

Spill the Beans: GoodGuide, Walmart and EPA Use Information as Efficient, Market-Based Environmental Regulation

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I. INTRODUCTION

Several recent initiatives led by GoodGuide, mega-merchandise Walmart, and the United States Environmental Protection Agency (EPA) have the potential to transform the marketplace and positively impact the environment at the same time. Say what? Harvard Business School professor Rosabeth Moss Kanter blogged that Walmart’s new initiative “changed the game with respect to environmental issues.” Information on corporate environmental compliance, as well as the environmental effects of a product or service over time (life cycle assessment or LCA), can be an efficient tool to influence consumer and investor behavior and thereby to achieve environmental goals.¹

The beauty of the Wal-Mart innovation is that it doesn’t ask anyone to change anything except the information that is provided and received. If polluters want to keep polluting, they are free to do so as long as they provide that data on their Wal-Mart labels. And if consumers choose to

1. Robert H. Cutting, Lawrence B. Cahoon & Ryan D. Leggette, *Enforcement Data: A Tool for Environmental Management*, 36 ENVTL. L. REP. 10060-72 (2006).

buy from polluters whose labels they can read, they are free to do so. In theory.

In practice, of course, we know that suppliers will change their practices to avoid embarrassing disclosures, and consumers will think twice about the choices they make.²

As EPA Administrator Lisa Jackson put it, “[w]e have seen that when information is made public, it can be a powerful tool to help improve the environment directly.”³ Information alone may not compel generators to internalize costs as a true market economy requires,⁴ but at least a key segment of consumers and investors will have data to factor in with the price and performance of both products and firms (stock prices for investors).

The first Council on Environmental Quality (CEQ) in 1970 reminded us that the marketplace can only properly price goods and services by including the value of environmental externalities, such as public health impacts (for example, heart and lung diseases) and property damage (for example, crops, timber, and Love Canal) through green taxes or more restriction on off-site waste disposal.⁵ Consumers drive some 70% of the U.S. economy,⁶ so if even a small fraction selected less polluting alternatives because price was equalized to compensate for the pollution subsidy, the impact could be significant. Proceeds from green taxes could be used to fund: (1) research that could spur further innovation; (2) capital for entrepreneurs of alternative techniques and technologies; and (3) damages, phased resolution, and remediation.

2. See Scott Kirsner, *Wal-Mart Using Its Clout To Go Green*, BOS. GLOBE, July 20, 2009, at BUS-4.

3. Memorandum from Lisa P. Jackson, Adm’r, EPA, to Cynthia Giles, Assistant Adm’r for Enforcement & Compliance Assurance, EPA (July 2, 2009), available at <http://epa.gov/compliance/data/results/performance/csa/jackson-ltr-csa-enf.html>.

4. James L. Huffman, *The Public Interest in Private Property Rights*, 50 OKLA. L. REV. 377, 380 n.11, 383-84 (1997); see also Erik T. Verhoef, *Externalities*, in HANDBOOK OF ENVIRONMENTAL AND RESOURCE ECONOMICS 197, 197-214 (Jaroen C.J.M. van den Bergh ed., 1999); JOSH HARKNESS DALES, POLLUTION, PROPERTY & PRICES 7-8 (1968); Robert Cutting & Lawrence B. Cahoon, *Thinking Outside the Box: Property Rights as a Key to Environmental Protection*, 22 PACE ENVTL. L. REV. 55, 64-67 (2005); William Simmons & Robert H. Cutting, Jr., *A Many Layered Wonder: Nonvehicular Air Pollution Control Law in California*, 26 HASTINGS L.J. 109, 113 (1975).

5. COUNCIL ON ENVTL. QUALITY, ENVIRONMENTAL QUALITY: THE THIRD ANNUAL REPORT OF THE COUNCIL ON ENVIRONMENTAL QUALITY (1972); U.S. PRESIDENT’S SCIENCE ADVISORY COMM., RESTORING THE QUALITY OF OUR ENVIRONMENT 1-2, 5-7, 10-15 (1965).

6. Catherine Rampell, *Consumers Help Drive U.S. Economy to 3.2% Growth Rate*, N.Y. TIMES, Apr. 30, 2010, at B1.

Price is the potent equalizer, but information alone can have an effect as a market-based tool.⁷ Product and service information allows consumers to accurately compare the issues that are important to them. A hefty slice of consumers have downloaded GoodGuide already. Early reports indicate that conversion rates for hits through GoodGuide are “5-10 times normal.”⁸ That effect can be multiplied when retailers like Walmart supply information to consumers, then apply the anticipated and actual demand to their own product lineup.

Matt Kistler, senior vice president of sustainability, acknowledges that “it is creating a new level of competition in ways that, historically, manufacturers have not competed. And when it comes down to it, it’s going to be an algorithm that creates a score, and it will reward some suppliers better than others.” Consumers won’t be the only ones selecting or snubbing products based on their scores; Kistler confirms that high-scoring products will earn preferential treatment—and likely more shelf space—in Walmart stores.⁹

While conventional wisdom has it that price is a priority, information can drive price—just ask apple growers about Alar.¹⁰ As a Walmart Fact Sheet notes, “[c]ustomers want more efficient, longer lasting, better performing products. They want to know the materials in the product are safe, that it is made well, [and that] the product was produced in a responsible way.”¹¹

Sustainability Consortium members do report some early successes.¹² It is difficult to conceive of a sustainable or green economy

7. The European Economic Community has pioneered ecological labeling since the early 1990s and the European Agency on the Environment has promised data on enforcement, compliance and environmental quality.

