

Southern Methodist University

SMU Scholar

Faculty Journal Articles and Book Chapters

Faculty Scholarship

2016

How Cheap is Corporate Talk? Comparing Companies' Comments on Regulations With Their Securities Disclosures

James W. Coleman

Southern Methodist University, Dedman School of Law

Recommended Citation

James W. Coleman, How Cheap is Corporate Talk? Comparing What Companies Tell Regulators With What They Tell Investors, 40 Harv. Envtl. L. Rev. 47 (2016)

This document is brought to you for free and open access by the Faculty Scholarship at SMU Scholar. It has been accepted for inclusion in Faculty Journal Articles and Book Chapters by an authorized administrator of SMU Scholar. For more information, please visit <http://digitalrepository.smu.edu>.

HOW CHEAP IS CORPORATE TALK? COMPARING COMPANIES' COMMENTS ON REGULATIONS WITH THEIR SECURITIES DISCLOSURES

James W. Coleman*

When companies face adverse proposed rules, they may want to convince regulators that the proposed rules are unworkable and should be changed while, at the same time, reassuring investors that the rules will be manageable. These conflicting incentives may lead to inconsistent messages in regulatory comments and securities disclosures, fueling a perception that corporate submissions to regulators are "cheap talk." Despite this perception, there has been no empirical study comparing statements to these two audiences. This project performs such a study, taking the example of comments submitted on the Environmental Protection Agency's Renewable Fuel Standard. This standard provides an ideal case study because controversial annual rulemakings have created a rich dataset of company comments that can be compared to contemporaneous securities disclosures from the same companies.

The empirical study demonstrates that oil companies do send inconsistent messages to their two audiences—warning regulators and reassuring investors. The Article suggests that regulators should use this approach to assess the sincerity of industry warnings about the cost of regulation. Private and public enforcers of securities disclosure laws should also use this approach to identify companies that are hiding regulatory risks. Finally, now that a company's comments can be compared with its securities disclosures, corporate counsel should align company statements to avoid securities litigation and enhance the company's credibility in each forum.

Introduction	48
I. The Regulator's Dilemma: Public Decisions, Private Knowledge.....	49
II. The Renewable Fuel Standard: A Running Battle in Notice-and-Comment Rulemaking	56
III. The Methodology: Comparing Statements to Two Audiences	66
IV. Results: Oil Companies Warn Regulators and Reassure Investors	70
A. Oil Companies Identify Significantly More Negative Impacts in Their Comments than in Their 10-K Disclosures	71
B. Ethanol Companies Identify Slightly Fewer Positive Impacts from the Renewable Fuel Standard in Their Comments than in Their 10-K Reports	74
V. How Securities Disclosures Can Be Used to Assess the Accuracy of Warnings in Regulatory Comments and Vice Versa	75
A. Environmental Regulators Should Assess the Accuracy of Comments by Comparing Them with Contemporaneous Securities Disclosures	76

* Assistant Professor, University of Calgary Faculty of Law, Haskayne School of Business; J.D., Harvard Law School; B.A., Harvard University. Thanks to Jonathan Adler, Nigel Banks, Nathan Cortez, Elisabeth De Fontenay, Aviana Eisenberg, Alexandra Klass, Ryan Koopmans, Richard Lazarus, William Magnuson, Martin Olszynski, Olga Petricevic, Richard Revesz, Arden Rowell, David Spence, Matthew Stephenson, Fenner Stewart, Bryce Tingle, Jacqueline Weaver, and Michael Allan Wolf for helpful comments and conversations. Caroline Law provided excellent coding and research assistance.

B. Securities Regulators and Plaintiffs' Counsel Can Use Comments on Environmental Regulations to Audit the Completeness of Securities Disclosures.....	78
C. Corporate Counsel Should Ensure Corporate Comments on Regulations Are Consistent	80
Conclusion	81
Appendix A: Study Codes	82
Appendix B: Sample Codes	85

"[T]his bill could prevent continued production of automobiles . . . [and] is a threat to the entire American economy and to every person in America."

Lee Iacocca, President, Ford Motor Company, on the Clean Air Act of 1970¹

"The automobile industry has survived and grown even in countries where government policies have made the cost of car ownership several times higher than it is in the United States. We have no doubt that our industry will continue to grow, because people everywhere place a high value on the individual mobility and on the freedom that this mobility makes possible."

Lee Iacocca, President, and Henry Ford II, Chairman, Ford Motor Company, Annual Report 1970²

INTRODUCTION

When a public company describes the impact of a proposed regulation it must consider two audiences: regulators and investors. It would like to convince the regulator to avoid burdensome regulations by emphasizing how strict regulations could cause job losses or reduce investment. But it may wish to convince investors that the company will thrive in the face of any plausible regulatory outcome. These conflicting incentives may lead to inconsistent messages and fuel a perception that industry submissions to regulators and investors are often "cheap talk."

Despite the common perception that corporations exaggerate the economic impact of regulation, and anecdotal reports of inconsistencies between comments to regulators and reports to investors, to-date there has been no empirical study of congruence between submissions to regulators and shareholder letters. This project performs and reports such a study, taking the example of comments submitted on the U.S. Environmental Protection Agency's ("EPA")

1. *Women's Suffrage and Other Visions of Right-Wing Apocalypse*, THE NEW REPUBLIC, Dec. 21, 2009, <http://perma.cc/6DZV-YSY2> [hereinafter *Women's Suffrage*] (alterations in original); HARVEY BLATT, AMERICA'S ENVIRONMENTAL REPORT CARD: ARE WE MAKING THE GRADE? 221 (2004).
2. FORD MOTOR CO., ANNUAL REPORT 1970 3 (March 10, 1971).

Renewable Fuel Standard rulemakings between 2009 and 2013. This example presents an ideal case study because new targets are proposed each year under the Standard, and each year several biofuel and oil companies submit publicly available comments. This study compares these comments with contemporaneous annual statements from the same companies describing their exposure to regulatory risk.

The study empirically demonstrates that oil companies facing adverse regulations tailor their messages to each audience—emphasizing the cost and economic danger of regulation to regulators while telling shareholders that regulation is merely a cost of doing business with few negative impacts. On the other hand, corporations anticipating beneficial regulations—the ethanol companies planning on mandates for their product—present a more consistent and cautiously optimistic forecast in both fora.

The Article considers the implications of these findings for environmental regulators and private and public corporate lawyers. It suggests that environmental regulators should ask companies to file excerpts from their corporate securities disclosures along with their comments to demonstrate that they take their own warnings about proposed regulations seriously enough to also warn their investors. It also suggests that the Securities and Exchange Commission (“SEC”) and private plaintiffs should scrutinize company comments to determine what regulatory risks companies are pointing out to regulators without disclosing them to investors. Finally, it suggests that corporate counsel should align these two sets of statements to protect public companies from securities litigation and enhance their credibility in each forum.

The Article proceeds in five parts. Part I identifies the “regulator’s dilemma” faced by policymakers that often need information from private industry to set pollution standards but have good reason to distrust the information and estimates that industry voluntarily provides. Part II describes the Renewable Fuel Standard and explains why it has become a target for so many comments and a useful test case for comparing corporate comments to regulators and securities disclosures to investors. Part III lays out the methodology developed to identify inconsistent statements to these two audiences, noting its potential application to other “two-audience” problems, which often arise in principal-agent relationships. Part IV presents the results of the study, showing how oil companies tell EPA one thing and investors another. Part V considers how regulators, securities enforcers, and corporate counsel can use this comparative approach to provide more accurate information to regulators, greater disclosure of regulatory risk to investors, and improve the credibility of corporate communications.

I. THE REGULATOR’S DILEMMA: PUBLIC DECISIONS, PRIVATE KNOWLEDGE

In 1970, Ford Motor’s President, Lee Iacocca, called the Clean Air Act “a threat . . . to every person in America” that “could prevent continued produc-

tion of automobiles.”³ His statement is an archetype of the prophesies of doom that industry often issues in the face of new regulations.⁴ His prediction and others like it are routinely cited to illustrate how corporations falsely claim that environmental regulations will cause severe economic harm.⁵ In contrast, retrospective reviews of Clean Air Act regulations have shown that these regulations cost even less than the regulators that imposed them expected, making them far more affordable than the stark warnings from industry suggested that they would be.⁶

As a result, when industry complains about how much a proposed regulation will cost, advocates for regulation may justly respond that such predictions have been wrong in the past. And these advocates often imply that such predictions can be safely ignored. After all, no one listens to the boy who cried wolf.⁷

But the reason false alarms are dangerous is because they prevent us from recognizing accurate warnings: the problem with “crying wolf” is that there *are* wolves. Some regulatory standards would, in fact, be technically impossible or economically infeasible to achieve. So when regulators set standards through notice-and-comment rulemaking,⁸ they almost always consider whether these standards are achievable.⁹ And regulators generally do not ignore industry’s pre-

3. *Women’s Suffrage*, *supra* note 1 (alteration in original); BLATT, *supra* note 1, at 221.

4. See, e.g., Alan S. Miller, *Environmental Regulation, Technological Innovation, and Technology Forcing*, 10 NAT. RES. & ENVT. 64, 65 (1995); see also James V. Cornehl, *Politics, Regulation, and Urban Transportation Priorities: The Triumph of the Auto Society*, 7 ANTITRUST L. & ECON. REV. 69, 75 (1974); Jagul Lee et al., *Forcing Technological Change: A Case of Automobile Emissions Control Technology Development in the U.S.*, 30 TECHNOVATION 249, 260 (2010).

5. See Cry Wolf Project, <http://perma.cc/9V9D-3C7X> (collecting corporate predictions that regulations will cause significant harm); Eban Goodstein, *Behind the Numbers: Polluted Data*, THE AM. PROSPECT, Nov. 16, 2001, <http://perma.cc/DK3Y-GTUS> (collecting examples of overestimated costs of regulations including regulations for asbestos, benzene, chlorofluorocarbons, coke ovens, cotton dust, halons, and vinyl chloride); Lisa Heinzerling et al., *Applying Cost-Benefit to Past Decisions: Was Environmental Protection Ever a Good Idea?*, 57 ADMIN. L. REV. 155, 190–92 (2005) (cost of reducing vinyl chloride was overestimated); SMALL BUSINESS MAJORITY & THE MAIN STREET ALLIANCE, THE CLEAN AIR ACT’S ECONOMIC BENEFITS PAST, PRESENT AND FUTURE 6–7 (2010) (documenting that costs of reducing sulfur dioxide under the 1990 Clean Air Act Amendments came in well under all estimates); Don Munton, *Dispelling the Myths of the Acid Rain Story*, 40 ENV’T 4, 7, 27 (1998) (same).

6. EPA, THE BENEFITS AND COSTS OF THE CLEAN AIR ACT: 1970 TO 1990 (1997), <http://perma.cc/9R74-965T>. For a critical review of this study, see *Performance of the Clean Air Act and its Amendments: Hearing Before the Comm. on Energy and Commerce*, 107th Cong. (2002) (statement of Alan Krupnick), <http://perma.cc/EZ3Y-VWLZ>, which argues that EPA’s study has “some important and acknowledged shortcomings” but ultimately agrees with the study’s conclusion that the Clean Air Act’s “total benefits to society exceed its costs.”

7. In Aesop’s fable, a shepherd boy cries “Wolf!” because it amuses him when his neighbors rush to help him and find no wolf; when a wolf really comes, no one believes his cries for help, and the wolf devours his whole flock. AESOP, THE BOY WHO CRIED WOLF, in THE FABLES OF AESOP AND OTHERS 263 (Joseph Johnson ed. 1805).

8. Anne Joseph O’Connell, *Political Cycles of Rulemaking: An Empirical Portrait of the Modern Administrative State*, 94 VA. L. REV. 889, 901–02 (2008) (briefly explaining the notice-and-comment process of informal rulemaking).

9. E. Donald Elliott, *Re-Inventing Rulemaking*, 41 DUKE L.J. 1490, 1493 (1992) (noting that Supreme Court decisions have made “notice-and-comment rulemaking under §553 of the

dictions about the feasibility and cost of compliance because private industry generally has more information on these points.¹⁰

Thus regulators face a fundamental difficulty when they set regulatory standards, which could be called the “regulator’s dilemma.” Public regulators often must prescribe standards that require the “best” or “lowest” rate of pollution that is “available,” “demonstrated,” “achievable,” or “practicable.”¹¹ But private industry generally has the most complete information about the monetary cost and practical feasibility of different control technologies.¹² And industry

[Administrative Procedure Act] . . . into the principal mechanism through which the government develops detailed technical standards regulating the economy” and explaining its role in creating a record for a reviewing court); Cass R. Sunstein, *Interest Groups in American Public Law*, 38 STAN. L. REV. 29, 61–65 (1985). Even when statutes do not allow regulators to make decisions based on cost, regulators often consider cost as a matter of economic or political necessity. Daniel A. Farber, *Rethinking the Role of Cost-benefit Analysis*, 76 U. CHI. L. REV. 1355, 1372–79 (2009) (demonstrating that regulators frequently use cost-benefit analyses even when the statute they are implementing directs them not to consider cost); Michael A. Livermore & Richard L. Revesz, *Rethinking Health-Based Environmental Standards*, 89 N.Y.U. L. REV. 1184, 1231–35 (2014) (explaining why regulators are often driven to consider cost even when they are implementing health-based statutes).

10. Many scholars have explained how private actors shape regulation by informing, influencing, and persuading regulators through submitted comments. *See, e.g.*, Lisa Schultz Bressman, *Procedures as Politics in Administrative Law*, 107 COLUM. L. REV. 1749, 1780–82 (2007); Scott Furlong, *Interest Group Influence on Rule Making*, 29 ADMIN. & SOC’Y 325, 339–41 (1997) (documenting the importance industry places on communication with regulators); Richard J. Pierce, Jr., *Seven Ways to Deossify Agency Rulemaking*, 47 ADMIN. L. REV. 59, 87–88 (1995); Michael Asimow, *Nonlegislative Rulemaking and Regulatory Reform*, 1985 DUKE L.J. 381, 403 (1985) (“An invitation to submit comments stimulates outsiders to furnish data and other inputs, providing a source of low-cost information to agency decisionmakers. A rule is likely to be a better product if its drafters must consider seriously alternatives that they might have overlooked or take account of practical problems that otherwise would crop up only after a rule goes into effect.”); Matthew C. Stephenson, *A Costly Signaling Theory of “Hard Look” Judicial Review*, 58 ADMIN. L. REV. 753, 761–63 (2006); *see also* Portland Cement Ass’n v. Ruckelshaus, 486 F.2d 375, 394 (D.C. Cir. 1973) (lack of agency response or consideration to a comment “becomes of concern” when it is “significant enough to step over a threshold requirement of materiality”); Ronald Levin, *Direct Final Rulemaking*, 64 GEO. WASH. L. REV. 1, 16 (1995) (arguing that it would be “problematic” for an agency to commit to a rulemaking course without first considering comments from the public). *But see* Jack M. Beermann, *Presidential Power in Transitions*, 83 B.U. L. REV. 947, 1001–02 (2003) (arguing that, in practice, it is not possible for a reviewing court to require an agency to keep an open mind).
11. Such standards are particularly common under the Clean Air Act, 42 U.S.C. § 7411(a)(1) (2012) (prescribing the “best system of emission reduction which . . . has been adequately demonstrated”); 42 U.S.C. § 7501(3) (defining the “lowest achievable emission rate” for air pollutants), and Clean Water Act, 33 U.S.C. § 1311(b)(2)(A)(i) (requiring “best available technology” for water pollutants); 33 U.S.C. § 1311(b)(2)(A)(i) (requiring “best conventional pollutant control technology” for water pollutants); 33 U.S.C. § 1281(b) (2012) (requiring “the application of the best practicable waste treatment technology”). *See also* Jonathan S. Masur & Eric A. Posner, *Against Feasibility Analysis*, 77 U. CHI. L. REV. 657, 664–67 (2010) (describing the “best available,” “reasonably available,” and “best practicable” standards).
12. Cary Coglianese et al., *Seeking Truth for Power: Informational Strategy and Regulatory Policymaking*, 89 MINN. L. REV. 277, 278–79 (2004) (“In particular, regulators need detailed and accurate information about the operations of private business enterprises to understand the scope and cause of regulatory problems, and to craft effective solutions to them.”); Jody Freeman & Daniel Farber, *Modular Environmental Regulation*, 54 DUKE L.J. 795, 815

has little reason to accurately report this private information; instead it often has an incentive to exaggerate the costs of new pollution control technologies and minimize their benefits to dissuade regulators from mandating new technologies that will reduce industry profits.¹³

This leaves regulators in a bind. One partial solution would be to look to industry leaders in pollution control and demand that the entire industry achieve the same level of control. One could call this the “catch-up regulation” approach: everyone must catch up to the industry leader. But this approach is still imperfect and can result in either too-lax or too-stringent standards. Standards may be too lax if the whole industry could efficiently upgrade its pollution control: after all, we often hope that standards can be “technology-forcing.”¹⁴ And standards may be too strict if not all facilities can achieve the same reductions’ due to different geography, climate, or pre-existing equipment.¹⁵ To achieve their legal and policy goals, regulators need private information to calibrate the standards that they set.

