See* CLIMATE CHANGE LITIGATION DATABASES, *supra* note 126.

[178] Brief of Appellants at 1, Minnesota v. Am. Petrol. Inst., No. 21-1752 (8th Cir. June 17. 2021), 2021 U.S. 8th Cir. Briefs LEXIS 2328.

[179] This accords with the efficient breach of public law view, or the law-as-price theory of compliance, which stipulates that "managers have no general obligation to avoid violating regulatory laws, when violations are profitable to the firm." *See* Frank H. Easterbrook & Daniel R. Fischel, *Antitrust Suits by Targets of Tender Offers*, 80 MICH. L. REV. 1155, 1168 (1982); *see also* Cynthia A. Williams, *Corporate Compliance with the Law in the Era of Efficiency*, 76 N.C. L. REV. 1265, 1270 (1998) (explaining and criticizing these theories). Notably, the law-as-price theory aims to function as both descriptive and normative theory, suggesting that people (and corporations) make and should make decisions about compliance with law based on a rational actor's calculations of costs and benefits. *See id.* at 1287.

tions that are driving a global crisis. In other words, climate denial campaigns aim to influence public opinion and perceptions to delegitimize the basis of climate change regulation,[180] resulting in wide-ranging, long-term harms to the achievement of climate mitigation goals. This denial strategy has been implemented so widely and so eagerly that it has been labeled a "denial machine."[181] Climate change denial is thus a special kind of adverse corporate behavior that needs to be robustly deterred with an appropriate and suitable regulatory tool.

Unlike direct infringements of emission rules, prohibitions, and permits, which directly add to the total of greenhouse gas emissions, climate change denial aims to persuade others—the public at large, policymakers,[182] and even schoolchildren[183]—that nothing should be done to fight climate change, that there is no urgency to the crisis, and that policy responses should be directed elsewhere. Corporate climate denial strategies also facilitate "climate silence" in public discourse and frustrate climate activism,[184] while also harming the public trust in science and scientists at large.[185] All these perspectives show that denial strategies produce fundamental, deep-rooted harms, thereby frustrating efforts to slow climate change and complicating this "wicked problem" of climate change even more.

Such profound implications warrant the use of methods not found in the regulatory toolkit commonly employed to enforce compliance with rules and regulations.[186] In this respect, regulatory shaming is a highly suitable means for addressing climate denial because both shaming and denial are communication-based strategies that address corporate reputation and aim to influence public opinion.[187] While climate change denial seeks to harness the

---

[180] *See infra* Section IV.C.

[181] *See* Almiron & Moreno, *supra* note 7, at 9.

[182] *See infra* Section IV.C.

[183] *See* Jie Jenny Zou, *Pipeline to the Classroom: How Big Oil Promotes Fossil Fuels to America's Children*, GUARDIAN (June 15, 2017), https://www.theguardian.com/us-news/2017/jun/15/big-oil-classrooms-pipeline-oklahoma-education [https://perma.cc/R7JH-B3RT] (reporting on educational programs sponsored by oil and gas companies which claim that it is too soon to tell if the earth is heating up, and that a little warming might be a good thing).

[184] *See* COOK ET AL., *supra* note 166, at 6–11. Climate denial tactics can also cause consumers "identity harms," which refers to the anguish experienced by consumers who learn that their efforts to consume in ways that match their personal values have been undermined by corporate deception. *See* Sarah Dadush, *Identity Harm*, 89 U. COLO. L. REV. 863, 888–93 (2018) (discussing deceitful corporate behavior toward consumers in the environmental context).

[185] *See* Justin Farrell, Kathryn McConnell & Robert Brulle, *Evidence-Based Strategies to Combat Scientific Misinformation*, 9 NATURE CLIMATE CHANGE 191, 191 (2019).

[186] Indeed, regulatory compliance issues are often highly complex, warranting sophisticated solutions that consider the unique relationships and challenges of all relevant actors, rather than classic regulatory one-size-fits-all tools. *See generally* David Orozco, *A Systems Theory of Compliance Law*, 22 U. PA. J. BUS. L. 244 (2020).

[187] Other means discussed in the literature to fight climate denial include, *inter alia,* disclosure obligations regarding financial supporters of think-tanks and advocacy groups; educational programs at schools; media-academia collaborations; and climate litigation, combined with media coverage. *See* Farrell et al., *supra* note 185, at 191.

public to pressure policymakers into maintaining fossil fuel dependence (using false corporate narratives, fake science, and "alternative facts"), regulatory climate shaming aims to harness the public to pressure corporations and policymakers into decreasing the reliance on fossil fuels and to develop awareness and critical thinking regarding corporate climate denial practices.

Moreover, regulatory shaming can convey a message to stakeholders that links corporations to the climate crisis and points to corporate liability and accountability for climate harms and greenhouse gas emissions. Regulatory climate shaming can thereby directly tackle new denial narratives currently promoted by corporations that focus, for example, on shifting liability and responsibility for the climate crisis from corporations to consumers. By promoting the idea through regulatory shaming tactics that corporations are legally or morally at fault, regulators can encourage climate litigation and activism, stimulate informed public discourse, and induce public pressure on corporations to alter their climate policies.

In order to be effective in their fight against climate change and retain their relevance, regulators must widen their scope of activity from legislating rules and regulations, issuing permits, monitoring compliance, investigating, sanctioning, and litigating, to tools based on communication, information sharing, public engagement (including through digital platforms), mobilizing public opinion, and conveying normative, evaluative messages to stakeholders about corporate actors and activities. These are the characteristics of regulatory climate shaming, which aims to publicize reputation-harming, trustworthy information and to convey messages to the public condemning corporate contribution to the climate crisis.[188] It further aims to influence public opinion regarding the role played by fossil fuel companies in the climate crisis and to nudge various stakeholders into taking action.