8. Jack Neff, *GoodGuide Puts Brands’ Ethical Claims to the Test*, ADVERTISING AGE, Sept. 28, 2009, at 1-2.

9. Kate Rockwood, *Attention, Walmart Shoppers: Clean-Up in Aisle Nine*, EAST COMPANY, Feb. 1, 2010, at 32.

10. The issue costs growers and processors millions and to date, generates controversy. Compare Elliott Negin, *The Alar “Scare” Was for Real; and So Is That “Veggie Hate-Crime” Movement*, COLUMBIA JOURNALISM REV., Sept./Oct. 1996, at 13, available at <http://www.pbs.org/tradesecrets/docs/alarscarenegin.html>, with Shannon Dininny, *Chemicals Coat Apples Decades After Alar Scare*, ASSOCIATED PRESS, Jan. 18, 2010, available at <http://www.chem.info/News/2010/01/Safety-Chemicals-Coat-Apples-Decades-after-Alar-Scare/>, and Elizabeth M. Whelan, Letter to the Editor, *Comforted with Apples*, COLUMBIA JOURNALISM REV., Nov./Dec. 1996, <http://www.pbs.org/tradesecrets/docs/alarscarenegin.html>.

11. Press Release, Walmart, Sustainable Product Index: Fact Sheet (July 16, 2009), available at <http://walmartstores.com/pressroom/news/9277.aspx> (follow “Sust. Index Fact Sheet” hyperlink).

12. Early progress from four Walmart Sustainability Consortium members was reported by Kate Rockwood. Rockwood, *supra* note 9, at 30-32.

- One-third of Frito-Lay factories are now “zero landfill” and another third will be so in 2010.

without the corresponding information flow to determine what products, practices, and firms are really “green.”¹³ The BP Gulf oil catastrophe provided negative reinforcement for those with less than stellar environmental records as BP’s stock took a 40% hit.¹⁴ It remains to be seen if there is any significant effect on consumer choice at the pump.

“We’re on the cusp of a major transition in the marketplace of what consumers demand to know and producers have to tell,” says Dara O’Rourke, CEO of GoodGuide, which independently rates the health, safety, and environmental impact of 50,000 consumer products. Even though Walmart execs have said that its index won’t be ready before 2013, the early discussions reveal just how roiling this initiative will be.¹⁵

Information on firm behavior and product/service footprint should also stimulate competition, in part by lowering the barriers to entry for all competitors through offering exposure to retailers and consumers through a data portal (for far less than conventional advertising dollars).¹⁶ An additional benefit is that public health and safety are enhanced by requiring definitive data on all products and services offered worldwide, thus providing greater protection against cases such as those involving lead paint and cadmium levels in toys from China.¹⁷ A recent study

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- Unilever has reduced its water use by 63% and its CO₂ emissions by 39% since 1995.
 - Disney visits 3500 factories each year to inspect worker-safety and labor practices.
 - General Mills has reduced packaging in Yoplait yogurt by 20%, saving 1200 tons of plastic every year.

Id.

13. JAMES GUSTAVE SPETH, *THE BRIDGE AT THE EDGE OF THE WORLD: CAPITALISM, THE ENVIRONMENT, AND CROSSING FROM CRISIS TO SUSTAINABILITY* (2008); VAN JONES, *THE GREEN COLLAR ECONOMY: HOW ONE SOLUTION CAN FIX OUR TWO BIGGEST PROBLEMS* (2008); THOMAS L. FRIEDMAN, *HOT, FLAT, AND CROWDED: WHY WE NEED A GREEN REVOLUTION—AND HOW IT CAN RENEW AMERICA* (2008) (discussing the global environmental crisis).

14. Steve Hargreaves, *BP’s \$70 Billion Whipping*, CNN.COM, June 2, 2000, http://money.cnn.com/2010/06/01/news/companies/BP_analysts/inde.htm. It has rebounded handily, however. *BP p.l.c. Common Stock*, YAHOO! FINANCE, <http://finance.yahoo.com/echarts?s=BP+Interactive#symbol=BP;range=1y> (last visited Apr. 7, 2011).

15. Rockwood, *supra* note 9, at 30-32. Information does not directly compel internalization through any of the usual devices of direct regulation, fees, green taxes, charges, trading credits, or litigation. Instead, real or perceived effects on sales or stock prices may compel improved firm environmental practices. Factors ranging from surveys to sales figures, as well as news about a product or firm, required disclosure. The firm’s own perceptions of its image can drive compliance.

16. This site could be enhanced by click-through features to other resources, such as company sites and trade associations, as well as other data resources like Consumer Reports, features that should have value to firms and create a revenue stream to the site.

17. Inez M. Tenenbaum, Chairman, U.S. Consumer Prod. Safety Comm’n, Address at the TIA International Toy Fair (Feb. 15, 2010), <http://www.cpsc.gov/pr/tenenbaum02152010.html>;

confirmed that Safe Drinking Water Act compliance was enhanced when information on performance was made easily accessible to customers.¹⁸

The regulated community gains too. Market position, from real or perceived “green” conduct, and actual increased earnings from byproducts such as gypsum from fossil power plant scrubbers or savings from process change, sometimes as simple as a change from diesel to natural gas, are just a few benefits realized by the community.