(2005) (“much of the information most relevant to prescriptive regulators is in the hands of industry, including information about the costs of controlling emissions, operational details about industrial processes, and rates of compliance”); Fenner L. Stewart, *The Corporation, New Governance, and the Power of the Publicization Narrative*, 21 IND. J. GLOBAL LEGAL STUD. 513, 527–28 (2014) (explaining how modern regulation is “dependent on the information that exchanges between regulators and the regulated to learn of and respond to complex regulatory challenges in a timely and effective manner or, more dramatically, simply to avoid regulatory failure”); see also David Spence, *Can Law Manage Competitive Energy Markets?*, 93 CORNELL L. REV. 767, 771 (2008) (describing how this dynamic affects utility regulators in particular).

13. James Coleman, *Unilateral Climate Regulation*, 38 HARV. ENVTL. L. REV. 87, 112 (2014) (“disparate cost estimates are often a principal focus of political and legal controversy concerning” environmental performance standards); Philip J. Harter, *Negotiating Regulations: A Cure for Malaise*, 71 GEO. L.J. 1, 19 (1982) (noting that in these comments “private participants tend to take extreme positions” and those “that oppose any regulation or that hope to obtain a minimally intrusive regulation may argue that no regulation is needed or that at most a weak one is required, and will tailor their evidence accordingly”). On the other hand, in some cases companies may prefer stricter regulation if it will insulate those companies from competition. See DALE D. MURPHY, *THE STRUCTURE OF REGULATORY COMPETITION: CORPORATIONS AND PUBLIC POLICIES IN A GLOBAL ECONOMY* (2007) 120–23 (describing how this process may explain regulation of ozone-depleting substances); Bruce Yandle, *Bootleggers and Baptists—The Education of a Regulatory Economist*, 7 REGULATION 12 (1983) (explaining how anti-competitive and pro-regulatory forces may combine in favor of strict regulation); Bruce G. Carruthers & Naomi Lamoreaux, *Regulatory Races: The Effects of Jurisdictional Competition on Regulatory Standards* 8 (UCLA Econ., Working Paper, 2009), <http://perma.cc/H2QP-3SUK> (“large firms may prefer to operate under a more stringent regulatory regime if it puts smaller competitors at a disadvantage”). Finally, one reason that environmental regulation often costs less than advertised is that it motivates innovation that makes compliance cheaper. Pascual Berrone et al., *Necessity as the Mother of ‘Green’ Inventions: Institutional Pressures and Environmental Innovations*, 34 STRAT. MGMT. J. 891, 895–96 (2013); Michael E. Porter & Claas van der Linde, *Toward a New Conception of the Environment–Competitiveness Relationship*, 9 J. ECON. PERSP. 4, 97 (1995).
14. See D. Bruce La Pierre, *Technology-Forcing and Federal Environmental Protection Statutes*, 62 IOWA L. REV. 771, 772–73 (1977).
15. Bruce A. Ackerman & Richard B. Stewart, *Reforming Environmental Law*, 37 STAN. L. REV. 1333, 1335 (1985) (“Uniform [best available technology] requirements waste many billions of dollars annually by ignoring variations among plants and industries in the cost of reducing pollution and by ignoring geographic variations in pollution effects.”).

As a result, environmental regulators are locked in ubiquitous stand-offs with industry, in which industry claims a new environmental rule is infeasible and the agency must decide whether industry is bluffing.¹⁶ This dilemma is most obvious with command-and-control regulation where the agency directly mandates facilities' emission rates, but can also arise when an agency sets broader goals for national or statewide reductions. Thus, even market-based regulations are often challenged based on their feasibility or economic impact.¹⁷ This dilemma also applies in several settings outside environmental regulation and to choices made by other public officials such as prosecutors,¹⁸ judges,¹⁹ and legislators,²⁰ who are often told that they are imposing infeasible mandates on United States companies.

-
16. A salient recent example is EPA's Clean Power Plan for state power sector greenhouse gas emissions. Carbon Pollution Emission Guidelines for Existing Stationary Sources: Electric Utility Generating Units, 80 Fed. Reg. 64,662 (Oct. 23, 2015) (to be codified at 40 C.F.R. pt. 60). For example, utility companies, joined by the continent's electric reliability watchdog, have suggested that EPA's plan is so ambitious that it might endanger reliability of electricity by too rapidly phasing out coal power. See N. AM. ELEC. RELIABILITY CORP., POTENTIAL RELIABILITY IMPACTS OF EPA'S PROPOSED CLEAN POWER PLAN: INITIAL RELIABILITY REVIEW (2014), <http://perma.cc/84TR-JF2R>; Herman K. Trabish, *Comments Are in on the EPA's Clean Power Plan: Utilities Say the Rules Go Too Far, Too Fast*, UTILITY DIVE, Dec. 2, 2014, <http://perma.cc/9FTR-YDQX>. Environmental groups have responded that these concerns are overstated. John Moore, *New Report: States Can Cut Carbon Pollution and Protect Grid Reliability*, NRDC SWITCHBOARD BLOG, <http://perma.cc/9B2W-TY3D> ("NERC's 'sky is falling' message reflect a fundamental misunderstanding of the proposed Clean Power Plan's compliance flexibility.").
 17. David M. Driesen, *Is Emissions Trading an Economic Incentive Program?: Replacing the Command and Control/Economic Incentive Dichotomy*, 55 WASH. & LEE L. REV. 289, 327–28 (1998) (describing how market-based regulations present many of the same problems as traditional regulations).
 18. For example, anti-corruption prosecutors are sometimes told that aggressive enforcement of foreign corrupt practices will push U.S. businesses overseas. See, e.g., COMMITTEE ON INTERNATIONAL BUSINESS TRANSACTIONS, NEW YORK CITY BAR ASSOCIATION, THE FCPA AND ITS IMPACT ON INTERNATIONAL BUSINESS TRANSACTIONS: SHOULD ANYTHING BE DONE TO MINIMIZE THE CONSEQUENCES OF THE U.S.'S UNIQUE POSITION ON COMBATING OFFSHORE CORRUPTION? 23 (2011), <http://perma.cc/X47A-5XQ9>; see also William Magnuson, *International Corporate Bribery and Unilateral Enforcement*, 51 COLUM. J. TRANSNAT'L L. 360 (2013).
 19. For example, courts are sometimes warned that their punitive damages award could cause American businesses to shut down. James B. Sales & Kenneth B. Cole, Jr., *Punitive Damages: A Relic That Has Outlived Its Origins*, 37 VAND. L. REV. 1117, 1120 (1984); W. Kip Viscusi, *The Social Costs of Punitive Damages Against Corporations in Environmental and Safety Torts*, 87 GEO. L.J. 285, 326 (1998) ("Once damages become excessively high, either product development will stagnate or firms will withdraw from the market altogether. Such withdrawal has been experienced in the United States private aircraft industry's production of private planes.").
 20. Legislators also must consider whether laws demand more than an established industry can provide. For example, scholars have suggested that the demise of free checking accounts for consumers can be attributed to legislation that forced banks to charge lower interchange fees to retailers on debit card transactions. See generally David S. Evans et al., *The Impact of the U.S. Debit Card Interchange Fee Regulation on Consumer Welfare: An Event Study Analysis* (Coase-Sandor Inst. for Law & Econ., Working Paper No. 658, 2013), <http://perma.cc/TL7P-HVGQ>; David S. Evans, Howard H. Chang & Margaret Weichert, *Analysis of Claims in Support of the 'Durbin Amendment' to Regulate Debit Card Interchange Fees* (May 12, 2011) (unpublished manuscript), <http://perma.cc/3HVV-C44X>.

This study demonstrates how another set of corporate statements can be used to audit corporations' regulatory submissions, easing the regulator's dilemma. Public corporations must make predictions about the impact of proposed regulations to another audience: their investors.²¹ Public companies must file an annual report with the SEC, known as Form 10-K, that summarizes the state of their business and includes a summary of the important risks facing the business.²²

At least in theory, these predictions are more constrained than statements made to other regulators because corporations may be held liable under SEC Rule 10b-5 for false or misleading statements and omissions made to the public.²³ Annual 10-K reports are a frequent basis for lawsuits under Rule 10b-5,²⁴ including lawsuits alleging that 10-K reports downplayed regulatory risk,²⁵ and many scholars have argued or assumed that this liability induces more honest

21. 17 C.F.R. § 229.503 (2015) ("Where appropriate, provide under the caption 'Risk Factors' a discussion of the most significant factors that make the offering speculative or risky. This discussion must be concise and organized logically. Do not present risks that could apply to any issuer or any offering. Explain how the risk affects the issuer or the securities being offered. Set forth each risk factor under a subcaption that adequately describes the risk.") And the SEC strongly encourages them to do so in plain language. Tim Loughran & Bill McDonald, *Plain English, Readability, and 10-K Filings* 1 (Univ. of Notre Dame, Working Paper, 2009) ("Although the rule is restricted to prospectuses, SEC documents clearly encourage firms to adopt the principles in all their filings and communications with shareholders." (citing SEC. & EXCH. COMM'N, A PLAIN ENGLISH HANDBOOK 4 (1998))). Underlying the adoption of extensive disclosure requirements was a legislative philosophy: "There cannot be honest markets without honest publicity. Manipulation and dishonest practices of the market place thrive upon mystery and secrecy." Basic Inc. v. Levinson, 485 U.S. 224, 230 (1988) (quoting H. R. Rep. No. 1383, 73d Cong., 2d Sess., 11 (1934)).
22. 17 C.F.R. § 249.310 (2015); see also Arnold S. Jacobs, *What Is a Misleading Statement or Omission Under Rule 10b-5?*, 42 FORDHAM L. REV. 243, 260-67 (1973) (describing how 10b-5 liability may result from corporate securities filings); David S. Ruder & Neil S. Cross, *Limitations on Civil Liability Under Rule 10b-5*, 1972 DUKE L.J. 1125, 1129.
23. Securities and Exchange Commission Rule 10b-5, 17 C.F.R. § 240.10b-5 (2015); *Blue Chip Stamps v. Manor Drug Stores*, 421 U.S. 723, 730 (1975); see also GERARD HERTIG, REINIER KRAAKMAN & EDWARD ROCK, *Issuer and Investor Protection*, in THE ANATOMY OF CORPORATE LAW 300 (2009) ("The U.S. still mandates the world's most extensive public reporting requirements . . . and deploys unparalleled private and public enforcement measures in the cause of investor protection.").
24. See, e.g., *Asher v. Baxter Intern. Inc.*, 377 F.3d 727, 734 (7th Cir. 2004) (allowing case to proceed because defendant may have "omitted important variables from the cautionary language and so made projections more certain than its internal estimates at the time warranted"); *Helwig v. Vencor, Inc.*, 251 F.3d 540, 559 (6th Cir. 2001) (holding that a company can be liable for minimizing regulatory risk, and writing: "Yet as the Budget Act neared enactment and as the warning signs flared, Vencor's precautions grew more cursory and abstract. In its first- and second-quarter filings of 1997, the company stated only that it could not predict the form, effect, or likelihood of any proposed legislation."); see also *Stoneridge Inv. Partners v. Scientific-Atlanta Inc.*, 128 S. Ct. 761, 767 (2008) (considering 10b-5 suit based "on financial statements filed with the Securities and Exchange Commission (SEC) and reported to the public"); *TSC Indus., Inc. v. Northway, Inc.*, 426 U.S. 438, 452 & n.13 (1976) (same, including Form 10-K); JAMES BROWN, *THE REGULATION OF CORPORATE DISCLOSURE* § 6A.05 (Supp. 2015-2).
25. See, e.g., *Helwig*, 251 F.3d at 559.

corporate disclosures of risk.²⁶ Furthermore, accounting bodies and the SEC have pursued several initiatives to improve reporting of risks due to environmental regulation.²⁷ Corporations, it is true, retain more latitude in making predictions about the future under the Private Securities Litigation Reform Act's "safe harbor" and the bespeaks caution doctrine.²⁸ But neither rule absolves a corporation of liability for a prediction that is made in bad faith or contradicted by contemporaneous predictions to regulators.²⁹

Regulators concerned by Lee Iacocca's prophecies of doom in 1970 would have been reassured if they had read Ford Motor Company's contemporaneous Form 10-K disclosures. In its 1970 report, the company assured its investors that its domestic operations would continue to succeed because "[t]he automobile industry has survived and grown even in countries where government policies have made the cost of car ownership several times higher than it is in the United States."³⁰ It concluded, "[w]e have no doubt that our industry will continue to grow."³¹ This statement was signed by two people on behalf of the board of directors: Henry Ford II and Lee Iacocca.³²