Regulatory climate shaming is also a particularly suitable approach in light of the significant resource gap between public regulators and private firms (particularly carbon majors and other industry-related giants). Public regulators tend to be resource-poor, while firms such as oil and gas companies typically enjoy considerable resources for promoting their financial interests, including by extensive denial campaigns, lobbying, and litigating. Conversely, the ability of regulators to litigate climate denial cases in courts for extensive periods of time, for example, is highly limited.[189] Yet regulatory climate shaming can potentially alter this equation. Entailing low regulatory costs and mostly relying on the resources of the public to perform the shaming, it is essentially a crowdsourced form of regulation.[190]

Regulatory climate shaming also fits the industry's claims regarding free speech. Freedom of speech is a commonly deployed argument by the

---

[188] *See supra* Part III.

[189] *See* Bruce Yandle, Andrew Dorchak & Andrew P. Morriss, *Regulation by Litigation*, 5 REGUL. & GOVERNANCE 241, 243 (2011) (explaining regulatory constraints and considerations relating to initiating litigation).

[190] The idea of shaming as a form of crowdsourcing is discussed *supra* Part III.

fossil fuel industry in climate denial cases. For example, in response to a lawsuit brought against ExxonMobil and seventeen other energy companies by several California municipalities, Exxon claimed constitutional violations of free-speech rights.[191] This legal tactic reinforces the argument, advanced in this subpart, that problems stemming from communication of messages should be met with the same approach; that is, that denial messages spread by the fossil fuel industry should be met with regulatory climate shaming. While formal legal proceedings against the industry's denial machine are costly and often unsuccessful, soft-law shaming tactics that shift the regulatory emphasis from the actual courts to the court of public opinion may prove beneficial in this regard.

Lastly, the favorable implications of regulatory reputation should also be addressed. Generally, regulators' work—legislation, monitoring compliance, and enforcement—is conducted away from the public eye.[192] Although most legislative and judicial regulatory actions, and some monitoring and inspection activities, are overt and transparent, they are usually not very accessible to the general public and are not part of the public discourse. Moving from the backstage activities of rulemaking, monitoring, and enforcement to the front stage of shaming schemes, which are based on communicating with the public about regulatory compliance, can improve the reputation of national and subnational regulators. On climate change, and especially in the United States, regulators and policymakers are perceived by the public as failing to create and maintain effective regulation.[193] Adopting regulatory climate shaming tactics may mend this poor regulatory image and enhance trust in public administration. This side-effect of regulatory shaming is especially relevant in responding to denial arguments that attack regulators as being alarmist, ill-informed, or biased.[194]

B. Benefits Relating to the Mitigation of Climate Washing

As corporations are increasingly recognizing the value of green reputations not only in general but particularly with regards to climate change, another practice is taking hold. Firms are now flaunting private climate ratings assigned by voluntary non-governmental programs. For instance, pro-

---

[191] *See* Petitioner's Brief on the Merits at 3–4, Exxon Mobil Corp. v. City of San Francisco, No. 20/0558 (Tex. Sep. 10, 2021).

[192] *See* Jennifer Shkabatur, *Transparency With(out) Accountability: Open Government in the United States*, 31 YALE L. & POL'Y REV. 79, 86 (2012); Spencer Willems, *Tape Don't Lie*, 67 DRAKE L. REV. 797, 808 (2019).

[193] *See* Bell et al., *supra* note 3 (sixty-one percent of respondents said that the United States is doing a bad job dealing with climate change, compared with thirty-six percent who said it is doing a good job).

[194] Such tactics have been implemented by the fossil fuel industry as part of its response strategy to climate denial litigation brought against it. *See, e.g.*, Exxon Mobil Corp. v. Healey, 215 F. Supp. 3d 520, 521 (N.D. Tex. 2016). However, regulatory climate shaming may also harm the reputation of regulatory bodies, which can be viewed as more political. This type of concern is briefly discussed in the Conclusion.

grams run by private organizations like the Carbon Disclosure Project ("CDP") offer companies the opportunity to be named-and-famed through scores, ratings, and rankings such as the CDP's "Climate Change A List."[195] Companies also publish their own processed, misleading climate statements, labels, and reports to gain public recognition and improve their business reputations.[196]

Private rating agencies present a series of problems. One of the main problems is that unlike credit rating agencies, the environmental, social, and governance ("ESG")[197] rating industry is currently unregulated, so there are no accepted standards regarding criteria and methodology for calculating and publicizing such ratings.[198] Another related problem concerns ESG ratings that in effect do not include any measurement of climate-related activity.[199] For example, MSCI, the largest ESG rating company, often does not factor firms' carbon footprints[200] into its scores,[201] even though investors, consumers, and other stakeholders may well assume that an ESG rating reflects the carbon footprint of a company. This is not an unreasonable assumption, given that climate change is currently considered a material, nontrivial issue in the corporate governance and environmental regulation spaces.[202] An additional important credibility issue relates to payment for rating. Critics often point to a practice in which firms pay for high ratings and subsequent reputational gains without investing in real measures to de-

---

[195] *See The A List 2022*, CDP, https://www.cdp.net/en/companies/companies-scores [https://perma.cc/N4MU-UW5G]; *see also* Ruth Jebe, *The Convergence of Financial and ESG Materiality: Taking Sustainability Mainstream*, 56 AM. BUS. L.J. 645, 661–65 (2019) (explaining how the CDP rating works).

[196] *See, e.g.*, Mei Li, Gregory Trencher & Jusen Asuka, *The Clean Energy Claims of BP, Chevron, ExxonMobil and Shell: A Mismatch Between Discourse, Actions and Investments*, 17 PLOS ONE, Feb. 16, 2022, at 1, 1–3 (examining, among others, greenwashing pledges in annual reports issued by carbon majors and comparing them to actual climate action).