The landscape changed in 2009. Until 2009, though, it seemed that efforts to provide public information were largely and increasingly stalled through the budget process, particularly at the state level. Each of the recent initiatives contribute to the overall goal of providing information to consumers and investors in a meaningful way. But the main efforts are voluntary. To ensure that the data are complete, uniform, useful, and credible, a partnership should be forged: the EPA or another federal agency could compel and combine federal (and state) data on practices and products. Then, third-parties such as GoodGuide, with contributions by media and industry (led by the Walmart effort), could provide a consumer-friendly data portal. Raw data would also be available to anyone, including trade associations and nongovernmental organizations (NGOs), to verify and interpret the data as they wish (subject to untrue and misleading advertising laws). Even behemoths like Google and Microsoft could be recruited.

GoodGuide emerged in late 2008 from efforts at UC Berkeley to craft an accessible Web-based source of product information as well as firm behavior; it promptly won awards from multiple major reviewers.¹⁹ The site provides information on environmental effects of products and practices as well as other consumer issues and issue-related discussions. This is “America’s Corporate Conscience” and “Shopping for a Better

see also Toxic Cadmium Found in Chinese Toys, ASSOCIATED PRESS, Jan. 11, 2010, available at <http://www.cbsnews.com/stories/2010/01/11/health/main6080353.shtml>.

18. Required information disclosure appears to have an impact on reducing firms’ impacts on the environment. When utilities in Massachusetts were required to inform consumers about drinking water violations (via the Safe Drinking Water Act), violations dropped between 30% and 44%, and health violations dropped about 40%. L.S. Benneer & S.M. Olmstead, *The Impacts of the “Right To Know”: Information Disclosure and the Violation of Drinking Water Standards*, 56 J. OF ENVTL. ECON. & MGMT. 117 (2008). Although utilities and state agencies were already required to collect this information, making the information easily accessible to consumers reduced discharges and improved the quality of the product consumed. *Id.*

19. Bryan Walsh, *10 Ideas Changing the World Right Now: Recycling the Suburbs*, TIME, Mar. 12, 2009, http://www.time.com/time/specials/packages/article/0,28804,1884779_1884782_1884776,00.html; Whitney Reynolds, *The Top 100 Web Sites of 2009: Shopping*, PC MAG., July 27, 2009, <http://www.pcmag.com/article2/0,2817,2350566,00.asp>; GOODGUIDE, <http://www.goodguide.com> (last visited Jan. 11, 2011).

World” on steroids.²⁰ At present, the organization reports that the site will expand beyond the reported 95,000 products, and it will provide information in some interesting dimensions that range from compliance and enforcement to corporate contributions.²¹ The site sets the bar high for future consumer sites. It can also be used by investors.

Walmart announced a plan in July of 2009 to require its 100,000-plus global suppliers to provide information on the environmental footprint of their products and practices, which will yield a consumer-friendly decision-making tool in a few years. Walmart is working with other firms, universities, and individuals to compile, process, and house the data at an independent entity that would be accessible to all, but the format is unknown and an arrival date several years away is forecast.²²

At almost the same time, EPA Administrator Lisa Jackson announced that the EPA will expand its Web presence to disseminate user-friendly information on compliance and enforcement records to advance the Obama Administration’s goals of transparency in the regulatory process, as well as fair, efficient, and effective enforcement. The ultimate goal is to provide real-time data to consumers, residents, and investors.²³ While the efforts of Walmart and others in the private sector are welcome strides into the Information Age, we think the EPA should seize the moment to become the coordinator and depository for several reasons: (1) the scope of federal authority to obtain information from firms through agencies such as the EPA, the Federal Trade Commission (FTC), and the Securities and Exchange Commission (SEC) could reach every business sector more rapidly than Walmart’s announced schedule; (2) a uniform federal simplified process could cost-effectively provide uniform data; (3) the EPA has an enormous volume of useful data and it can more effectively mine data from firms and public entities because it can condition permit or program approval on

20. Cutting, Cahoon & Leggette, *supra* note 1.

21. GOODGUIDE, *supra* note 19.

22. Press Release, Walmart, *supra* note 11. The current target date is sometime in 2013, although some testing is underway.

23. National Pollution Discharge Elimination System (NPDES) water programs will be the lead, and state review data will also be immediately available. *Civil Enforcement: Clean Water Act Action Plan*, EPA, <http://www.epa.gov/compliance/civil/cwa/cwaenfplan.html> (last visited Jan. 7, 2011); *Compliance & Enforcement Through State Government: State Review Framework*, EPA, <http://www.epa.gov/compliance/state/srf/index.html> (last visited Jan. 7, 2011) (providing state-by-state reports); *Data, Planning and Results: Facilities and Enforcement Activities Related to the Clean Water Act National Pollution Discharge Elimination System (NPDES) Program*, EPA, <http://www.epa.gov/compliance/data/results/performance/cwa/index.html> (last visited Jan. 7, 2011) (providing state enforcement data). One component was introduced in late 2009: an interactive map of enforcement actions for calendar year 2009 (but not for previous years).

disclosure of information; (4) naysayers acknowledged the EPA appears more objective than trade groups;²⁴ (5) to ensure impartiality, the raw information (minus trade secrets) should be made available to anyone to interpret and display; and (6) one national portal for data collection with uniform rules and ease-of-use makes more sense for consumers, investors, and the regulated community itself.