26. Steve Thel, *The Original Conception of Section 10(b) of the Securities Exchange Act*, 42 STAN. L. REV. 385, 409 (1990); see also Ronald J. Gilson & Reinier H. Kraakman, *The Mechanisms of Market Efficiency*, 70 VA. L. REV. 549, 601 (1984) (discussing the efficiencies of placing the burden of disclosure on the issuers of securities); Louis E. Ebinger, Note, *Sarbanes-Oxley Section 501(a): No Implied Private Right of Action, and a Call to Congress for an Express Private Right of Action to Enhance Analyst Disclosure*, 93 IOWA L. REV. 1919, 1945 (2008).
27. In 2010, the Securities and Exchange Commission issued binding guidance requiring companies to disclose risks related to climate regulation. Commission Guidance Regarding Disclosure Related to Climate Change, 75 Fed. Reg. 6290, 6296 (Feb. 8, 2010) (to be codified at 17 C.F.R. pts. 211, 231, and 241) ("Item 303 requires registrants to assess whether any enacted climate change legislation or regulation is reasonably likely to have a material effect on the registrant's financial condition or results of operation."); see also Rick Hansen, *Climate Change Disclosure by SEC Registrants: Revisiting the SEC's 2010 Interpretive Release*, 6 BROOK. J. CORP. FIN. & COM. L. 487, 490 (2012). This guidance built on an initiative by New York's Attorney General that resulted in settlement agreements with large energy companies that required them to report risks from climate change and climate change regulation. Seth Kerschner, *Power Companies Agree to Expanded Disclosure of Climate Change Risk in Landmark Settlements with New York Attorney General*, 61 A.B.A. ENVTL. DISCLOSURE COMM. NEWSL. 1, 11 (2009). In 1995, the American Accounting Association's Securities and Exchange Commission Liaison Committee had identified risk from environmental regulation as a priority for improved disclosure. Robert J. Sack et al., *Mountaintop Issues: From the Perspective of the SEC*, 9 ACCT. HORIZONS 79, 80 (1995).
28. 15 U.S.C. § 78u-5; see also *Plumbers Union v. Nomura Asset Acceptance Corp.*, 632 F.3d 762, 772 (1st Cir. 2011).
29. See, e.g., *Omnicare, Inc. v. Laborers Dist. Council Constr. Indus. Pension Fund*, 135 S. Ct. 1318, 1329 (2015) (writing that a statement of opinion in a securities disclosure is actionable under SEC Rule 11 if it does not represent the issuer's honest opinion or does not "fairly align[] with the information in the issuer's possession at the time"); *Nakkhumpun v. Taylor*, 782 F.3d 1142, 1159 (10th Cir. 2015) (applying *Omnicare* to Rule 10b-5 claim); Alison Grey Anderson, *The Disclosure Process in Federal Securities Regulation: A Brief Review*, 25 HASTINGS L.J. 311, 348-49 (1973); Victor Brudney, *A Note on Materiality and Soft Information Under the Federal Securities Laws*, 75 VA. L. REV. 723, 726-27 (1989).
30. *FORD MOTOR CO.*, *supra* note 2, at 3 (going on to say "[b]ut it will grow more and serve better if governments, unions and manufacturers all accept their share of the responsibility to control costs").
31. *Id.*
32. *Id.*

This Article shows how this alternate set of corporate statements on the impact of regulation, collected in Form 10-K submissions, can be compared to corporate statements on proposed rules. If corporations warn regulators that rules will cause them economic harm but fail to warn their investors of the same risks in 10-K reports, then we can conclude that they are either exaggerating the harm from the rules or failing to disclose important risks to their investors.³³ Going forward, environmental and securities regulators should perform this type of audit to gauge the seriousness of corporate warnings and to ensure that corporations are adequately disclosing risk.

II. THE RENEWABLE FUEL STANDARD: A RUNNING BATTLE IN NOTICE-AND-COMMENT RULEMAKING

The United States Renewable Fuel Standard requires oil companies to blend a specified proportion of renewable fuels such as ethanol into the fuels that they sell.³⁴ It presents an ideal test case for developing a method to compare corporate statements to regulators and investors for three reasons. First, EPA generally proposes and finalizes an updated standard each year, giving oil and biofuel companies many opportunities to comment. Second, these standards present an archetypal example of a regulator's dilemma: as the study shows, oil companies have frequently warned EPA that its proposed regulations are infeasible, while biofuel companies have disagreed. Third, the United States consumes a fifth of the world's oil production, so its fuel regulations are a crucial source of financial risk even for corporations that participate in international markets.³⁵ This section provides a brief explanation of the Renewable Fuel Standard and the continuing controversy surrounding it to explain why annual rulemakings under the standard continue to attract such interest from oil and ethanol companies.

-
33. Previous scholarship has suggested that annual reports often portray the best image of a company. Luis Fernando Escobar & Harrie Vredenburg, *Multinational Oil Companies and the Adoption of Sustainable Development: A Resource-based and Institutional Theory Interpretation of Adoption Heterogeneity*, 98 J. BUS. ETHICS 39, 51 (2011). These reports are often prepared by public relations specialists rather than the top management. Eric Abrahamson & Donald C. Hambrick, *Attentional Homogeneity in Industries: The Effect of Discretion*, 18 J. ORG. BEHAVIOUR 513, 520 (1997); Pamela S. Barr, J. L. Stimpert & Anne S. Huff, *Cognitive Change, Strategic Action, and Organizational Renewal*, 13 STRATEGIC MGMT. J. 15, 21 (1992); Stephen E. Clapham & Charles R. Schwenk, *Self-serving Attributions, Managerial Cognition, and Company Performance*, 12 STRATEGIC MGMT. J. 219, 219–20 (1991). Annual reports are a more consistent and reliable measure of communication to shareholders as compared with press releases, transcripts from shareholders' meeting and interviews with executives. Vincent J. Duriau, Rhonda K. Reger & Michael D. Pfarer, *A Content Analysis of the Content Analysis Literature in the Organization Studies: Research Themes, Data Sources, and Methodological Refinements*, 10 ORG. RES. METHODS 5, 17 (2007).
 34. 42 U.S.C. § 7545(o); Regulation of Fuels and Fuel Additives: Renewable Fuel Standard Program, 72 Fed. Reg. 23,900, 23,903 (May 1, 2007) (to be codified at 40 C.F.R. pt. 80).
 35. BP STATISTICAL REVIEW OF WORLD ENERGY 9 (2014) (in 2013 the U.S. consumed 19.9% of global oil production; China is the next largest at 12.1%).

The stated goals of the Renewable Fuel Standard are to reduce greenhouse gas emissions, reduce reliance on imported petroleum, and develop the country's renewable fuel sector.³⁶ Renewable fuels like ethanol and biodiesel are derived from plants or natural waste products and used as a substitute for more traditional motor fuels that are derived from oil such as gasoline and diesel.³⁷ When renewable fuels are burned in an engine, they produce greenhouse gas emissions, just like oil products.³⁸ But when plants grow, they pull carbon dioxide out of the air, so if plants are grown and burned at the same rate, the net impact on the atmosphere is zero.³⁹ And if you burn plant and animal waste products that would otherwise have decomposed into greenhouse gases, then you may not have added any carbon to the atmosphere compared to what would have otherwise occurred.⁴⁰ So, in theory, replacing oil products with renewable fuels can reduce the net amount of greenhouse gases emitted to the atmosphere as a result of motor fuels.⁴¹

Renewable fuels have also attracted support as an alternative to oil imports that may send money to countries hostile to United States' interests.⁴² And by

-
36. Energy Independence and Security Act of 2007, Pub. L. No. 110-140, § 801 (amending 42 U.S.C. § 17281) ("The production of transportation fuels from renewable energy would help the United States meet rapidly growing domestic and global energy demands, reduce the dependence of the United States on energy imported from volatile regions of the world that are politically unstable, stabilize the cost and availability of energy, and safeguard the economy and security of the United States.").
 37. RANDY SCHNEPP & BRENT D. YACOBUCCI, CONG. RES. SERV., R40155, RENEWABLE FUEL STANDARD (RFS): OVERVIEW AND ISSUES 16 (2013) ("[T]he mandated 36 bgals of renewable fuel will displace about 13.6 bgals of petroleum-based gasoline and diesel fuel, representing about 7% of expected annual U.S. transportation fuel consumption.").
 38. *Id.*; *How Much Carbon Dioxide Is Produced by Burning Gasoline and Diesel Fuel?*, U.S. ENERGY INFO. ADMIN.: FREQUENTLY ASKED QUESTIONS (July 7, 2015), <http://perma.cc/C9UK-XK9U>. In general, when "renewable" fuels are used for combustion, there is no climate benefit in the combustion itself. The benefit, if any, comes from the carbon that is taken out of the air before the product is burned. ROSS GORTE, CONG. RES. SERV., RL31432, CARBON SEQUESTRATION IN FORESTS 16 (2009), <http://perma.cc/2KR5-DDWP> ("Although wood could replace some fossil fuels, it still produces [carbon dioxide] (and water vapor and some other by-products) when burned."); KELSIE BRACMORT, CONG. RES. SERV., R41603, IS BIOPOWER CARBON NEUTRAL? (2015), <http://perma.cc/2LYX-DPDL>.
 39. Regulation of Fuels and Fuel Additives: Changes to Renewable Fuel Standard Program, 74 Fed. Reg. 24,904, 25,040 (May 26, 2009) ("Combustion [carbon dioxide] emissions for ethanol, biomass-based diesel, petroleum diesel and gasoline were based on the carbon content of the fuel. However, over the full lifecycle of the fuel, the [carbon dioxide] emitted from biomass-based fuels combustion does not increase atmospheric [carbon dioxide] concentrations, assuming the biogenic carbon emitted is offset by the uptake of [carbon dioxide] resulting from the growth of new biomass."). It is not clear, however, that plants are grown and burned at the same rate that they would be without ethanol use.
 40. BRACMORT, *supra* note 38, at 8 ("EPA reports that it considered information that 'supports the finding that use of waste-derived feedstocks and certain forest-derived industrial byproducts are likely to have minimal or no net atmospheric contributions of biogenic CO₂ emissions, or even reduce such impacts, when compared with an alternate fate of disposal.'").
 41. In fact, the net climate impact of renewable fuels is sharply contested. *See id.* at 1.
 42. In reality, the United States imports three times as much oil from Canada as from any other country, but the next four biggest sellers are Saudi Arabia, Mexico, Russia, and Venezuela. *How Much Petroleum Does the United States Import and from Where?*, U.S. ENERGY INFO.

diversifying fuel sources renewable fuels may protect consumers from volatile oil prices that are set in world markets, which the United States cannot control.⁴³ By the same token, it might allow the U.S. government to focus fewer geopolitical resources on major sources of world oil production, such as the Middle East.⁴⁴ Finally, supporters of the Renewable Fuel Standard often focus on how it benefits the renewable fuel industry by guaranteeing it a market, and benefits agricultural communities by providing a certain market for their products.⁴⁵

The Renewable Fuel Standard was first created under the Energy Policy Act of 2005, and it took an unusual form.⁴⁶ Instead of requiring that transportation fuels contain a specified percentage of renewable fuel, the Act mandated that a minimum volume of renewable fuel be sold in the United States each year.⁴⁷ It required EPA to ensure that 7.5 billion gallons of renewable fuel be sold in the United States by 2012.⁴⁸ EPA, in turn, finalized a rule in 2007 that required fuel refiners to blend a specified percentage of renewable fuel into transportation fuels like gasoline and diesel.⁴⁹ EPA used an estimate of how much fuel of all kinds would be sold in the United States and then mandated a percentage of renewable fuel that would ensure that the required volume of renewable fuel was sold.⁵⁰

In 2007, Congress dramatically expanded the Renewable Fuel Standard as part of the Energy Independence and Security Act.⁵¹ The Act also set out year-

ADMIN.: FREQUENTLY ASKED QUESTIONS (Sept. 14, 2015), <http://perma.cc/TS4Y-PXBN>.

43. James Coleman, *The Shale 'Revolution' Is About Gas Prices & Oil Production*, ENERGY COLLECTIVE (Jul. 17, 2014), <http://perma.cc/9AKC-S7LL>.
44. MICHAEL RATNER & CAROL GLOVER, CONG. RES. SERV., R40187, U.S. ENERGY: OVERVIEW AND KEY STATISTICS 19 (2014), <http://perma.cc/AR8F-Z6EC> ("The concentration of oil resources in the Persian Gulf countries means that the political events in the Middle East can have great influence on the oil market.").
45. SCHNEPF & YACOBUCCI, *supra* note 37, at 17 (noting the argument that Renewable Fuel Standard "provides an additional source of demand—renewable biofuels—for U.S. agricultural output that has significant agricultural and rural economic benefits via increased farm and rural incomes and substantial rural employment opportunities"). On the other hand, there is growing concern about other environmental harms exacerbated by cultivation of biofuels. See Joseph Fargione et al., *The Ecological Impact of Biofuels*, 41 ANN. REV. ECOL. EVOL. SYST. 351, 360 (2010) (noting significant impacts on land-use and biodiversity).
46. Energy Policy Act of 2005, Pub. L. No. 109-58. Ethanol was also once supported with significant tax credits, which have now expired. Alexandra B. Klass, *Tax Benefits, Property Rights, and Mandates: Considering the Future of Government Support for Renewable Energy*, 20 J. ENVTL. & SUSTAINABILITY L. 19, 33–37 (2013).
47. Energy Policy Act of 2005, Pub. L. No. 109-58, § 1501 (amending 42 U.S.C. § 7545).
48. *Id.* § 1501 (amending 42 U.S.C. § 7545(o)(2)(B)(i)).
49. Regulation of Fuels and Fuel Additives: Renewable Fuel Standard Program, 72 Fed. Reg. 23,900, 23,903 (May 1, 2007) (to be codified at 40 C.F.R. pt. 80) ("In order to ensure the use of the total renewable fuel volume specified for each year, the Agency must set a standard for each year representing the amount of renewable fuel that each refiner, blender, or importer must use, expressed as a percentage of gasoline sold or introduced into commerce. This yearly percentage standard is to be set at a level that will ensure that the total renewable fuel volumes shown in Table I.B-1 will be used based on gasoline volume projections provided by the Energy Information Administration.").
50. *See id.*
51. Energy Independence and Security Act of 2007, Pub. L. No. 110-140.

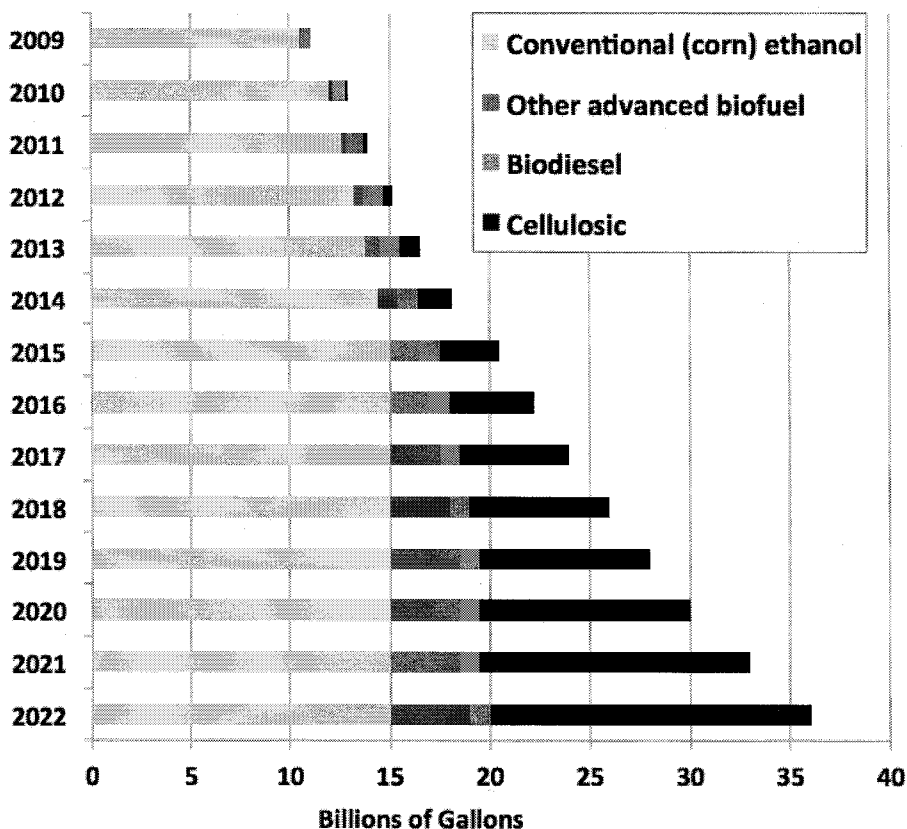
by-year targets for renewable fuel consumption, demanding that renewable fuel sales swell from 9 billion gallons in 2008 to 36 billion gallons by 2022.⁵² And it extended the standard to include diesel as well as gasoline and established separate categories of renewable fuel such as advanced biofuel and cellulosic ethanol, each with its own volume standard to be set every year.⁵³ It also required EPA to apply life cycle greenhouse gas calculations to ensure that each category of renewable fuel emits substantially less greenhouse gas than the petroleum fuel it replaces.⁵⁴ Figure 1 shows how the Energy Independence and Security Act mandated dramatically increasing volumes of each type of fuel.