[197] *See* Javier El-Hage, *Fixing ESG: Are Mandatory ESG Disclosures the Solution to Misleading ESG Ratings?*, 26 FORDHAM J. CORP. & FIN. L. 359, 363 (2021) (noting that ESG covers a wide range of issues that may have investment relevance but are not included in traditional financial analysis of firms); Elizabeth Pollman, *The Making and Meaning of ESG* 3 (Penn. Inst. for Law & Econ., Working Paper No. 659/2022, Rsch. Paper No. 22-23, 2022), https://ssrn.com/abstract=4219857 [https://perma.cc/7UGX-NXAC].

[198] *See* El-Hage, *supra* note 197, at 361, 369.

[199] These rating organizations typically evaluate dozens of environmental, social, and corporate governance indicators, such as supply chains and human rights, employee relations, corporate culture, community relations, pollution and waste management, and product safety. *See id.* at 363–65.

[200] Generally, carbon footprint refers to the total of direct and indirect greenhouse gas emissions caused by the actions of a person or an organization. *See, e.g.*, *Carbon Footprint*, MERRIAM-WEBSTER, https://www.merriam-webster.com/dictionary/carbon%20footprint [https://perma.cc/ACU8-2VQ8].

[201] *See* Cam Simpson, Akshat Rathi & Saijel Kishan, *The ESG Mirage*, BLOOMBERG (Dec. 10, 2021), https://www.bloomberg.com/graphics/2021-what-is-esg-investing-msci-ratings-focus-on-corporate-bottom-line [https://perma.cc/P5D6-WG8Z].

[202] *See* Pollman, *supra* note 197, at 10, 38.

crease their direct and indirect contribution to greenhouse gas emissions.[203] Such voluntary rating schemes are thus only undertaken by firms to give a falsely positive impression of their business ethics.[204]

It is important to note at this point that while ESG ratings are mostly associated with the investment world, functioning as a tool designed to help individuals, organizations, and fund managers make sustainable and ethical investments, they also enable firms to improve their overall reputation among various stakeholders and help them gain access to capital, public contracts, and other commercial opportunities.[205]

A related issue is selective climate disclosure, in which companies reveal to the public highly specific, often real, pieces of flattering information regarding their carbon footprint, to intentionally obscure their poor overall performance data.[206] Some companies also mislead the public regarding the carbon footprint of their service or product, labeling it "carbon-negative."[207] Additionally, large oil and gas companies advertise their "net-zero," "climate neutral," and "offsetting" policies in misleading ways to consumers, investors, and the public at large.[208]

Taken together, these types of business behaviors can be labeled "climate washing"[209]—a derivative term of greenwashing, which is commonly defined as unsubstantiated or misleading claims regarding corporate environmental performance.[210] Climate washing refers to intentionally misleading climate-related corporate marketing campaigns, statements, labels, and investment ratings.[211]

Importantly, climate washing is not merely a marketing problem or a consumer fraud problem. It actually impedes reductions in greenhouse gas

---

[203] *See, e.g.*, Lital Helman, *Pay for (Privacy) Performance: Holding Social Network Executives Accountable for Breaches in Data Privacy Protection*, 84 BROOK. L. REV. 523, 553 (2019).

[204] *See, e.g.*, David Coen, Kyle Herman & Tom Pegram, *Are Corporate Climate Efforts Genuine? An Empirical Analysis of the Climate 'Talk–Walk' Hypothesis*, 31 BUS. STRATEGY & ENV'T 3040, 3041 (2022).

[205] *See, e.g.*, *Why Disclose as a Company*, CDP, https://www.cdp.net/en/companies-discloser [https://perma.cc/9BT6-C3UB].

[206] *See* Taebi & Safari, *supra* note 31, at 1298.

[207] *See* BENJAMIN ET AL., *supra* note 124, at 5, 8–10; *see also* Marcus Fairs, *"Carbon Washing is the New Greenwashing,"* DEZEEN (July 31, 2021), https://www.dezeen.com/2021/07/31/carbon-washing-greenwashing-opinion [https://perma.cc/SD86-XFT5]; Mark Sweney, *Oatly Ads Banned by UK Watchdog Over 'Misleading' Green Claims*, GUARDIAN (Jan. 26, 2022), https://www.theguardian.com/media/2022/jan/26/oatly-ads-banned-by-uk-watchdog-over-misleading-green-claims [https://perma.cc/XG5T-94G6].

[208] *See* BENJAMIN ET AL., *supra* note 124, at 5, 8–10; *see also* Niamh McIntyre, *Fossil Fuel Firms Among Biggest Spenders on Google Ads That Look Like Search Results*, GUARDIAN (Jan. 5, 2022), https://www.theguardian.com/technology/2022/jan/05/fossil-fuel-firms-among-biggest-spenders-on-google-ads-that-look-like-search-results [https://perma.cc/G6RS-QVXD].

[209] *See* BENJAMIN ET AL., *supra* note 124, at 5–6.

[210] *See, e.g.*, William S. Laufer, *Social Accountability and Corporate Greenwashing*, 43 J. BUS. ETHICS 253, 255 (2003) (developing the conceptual framework of greenwashing).

[211] *See* BENJAMIN ET AL., *supra* note 124, at 4 (similarly defining climate washing).

emissions and exacerbates the climate crisis.[212] Climate washing enables companies to protect their business interests by continuing to emit greenhouse gas emissions as usual and avoiding action to develop new business paths that will reduce their carbon footprint—all while eluding reputational harms. Ultimately, like climate denial, it is part of the climate obstruction phenomenon, which aims to frustrate climate regulation and suppress climate action.

Climate washing silences public criticism, climate activism, and climate litigation because it falsely gives stakeholders the impression that companies are responsive to climate change norms. Policymakers, legislators, regulators, and law enforcement agencies can also be made to mistakenly believe that companies are successfully self-regulating and that government intervention is unnecessary.