This entire scenario fits well into the larger Information Age. As inventor of the World Wide Web, Sir Tim Berners-Lee said, “‘openness of data and the neutrality of the network’ should be considered as important as free speech.”²⁵

II. BACKGROUND: CONSUMER AS KING

The first CEQ in 1970 recommended that the power of consumer choice could be harnessed to encourage sustainable goods and services if the real environmental costs (externalities such as health costs, property damage, and ecosystem services) were included in the price of goods and services.²⁶ Otherwise, those costs fall upon the population as a whole,²⁷

24. In an evaluation of U.S. energy ecological labeling programs, private labeling programs were found to have an insignificant effect on the market. However, the government was found to be critical in establishing a program’s credibility, financial stability, and long term viability. Banerjee compared five programs: Green Seal, SCS, Energy Guide, Energy Star, and Green-e. See Abhijit Banerjee & Barry D. Solomon, *Eco-Labeling for Energy Efficiency and Sustainability: A Meta-Evaluation of U.S. Programs*, 31 ENERGY POL’Y 109 (2003). The EPA should take note that while GoodGuide and Walmart have the ability to provide information to many consumers, the credibility of that information is tied to legislative mandate and the source of the information. *Id.* In a comparison of Australian, European, and Canadian labeling systems (both government-backed and private), government involvement in labels improved uptake and consumer recognition and leveled the playing field for producers. See Ralph E. Horne, *Limits to Labels: The Role of Eco-Labels in the Assessment of Product Sustainability and Routes to Sustainable Consumption*, 33 INT’L J. OF CONSUMER STUD. 175 (2009). Multistakeholder involvement was also found critical to label uptake, indicating the need of involvement from corporations such as Walmart and GoodGuide to ensure consumers have easy access to information. *Id.*

25. Chris Valance, *Web Inventor Calls for Government Data Transparency*, BBC NEWS, Mar. 18, 2010, <http://news.bbc.co.uk/2/hi/technology/8572809.stm>. Sir Berners-Lee was speaking specifically about government corruption, and the principle certainly applies to the regulatory process.

26. Cutting, Cahoon & Leggette, *supra* note 1; U.S. PRESIDENT’S SCIENCE ADVISORY COMM., *supra* note 5, at 197; COUNCIL ON ENVTL. QUALITY, ENVIRONMENTAL QUALITY: THE FIRST ANNUAL REPORT OF THE COUNCIL ON ENVIRONMENTAL QUALITY 5-18 (1970). As we noted in Cutting, Cahoon & Leggette, *supra* note 1, evaluation of the effectiveness of environmental programs often focuses on the efficacy of regulatory programs, such as the number of enforcement cases (criminal, civil, and administrative), informal actions, supplemental environmental projects, inspections, and the like. Commentators such as the Environmental Compliance Consortium, composed of fifteen member states, suggest that beyond the “bean-counting” approach lies the promise of more meaningful data, measured by the indicators of environmental quality in a state, such as compliance with the Clean Air Act’s (CAA) National

resulting in a textbook market failure (a subsidy) because of the externalities. For proof that the concept is now mainstream, check a recent cover of Time Magazine: “The Real Cost of Cheap Food,” where authors observe that “[t]here’s no firm evidence that organics are more nutritious than conventional food, but they do reduce pesticide exposure. There are also hidden ecological costs to conventional farming. Add those in at the cash register, and the two grocery bills don’t look so different”²⁸

Rechanneled consumer spending has enormous potential.²⁹ While we cannot spend our way to sustainability, perhaps some of the way can be paved with consumer and investor dollars that reward good stewards, thus avoiding environmental costs in the process, particularly public

Ambient Air Quality Standards’ (NAAQS) and the Clean Water Act’s (CWA) state water quality standards. Shelley Metzenbaum, *More Nutritious Beans*, 20 ENVTL. F. 18 (2003). We completely agree that states should be assessed by indicators keyed to national performance standards and that each state should have an assessment of environmental indicators, like North Carolina did in the early 1990s. But consumers and investors need firm data. Cutting, Cahoon & Leggette, *supra* note 1, at 10066 n.58.

27. William H. Rodgers, Jr., *The War of “Clever Hans” on the Common Law of Environment Law*, in CREATIVE COMMON LAW STRATEGIES FOR PROTECTING THE ENVIRONMENT 165, 170 (Clifford Rechtschaffen & Denise Antolini eds., 2007).

28. Bryan Walsh & Rebecca Kaplan, *America’s Food Crisis and How To Fix It*, TIME, Aug. 31, 2009, at 30-33; see *The Economics of Ecosystems and Biodiversity*, EUROPEAN COMM’N, <http://ec.europa.eu/environment/nature/biodiversity/economics/> (last visited Mar. 27, 2011); Pavan Sukhdev, *Putting a Value on Nature Could Set Scene for True Green Economy*, GUARDIAN, Feb. 10, 2010, <http://www.guardian.co.uk/commentisfree/cif-green/2010/feb/10/pavan-sukhdev-natures-economic-model>; see also Juliette Jowit, *World’s Top Firms Cause \$2.2tn of Environmental Damage, Report Estimates*, GUARDIAN, Feb. 18, 2010, <http://www.guardian.co.uk/environment/2010/feb/18/worlds-top-firms-environmental-damage>. This is a report for the United Nations into the activities of the world’s 3000 biggest companies that estimates one-third of profits would be lost if firms were forced to pay for use, loss, and damage of the environment.