52. *Id.* § 202 (amending 42 U.S.C. § 7545(o)(2)).

53. *Id.*

54. *Id.* Life cycle greenhouse gas emissions are all emissions related to the production and use of a fuel. James Coleman, *Importing Energy, Exporting Regulation*, 83 *FORDHAM L. REV.* 1357, 1373–74 & n.95 (2015) (explaining calculation of life cycle greenhouse gas emissions for ethanol). The Energy Independence and Security Act also established a trading program of renewable identification number credits. A credit is generated when a gallon of renewable fuel is produced. Companies can either produce renewable fuel or purchase credits from other companies to comply with the Renewable Fuel Standard. Energy Independence and Security Act of 2007, Pub. L. 110-140, § 104 (amending 49 U.S.C. § 32903).

FIGURE 1. RENEWABLE FUEL VOLUMES REQUIRED BY THE ENERGY INDEPENDENCE AND SECURITY ACT⁵⁵



EPA set out to implement the revised Renewable Fuel Standard, sometimes known as “RFS2,”⁵⁶ through annual rulemakings, mandating specified percentages of four categories of renewable fuel: biomass-based diesel, advanced biofuel, cellulosic biofuel, and total renewable fuel.⁵⁷ The Energy Independence and Security Act required EPA to set the annual standard each year by Novem-

55. 42 U.S.C. § 7545(o)(2)(B)(i) (prescribing volumes for renewable fuels, advanced biofuel, cellulosic biofuel, and biomass-based diesel). Prescribed volumes of biomass-based diesel end in 2012 at one billion gallons, which is the plateau for biomass-based diesel shown in this chart, but EPA is given continuing authority to adjust this volume up or down in subsequent years. *Id.* § 7545(o)(2)(B)(i)(IV).

56. Regulation of Fuels and Fuel Additives: Changes to Renewable Fuel Standard Program, 74 Fed. Reg. 24,904, 24,908 (May 26, 2009) (“The renewable fuel program established by [the Energy Independence and Security Act], hereafter referred to as RFS2, mandates the use of 36 billion gallons of renewable fuel by 2022.”).

57. *Id.* at 24,910.

ber 30 before the start of the year in which it would apply.⁵⁸ But EPA has struggled to meet these deadlines. The final rule for 2010, which also included some requirements for 2008 and 2009, was not published until March 26, 2010.⁵⁹ The 2011 and 2012 rules were only a few weeks late,⁶⁰ but the 2013 rule was not finalized until August 2013⁶¹ and the 2014 rule was so late that EPA decided to just roll it into the 2015 rulemaking.⁶²

Throughout its brief existence the annual renewable fuel standard rulemakings have attracted significant comments from the oil industry, the renewable fuels industry, and companies that indirectly benefit from these industries as well as other stakeholders. EPA docketed 3,955 unique public comments from 2010 to 2013, the years covered in this study.⁶³ Thirty-six public companies filed comments: sixteen from the oil industry and other industries that oppose higher ethanol mandates and twenty from the ethanol industry as well as related pro-ethanol businesses.⁶⁴ Several companies submitted comments in multiple years, so the thirty-six companies submitted 56 unique comments. Furthermore, some of these companies endorsed comments from two oil-trade associations, the American Fuel and Petrochemical Manufacturers' Association and the American Petroleum Institute, and two ethanol trade associations, the Renewable Fuels Association and the Brazilian Sugarcane Industry Association. Figure 2 shows how many comments were filed in each year.

-
58. 42 U.S.C. § 7545(o)(3)(B)(i) ("Not later than November 30 of each of calendar years 2005 through 2021, based on the estimate provided under subparagraph (A), the Administrator of the Environmental Protection Agency shall determine and publish in the Federal Register, with respect to the following calendar year, the renewable fuel obligation that ensures that the requirements of paragraph (2) are met.").
 59. Regulation of Fuels and Fuel Additives: Changes to Renewable Fuel Standard Program, 75 Fed. Reg. 14,670 (March 26, 2010) (to be codified at 40 C.F.R. pt. 80).
 60. Regulation of Fuels and Fuel Additives: 2011 Renewable Fuel Standards, 75 Fed. Reg. 76,790 (Dec. 9, 2010) (to be codified at 40 C.F.R. pt. 80); Regulation of Fuels and Fuel Additives: 2012 Renewable Fuel Standards, 77 Fed. Reg. 1320 (Jan. 9, 2012) (to be codified at 40 C.F.R. pt. 80).
 61. Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards, 78 Fed. Reg. 49,794 (Aug. 15, 2013) (to be codified at 40 C.F.R. pt. 80).
 62. Delay in Issuing 2014 Standards for the Renewable Fuel Standard Program, 79 Fed. Reg. 73,007 (Dec. 9, 2014) (to be codified at 40 C.F.R. pt. 80).
 63. Many more comments were filed as part of letter-writing campaigns, but EPA does not include duplicative comments in its online docket. As of March 2015, the controversial 2014 rule had received 344,326 comments. *See infra* notes 77–81 and accompanying text.
 64. The sixteen anti-ethanol companies are: The Boeing Company, BP plc, Caterpillar, Celanese Corporation, Chevron Corporation, ConocoPhillips, CVR Energy Inc., ExxonMobil Corporation, Ford Motor Company, LyondellBasell Industries N.V., Marathon Petroleum Corporation, Oglethorpe Power Corporation, Phillips 66, Royal Dutch Shell plc, United Refining Company, Valero Energy Corporation. The twenty pro-ethanol companies are Amyris Inc., Archer Daniels Midland Company, Bluefire Renewables Inc., Clean Energy Fuels Corporation, Covanta Holding Corporation, Darling International Inc., Deere & Company, E. I. Du Pont De Nemours and Company, Gevo Inc., Greenshift Corporation, Honeywell International Inc., Iowa Renewable Energy LLC, MagellanMidstream Partners LP, Monsanto Company, Renewable Energy Group Inc., Rentech Inc., Syntroleum Corporation, Tyson Foods Inc., WasteManagement Inc., and Weyerhaeuser Company. *See* <https://perma.cc/P7NM-XQQ3>.

FIGURE 2. NUMBER OF COMMENTS IN EACH YEAR⁶⁵

	2010	2011	2012	2013
Total	3257	529*	529*	169
Public companies	33	3	9	11
Anti-ethanol companies	14	1	6	7
Pro-ethanol companies	19	2	3	4

*The 2011 and 2012 rules used a combined docket. Public company comments made clear which year they were addressing, but the total number here is for both years.

Even after nearly a decade, the Renewable Fuel Standard remains extremely controversial because of two developments in the United States' energy markets: a fall in gasoline consumption, and the failure of the renewable fuel industry to produce the quantities of cellulosic ethanol mandated by the Renewable Fuel Standard. When Congress passed the Energy Independence and Security Act in 2007, the U.S. projected that gasoline use would continue to increase in coming decades, just as it had in past decades.⁶⁶ But when the financial crisis hit in 2008, growth in gasoline consumption abruptly ended, and it now seems that gasoline consumption may remain flat or continue falling.⁶⁷ Figure 3 provides an excellent visualization from President Obama's 2015 Economic Report showing how dramatically projections of future gasoline use have changed over the past decade: the United States is now projected to use only half as much gasoline in 2030 as was projected just nine years ago.

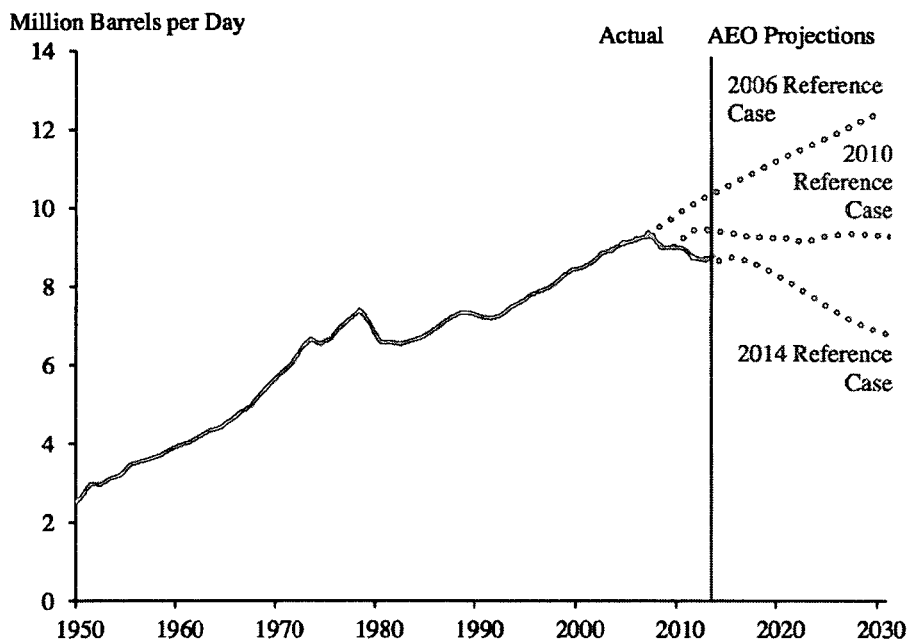
65. Regulation of Fuels and Fuel Additives: Changes to Renewable Fuel Standard Program, 75 Fed. Reg. 14,670 (March 26, 2010); Regulation of Fuels and Fuel Additives: 2011 Renewable Fuel Standards, 75 Fed. Reg. 76,790 (Dec. 9, 2010); Regulation of Fuels and Fuel Additives: 2012 Renewable Fuel Standards, 77 Fed. Reg. 1320 (Jan. 9, 2012); Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards, 78 Fed. Reg. 49,794 (Aug. 15, 2013).

66. ECONOMIC REPORT OF THE PRESIDENT 246 (2015), <https://perma.cc/2HWV-EJS7>.

67. *Id.* This development is aided by increased fuel economy standards for cars and trucks. Light-Duty Vehicle Greenhouse Gas Emission Standards and Corporate Average Fuel Economy Standards, 75 Fed. Reg. 25,324, 25,330 (May 7, 2010).

FIGURE 3. PROJECTED U.S. GASOLINE CONSUMPTION HAS FALLEN RAPIDLY OVER THE PAST DECADE

U.S. Consumption of Motor Gasoline, 1950–2030



Source: Energy Information Administration, Annual Energy Outlook (AEO) 2006, 2010 and 2014.

The fall in gasoline consumption created substantial problems for the Renewable Fuel Standard because the standard calls for dramatically increasing sales of renewable fuel at the same moment that total fuel sales are falling. Achieving the standard would require a rapid transition to a very high proportion of renewable fuels: gasoline would have to be 25% ethanol by 2022.⁶⁸ But conventional automobiles are not designed to run on ethanol blends greater than 10%; using higher concentrations could void customers' manufacturer car warranties.⁶⁹ This 10% upper limit creates a "blend wall" which limits ethanol sales to about 15 billion gallons annually at current levels of gasoline consump-

68. CONG. BUDGET OFFICE, *THE RENEWABLE FUEL STANDARD: ISSUES FOR 2014 AND BEYOND* (2014), <https://perma.cc/2AZA-4JMX>. ("[The Energy Independence and Security Act]'s growing requirements for the total gallons of renewable fuels to be used each year, combined with a projected decline in gasoline use, suggest that the average concentration of ethanol in gasoline would have to rise to well above that 10 percent 'blend wall,' potentially increasing to about 25 percent by 2022."); BRENT D. YACOBUCCI, CONG. RES. SERV., R40445, *INTERMEDIATE-LEVEL BLENDS OF ETHANOL IN GASOLINE, AND THE ETHANOL "BLEND WALL"* 3 (2010), <http://perma.cc/9M6R-LXTG>.

69. YACOBUCCI, *supra* note 68, at 5 ("Second, automakers currently warranty their vehicles to operate on ethanol/gasoline blends up to 10%. While there is data to suggest that newer vehicles could be operated reliably on higher levels of ethanol without modification, no automaker has yet approved those higher blends for use."). Furthermore, state and federal

tion.⁷⁰ There are a limited number of “flex-fuel” vehicles that can use ethanol blends over 10%, which means the blend wall is not an absolute cap, but the Renewable Fuel Standard demands volumes that reach 15 billion gallons in 2012 and escalate dramatically after that.⁷¹ In 2016, the statute requires fuel retailers to sell 22.25 billion gallons of renewable fuel; hitting that target would require either radical shifts in U.S. energy markets and infrastructure or pointless combustion of billions of gallons of ethanol.⁷²

At the same time, renewable fuel producers have not been able to produce nearly as much cellulosic biofuel as the Energy Independence and Security Act requires. The Act placed great hope in this subcategory of renewable fuel, which is made from sources such as grass, trees, and agricultural wastes that have a smaller impact on the environment than corn.⁷³ The statute required 500 million gallons of cellulosic biofuel in 2012 and 16 billion gallons by 2022.⁷⁴ But zero gallons were produced in 2012 and the U.S. now projects that even by 2022, just 327 million gallons will be produced—about 2% of what the statute requires for that year.⁷⁵ These two practical challenges present a classic regulator’s dilemma: according to the oil industry, the renewable fuel volumes required by the statute are simply infeasible.⁷⁶

Facing these practical challenges to the statute, EPA’s Renewable Fuel Standard proposal for 2014 effectively waved the white flag. Although the statute mandated an increase in renewable fuels from 16.55 billion gallons to 18.15 billion gallons,⁷⁷ as shown in Figure 4, EPA proposed to *decrease* the renewable fuel requirement to 15.21 billion gallons, asserting that it had authority to waive the statutory requirement to avoid the blend wall.⁷⁸ EPA also proposed mandating just 17 million gallons of cellulosic ethanol,⁷⁹ which is about 1% of the 1.75 billion gallons mandated by the law.⁸⁰ EPA’s retreat from the statutory goals has caused a furious controversy that ultimately pushed EPA to delay its

laws place some limits on the ability to retail blends of more than 10% ethanol, and U.S. fuel distribution infrastructure is often not set up for high-ethanol blends. *Id.* at 5–6.

70. *Id.* at 5 (providing approximations from 2008).

71. *Id.* at 2; *see also supra* note 55.

72. 42 U.S.C. § 7545(o)(2)(B)(i)(I).

73. YACOBUCCI, *supra* note 68, at 1.

74. 42 U.S.C. § 7545(o)(2)(B)(i)(III).

75. CONG. BUDGET OFFICE, *supra* note 68, at 6–7.

76. *See infra* Part IV.A.