Climate washing also attracts investors to what they falsely believe to be climate-responsible firms, pouring more funds into the oil and gas sector and related businesses. Similarly, climate washing denies stakeholders important information regarding how their interactions with specific corporations—whether through employment, services and products, business associations, and so on—contribute to the climate crisis. It further deprives them of the ability to choose their actions based on accurate information about relevant companies. Unmitigated corporate climate washing therefore silences stakeholders, reduces corporate incentives to change course and adopt climate policies, and exacerbates the climate crisis.[213]

This is where regulatory climate shaming can prove especially useful. Because regulatory shaming targets corporate reputations among company stakeholders, it has the potential to offset (at least to some degree) the reputational gains that companies achieve among similar stakeholders through climate washing, using similar tactics as the companies. For example, since much climate washing is performed through privately-owned rating agencies awarding climate or ESG ratings to companies without government supervision, regulatory shaming could target these ratings and expose inaccuracies and disinformation, especially by publishing counter-ratings. Government ratings and rankings of companies are likely to be regarded more credible than private rating schemes because they originate in an administrative authority and do not involve any payment.[214]

Regulatory climate shaming ratings could be inspired by environmental ratings that are already published by regulators in several countries world-

---

[212] *See id.* at 14.

[213] As recently expressed by United Nations Secretary-General António Guterres: "Using bogus 'net-zero' pledges to cover up massive fossil fuel expansion is reprehensible. It is rank deception. This toxic cover-up could push our world over the climate cliff. The sham must end." *See COP27: 'Zero Tolerance for Greenwashing', Guterres Says as New Report Cracks Down on Empty Net-Zero Pledges*, UNITED NATIONS (Nov. 8, 2022), https://news.un.org/en/story/2022/11/1130317 [https://perma.cc/4W8D-2TPU].

[214] This effect is dependent, of course, on cultural, economic, environmental, and political perceptions, which may vary among jurisdictions.

wide.[215] For example, Israel's Ministry of Environmental Protection publishes what it calls a "red list" of companies and factories, ranked according to various environmental factors.[216] In a similar vein, the Irish Environmental Protection Agency lists the top non-compliant companies in the country.[217] Such ratings create a shaming effect:[218] they make information public, name specific firms, present companies in a negative context (polluting the environment), assign scores, use color coding (such as assigning red to underperforming firms), and broadcast accompanying condemning regulatory statements.[219] In addition, the ratings produced are often actively publicized through social media and press releases (not simply passively presented on the website of the regulator), which increases the shaming effect and provides a stronger nudge for public action and response.[220] Taking into account the research surveyed in the previous Part of this Article[221] on the effectiveness of regulatory shaming in the environmental and other closely-related contexts, such as public health, regulators should consider designing similar shaming schemes for the climate context.

Besides public ratings and rankings, there are other forms of regulatory shaming that can offset misleading private ratings and other deceptive corporate information-sharing practices that come under the umbrella of climate washing. One form of such shaming is the regulatory publication of names of firms that have breached climate change rules, regulations, permits, agreements, and terms of voluntary programs. Shedding light on corporate violations through regulatory climate shaming can counteract the ill-gained corporate reputational benefits of climate washing by demonstrating to company stakeholders that climate representations made by the company are incorrect, partial, or intentionally misleading.

Regulatory shaming practices based on emission databases and climate disclosure requirements can bring about a similar effect.[222] Since these information sources tend to be vast, complex, and not easily accessible to the general public, regulators could publish data summaries using infographics, charts, and short statements to actively communicate important information to the public in a highly accessible form.

A substantial shaming effect (and dilution of corporate reputation) can be expected in cases where data revealed by regulatory climate shaming is

---

[215] *See* Yadin, *supra* note 90 (manuscript at 11–15).

[216] *See* Ministry of Env't Prot., *supra* note 58.

[217] *See* News Release, EPA, Complaints Against Licensed Industrial and Waste Sites Increased Significantly During First Six Months of 2020 Says EPA (July 16, 2020), https://www.epa.ie/news-releases/news-releases-2020/complaints-against-licensed-industrial-and-waste-sites-increased-significantly-during-first-six-months-of-2020-says-epa.php [https://perma.cc/NP4W-RZQH].

[218] This type of regulatory shaming can be labeled "eco-shaming." *See* Yadin, *supra* note 90 (manuscript at 1).

[219] *See id.*

[220] *See id.*

[221] *See supra* Part III.

[222] *See supra* notes 68, 70, 123 and accompanying text.

compared with data produced as part of climate washing practices, thereby exposing major differences in statements, scores, and performance.[223] Regulatory climate shaming that actively highlights such differences could maximize the shaming effect. While arguments of variations in the methodology of measuring greenhouse gas emissions and carbon footprints will surely arise, many companies will have difficulties in explaining significant discrepancies in data. In order to avoid such reputational harms, firms may opt to avoid taking part in climate washing *ex ante.* This is an especially important benefit of regulatory climate shaming in light of the recent proliferation of ESG rating agencies, with over 100 ESG schemes currently available in the United States alone,[224] and the rise in firms' climate statements on products in the food and fashion industries, for instance.[225]

Finally, regulators could directly target climate washing practices by listing the names of firms that are suspected of using such tactics. This regulatory approach is currently being considered by the European Central Bank ("ECB") due to significant noncompliance with climate risk disclosure rules.[226] Namely, the ECB is considering publicly listing banks that repeatedly fail to fully disclose their climate risks by issuing "green" information, like clean investment and net-zero pledges, with no real substance or intention to follow through.[227]

In summary, regulatory climate shaming is a fitting response to climate washing practices, which are not only misleading in themselves but also inhibit corporate progress on climate change by allowing firms to evade the reputational and environmental costs of their actions. Regulatory climate shaming forces companies to internalize at least some of these costs by offsetting corporate reputational manipulations, and thereby serves as a deterrent to climate washing.