29. Efficiency achieved through product selection and other measures could reduce overall energy use from 15% to 23% by 2020, according to recently released reports by McKinsey Consulting firm and the National Research Council. Kate Galbraith, *Efficiency Drive Could Cut Energy Use 23% by 2020, Study Finds*, N.Y. TIMES, July 30, 2009, at B3. Estimated savings could be \$1.2 trillion or more. *Id.* Reduced production should equal fewer emissions, which means fewer health effects externalities and more savings. See, e.g., Press Release, EPA, EPA Updates Database on Health and Environmental Impacts of Electricity Generation/User Friendly Webtools Allow Americans To Search for Power Providers by Zip Code (Mar. 8, 2011), available at <http://Yosemite.epa.gov/opa/admpress.nsf/f0&7b5b28db5b04985257359003+533b/9cd5bc686a0adf288525784&005f7048>. You can reduce vehicle miles traveled by 25% across the nation by convincing commuters to use shared transit, walk, bike, or at least use efficient vehicles to reduce emissions. Reduced emissions mean a reduced carbon footprint and a measurable increase in both air quality and human health. The costs of repair, rebuilding, and relocation are avoided. Similarly, increasing the use of unbleached paper products, or at least decreasing the use of those that currently discharge to surface waters, should save consumers money while reducing water and solid waste pollution and decreasing property damage (for example, crops, land loss, etc.).

health costs.³⁰ The economic conditions following the economic collapse of 2008 may affect the spending patterns of some consumers, but a recent study has shown that 34% of American consumers say they are more likely to buy environmentally responsible products compared to 2008.³¹ Other findings represent the present and future consumer potential for a green marketplace. For example, 44% say their spending habits have not changed because of the economy, 35% of Americans say they have a higher interest in the environment than they did one year ago, and 70% say they are paying attention to what companies are doing with regard to the environment today.³²

III. ARE WE THERE YET?

The goal set by the CEQ has proven elusive. The costs have not been internalized by private action, litigation, fiscal and tax policy, or adequate regulation. Thus, consumers still reinforce firms that cut prices by avoiding costs of pollution. Failure to contain real externalities means that the promises of the major environmental acts of the 1970s and 1980s to meet the health, safety, and property issues identified during that era are still not fulfilled. Forty years later, we are still out of attainment in ozone and other air pollutants (particularly the newly regulated hazardous air pollutants) and have essentially ignored the impact of greenhouse gases until now. The Clean Water Act (CWA) still states that discharges to surface waters should have been eliminated by 1985,³³ but

30. The EPA has for years included mortality figures for changes in air quality rules that improve health. See, e.g., Alicia Chang, *Cleaner Air Increases Life Span, Study Finds Americans Gain an Average of 5 Months After Pollution Cut*, ASSOCIATED PRESS, Jan. 22, 2009, at A-1; C. Arden Pope, III et al., *Fine-Particulate Air Pollution and Life Expectancy in the United States*, 360 NEW ENG. J. MED. 376 (2009). The EPA issued a press release promulgating new standards stating:

For the first time in more than 35 years, EPA has proposed to strengthen the nation's nitrogen dioxide (NO₂) air quality standard that protects public health. The proposed changes reflect the latest science on the health effects of exposure to NO₂, which is formed by emissions from cars, trucks, buses, power plants, and industrial facilities and can lead to respiratory disease.

Press Release, EPA, EPA Proposes Stronger Air Quality Standards for Nitrogen Dioxide/The Agency Aims To Reduce Respiratory Illness Including Asthma (June 29, 2009), available at <http://yosemite.epa.gov/opa/admpress.nsf/6424ac1caa800aab85257359003f5337/980927903e5cd85852575e40068b819!OpenDocument>.

31. *Consumer Interest in Environmental Purchasing Not Eclipsed by Poor Economy*, CONE (Feb. 18, 2009), http://www.coneinc.com/stuff/contentmgr/files/0/56cf70324c53123abf75a14084bc0b5e/files/2009_cone_consumer_environmental_survey_release_and_fact_sheet.pdf.

32. *Id.*

33. EPA reported the numbers for (1) waters assessed and (2) percent of impairment of assessed waters. *Watershed Assessment, Tracking & Environmental Results*, EPA, http://iaspub.epa.gov/waters10/attains_nation_cy.control (last visited Jan. 21, 2011) [hereinafter *Watershed*].

the government still permits pollution. Agriculture and entire classes of economic activity are exempted from some environmental regulation altogether, even though illness caused by food sources is a major and growing human health problem.³⁴ The constituents of permitted waste streams such as compounds found in personal care products, pharmaceuticals, and plastic derivatives remain inadequately described, quantified, and evaluated. Many recent commentators have noted the overall scorecard is less than passing.³⁵ Thus, the special protections historically granted to businesses by regulators have caused the negative externalities of production to be passed on to not only their consumers, but to society and the environment as a whole. A system that allows consumers to track the potential environmental costs of their desired product, with the realization that lower prices generally means more negative externalities, should create enough incentive for such individuals to demand that these costs be internalized in the future.