77. 42 U.S.C. § 7545(o)(2)(B)(i)(I).

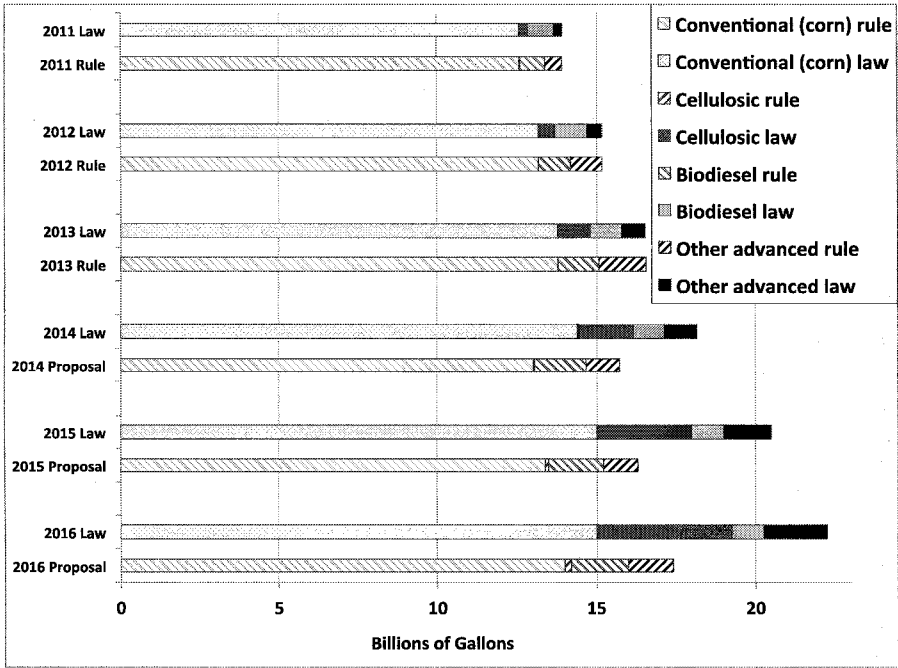
78. 2014 Standards for the Renewable Fuel Standard Program, 78 Fed. Reg. 71,732, 71,734 (proposed Nov. 29, 2013) (to be codified at 40 C.F.R. pt. 80) (noting that EPA has authority to waive the requirements under 42 U.S.C. § 7545(o)(7)(A), which allows EPA, in consultation with the Departments of Agriculture and Energy, to waive volume requirements if “[t]here is inadequate domestic supply,” and arguing that even though the U.S. could produce more corn ethanol, domestic supply is “inadequate” under the statute because of infrastructure constraints that limit supply of ethanol to consumers). EPA issued a modified proposal in mid-2015 that would require slightly more ethanol, but still nothing close to the statutory standards. Renewable Fuel Standard Program: Standards for 2014, 2015, and 2016 and Biomass-Based Diesel Volume for 2017, 80 Fed. Reg. 33,100 (June 10, 2015).

79. 2014 Standards for the Renewable Fuel Standard Program, 78 Fed. Reg. at 71,734.

80. 42 U.S.C. § 7545(o)(2)(B)(i)(III).

2014 standard—instead, it now aims to resolve this intractable dispute in time to set a three-year standard for 2014–2016 sometime in 2015.⁸¹

FIGURE 4. EPA CHANGES TO RENEWABLE FUEL STANDARD TARGETS
2011–2016⁸²



81. Delay in Issuing 2014 Standards for the Renewable Fuel Standard Program, 79 Fed. Reg. 73,007, 71,734 (proposed Dec. 9, 2014) (to be codified at 40 C.F.R. pt. 80) (delaying standards on the basis that “[t]he proposal has generated significant comment and controversy, particularly about how volumes should be set in light of lower gasoline consumption than had been forecast at the time that the Energy Independence and Security Act was enacted, and whether and on what basis the statutory volumes should be waived” and highlighting that “commenters expressed concerns regarding the proposal’s ability to ensure continued progress towards achieving the volumes of renewable fuel targeted by the statute”); Renewable Fuel Standard Program: Standards for 2014, 2015, and 2016 and Biomass-Based Diesel Volume for 2017, 80 Fed. Reg. 33,100 (June 10, 2015); Matthew Philips, *Ethanol, Fighting for Its Life, Gets a Temporary Reprieve*, BLOOMBERG, Nov. 24, 2014, <http://perma.cc/J7ZR-B8VZ> (reporting the “deep lobbying effort” on both sides, and quoting ethanol spokesman saying waiver “would’ve ripped the guts out of the RFS”).

82. 42 U.S.C. § 7545(o)(2)(B)(i); Regulation of Fuels and Fuel Additives: 2011 Renewable Fuel Standards, 75 Fed. Reg. 76,790 (Dec. 9, 2010); Regulation of Fuels and Fuel Additives: 2012 Renewable Fuel Standards, 77 Fed. Reg. 1320 (Jan. 9, 2012); Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards, 78 Fed. Reg. 49,794 (Aug. 15, 2013); Renewable Fuel Standard Program: Standards for 2014, 2015, and 2016 and Biomass-Based Diesel Volume for 2017, 80 Fed. Reg. 33,100 (June 10, 2015).

III. THE METHODOLOGY: COMPARING STATEMENTS TO TWO AUDIENCES

This study reports a new methodology for comparing statements on the same topic to two audiences. Public companies are hardly the only actors that face what this article labels the "two-audience problem." These problems are ubiquitous in principal-agent relationships. For example, an agent that wants to facilitate a transaction may hope that both the buyer and seller think they are receiving a one-sided deal.⁸³ Or a head-of-state may want to signal to an international audience that a negotiated settlement is the least she could grudgingly accept, while signalling to a domestic audience that the settlement is a splendid victory and cause for rejoicing.⁸⁴

There are very few previous attempts to empirically study the results of this two-audience problem through a comparison of statements to both audiences on the same topic. The most significant is a study by Marlene Fiol that compares forest product industry letters to shareholders with internal planning documents during a period of upheaval for the industry.⁸⁵ This study, however, does not match documents that discuss the same issue for comparison, and it only scores the corporate statements for general attributes such as positive-versus-negative and controlled-versus-helpless framings.⁸⁶

The ubiquity of the two-audience problem and the dearth of empirical studies on its effects may be a function of the difficulty of constructing a test for inconsistency. Most actors facing a two-audience problem are smart enough to avoid direct factual contradictions. Instead, actors resolve two-audience problems through differential emphasis, using selective omission, deliberate ambiguity, and exaggeration. Even Lee Iacocca's statement that the Clean Air Act "could prevent continued production of automobiles"⁸⁷ does not technically contradict his contemporaneous statement that the "industry will continue to grow."⁸⁸ He may have thought that although the Act *could* shut down the car industry, and should be seen as a "threat to . . . every person in America,"⁸⁹ his warnings would ensure that its implementation would be altered so that the

83. As just one example, the SEC famously charged Goldman Sachs with defrauding investors for matching a hedge fund that wanted to bet against specific mortgage-backed securities with other clients who were unaware that the hedge fund was choosing securities to short. Press Release, Sec. & Exch. Comm'n, SEC Charges Goldman Sachs with Fraud in Structuring and Marketing of CDO Tied to Subprime Mortgages (Apr. 16, 2010), <http://perma.cc/S94D-VFSH>.

84. See James D. Fearon, *Domestic Political Audiences and the Escalation of International Disputes*, 88 AM. POLI. SCI. REV. 577, 581 (1994) ("Leaders engaged in disputes appear to worry about both international and domestic audiences.").

85. C. Marlene Fiol, *Corporate Communications: Comparing Executives' Private and Public Statements*, 38 ACAD. MGMT. J. 522, 527-28 (1995) (describing methodology).

86. See *id.* at 528-32 (finding that corporations were more likely to identify changing circumstances as risks in communications to investors and more likely to identify statements as opportunities in internal communications).

87. *Women's Suffrage*, *supra* note 1.

88. FORD MOTOR CO., *supra* note 2, at 3.

89. *Women's Suffrage*, *supra* note 1.

industry could keep growing. Indeed, his reassurance was specifically predicated on the political strength of the auto industry—the fact that “people everywhere place a high value on the individual mobility”⁹⁰—and the auto industry did, at key moments, convince EPA to delay implementation of some of the standards he feared.⁹¹ So although his statements were so inconsistent that they would leave polar opposite impressions on a listener, they do not involve the kind of factual or quantitative contradiction that is easily tested.⁹² Thus, testing a two-audience problem for inconsistency means detecting exaggeration, ambiguity, and omission.⁹³

To tease out differential emphases, this study catalogues each statement and prediction about the Renewable Fuel Standard made by each of the thirty-six companies represented in the fifty-six comment 10-K pairings that were filed from 2010 to 2013. This study compares each year’s comments with the first Form 10-K that the company filed after that year’s standard was finalized. Companies must file Form 10-K within sixty to ninety days of the end of their fiscal years, which means that most companies file in March.⁹⁴ So far, EPA has never finalized a rule that prescribed significantly different volumes than those proposed.⁹⁵ So by the time each company filed its 10-K disclosure, the rule that the company had commented on had come into effect.⁹⁶ Thus, there are fifty-six matched pairs of comments to EPA and Form 10-K securities disclosures.

90. FORD MOTOR CO., *supra* note 2, at 3.

91. Lee, *supra* note 4, at 251 (“As a result, the timetable for the attainment of the emission reductions was, therefore, delayed several times.”).

92. And, in addition to deceiving regulators, technically accurate statements may still be actionable under securities laws. *Omnicare, Inc., et al. v. Laborers Dist. Council Constr. Indus. Pension Fund et al.*, 135 S. Ct. 1318, 1331 (2015) (“[L]iteral accuracy is not enough: an issuer must as well desist from misleading investors by saying one thing and holding back another.”).

93. The differences between statements to different audiences in a two-audience problem might be thought of as analogous to “acoustic separation” in the law where different audiences receive different messages, which serves instrumental goals. *See generally* Meir Dan-Cohen, *Decision Rules and Conduct Rules: On Acoustic Separation in Criminal Law*, 97 HARV. L. REV. 625 (1984) (arguing that public focus on conduct rules and official focus on decision rules may accommodate competing values).

94. SEC. & EXCH. COMM’N, FORM 10-K, GENERAL INSTRUCTIONS A(1), <https://perma.cc/6YAT-QQPA>.

95. *Compare* Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards, 78 Fed. Reg. 49,794, 49,798 (Aug. 15, 2013), *with* Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards, 78 Fed. Reg. 9282, 9283 (proposed Feb. 7, 2013); *compare* Regulation of Fuels and Fuel Additives: 2012 Renewable Fuel Standards, 77 Fed. Reg. 1320 (Jan. 9, 2012) *with* Regulation of Fuels and Fuel Additives: 2012 Renewable Fuel Standards, 76 Fed. Reg. 38,844, 38,848 (proposed July 1, 2011); *compare* Regulation of Fuels and Fuel Additives: 2011 Renewable Fuel Standards, 75 Fed. Reg. 76,790 (Dec. 9, 2010), *with* Regulation of Fuels and Fuel Additives: 2011 Renewable Fuel Standards, 75 Fed. Reg. 42,238, 42,242 (proposed July 20, 2010); *compare* Regulation of Fuels and Fuel Additives: Changes to Renewable Fuel Standard Program, 75 Fed. Reg. 14,670 (March 26, 2010), *with* Regulation of Fuels and Fuel Additives: Changes to Renewable Fuel Standard Program, 74 Fed. Reg. 24,904, 25,040 (proposed May 26, 2009).

96. The one exception to this rule is the 2013 standard, which was not finalized until August 2013. Regulation of Fuels and Fuel Additives: 2013 Renewable Fuel Standards, 78 Fed. Reg. 49,794, 49,798 (Aug. 15, 2013). Nevertheless, by 2013, the Agency had established a

The study uses fifty-nine codes to encompass every kind of prediction and statement related to the Renewable Fuel Standard.⁹⁷ These codes were chosen to represent each kind of statement that companies made about the Renewable Fuel Standard. The direct focus of this study was on those codes that predicted an impact on the company from the standard because those codes appeared both in company comments and company 10-K disclosures.⁹⁸ Other types of coded statements appeared only in comments, such as company positions on how provisions of the Renewable Fuel Standard should be modified or retained,⁹⁹ endorsements of the comments of a trade association,¹⁰⁰ and predictions about how the Renewable Fuel Standard would affect stakeholders apart from the company.¹⁰¹ Still other coded statements appeared only in securities

pattern of sticking to its proposed volumes, so companies probably would not have expected major deviations in the final rule.

97. These codes are reported in Appendix A. Some sample coded statements are reported in Appendix B. This study is a form of content analysis, which is the “systematic, objective, quantitative analysis of message characteristics.” K.A. NEUENDORF, *THE CONTENT ANALYSIS GUIDEBOOK* 1 (2002). Content analysis is a commonly used technique that categorizes language so that contextual inferences can be made. KLAUS KRIPPENDORFF, *CONTENT ANALYSIS: AN INTRODUCTION TO ITS METHODOLOGY* 21 (2004). While this methodology is used widely in the social sciences, it is also used in legal research. In particular, it is often used in analyzing judicial opinions, see Mark A. Hall & Ronald F. Wright, *Systematic Content Analysis of Judicial Opinion*, 96 CALIF. L. REV. 63, 64 (2008), or tribunal decisions, see Gus Van Harten, *Arbitrator Behaviour in Asymmetrical Adjudication: An Empirical Study of Investment Treaty Arbitration*, 50 OSGOODE HALL L.J. 211, 233–36 (2012), or other outcomes, see generally D. Freelon, *ReCal: Intercode Reliability Calculation as a Web Service*, 5 INT’L J. INTERNET SCI. 20 (2010), discourse, see Richard Jochelson et al., *Searching and Seizing After 9/11: Developing and Applying Empirical Methodology to Measure Judicial Output in the Supreme Court’s Section 8 Jurisprudence*, 35 DALHOUSIE L.J. 179, 195–99 (2012), or attitude of lawyers, see Peter Mercer et al., *The Practice of Ethical Calculation: Dissecting Decision-Making by Lawyers*, 9 CAN. J.L. & JURIS. 141, 144–48 (1996), and judges, see generally C.L. OSTBERG & MATTHEW E. WETSTEIN, *ATTITUDINAL DECISION MAKING IN THE SUPREME COURT OF CANADA* (2007), or the portrayal of legal issues in the media, see generally FLORIAN SAUVAGEAU ET AL., *THE LAST WORD: MEDIA COVERAGE OF THE SUPREME COURT OF CANADA* (2006). See also ROBERT M. LAWLESS ET AL., *EMPIRICAL METHODS IN LAW* (2010).
98. Codes 201–208 recorded positive impact predictions and codes 301–308 recorded negative impact predictions. See *infra* app. A. The most common predictions described whether it is feasible for companies to comply and whether the Renewable Fuel Standard increases or decreases certainty for companies. Predictions also included statements that the Renewable Fuel Standard would increase or decrease the company’s profits, and cost of production as well as predictions that it would impact the company’s customer demand, return on investment, and ability to maintain or increase its facilities’ capacity. See <https://perma.cc/PMD4-ET6Z>. Because these comments describe impacts of the Renewable Fuel Standards on the company’s financial position, rather than aspects of the Standard that should be changed, they are relevant to both EPA and investors.
99. Codes 101–104 show whether a company supports the Renewable Fuel Standard and how, if at all, it would suggest changing the timing of the rule and the targets for advanced biofuel, cellulosic biofuel, biomass-based diesel, and total biofuel. See *infra* app. A.
100. Codes 901–907.
101. Codes 401–407 recorded positive impact predictions and codes 501–507 recorded negative impact predictions about how the Renewable Fuel Standard will affect actors outside the company. These codes identified statements about how the Renewable Fuel Standard would benefit or harm job growth, the domestic and international economy, energy independence, energy supply, and food and commodity prices. See *infra* app. A.

disclosures, such as positive and negative impacts from climate regulation in general, or other descriptions of regulatory risk that may be meant to include the Renewable Fuel Standard, but do not single it out.¹⁰²

The fifty-six paired submissions contained over 10,000 pages and revealed 739 coded statements related to the Renewable Fuel Standard.¹⁰³ The most crucial codes were 218 separate predictions about how the Renewable Fuel Standard would affect the company making the statement. To determine how companies used different emphasis in the different settings, the author calculated how many separate negative impacts each company predicted it would suffer due to the Renewable Fuel Standard in its comments and how many it predicted it would suffer in its 10-K.¹⁰⁴

The thirty-six companies were analyzed as two distinct sample groups. The first group comprises anti-ethanol companies that oppose the Renewable Fuel Standard. The second group comprises pro-ethanol groups that support the Renewable Fuel Standard. The companies were classified into one of the two groups based on the number of positive and negative impact predictions identified in their communications to EPA and their statements of support or opposition to the Standard.