---

[223] The recent uncovering of unsubstantiated green statements by the fashion company H&M demonstrates this effect. *See* Matthew Stern, *H&M Case Shows How Greenwashing Breaks Brand Promise*, FORBES (July 13, 2022), https://www.forbes.com/sites/retailwire/2022/07/13/hm-case-shows-how-greenwashing-breaks-brand-promise/?sh=566c8e9e1171 [https://perma.cc/D7GW-NM75].

[224] *See* El-Hage, *supra* note 197, at 367.

[225] *See* Stern, *supra* note 223 (discussing greenwashing in the fashion industry); Fairs, *supra* note 207 (discussing misleading carbon labels on alcoholic beverages and unverified climate statements by tech firms); Fiona Harvey, *World's Biggest Firms Failing Over Net-Zero Claims, Research Suggests*, GUARDIAN (Feb. 6, 2022), https://www.theguardian.com/environment/2022/feb/06/amazon-ikea-nestle-biggest-carbon-net-zero-claims [https://perma.cc/K5K9-CR3C] (suggesting that major retailers will not be able to meet their net-zero emission pledges).

[226] *See* Martin Arnold, *ECB Accuses Eurozone Banks of 'White Noise' on Climate Risks*, FIN. TIMES (Mar. 14, 2022), https://www.ft.com/content/aaa06d90-0356-44b4-b637-0e47c9003ba4 [https://perma.cc/EK8C-XLJW].

[227] *See id.*

C. Advantages Relating to the Outcomes of Climate Obstruction

The fossil fuel industry has been lobbying against climate regulation for decades.[228] This activity has been successful in impeding climate regulation policies at international, national, and subnational levels in various jurisdictions, including in the United States.[229] The industry's vast lobbying efforts have relied heavily on climate denial tactics.[230] As a result, policymakers were led to believe that global warming and climate change do not warrant immediate hard-law restrictions.[231]

While climate denial tactics may be producing diminishing returns, the fossil fuel industry is still lobbying to delay climate regulation[232] by redirecting responsibility from corporations to individuals, advancing non-transformative solutions, emphasizing the costs of climate mitigation and adaptation policies, and advocating giving in to climate change since it is too late to act anyway.[233] This discourse has indeed delayed, and is still delaying, swift regulatory climate action on global and national scales.[234]

Industry groups have also attacked attempts to regulate greenhouse gas emissions through the courts. For example, the automobile industry brought legal challenges against vehicle emissions standards for greenhouse gases.[235] In another series of cases, groups representing the energy sector have petitioned against EPA rulemaking meant to regulate greenhouse gas emissions.[236] Many of these cases centered on the proper interpretation of the

---

[228] *See* Tucker, *supra* note 143, at 886.

[229] *See, e.g.*, Nicolas Graham, William K. Carroll & David Chen, *Carbon Capital's Political Reach: A Network Analysis of Federal Lobbying by the Fossil Fuel Industry from Harper to Trudeau*, 14 CANADIAN POL. SCI. REV. 1, 7–22 (2020) (analyzing lobbying by the fossil fuel industry in Canada); Trevor Culhane, Galen Hall & J. Timmons Roberts, *Who Delays Climate Action? Interest Groups and Coalitions in State Legislative Struggles in the United States*, 79 ENERGY RSCH. & SOC. SCI. 1, 5–12 (2021) (showing that the fossil-fuel industry has been successful in blocking climate and energy legislation in Massachusetts).

[230] *See supra* Section IV.A.

[231] Other factors, such as political forces, economic and energetic security, technological constraints, path dependence, and regulatory capture problems have also contributed to the fact that climate regulation is in relatively early stages all over the world. *See, e.g.*, Graham et al., *supra* note 229, at 2–3.

[232] *See generally* Lamb et al., *supra* note 155. In this vein, some argue that abandoning the fossil-fuel economy will harm poor and marginalized communities—an argument that was termed "wokewashing." *See* Amy Westervelt, *Big Oil's 'Wokewashing' Is the New Climate Science Denialism*, GUARDIAN (Sept. 9, 2021), https://www.theguardian.com/environment/2021/sep/09/big-oil-delay-tactics-new-climate-science-denial [https://perma.cc/5K5V-SMLU].

[233] *See* Lamb et al., *supra* note 155, at 2.

[234] *See* CLIMATE SOC. SCI. NETWORK, *supra* note 7, at 2–3.

[235] *See* John R. Nolon, *Land Use and Climate Change: Lawyers Negotiating Above Regulation*, 78 BROOK. L. REV. 521, 541 (2013) (discussing litigation between the State of California and the automobile industry).

[236] *See, e.g.*, Util. Air Regul. Grp. v. EPA, 573 U.S. 302 (2014).

Clean Air Act and the scope of authority that the Act gives the EPA for restricting greenhouse gas emissions from various sources.[237]

Recently, in *West Virginia v. EPA*,[238] the United States Supreme Court ruled on a petition filed by power companies and twenty states, holding that the EPA was not authorized to set emissions caps under the Clean Power Plan ("CPP") rule for existing coal- and natural-gas-fired power plants.[239] Under the CPP rule, the EPA required coal-fired plants to limit production and shift to natural gas, which is a cleaner source of energy; it also required natural-gas-fired plants to shift to cleaner, renewable energy sources such as wind and solar.[240] The EPA had argued that it had the authority to regulate carbon emissions in accordance with the CPP rule under the Clean Air Act.[241] However, the Court ruled that the EPA does not have the authority to regulate power plants in this manner and that under the major questions doctrine the issue requires a clear and explicit congressional authorization.[242]

As a result of these intense lobbying and litigation endeavors against climate regulation,[243] regulators were left with a relatively limited toolset.[244] Now, policymakers around the world, including in the United States, are beginning to build their climate change regulation toolkit—but often very late in the game, entailing enormous expense.[245] Climate delay tactics through both lobbying and litigation have contributed to the necessity to advance large-scale and costly reforms since governments missed earlier opportunities to address climate change more gradually, when moderate costs could have been spread over longer periods of time.[246] However, scientists predict that the next few years will be critical to avoiding the most cata-

---

[237] *See* Amanda C. Leiter, Utility Air Regulatory Group v. EPA: *A Shot Across the Bow of the Administrative State*, 10 DUKE J. CONST. L. & PUB. POL'Y 59, 65–69 (2014).