There are several reasons we have failed:

(a) *The cost of pollution control is often daunting*; thus, the collective resistance from the regulated community results in efficient

Assessment]; see also Kenneth M. Murchison, *Learning from More than Five-and-a-Half Decades of Federal Water Pollution Control Legislation: Twenty Lessons for the Future*, 32 B.C. ENVTL. AFF. L. REV. 527 (2005); CHRISTY LEAVITT, U.S. PIRG EDUC. FUND, TROUBLED WATERS: AN ANALYSIS OF 2005 CLEAN WATER ACT COMPLIANCE (2007). Today, more than 40% of U.S. waterways are unsafe for these basic activities. *Watershed Assessment, supra*. The findings in the 2007 study included that nationally, 57% of all major industrial and municipal facilities discharged more pollution into U.S. waterways than their permits allowed at least once during the eighteen-month period studied. *Id.* “Major facilities exceeding their [CWA] permits, on average, exceeded their permit limits by [about] 263%, or [almost] four times the allowed amount.” LEAVITT, *supra*, at 2. “Nationally, 628 major facilities exceeded their [CWA] permit limits for at least half [9 of the 18] the monthly reporting periods between January 1, 2005 and December 31, 2005. Eighty-one . . . facilities exceeded their [CWA] permits during every monthly reporting period. . . . The [ten] U.S. states [that allowed] the highest percentage of major facilities to exceed their [CWA] permit limits at least once are Maine, Massachusetts, Rhode Island, New Hampshire, Ohio, Connecticut, New York, North Dakota, California, and West Virginia.” *Id.* at 2, 9.

“According to the EPA’s Toxic Release Inventory, polluters discharged more than 240 million pounds of toxic chemicals into our waterways in 2005 alone.” *Id.* at 3. “Approximately 39% of our rivers, 46% of our lakes, and 51% of our estuaries are . . . still too polluted for safe fishing or swimming.” *Id.*

“In March 2006, the U.S. Geological Survey (USGS) released a report describing . . . pesticides in streams and groundwater over the [ten] years spanning 1992–2001. [The] USGS found at least one pesticide in [each] of the streams studied.” *Id.*

Pollution caused nearly 25,000 beach closings in 2006, the highest level in seventeen years. *Id.* “In 2006, [thirty-two] states . . . had statewide fish consumption advisories in place because of toxic pollution. . . . At least 850 billion gallons of raw sewage are dumped into U.S. waterways every year. U.S. sewer systems are aging.” *Id.* By 2025, sewage pollution will reach the highest levels in U.S. history without significant investment in wastewater treatment infrastructure. *Id.*

34. SPETH, *supra* note 13.

35. *Id.*

lobbying, and now campaigning,³⁶ intended to reduce or at least slow the costs (“capture”).³⁷ Frontal assaults on major environmental laws (such as that in the 1994 Contract with America) consistently fail, but reducing budgets for research and enforcement has provided effective means to slow implementation of the regulations.³⁸

But the costs to receptors of the externalities are also enormous. Ironically, corporate and societal costs could both be reduced if more science were employed.³⁹ Unfortunately, some of that research will also reveal health risks and property damage that were previously poorly understood. That, of course, is precisely what must be known to price products accurately.⁴⁰ Just as clearly, most industries are overregulated in

36. *Citizens United v. Fed. Election Comm’n*, 130 S. Ct. 876 (2010).

37. Even if regulatory agencies have not really been “captured” by the regulated community, the *appearance* is that it is cheaper to lobby than to solve environmental problems. Our favorite encapsulation is from Tulane’s Professor Oliver Houck, who wrote that state implementation plans for air quality and new total maximum daily loading standards to restore surface waters have become programs that “eat up heroic amounts of money, remain information-starved, feature shameless manipulation of the data, face crippling political pressure, and produce little abatement.” Oliver Houck, *Tales from a Troubled Marriage: Science and Law in Environmental Policy*, 302 SCIENCE 1926, 1928 (2003) (arguing that scientific discovery has historically fallen victim to “scientific management”).

38. This can happen especially during a deregulation administration such as Reagan, Bush I, and Bush II. Instead of obtaining information on the effects of trace pesticides on food, for example, the Bush II Administration simply ended the testing program. Stephen J. Hedges, *Citing Cost, USDA Kills Pesticide-Testing Program*, CHI. TRIB., Sept. 28, 2008, http://articles.chicagotribune.com/2008-09-28/news/0809270504_1_pesticide-usda-agriculture-secretary-ed-schafer.

39. (1) More efficient processes or alternate energy, or more efficient pollution control technology, can also save money in long-term costs and market share, or (2) additional profit centers from byproducts can arise from those same modifications (for example, Progress Energy in the Southeast employees stack scrubbers that produce gypsum used onsite by other companies to make drywall). The first CEQ reported in 1972 that sector-by-sector, the net economic effect of pollution control was positive. COUNCIL ON ENVTL. QUALITY, *supra* note 5 (citing a report by major accounting firms that concluded, sector-by-sector, that the net effect of pollution control would be positive). Thomas Friedman argues that a sustainable, green economy based on changes in energy patterns is the most promising economic strategy. THOMAS FRIEDMAN, *THE WORLD IS FLAT: A BRIEF HISTORY OF THE TWENTY-FIRST CENTURY* 411-12 (2005) (finding that the transboundary effects of pollution result from the “Economy of Nature” where, for example, wind carries pollutants); *see also* FRIEDMAN, *supra* note 13 (discussing the global environmental crisis); SPETH, *supra* note 13.