Companies had to be separated into two groups because these groups face dramatically different incentives in their comments and securities disclosures. As noted, companies that perceive the Renewable Fuel Standard as a threat will want to warn the regulator that the Renewable Fuel Standard places them in danger, but will want to reassure investors. In contrast, groups that favor the Renewable Fuel Standard face more similar incentives in the two settings: they want to tell both regulators and investors about the benefits that will flow from the Renewable Fuel Standard. For simplicity, the companies that view the Renewable Fuel Standard as a risk are also referred to here as “anti-ethanol” companies and “oil companies” because most are oil companies that oppose ethanol mandates, although some are companies that manufacture products that run on motor fuels,¹⁰⁵ and some of the oil companies have side businesses in biofuels. Similarly, companies that favor the Renewable Fuel Standard are sometimes referred to as “ethanol companies” even though some, such as Deere & Com-

102. Codes 601 and 701.

103. Full dataset and calculations are available at <https://perma.cc/PMD4-ET6Z> and <https://perma.cc/P7NM-XQQ3>.

104. To focus on separate predictions, each code was counted just once per document. For example, if a company stated that the Renewable Fuel Standard was infeasible in the introduction, body, and conclusion of its comment, those statements were counted only as one prediction. It is possible that repeating a prediction multiple times in a document might leave a marginally stronger impression than a single clear prediction, but the study assumes that a warning is stronger if it comes with many different arguments about how the regulation will harm the industry. Thus, the unit of analysis is the number of logically separable arguments about the impact of the standard. This approach gives the same weight to repetitive or long-winded recitations of an argument as to concise and pointed versions of the same argument. That is, the study measures the strength of the warning by identifying how many distinct negative impacts the company predicts it will suffer because of the regulation.

105. These companies are Boeing, Caterpillar, and Ford. *See supra* note 64.

pany, which manufactures agricultural equipment, are merely companies that benefit from the ethanol industry indirectly.

The comments and Form 10-K of all thirty-six companies were then coded by one coder.¹⁰⁶ Paired t-tests and a Wilcoxon-Mann-Whitney test were performed to determine whether there was a significant difference between how many company-specific risks and benefits were identified in the companies' comments to EPA and their Form 10-K disclosures to investors.¹⁰⁷

IV. RESULTS: OIL COMPANIES WARN REGULATORS AND REASSURE INVESTORS

The study confirms the hypothesis that oil companies tell regulators that the Renewable Fuel Standard will harm them financially while simultaneously assuring investors that the company is well-positioned to comply. When these companies submitted comments, they identified more than three times as many ways that the standard would harm them as were identified in their contemporaneous securities disclosures.

Some oil companies even identified the Renewable Fuel Standard as a boon in their 10-K disclosures and as a bane in their comments. For example, Shell told EPA that without major changes the Renewable Fuel Standard would "limit the supply of gasoline,"¹⁰⁸ which would prevent it from serving customers and cause "severe economic harm."¹⁰⁹ In contrast, the only thing its

106. A random sample of forty-eight passages that contained seventy-four coded portions was chosen from both comments and Form 10-K from the 2013 sample to assess intercoder reliability of the coding scheme. Two testers individually tested the codes. The intercoder agreement between the two coders from the project was 83.8%, with a Krippendorff alpha = 0.83. See KRIPPENDORFF, *supra* note 97, at 227. These are within typical acceptable intercoder reliability rates for content analysis. See NEUENDORF, *supra* note 97, at 143. In this study, the challenges to intercoder agreements include the high number of codes (fifty-nine in total), the technical nature of the Renewable Fuel Standard regulation, and the complex arguments sometimes used in the documents analyzed.

107. Both tests are frequently used for determining whether the means of two populations differ significantly. Michael P. Fay & Michael A. Proschan, *Wilcoxon-Mann-Whitney or t-test? On Assumptions for Hypothesis Tests and Multiple Interpretations of Decision Rules*, 4 STAT. SURV. 1, 1 (2010) ("For example, often a researcher wants to know which of two groups generally has the larger responses, and either a t-test or a Wilcoxon-Mann-Whitney test could be acceptable."). The Wilcoxon-Mann-Whitney test is generally thought more appropriate for variables that, like the number of predictions reported here, may not be fully continuous or normally distributed. See generally H.B. Mann & D.R. Whitney, *On a Test of Whether One of Two Random Variables Is Stochastically Larger than the Other*, 18 ANN. MATH. STAT. 50 (1947). Statisticians, however, have not reached complete consensus. See Fay & Proschan, *supra* at 9 ("The researcher may think the choice between the Wilcoxon rank sum/Mann-Whitney U test (WMW test) and the t-test depends on the results of a test of normality" but "the issue is not so simple.").

108. Shell Oil Products US, Comment Letter on Proposed 2013 Renewable Fuel Standards Rule (Apr. 5, 2013), <http://perma.cc/8F4M-7KAR> ("If the blend wall is not appropriately addressed, it will limit the supply of gasoline and diesel fuel and have significant adverse impacts on consumers.").

109. *Id.* at 3 ("EPA should use its general waiver authority to adjust the standards down to reasonably achievable levels to avoid severe economic harm.").

parent company told its investors about the Renewable Fuel Standard was that the standard would boost biofuels, which it implied was good because in addition to its primary business as an oil company it was also one of the “largest biofuels producers.”¹¹⁰

In contrast, companies that favor the Renewable Fuel Standard, such as ethanol interests, actually identified slightly more impacts from the Renewable Fuel Standard in their 10-K disclosures. This confirms that the result for oil companies is not driven by any inherent differences between the format of comments and 10-K disclosures.¹¹¹ In fact, the ethanol company result is a kind of flip-side of the oil company result; together these results suggest that oil companies send inconsistent messages because, unlike ethanol companies, they face different incentives when they address these different audiences.

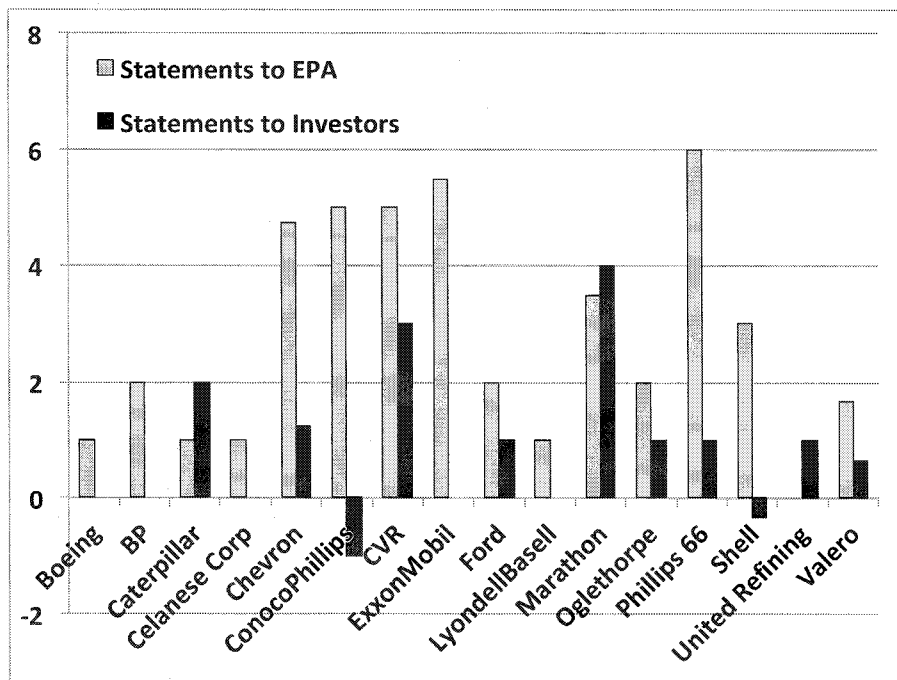
A. Oil Companies Identify Significantly More Negative Impacts in Their Comments than in Their 10-K Disclosures

The companies with a negative view of the Renewable Fuel Standard identified significantly more negative impacts from the standard in their comments to EPA than in their comments to investors. Figure 5 shows the average number of negative comments that these companies reported during the entire period studied. Of the sixteen companies with a negative view of the Renewable Fuel Standard, thirteen identified more negative impacts in their comments to EPA than in their securities disclosures to investors.

110. ROYAL DUTCH SHELL PLC, ANNUAL REPORT (FORM 20-F) 50 (2013) (“The international market for biofuels is growing, driven largely by the introduction of new energy policies in Europe and the USA that call for more renewable, lower-carbon fuels for transport. . . . We are one of the world’s largest biofuels producers.”).

111. That is, this result confirms that there is no inherent tendency for comments to focus more on impacts to companies than 10-K disclosures. If there was such a tendency, oil company comments might contain more impact predictions even though oil companies were sending similar messages in each forum. But the prevalence of impact predictions in ethanol company 10-K disclosures acts as a control that rejects this alternative explanation of the discrepancy in oil company disclosures. And this explanation—that securities disclosures inherently say less about how regulation may impact a company—seems implausible anyway because, unlike comments, 10-K disclosures are required to include comments about risk to the company in particular. See 17 C.F.R. § 229.503 (2013) (“Where appropriate, provide under the caption ‘Risk Factors’ a discussion of the most significant factors that make the offering speculative or risky. . . . Do not present risks that could apply to any issuer or any offering. Explain how the risk affects the issuer or the securities being offered.”). By contrast, comments are designed to focus on public costs and benefits of a rule. See *supra* note 10 and accompanying text.

FIGURE 5. AVERAGE NEGATIVE IMPACTS IDENTIFIED BY COMPANIES THAT PERCEIVE THE RENEWABLE FUEL STANDARD AS A RISK IN COMMENTS AND SECURITIES DISCLOSURES FILED FROM 2010–2013



Some companies said *positive* things about the impact of the rule, which are shown as negative in Figure 5.¹¹² As mentioned, Shell told EPA that the Renewable Fuel Standard could cause severe economic harm by limiting gasoline sales, but only told its investors that the Renewable Fuel Standard could boost its biofuel sales.¹¹³ These positive mentions also included assertions that complying with the rule is feasible. For example, in its Form 10-K for 2010, ConocoPhillips said, “We have met the increased requirements to date while establishing implementation, operating and capital strategies, along with advanced technology development, to address projected future requirements.”¹¹⁴ By contrast, in that same year, ConocoPhillips endorsed the comments of the

112. The two companies that suggested the rule was, if anything, a benefit also did not hedge their bets by suggesting any ways that the rule might harm them. See CONOCOPHILLIPS, ANNUAL REPORT (FORM 10-K) 58 (Feb. 17, 2010); SHELL OIL COMPANY, ANNUAL REPORT (FORM 20-F) 84 (Feb. 24, 2013).

113. Shell Oil Company, Comments on 2013 Renewable Fuel Standard Proposal, EPA-HQ-OAR-2012-0546-0085, 3 (2012); SHELL OIL COMPANY, ANNUAL REPORT (FORM 20-F) 84 (2013).

114. CONOCOPHILLIPS, ANNUAL REPORT (FORM 10-K) 58 (Feb. 17, 2010).

National Petrochemical and Refiner’s Association,¹¹⁵ which stated plainly that the standard, as planned, was “infeasible.”¹¹⁶

As shown in Figure 6, the average company that opposed the Renewable Fuel Standard identified almost three specific ways (2.78) that the standard would harm the company in each of its comments. In contemporaneously filed 10-K disclosures, the average company identified less than one way (0.87) that the Renewable Fuel Standard might harm the company and its investors. A paired t-test and the Wilcoxon-Mann-Whitney test both confirm that this result is highly significant at $P = 0.003$ and $P = 0.002$, respectively.

FIGURE 6. REGULATORY IMPACT PREDICTION FROM SIXTEEN COMPANIES THAT OPPOSED THE RENEWABLE FUEL STANDARD

	Comments	10-K
Negative impacts per company statement	2.78	0.87
$P = 0.002$ (Wilcoxon-Mann-Whitney test)		

Studying individual years gives similar results, although the smaller number of observations reduces the statistical power of the dataset. For example, in 2013, seven public oil companies filed comments on the Renewable Fuel Standard. On average, these comments identified exactly 4 negative impacts from the standard. By contrast, contemporaneous securities disclosures identified only 1.14 negative impacts from the Renewable Fuel Standard. This difference is significant at $P = 0.020$ under the paired t-test and $P = 0.032$ under the Wilcoxon-Mann-Whitney test.¹¹⁷ As shown in Figure 7, in 2013 all but one oil company identified more negative impacts in their comments than in their securities disclosures, and that company, BP, did not identify any impact from the Renewable Fuel Standard in either forum. As it faces the regulator’s di-

115. ConocoPhillips, Comments on 2010 Renewable Fuel Standard Proposal (Sept. 25, 2009), <http://perma.cc/5XCR-SXHX> (“ConocoPhillips is a member of the American Petroleum Institute and the National Petrochemical and Refiner’s Association and generally support the comments submitted by both associations.”).