[238] 142 S. Ct. 2587 (2022).

[239] *See id.* at 2616.

[240] *See id.* at 2603.

[241] *See id.* at 2602–04.

[242] *See id.* at 2614–15.

[243] Other factors, including political, technological, and financial ones, also played a role. *See supra* note 231 and accompanying text.

[244] *See* Lisa Benjamin, *The Responsibilities of Carbon Major Companies: Are They (and Is the Law) Doing Enough?*, 5 TRANSNAT'L ENV'T L. 353, 354 (2016) (discussing the scarcity of U.K. climate regulation tools).

[245] *See, e.g.*, *Climate Change Regulatory Actions and Initiatives*, EPA, https://www.epa.gov/climate-change/climate-change-regulatory-actions-and-initiatives [https://perma.cc/YV7Q-X7BW] (surveying new climate rules that are currently being advanced or that have recently come into force); *Fact Sheet: President Biden Sets 2030 Greenhouse Gas Pollution Reduction Target Aimed at Creating Good-Paying Union Jobs and Securing U.S. Leadership on Clean Energy Technologies*, THE WHITE HOUSE (Apr. 22, 2021), https://www.whitehouse.gov/briefing-room/statements-releases/2021/04/22/fact-sheet-president-biden-sets-2030-greenhouse-gas-pollution-reduction-target-aimed-at-creating-good-paying-union-jobs-and-securing-u-s-leadership-on-clean-energy-technologies [https://perma.cc/6R5C-C8UB].

[246] *See, e.g.*, Ron Shadbegian, Jim Stock & Jason Furman, *The Cost of Delaying Action to Stem Climate Change: A Meta-Analysis*, CEPR VOXEU (Feb. 25, 2015), https://cepr.org/voxeu/columns/cost-delaying-action-stem-climate-change-meta-analysis [https://perma.cc/Y3WG-PYKX].

strophic implications of climate change and that dramatic policy changes must be instituted immediately in order to avoid the more extreme environmental scenarios.[247]

Accordingly, many countries are trying to advance ambitious climate regulation strategies: regulatory agencies are fighting to promote climate bills and secure funding for new supervisory and enforcement bodies and activities;[248] heads of state are pushing for major climate packages and sweeping legislative reforms;[249] and the international community is trying to secure substantial financial aid packages to help developing countries promote climate mitigation and adaptation plans.[250]

Against this background, the cost advantages of regulatory climate shaming become evident. As discussed previously, shaming is low-cost.[251] It is based on communication, information, perceptions, and ideas. Press releases and online publications through regulatory agencies' websites or social media are virtually costless. In some cases—such as labeling, reporting, and disclosure obligations that include shaming components[252]—corporations themselves shoulder a substantial part of the costs. Any costs associated with the regulator's compilation and analysis of the relevant data, including the creation of ratings, league tables, and searchable databases, are relatively low. The low costs of regulatory climate shaming can also contribute to its rapid implementation within existing regulatory strategies, thus providing a speedy response to an urgent problem.

It is true that regulatory climate shaming may impose costs on the government if it becomes the subject of litigation, rendering such policy less efficient and effective, especially considering the vast resources of the oil and gas industries and their use of climate obstruction tactics. However, in this respect shaming is not essentially different from any other regulatory enforcement tool or action that may be subject to judicial review. Similarly, critiques regarding the potential indirect costs of shaming, such as the loss of jobs in the fossil fuel industry, shortages of energy sources, and price increases,[253] also apply to various other climate regulation tools that aim to curb greenhouse gas emissions.[254]

---

[247] *See* Moomaw et al., *supra* note 12, at 164, 169.

[248] *See, e.g.*, EPA, *supra* note 245.

[249] *See, e.g.*, THE WHITE HOUSE, *supra* note 245.

[250] *See COP26 Outcomes: Finance for Climate Adaptation*, UNITED NATIONS CLIMATE CHANGE, https://unfccc.int/process-and-meetings/the-paris-agreement/the-glasgow-climate-pact/cop26-outcomes-finance-for-climate-adaptation [https://perma.cc/AT3F-5HBK].

[251] *See supra* Parts III, IV.A.

[252] *See supra* Part II.

[253] *See, e.g.*, Taufique et al., *supra* note 60, at 135 (surveying literature suggesting that climate building labels have led to increased rental prices).

[254] *See, e.g.*, Stephen Moore & Timothy Doescher, *To Save American Jobs, Leave the Paris Agreement Now*, INV.'S BUS. DAILY (Mar. 17, 2017), https://www.investors.com/politics/commentary/to-save-american-jobs-leave-the-paris-agreement-now [https://perma.cc/889L-56NK] (asserting that climate regulation causes unemployment in the coal, steel production, oil and gas, construction, and manufacturing industries and sectors); Nives Dolsak & Aseem

But, more concretely, it should be much more difficult for companies to attack regulatory climate shaming for being politically biased, unfair, overly burdensome, or uninformed when it is mostly carried out by the companies' own consumers, investors, customers, and the like. In addition, litigation may harm the reputation of litigating companies, including in the oil and gas industries, which are currently making an effort to (at least) appear to be climate-conscious, if not climate-friendly.[255] A shaming approach may also be generally regarded as fairer by firms—reducing corporate climate litigation brought against regulators—because regulatory climate shaming does not forcefully dictate new emission standards, require the implementation of new technologies, or ban certain products or business activities. Instead, it uses nudging, information-sharing, and private enforcement tools to mitigate climate change.