40. Likely candidates included: (1) Substance-driven inquiries, such as persistent organophosphates (POPs), nanoparticles, and biologically active agents, and (2) disease-driven inquiries such as Alzheimer’s syndrome. Reversing the Bush II policy noted *supra* in footnote 35, the EPA has just recently began to require pesticide manufacturers to test for endocrine activity disrupters, although the potential problems have been known for years. Press Release, EPA, EPA To Begin Testing Pesticides for Endocrine Disruption (Apr. 15, 2009), *available at* <http://yosemite.epa.gov/opa/admpress.nsf/eeffe922a687433c85257359003f5340/dfd91ca5c855baf58525759a005c81b6!OpenDocument>. The EPA has issued the first list of pesticides to be screened for possibly disrupting the endocrine system. *Id.* Endocrine disruptors are chemicals that interact with and possibly disrupt the hormones produced or secreted by the human or animal endocrine system,

some way because we simply do not have the science to be precise. Thus, costs could be reduced for these firms.⁴¹

(b) *There is a lack of scientific information to determine effects and alternatives.* Science is still hampered by a chronic lack of research support, which has prolonged the exposure of the population to risks that are not well understood. Two recent articles in *Science* argue that we simply do not know enough about the chemical inventory, in large measure, because the law does not require sufficient data.⁴² Many hazards, such as lead, mercury, PCBs, asbestos, fine particulates, dioxins, radioactivity, *Cryptosporidium*, *E. coli* O157:H7, and Methicillin-resistant *Staphylococcus aureus* (MRSA), were only fully appreciated after epidemiological studies. As Professor William Rodgers⁴³ notes, the nation is using the human population at large as test subjects, which is hardly reassuring to the population.⁴⁴

which regulates growth, metabolism, and reproduction. *Id.* Biotechnology and nanotechnology are also so lightly regulated that problems could be anticipated. *Pollution Prevention and Toxics: Control of Nanoscale Materials Under the Toxic Substances Control Act*, EPA, <http://www.epa.gov/oppt/nano/> (last visited Jan. 7, 2011).

41. J. CLARENCE DAVIES & JAN MAZUREK, REGULATING POLLUTION: DOES THE U.S. SYSTEM WORK? (1997). We are convinced that the vast majority of those who resist expenditures for environmental protection do so not intentionally to damage people or the environment. Managers are under pressure primarily to reduce their own costs and can do so by avoiding expensive modifications and by externalizing costs, at least for a while. As Reich notes, this is what business entities do, and that is one reason they employ so many lobbyists to ensure that other competitors gain advantage. ROBERT B. REICH, SUPERCAPITALISM: THE TRANSFORMATION OF BUSINESS, DEMOCRACY, AND EVERYDAY LIFE (2007). Investment in science and technological assistance could reduce industry resistance if the science is managed well and made available to business under reasonable conditions. Low-cost loans to facilitate energy efficiency and pollution control stimulate the economy in sustainable ways; compliance and enforcement costs may be reduced for both firms and regulators. In any event, performance data ought to be available publicly to assist in evaluating the efficacy of particular strategies so that recipients are accountable.

42. See Erik Stokstad, *Putting Chemicals on a Path to Better Risk Assessment*, 325 SCIENCE 694 (2009); Robert F. Service, *A New Wave of Chemical Regulations Just Ahead?*, 325 SCIENCE 692 (2009); see also Cutting & Cahoon, *supra* note 4.

43. Rodgers, *supra* note 27.

44. To add to the problem, the NASA Inspector General, the Union of Concerned Scientists, and others have concluded that tampering with science has persisted in many contexts, from the discussion of global warming to listing decisions concerning endangered species. Juliet Eilperin, *Climate Findings Were Distorted, Probe Finds: Appointees in NASA Press Office Blamed*, WASH. POST, June 3, 2008, <http://www.washingtonpost.com/wp-dyn/content/article/2008/06/02/AR2008060202698.html>; Press Release, Union of Concerned Scientists, Systematic Interference with Science at Interior Department Exposed (Oct. 30, 2009), available at http://www.ucsusa.org/news/press_release/systematic-interference-with.html. Climate change is a perfect example of the manipulation of science by first denying the phenomenon against overwhelming evidence, then delaying a report that recommended a legal finding necessary to regulate greenhouse gases. *Manipulation of Global Warming Science*, UNION OF CONCERNED SCIENTISTS, http://www.ucsusa.org/scientific_integrity/abuses_of_science/manipulation-of-

(c) *There is a failure to account for externalities (such as externalities of suppliers or externalities connected with long-term health impacts).* The huge holes in scientific understanding mean that it is currently difficult to value products and services, especially because the burden is generally on the public to discover and recover those costs.⁴⁵ Sometimes that is because the effects are not discovered, or even apparent, for decades. Valuing ecosystem services is still difficult.⁴⁶

(d) *Adjustment mechanisms have failed.* Across the board, mechanisms to adjust risks have failed to internalize the costs to the polluter.⁴⁷ Ineffective enforcement, often the result of inadequate resources (usually because of a lack of political will), has not resulted in compliance with standards, let alone elimination of transboundary pollutants.⁴⁸ Enforcing existing laws fairly and evenly levels the playing field for all competitors and reduces the incentive to evade the costs. EPA Administrator Jackson signaled a major change in July 2009 to provide more effective enforcement and greater transparency.⁴⁹ Private litigation appears efficient to some.⁵⁰ But private litigation fails because (1) the high transactional costs result in fewer claims and (2) damages do

global.html (last visited Feb. 28, 2011). For an excellent discussion of the subject, see NAOMI ORESKES & ERIK M. CONWAY, *MERCHANTS OF DOUBT* (2010).