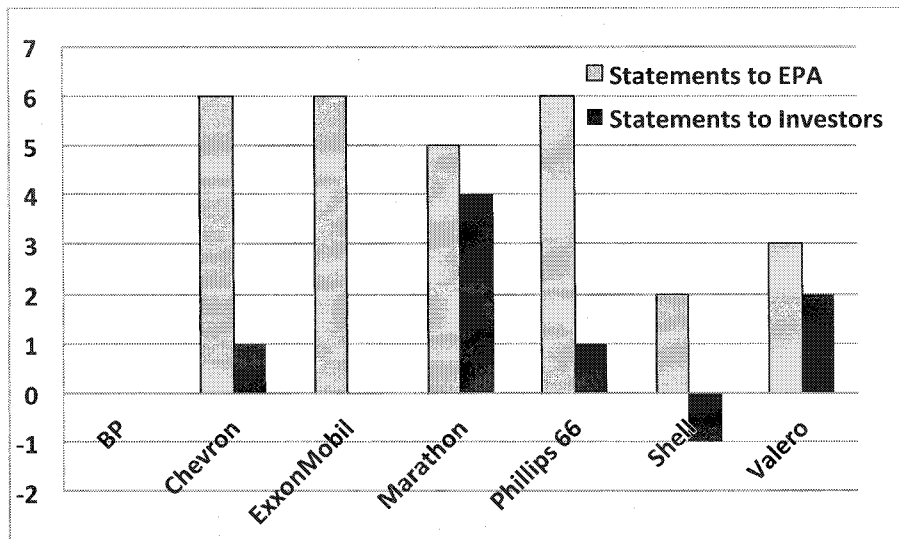
116. National Petrochemical and Refiner’s Association, Comments on 2010 Renewable Fuel Standard (Sept. 25, 2009), <http://perma.cc/D5VV-DWAC> (“The RFS2 program should begin on January 1, 2011; January 1, 2010 implementation is infeasible.”).

117. As for the other years, in 2010, fourteen oil companies filed comments on the standard, which identified 2.79 negative impacts on average; contemporaneous 10-K statements identified only 0.86 negative impacts on average. Using the Wilcoxon-Mann-Whitney test this difference is significant at $P = 0.006$. In 2010, nineteen ethanol companies commented on the standard, which identified 0.12 positive impacts on average; contemporaneous 10-K statements identified 0.53 positive impacts on average. Using the Wilcoxon-Mann-Whitney test this difference is also significant at $P = 0.045$.

The other years did not provide enough paired observations for a meaningful comparison of comments and securities disclosures for the individual year standing alone. In 2011, only one oil company commented to EPA on the standard. In 2011, 2012, and 2013, only two, three, and four ethanol companies commented, respectively.

lemma, EPA is hearing a very different story from the story heard by oil company investors.

FIGURE 7. NEGATIVE IMPACTS IDENTIFIED BY COMPANIES OPPOSED TO THE RENEWABLE FUEL STANDARD IN COMMENTS AND SECURITIES DISCLOSURES

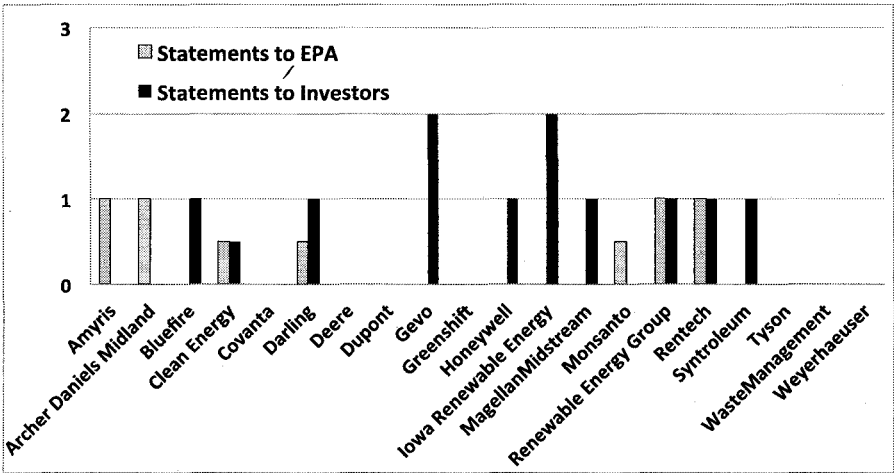


B. Ethanol Companies Identify Slightly Fewer Positive Impacts From the Renewable Fuel Standard in Their Comments Than in Their 10-K Reports

Companies that favor the Renewable Fuel Standard appear slightly more eager to brag about its positive impact to their investors than to regulators. As shown in Figure 8, nine out of twenty companies identified more positive impacts in their 10-K submissions. Nine more companies identified the same number of impacts in both settings, and two companies identified more positive impacts in their comments.¹¹⁸ The impact mentioned most frequently in the Form 10-K is that the Renewable Fuel Standard will increase demand for the company's product.

118. As with the figure for oil companies, there are some negative figures on this graph. This is because some companies, such as DuPont, felt that EPA's untimely proposals were making the standard difficult to meet even for the companies it favored. See DuPont Applied Biosciences, Comments on 2010 Renewable Fuel Standard Proposal (Sept. 25, 2009), <http://perma.cc/SD25-CFJX> ("Given the complexity of EPA's effort, and the many areas still in need of clarification, we respectfully suggest that the RFS2 program effective date be delayed until January 1, 2011, to allow additional time for refinement and to give regulated parties an opportunity to prepare adequately.").

FIGURE 8. POSITIVE IMPACTS IDENTIFIED BY COMPANIES THAT SUPPORT THE RENEWABLE FUEL STANDARD IN COMMENTS AND FORM 10-K



As shown in Figure 9, the average company identified just 0.21 positive impacts to the company in its submissions to EPA. In their 10-K submissions, the average company made 0.58 positive impact predictions. This small difference is on the cusp of statistical significance: it would be significant at a $P = 0.052$ level under the paired t-test and at a $P = 0.054$ level under the Wilcoxon-Mann-Whitney test.

FIGURE 9. REGULATORY IMPACT PREDICTION FROM TWENTY COMPANIES THAT PERCEIVE THE RENEWABLE FUEL STANDARD AS A BENEFIT

	Comments	10-K
Positive impacts per company statement	0.21	0.58
$P = 0.054$ (Wilcoxon-Mann-Whitney test)		

V. HOW SECURITIES DISCLOSURES CAN BE USED TO ASSESS THE ACCURACY OF WARNINGS IN REGULATORY COMMENTS AND VICE VERSA

The approach developed here will be a crucial tool for environmental regulators, public and private enforcers of securities disclosures, and corporate counsel. Regulators can use securities disclosures as a reality check on corporate predictions of harm. The SEC and private investors can use securities law to push companies to disclose all regulatory risks that they have identified in regu-

latory comments. And corporate counsel can compare public company comments with securities disclosures to ensure that the company is giving a coherent, accurate, and credible picture of the company's exposure to regulatory risk.

A. Environmental Regulators Should Assess the Accuracy of Comments by Comparing Them with Contemporaneous Securities Disclosures

Environmental regulators should use the approach developed here, comparing the comments they receive with companies' securities disclosures, to gain a more realistic view of the economic harm that their regulations might cause. Regulators cannot ignore corporate comments because setting technology-based or feasibility-driven standards requires massive amounts of private information best known by these companies.¹¹⁹ And, as the Renewable Fuel Standard's cellulosic ethanol targets make plain, sometimes a statutory mandate is truly impossible to achieve with current technology. But, as this study demonstrates, comments from private companies can present an exaggerated picture of the cost of regulation.

Regulators can retain the benefit of private information, but improve its accuracy, by matching comments with contemporaneous securities disclosures.¹²⁰ Even when comments and securities disclosures are not technically inconsistent, they often leave very different impressions about how feasible a proposed rule will be for industry. Thus, securities disclosures can be an interpretive aid for regulators, helping them suss out which regulations actually may be infeasible.

As an example of how this would work, consider the current controversy over EPA's Clean Power Plan for power sector carbon emissions. In November 2014, the North American Electric Reliability Corporation, North America's energy watchdog,¹²¹ warned that states might need more compliance time than EPA was allowing for the Clean Power Plan to ensure that utilities can main-

119. Ackerman & Stewart, *supra* note 15, at 1337 (writing that these types of standard "involv[e] the centralized determination of complex scientific, engineering, and economic issues regarding the feasibility of controls on hundreds of thousands of pollution sources" and "[s]uch determinations impose massive information-gathering burdens on administrators, and provide a fertile ground for complex litigation in the form of massive adversary rulemaking proceedings and protracted judicial review"); see also *supra* notes 11–20 and accompanying text.

120. This study's methodology relies on securities disclosures from the following year because, by that point, the rule has generally been finalized, so the company cannot claim it thought the rule would change after proposal. Regulators, by contrast, will have to rely on contemporaneous securities disclosures in considering whether to modify their proposed rules. But these contemporaneous disclosures, filed after the rule is proposed but before it is finalized, should address the impact of the proposed rule according to SEC guidance. Commission Guidance Regarding Disclosure Related to Climate Change, 75 Fed. Reg. 6290, 6296 (Feb. 8, 2010) (to be codified at 17 C.F.R. pts. 211, 231, 241).

121. The North American Electric Reliability Corporation, known as NERC, is a public-private hybrid organization partially supervised by the Federal Energy Regulatory Commission. Hari M. Osofsky & Hannah J. Wiseman, *Hybrid Energy Governance*, U. ILL. L. REV. 1, 35–44 (2014) (providing an excellent summary of the evolution of NERC).

tain the reliability of electricity distribution.¹²² In February 2015, a consulting group responded, claiming that the energy watchdog's report exaggerated the risk that EPA's plan posed to reliability.¹²³ But electric utilities have echoed the report's concern, telling EPA that its plan would endanger electric reliability; for example, Ameren, a major Missouri and Illinois utility, cited the report extensively in a white paper on the Clean Power Plan.¹²⁴

Is EPA's proposed Clean Power Plan timeline too rapid to ensure reliability? The agency can calibrate how seriously it takes utility company comments by examining the securities disclosures that most companies filed in the first months of 2015. Taking the example of Ameren, the company's 10-K does say that it is "evaluating the proposed Clean Power Plan and the potential impact to its operations, including those related to electric system reliability."¹²⁵ So Ameren is considering the issue, but this statement is somewhat less stark than the white paper, which said that the Clean Power Plan's "interim targets . . . jeopardiz[e] the reliability of the electricity supply and risk[] economic disruption."¹²⁶ The Form 10-K, like the white paper, also states clearly that the Clean Power Plan imposes a substantial economic risk on the utility, which may suggest that this concern is genuine, whether or not it is accurate.¹²⁷ A comprehensive review of utility 10-K forms would reveal how many utilities truly shared these concerns.

122. N. AM. ELEC. RELIABILITY CORP., POTENTIAL RELIABILITY IMPACTS OF EPA'S PROPOSED CLEAN POWER PLAN: INITIAL RELIABILITY REVIEW 2 (2014), <http://perma.cc/84TR-JF2R> ("More time for [Clean Power Plan] implementation may be needed to accommodate reliability enhancements . . . [Compliance through] resource additions, as well as the expected transmission enhancements, may represent a significant reliability challenge given the constrained time period for implementation.").

123. JURGEN WEISS ET AL., THE BRATTLE GROUP, EPA'S CLEAN POWER PLAN AND RELIABILITY: ASSESSING NERC'S INITIAL RELIABILITY REVIEW iv-v (2015), <http://perma.cc/3W3N-5J3X> ("[L]egitimate arguments exist to counterbalance NERC's concerns in each building block and . . . as a result of these arguments (and the additional tools we outline as options to counteract the issues raised by NERC) NERC's reliability concerns could be partially or entirely mitigated.").

124. *See, e.g.*, AMEREN, AMEREN'S ALTERNATIVE TO THE EPA'S PROPOSED GREENHOUSE GAS RULES 7 (2015), <https://perma.cc/X6K6-NJB9> ("The non-partisan North American Electric Reliability Corporation ("NERC") has concluded that Missouri and Illinois could fall below reserve margin standards deemed necessary to ensure reliability."); *see also* Herman K. Trabish, *Comments Are in on the EPA's Clean Power Plan: Utilities Say the Rules Go Too Far, Too Fast*, UTILITY DIVE (Dec. 2, 2014), <http://perma.cc/9FTR-YDQX>.

125. AMEREN, ANNUAL REPORT (FORM 10-K), at 138 (Mar. 2, 2015), <http://perma.cc/2XSL-3RQP>.

126. AMEREN, *supra* note 124, at 10.

127. AMEREN, *supra* note 125, at 138-39 ("As proposed, the Clean Power Plan would require the states, including Missouri and Illinois, to submit compliance plans as early as 2016. The states' compliance plans might require Ameren Missouri to construct natural gas-fired combined cycle generation and renewable generation, at a currently estimated cost of approximately \$2 billion by 2020, that Ameren Missouri believes would otherwise not be necessary to meet the energy needs of its customers. Additionally, Missouri's implementation of the proposed rules, if adopted, could result in the closure or alteration of the operation of some of Ameren Missouri's coal and natural gas-fired energy centers, which could result in increased operating costs or impairment of assets.").

Regulators should also request that companies submit excerpts from their securities disclosures that show exactly how seriously they take the threat of regulation. The burden of this requirement would be minimal because companies have already drafted these disclosures. In fact, it would benefit corporate counsel as a check to ensure that the company was sending out consistent messages on the impact of regulation.¹²⁸ Regulators could simply offer to give particular consideration to comments that were accompanied by these excerpts from securities disclosures. No further sanction would be necessary;¹²⁹ if a company failed to make this submission, a regulator could bolster its answer to the comment by noting that it was unsupported by the company's own securities disclosures.¹³⁰

At the least, regulators could adopt this approach for major rules likely to attract major comment and present the regulator's dilemma—that is, proposed rules that a substantial portion of industry will claim are infeasible. Regulators could also time proposals so that comment periods are contemporaneous with most 10-K filings to allow the agency to cross-check company statements to each audience.

B. Securities Regulators and Plaintiffs' Counsel Can Use Comments on Environmental Regulations to Audit the Completeness of Securities Disclosures

Just as companies may exaggerate how *much* regulation will cost in their comments, so too they may exaggerate how *little* regulation will cost in their disclosures to investors. Securities regulators and plaintiffs' counsel can use this study's approach to improve corporate disclosures, because they can use public companies' comments to identify material risks absent from their securities disclosures. This could significantly strengthen the nascent movement to improve companies' reporting of environmental risk.¹³¹

According to the SEC's binding guidance, a company must disclose how a pending regulation will impact it unless the company determines it is not likely

128. See *infra* Part V.C.

129. Congress could also consider mandating a standard of reliability for predictions in comments to regulators. But this seems unnecessary—an unreliable comment does little harm if regulators and the public know it is unsupported. And there is little reason to think that unreliable comments in rulemaking dockets, which Congress might control, would have any worse impact than unreliable comments in public discussions, which it cannot.

130. Agencies already provide independent regulatory impact analyses that estimate the effects of proposed regulations. Exec. Order No. 12,866, 3 C.F.R. § 6 (1994). This approach could simply strengthen the agency's hand by revealing cases where industry counterarguments were undercut by their own statements to investors.

131. See Nina Hart, *Moving at a Glacial Pace: What Can State Attorneys General Do About SEC Inattention to Nondisclosure of Financially Material Risks Arising from Climate Change?*, 40 COLUM. J. ENVT'L. L. 99, 111–15 (2015); see also JIM COBURN ET AL., DISCLOSING CLIMATE RISKS & OPPORTUNITIES IN SEC FILINGS: A GUIDE FOR CORPORATE EXECUTIVES, ATTORNEYS & DIRECTORS 14 (2011), <http://perma.cc/M5PM-ZSVZ>.

to be enacted or not likely to affect the company.¹³² So if a company tells regulators that it will be negatively impacted by a proposed regulation, it must disclose this risk unless it believes the regulation will not be enacted. During the first four years of the new Renewable Fuel Standard, 2010–2013, which are the years studied here, EPA finalized a renewable fuel standard each year that was very similar to the proposal addressed by company comments.¹³³ Companies would have a very difficult time arguing that it was unlikely that EPA would act as it always had in the past.¹³⁴

The SEC should insist that companies' securities disclosures include the risks that they identify in their comments to regulators. The Commission is under significant pressure from investor groups, state officials, and environmental activists that are dissatisfied with the currently meager disclosure of regulatory risk.¹³⁵ The Commission should use its existing authority to enforce its disclosure requirements through escalating sanctions beginning with comment letters and progressing to enforcement actions.¹³⁶ The SEC could also consider forming an interagency working group to identify severe examples of the regulator's dilemma—that is, areas where industry complaints about proposed rules have been particularly vociferous.¹³⁷ It could then focus on corporate statements

132. Commission Guidance Regarding Disclosure Related to Climate Change, 75 Fed. Reg. 6290, 6296 (Feb. 8, 2010) (to be codified at 17 C.F.R. pts. 211, 231, 241) (noting that “disclosure is required” of the effect of “pending legislation or regulation . . . [u]nless management determines that it is not reasonably likely to be enacted [or] determines that a material effect is not reasonably likely”).