In addition to low implementation costs, regulatory climate shaming also has the advantage of low legal costs pertaining to ensuring regulatory authority. This is due to the fact that soft-law tools generally do not impose legally binding obligations based on a government's ability to coerce and punish. Instead, they rely on consent, cooperation, nudging, above-compliance, ethics, public pressure, and reputational costs and benefits. Thus, while some regulators will anchor regulatory climate shaming schemes in primary or secondary legislation, which may be costly, lengthy processes, others will be able to rely on existing regulatory mandates.[256]

There are already many cases in which regulators, lacking a strong basis of command-and-control climate regulation, have turned to soft regulation[257]—for example, using informative labels, offering voluntary "beyond compliance" programs, and negotiating regulatory agreements with industries and companies.[258] In this vein, and in light of its low legal and financial costs, regulatory climate shaming (and its counterpart of regulatory climate faming) should be developed and implemented in combination with other soft and hard tools.

Generally, new climate regulatory tools currently being implemented or developed are quite diverse. These include, international climate agreements, national climate laws, national and subnational rules, regulations, codes, ordinances, orders, decisions, programs, permits, and guidelines on topics such as greenhouse gas emissions, fossil-fuel restrictions, carbon pricing, finan-

---

Prakash, *How To Reboot Climate Policy After COP27: Five Models of Policy Making*, FORBES (Dec. 4, 2022), https://www.forbes.com/sites/prakashdolsak/2022/12/04/how-to-reboot-climate-policy-after-cop27-five-models-of-policy-making/?sh=5f0d157c4e2b [https://perma.cc/GMH4-XZZW].

[255] *See supra* Section IV.B.

[256] Of course, the legal basis will vary according to the shaming scheme adopted and the applicable legal landscape. Yadin, *supra* note 90 (manuscript at 22).

[257] *See* Benjamin, *supra* note 244, at 354 (highlighting that carbon majors are not regulated through top-down limits but mainly through disclosure rules).

[258] *See* Nolon, *supra* note 235, at 542 (describing voluntary agreements on greenhouse gas emission between the State of California, the EPA, the National Highway Traffic Safety Administration and the automobile industry).

cial and technological support, low-carbon and renewable energy, deforestation, low-carbon construction and transportation, and adaptation[259] measures (focusing on improving readiness to climate change implications).[260]

The variety of tools harnessed is itself important in encouraging compliance, as regulatory theory often underscores. For example, Ian Ayres and John Braithwaite have advanced the idea that regulators should acquire a variety of hard and soft enforcement tools and use the soft tools as often as possible, leaving the most severe sanctions to extreme cases.[261] They further assert that regulators should use each tool in response to industry behavior, so as to increase effectiveness and achieve deterrence.[262] Similarly, theories such as smart regulation assert that the enforcement pyramid should not be one-dimensional but multi-dimensional, to include various stakeholders in the regulatory process.[263] Regulatory climate shaming is therefore an important addition to the regulatory toolkit.[264] It not only adds to the variety of regulatory tools but also is a soft-law tool that fosters public participation in response to climate obstruction efforts.

Regulatory climate shaming is also highly relevant since it can concentrate on encouraging environmentally conscious business behavior, based on CSR and ESG norms. As regulators currently lack sufficient command-and-control climate tools (due to the industry's efforts to frustrate legislation and enforcement actions), it makes sense that regulators should try to influence corporations to voluntarily adopt climate-friendly policies and practices. For example, regulatory climate shaming can encourage companies to invest in clean energy and reduce greenhouse gas emissions. Additionally, it can deter them from entering or further operating in carbon-intensive sectors, even when such norms are not yet legally binding.

Finally, regulatory climate shaming can also serve other goals relating to the aftermath of climate obstruction. For example, it can advance public

---

[259] Generally, climate change mitigation policies address the root causes of climate change (such as coal-generated power), and seek to reduce their scope and impact, while policies of climate change adaptation are focused on providing better responses to current and expected implications of climate change, such as natural disasters or mass migration. *See, e.g.*, Jan McDonald & Phillipa C. McCormack, *Rethinking the Role of Law in Adapting to Climate Change*, WIREs CLIMATE CHANGE, July 1, 2021, at 4 (discussing the conceptual relationship between climate change mitigation and adaptation).

[260] *See, e.g.*, CLIMATE CHANGE LAWS OF THE WORLD, LSE GRANTHAM RSCH. INST. ON CLIMATE CHANGE & THE ENV'T, https://climate-laws.org [https://perma.cc/5KGG-4Y8M] (database provided by the Grantham Research Institute at the London School of Economics and the Sabin Center at Columbia Law School).

[261] *See* AYRES & BRAITHWAITE, *supra* note 109, at 4.

[262] *See id.*

[263] Smart regulation theory, originally developed in the environmental context, suggests better regulatory results are yielded by using multiple policy instruments, rather than a single one, as well as a broad range of actors, including third parties. *See* NEIL GUNNINGHAM & PETER GRABOSKY, SMART REGULATION: DESIGNING ENVIRONMENTAL POLICY 9 (1998).

[264] *See* Stephen Kim Park, *Legal Strategy Disrupted: Managing Climate Change and Regulatory Transformation*, 58 AM. BUS. L.J. 711, 736 (2021). *See generally* DAVID COEN, JULIA KREIENKAMP & TOM PEGRAM, GLOBAL CLIMATE GOVERNANCE (2020).

education on climate change;[265] nudge consumers toward climate-responsible choices; foster environmental transparency; and help regulatory bodies improve their own public images by taking a fiercer, more proactive stand on climate change.[266]

V. Conclusion

This Article explored shaming as a regulatory tool for combating climate change through the targeting of corporate reputations. It developed a regulatory climate shaming framework based on contemporary examples of information-based policies implemented in various jurisdictions worldwide and on regulatory shaming theory. This Article also offered a normative theory of regulatory climate shaming, focusing on justifications and rationales that transcend the conventional justifications for regulatory shaming. Namely, this Article focused on the ways in which regulatory shaming can fight the climate crisis by also responding to corporate climate obstruction tactics like climate denial and climate washing. These manipulative reputation- and regulation-management tactics employed by oil and gas companies and companies in other sectors are currently under-regulated, causing detrimental harm to public rights and interests. In fact, this is a regulatory blind spot in the context of climate mitigation, which is currently focused on tools such as emissions reduction rules. Therefore, while the use of shaming tactics by regulators is a highly controversial practice, this Article asserted that regulators should indeed climate shame companies.

I have intentionally left out from the discussion any moral arguments pertaining to companies' deceitful and harmful behavior and focused instead on instrumental reasons to climate shame companies. I also did not intend for any of the arguments put forward in this Article to imply that regulatory climate shaming should be used as a retaliation tool or as punishment. However, I am sure that a study of the moral basis for regulatory climate shaming is important and highly relevant, especially because shaming entails moral condemnation of others, and direct and indirect corporate contributions to the climate crisis may be regarded as immoral. But such a study is beyond the scope of this project.

Indeed, the severity of the climate crisis and its extreme, wide-ranging implications for public interests and human rights, combined with the current complex limitations of the climate regulation landscape discussed in this Article, warrant controversial and somewhat unconventional measures such as shaming. That said, several clarifications should be made regarding the use of this tactic from regulatory and legal perspectives. First, I do not sug-

---

[265] *See supra* note 183 and accompanying text.

[266] *See* James R. Brooks & Kristie L. Ebi, *Climate Change Warning Labels on Gas Pumps: The Role of Public Opinion Formation in Climate Change Mitigation Policies*, 5 Glob. Challenges, no. 10, 2021, at 1, 2–4 (discussing "warming labels" on fuel pumps and their various educational, behavioral, and democratic benefits); *see also supra* Part IV.A.

gest that all other regulatory measures for addressing the climate crisis—such as command-and-control regulation, voluntary public-private agreements, self-imposed private regulation of industries, and international agreements—should be set aside in favor of regulatory climate shaming. On the contrary, climate shaming should be deployed as part of a broader regulatory strategy that combines multiple regulatory approaches, each suitable for specific fields and jurisdictions, in line with modern regulatory theories on responsive regulation and smart regulation. Instead, this Article emphasized the unique benefits of regulatory shaming relative to other climate regulation tactics, underlining that shaming should be positively considered as a valuable addition to the regulatory toolbox.

Second, legal procedures that I have discussed elsewhere should be considered in order to ensure fair and balanced regulation.[267] These include conducting pre-shaming hearings; taking privacy measures that may allow companies to restore their good name after a certain period of time (e.g. by deleting the information); giving companies an opportunity to correct their behavior post-shaming, and if possible, pre-shaming as well; issuing warnings to the shamed entity or the entire sector before introducing new climate shaming tactics or before publishing shaming information; publishing a guidance on regulatory climate shaming policy and principles; performing cost-benefit analysis pre- and post-shaming; consulting with the public and with regulated parties before introducing new climate shaming policies; and publicizing detailed reasons and explanations for using regulatory climate shaming. A mixture of at least some of these measures should be adopted by regulators and legislators who are currently considering or implementing regulatory climate shaming policies.

Some may argue that certain industries, specifically the fossil fuel industry, are beyond shaming. However, the existence of the climate denial machine[268] indicates that corporations, specifically oil and gas companies, are sensitive to their public image. Whether or not this sensitivity is based on nothing more than concern for the bottom line is less important than the fact that it exists. It means that these companies are not beyond shaming because in the context of regulatory shaming, effective shaming means corporate responsiveness to public pressure based on publication of information and messages that may damage corporate reputation. Companies in various sectors are clearly sensitive to the perceptions and attitudes of stakeholders[269] pertaining to the company's climate performance, or else they would not go to the trouble of climate washing.[270]

---

[267] *See* Yadin, *supra* note 90 (manuscript at 21–22).

[268] *See supra* Section IV.A.

[269] Including investors, journalists, social media influencers, NGOs, consumers, and shareholders.

[270] *See supra* Section IV.B.; *see also* Robert J. Brulle, Melissa Aronczyk & Jason Carmichael, *Corporate Promotion and Climate Change: An Analysis of Key Variables Affecting Advertising Spending by Major Oil Corporations, 1986–2015*, 159 CLIMATIC

Others might argue that specific companies cannot be shamed effectively if entire sectors are acting with the same lack of regard to climate change. Yet, as companies in, for example, the automobile industry, the financial sector, or the advertising industry compete with one another for clients and investors, it is possible to shame a specific company even when other companies in the same market share the same practices and avoid adopting climate-friendly policies. Additionally, entire sectors can be shamed en masse, jeopardizing their current (convenient) regulatory landscapes. In these situations, industry leaders may be inclined to react to regulatory climate shaming publications and improve business practices, thereby encouraging other firms to follow the same path.

Indeed, it can be assumed that in some cases, despite implementing appropriate administrative measures, regulatory climate shaming will be met with aggressive industry response. In particular the fossil fuel industry has indicated not only the ability, in terms of resources, but also the willingness to pursue aggressive regulatory obstruction tactics.[271] Aggressive corporations may also go after policymakers personally or seek to tarnish the reputation of regulatory bodies, constituting a form of legal bullying.[272] But policymakers should not be discouraged by these risks, keeping in mind the considerations, rationales, and justifications discussed in this Article. Hopefully, regulatory climate shaming will prove effective in slowing climate change, helping to secure the safety and wellbeing of current and future generations.

CHANGE 87, 88 (2020) (explaining the importance of public reputation in the eyes of the oil and gas companies).

[271] *See supra* Part IV.

[272] *See* David Orozco, *Strategic Legal Bullying*, 13 N.Y.U. J.L. & BUS. 137, 138 (2016).