133. *See supra* note 95.

134. Indeed, the 2011 and 2012 standards had already been finalized by the time companies made their 10-K disclosures at the start of the year. Regulation of Fuels and Fuel Additives: 2012 Renewable Fuel Standards, 77 Fed. Reg. 1320 (Jan. 9, 2012); Regulation of Fuels and Fuel Additives: 2011 Renewable Fuel Standards, 75 Fed. Reg. 76,790 (Dec. 9, 2010).

135. *See* GARY SHORTER, CONG. RES. SERV., R42544, SEC CLIMATE CHANGE DISCLOSURE GUIDANCE: AN OVERVIEW AND CONGRESSIONAL CONCERNS 6, 7 (2013) (reporting evidence from “a nonprofit coalition of institutional investors, environmental organizations, and other public interest groups” that corporations “needed more experience at communicating the risks associated with climate change”). The world's largest proxy advisory firm, which advises institutional shareholders on corporate governance, issued a report on the response to SEC's guidance with a press release titled: “New ISS Corporate Services Report Highlights Need for Improved Company Disclosure Per New SEC Climate Risk Disclosure Guidelines.” Press Release, ISS Corporate Services (Oct. 12, 2010), <http://perma.cc/ZG75-AT5T> (noting that “[o]nly 20% of companies cover all issues defined in the February 2010 SEC climate risk guidelines in their most recent Form 10-K disclosure”). *See also* JIM COBURN & JACKIE COOK, CERES, COOL RESPONSE: THE SEC & CORPORATE CLIMATE CHANGE REPORTING 5 (Feb. 2014), <http://perma.cc/X7JP-3NVL> (criticizing the SEC for not doing enough to enforce its environmental disclosure requirements and noting a sharp drop-off in comment letters after SEC issued its guidance in 2010).

136. *See* Hansen, *supra* note 27, at 499. *See also* Petition for Interpretive Guidance on Climate Risk Disclosure, File No. 4-547 at 10 (Sept. 18, 2007), <http://perma.cc/Z4B7-3BUG> (investor groups and state treasurers petitioning SEC to issue guidance on disclosing risk from climate regulation and to “take action to ensure that [issuers] meet their obligations under the securities laws and regulations”).

137. This working group could build on similar efforts by the SEC and the Food and Drug Administration, which have teamed up to ensure that drug manufacturers are not misleading investors about their prospects of regulatory approval. Sec. & Exch. Comm'n, SEC and FDA Take Steps to Enhance Inter-Agency Cooperation (Feb. 5, 2004), <https://perma.cc/>

to investors in those areas to ensure that companies are equally frank with their investors.

When a company is harmed by environmental regulations,¹³⁸ injured investors can also use company comments to show that companies' disclosures did not present a complete picture of the company's exposure to regulatory risk.¹³⁹ SEC Rule 10b-5 gives private plaintiffs a right of action to sue companies when their securities disclosures contain misleading representations or omissions.¹⁴⁰ Under the "fraud-on-the-market" theory adopted by the Supreme Court in *Basic Inc. v. Levinson*,¹⁴¹ these plaintiffs need not even show that they read and relied on these disclosures, so long as they can show that they purchased stock at an artificially inflated price caused by the misleading disclosure.¹⁴² By scrutinizing corporate comments, private plaintiffs can give public companies an incentive to make their securities disclosures consistent with their comments to regulators.

C. Corporate Counsel Should Ensure Corporate Comments on Regulations Are Consistent

If corporations' comments on public regulation can be compared to corporate securities disclosures, there is no longer any advantage to presenting inconsistent messages to the two audiences. Indeed, inconsistent messages could create a lose-lose situation for a public company. If a proposed regulation is a true threat to the company, and the company uses its comments to inform the agency of the danger posed by the proposal, the agency may dismiss the comments as cheap talk if they are not also reflected in securities disclosures. And if the agency finalizes an unchanged regulation that harms the company, investors will have evidence that the company gave incomplete securities disclosures, which could result in liability for the company in a lawsuit under Rule 10b-5.

On the flip side, if a company believes that a proposed regulation is not a true threat and follows the usual pattern of warning regulators and reassuring

4B3M-MGXE; Food & Drug Admin., FDA and SEC Work to Enhance Public's Protection from False and Misleading Statements (Feb. 5, 2004), <http://perma.cc/WMN8-BAP6>.

138. Company stocks respond to news regarding environmental regulation in both the short term and long term. *See, e.g.,* Vikash Ramiah et al., *How Does the Stock Market React to the Announcement of Green Policies?*, 37 J. BANKING & FIN. 1747, 1750–51 (2013) (using event study to show that oil and gas stocks, among others, lose value in response to the announcement of environmental policies); Matt Phillips, *Coal Stocks are Paying a Price for Environmental Regulations*, YAHOO FINANCE (Dec. 24, 2014), <http://perma.cc/TDT2-8TAN>.

139. One reason that private plaintiffs may not yet have taken advantage of this comparison is that the U.S. government has just started providing easy access to comments in rulemaking dockets over the past decade. *See* Exec. Order No. 13,563, 76 Fed. Reg. 3821, 3821–22 (Jan. 21, 2011) (mandating "timely online access to the rulemaking docket on regulations.gov"); Cary Coglianese, *Citizen Participation in Rulemaking: Past, Present, and Future*, 55 DUKE L.J. 943, 946–47 (2006) (describing e-rulemaking initiative begun during Bush Administration).

140. *See* *Blue Chip Stamps v. Manor Drug Stores*, 421 U.S. 723, 730 (1975).

141. 485 U.S. 224 (1988).

142. *See id.* at 244; *see also* *Halliburton Co. v. Erica P. John Fund, Inc.*, 134 S. Ct. 2398, 2408–13 (2014) (declining to overrule *Basic* on this point).

investors, it will still face negative consequences. The regulator will accurately dismiss the comments as cheap talk, but when this judgment proves accurate, the company will have lost credibility for its future regulatory submissions.¹⁴³ And if, for some reason, the regulation proves more damaging than the company expected, the company comments, even if insincere, may be used against it in a 10b-5 lawsuit.

To avoid liability and enhance the credibility of company comments on regulation, corporate counsel should ensure that the company is not telling different audiences different stories about the potential impact of regulation.¹⁴⁴ Now that a company's comments can be compared to its securities disclosures, there is no advantage to inconsistency. Indeed, companies should consider voluntarily including relevant excerpts from their securities disclosures with their comments to agencies to demonstrate how seriously they take the dangers of overregulation that they are combating.¹⁴⁵ Due to past exaggerations, regulators may dismiss unsupported warnings. Companies can restore their credibility by showing regulators that they take their warnings seriously enough to share them with investors as well.

CONCLUSION

Two audiences—environmental regulators and investors—both need to know how regulations may impact public companies. But when they face adverse regulations, companies would like regulators to think the danger is severe and would like investors to think the danger is manageable. Faced with this two-audience problem, corporate talk is cheap: oil companies made very different predictions about the impact of the Renewable Fuel Standard in their comments to regulators and their securities disclosures to investors.

Fortunately, by measuring this discrepancy, this study will help regulators, investors, and companies to cure it. Regulators should integrate review of securities disclosures into their rulemaking process to gain a more accurate picture of the risks they are imposing on industry. Doing so will ease the regulator's dilemma of gauging the sincerity of corporate warnings. On the flip-side, securities regulators and investors should review comments on regulation to identify regulatory risks that companies are not disclosing. Finally, corporate counsel should anticipate this scrutiny by harmonizing the messages it sends in regulatory comments and securities disclosures.

143. Indeed, even now company comments are often not considered credible. *See supra* note 5 and accompanying text.

144. One reason for inconsistent messages could be that different lawyers, and potentially outside counsel, are drafting comments and securities disclosures. If this is the case, corporate counsel will have to take extra precautions to ensure these different drafters produce consistent messages.

145. For example, if a utility like Ameren wanted to convince EPA that its concerns about the Clean Power Plan affecting reliability were sincere, it could file excerpts from its Form 10-K disclosures in the Clean Power Plan docket.

APPENDIX A: STUDY CODES

<p>101. Support Renewable Fuel Standard (RFS)</p> <p>102. Disagree with Renewable Fuel Standard</p> <p>103. Suggested modification</p> <ul style="list-style-type: none"> a. Increase overall volume standard b. Decrease overall volume standard c. Maintain overall volume standard d. Increase advanced biofuel volume standard e. Decrease advanced biofuel volume standard f. Maintain advanced biofuel volume standard g. Increase cellulosic volume standard h. Decrease cellulosic volume standard i. Maintain cellulosic volume standard j. Increase biodiesel volume standard [same as biomass-based diesel] k. Decrease biodiesel volume standard l. Maintain biodiesel volume standard <p>104. EPA should issue proposal in a timely fashion</p>	<p><u>Negative impact prediction to the company</u></p>
<p><u>Positive impact prediction to the company</u></p> <p>NB: The positive codes also apply if the text first describes the positive impact of the RFS to the company and then went on to say that the repealing of the RFS (or changes, and the lack of enforcement) could have adverse effects to the company.</p> <p>For companies which foresee a positive impact from the RFS, but describe the repeal/change of the RFS as an adverse risk, use 601.</p> <p>201. +Income [includes increase of demand, income, revenue, market share, profits, the gaining of new market in relations to renewable energy, any positive business venture as a result of the RFS]</p> <p>202. Compliance is feasible / confident with adaptation [look for adjectives that indicates positive outlook in regards to RFS adoption, or indication that there is enough volume to comply]</p>	<p>301. -Income [includes decrease of demand, income, revenue, market share, profits, the losing of market share or any negative result to the business venture as a result of the RFS]</p> <p>302. Compliance challenge/infeasible [difficulties due to cost, technological lag, blendwall, not enough volume to comply or any other reasons]</p>

<p>203. Reduce costs of production</p> <p>204. -Costs for customers [including energy price]</p> <p>205. +Return on investment [referring specifically to stock market related investment, e.g., share price]</p> <p>206. +Facilities [referring to <u>physical facilities only</u>—increase capacity of manufacturing facilities, factories, refineries, fixed investments, opening and closing of facilities]</p> <p>207. No impact to the company due to uncertainties related to RFS</p> <p>208. Certainty for the biofuel industry</p>	<p>303. Increase costs of production</p> <p>304. +Costs for consumers [including energy price]</p> <p>305. -Return on investment [referring specifically to stock market related investment, e.g., share price]</p> <p>306. -Facilities [referring to <u>physical facilities only</u>—decrease capacity of manufacturing facilities, factories, refineries, fixed investments, opening and closing of facilities]</p> <p>307. Uncertainty caused by changing RFS (by EPA or Congress) [uncertainties caused by changes specifically related to RFS, where RFS is specifically mentioned]</p> <p>308. Uncertainty due to RIN price volatility</p>
<p><u>Positive impact prediction to the economy</u></p> <p>401. +Domestic economy [positive overall impact to the domestic, i.e., U.S., economy]</p> <p>402. Energy independence [reduce reliance on foreign supply of energy, supply of raw material for the production of energy such as corn, sugarcane, etc.]</p> <p>403. Supply of energy [supply of energy remains steady or there is no negative impact to supply, or positive impact]</p> <p>404. +Non-energy commodity price [any positive impact, neutral effect, or it stabilizes a non-energy commodity (non-food or non-feedstock commodity) price]</p> <p>405. +Food [any positive impact, neutral effect, or it stabilizes food and feedstock prices, food supply, and food security]</p>	<p><u>Negative impact prediction to the economy</u></p> <p>501. -Domestic economy [negative overall impact to the domestic, i.e., U.S., economy]</p> <p>502. Dependence on foreign suppliers [reliance on foreign supply of energy, supply of raw material for the production of energy such as corn, sugarcane, etc.]</p> <p>503. Supply of energy disruption [disruption of energy supply, including raw materials for energy]</p> <p>504. -Non-energy commodity price [increases or causes fluctuation of non-energy commodity (non-food and non-feedstock commodity) price]</p> <p>505. -Food [increases or causes fluctuation on food and feedstock prices, food supply, and food security]</p>

<div>406. +Job market [any positive impact in relations to outsourcing, labor, labor market, workforce, work, or employment]</div> <div>407. +Internationaleconomy [positive impact to the international economy]</div>	<div>506. -Job market [any negative impacts in relations to outsourcing, labor, labor market, workforce, work, or employment]</div> <div>507. -International economy (price volatility) [negative impact to the international economy]</div>
<div>601. General benefits that may or do relate to RFS [benefits due to changing environmental and climate regulation and any other issues in relation to RFS <i>where the RFS is not specifically mentioned</i>; when RFS is mentioned in a benefit, identify the benefits and use 200 series or 400 series Study Codes]</div>	<div>701. General risk that may or do encompass RFS risk [general risks which might be indirectly related to the RFS <u>where the RFS is not specifically mentioned</u> or when it is specifically mentioned <u>but is just part of a big list of risks in a risk/forward-looking statement</u>]</div>
<div>Non-RFS related risk</div> <div>801. Weather, climate, natural disasters</div> <div>802. Climate change, global warming</div> <div>803. Non-RFS legal changes [legal changes that are not related to the RFS or the environment, e.g. legal, financial, employment, laws, regulation]</div> <div>804. Non-RFS related environmental legal risks [refers to changes in any environmental laws such as low carbon fuel standards, greenhouse gas standards, or other parts of the Clean Air Act]</div> <div>Endorsed Trade Association Comment</div> <div>901. American Chemistry Council</div> <div>902. American Fuel Petrochemical Manufacturers</div> <div>903. American Petroleum Institute</div> <div>904. Brazilian Sugarcane Industry Association</div> <div>905. Grocery Manufacturers Association</div> <div>906. Growth Energy</div> <div>907. Renewable Fuels Association</div>	

APPENDIX B: SAMPLE CODES

	Positive Impact Prediction	Negative Impact Prediction
Comments	The biodiesel industry clearly has the ability to meet its requirements under the RFS.	The RFS2 presents production and logistic challenges for both the renewable fuels and petroleum refining and marketing industries.
Form 10-K	The most important of these programs is RFS2, which we expect will create significant, stable and growing demand for our biodiesel.	A potential consequence of failing to reduce the advanced biofuel category would be increased imports of Brazilian sugar cane ethanol since it is the most readily available advanced biofuel. We do not think that it was the intent of Congress when they passed the Energy Independence and Security Act of 2007 to replace crude oil imports with Brazilian sugarcane ethanol imports.