45. See Stokstad, *supra* note 42, at 694; Service, *supra* note 42.

46. There is a wide variety of literature on the subject, including works by Robert Costanza, Ralph d'Arge, Rudolf de Groot, Stephen Farberk, Monica Grasso, Bruce Hannon, Karin Limburg, Shahid Naeem, Robert V. O'Neill, Jose Paruelo, Robert G. Raskin, Paul Suttonk, and Marjan van den Belt. See, e.g., Robert Costanza & Ralph d'Arge, *The Value of the World's Ecosystem Services and Natural Capital*, 387 *NATURE* 253 (1997); James Salzman, Barton Thompson, Jr. & Gretchen Daily, *Protecting Ecosystem Services—Science, Economics, and Policy*, 20 *STAN. ENVTL. L.J.* 309 (2001).

47. Cutting & Cahoon, *supra* note 4.

48. The U.S. Government Accountability Office (GAO) issued a report that concludes the Bush II Administration inflated its enforcement record. See Report from David C. Mauer, Acting Dir. Natural Res., GAO, to John Dingell & Bart Stupak, Chairman, Comm. House of Representatives on Energy & Commerce (Sept. 18, 2008), available at <http://www.gao.gov/new.items/d081111r.pdf>. Civil penalties, for example, fell from a high of \$292 million the final year of the Clinton Administration to \$137 million last year. R. Steven Brown, *The Funding Gap: One Billion Dollars Short*, *ECOSTATES* 1, 5-7 (2004); see also CLIFFORD RECHTSCHAFFEN & DAVID L. MARKELL, *REINVENTING ENVIRONMENTAL ENFORCEMENT AND THE STATE/FEDERAL RELATIONSHIP* 217-18 (2003); Joel A. Mintz, "Treading Water": *A Preliminary Assessment of EPA Enforcement During the Bush II Administration*, 34 *ENVTL. L. REP.* 10912, 10930 (2004), available at <http://www.elr.info/articles/vol34/34.10912.pdf>. But see DAN BEESE & ROBIN K. SMITH, *CONSERVATION COUNCIL OF N.C. FOUND., SEE NO EVIL: WHY OUR ENVIRONMENTAL LAWS AREN'T BEING ENFORCED* 21 (2002) (discussing agency reluctance to use enforcement tools).

49. "We are also falling short of this Administration's expectations for the effectiveness of our clean water enforcement programs." Memorandum from Lisa P. Jackson to Cynthia Giles, *supra* note 3.

50. Huffman, *supra* note 4.

not account for all externalities, and the economic costs are consequently underestimated.

IV. STICKS AND STONES . . . SO WHY USE WORDS?

Budget increases for enforcement are a tough sell, especially in rough economic times. Furthermore, the prospects are not likely to improve with a newly elected Republican House of Representatives. Transactional costs for private efforts, for example, litigation, present an even greater barrier. Information on the effects of products and level of environmental stewardship practiced by firms would assist buyers and sellers and, as Professor Rosabeth Moss Kanter noted, costs little compared to traditional enforcement tools.⁵¹ Some commentators, such as UC Berkeley's Professor Robert Reich, are skeptical that consumers will put their dollars where their hearts might be.⁵² Even BP may weather the DEEPWATER HORIZON blowout disaster. "Here in America we tend to have pretty short memories," said Ken Carol, an oil analyst at Johnson Rice & Co. "There was a big boycott after the Exxon Valdez, and they seem to be doing just fine now."⁵³ But, because marketers appear to be taking no chances and because the information is public anyway, why not make it more readily available? We reviewed environmental compliance information sources in 2006 and concluded that compliance and enforcement information could be useful, but also found that it was not readily available at the private, NGO, state, or federal levels. Now, consumers have the basic tools. It is a full and complete dataset that is lacking.

A. *Information as a Market-Based Tool*

Information has been used for decades as a basic form of regulation, starting with the "Printers Ink" statutes that prohibit false advertising. The amount and quality of information is regulated to ensure a fair and informed market. The securities laws feature disclosure as the key element to instill confidence in the capital formation process. Those Blue Sky Laws are viewed as much less intrusive and disruptive than regulation that requires disclosure *plus* regulatory approval for the offering⁵⁴ (although the meltdown of 2008 proves that informational laws

51. Kirsner, *supra* note 2.

52. REICH, *supra* note 41; *see also* LES CARLOUGH, OREGON DEP'T OF ENVTL. QUALITY, GENERAL DETERRENCE OF ENVIRONMENTAL VIOLATION: A PEEK INTO THE MIND OF THE REGULATED PUBLIC (2004).

53. Hargreaves, *supra* note 14.

54. *See* CAL. CORP. CODE § 25110 (2006) and related sections.

alone are not enough without meaningful enforcement to prevent massive investment fraud). In the environmental realm, the environmental assessment processes (both state and federal, public and private) utilize information to shape behavior, as do statutes such as the Toxic Substances Control Act, Emergency Planning and Community Right-To-Know Act (EPCRA), Safe Drinking Water Act, and even the Beach Bill.⁵⁵ In 2004, Professor Clifford Rechtschaffen noted the utility of information as regulation.⁵⁶ There is substantial academic and trade press discussion on the subject.⁵⁷ Firms have said they believed the costs of negative publicity for violating environmental rules outweighed the cost savings from polluting.⁵⁸ The same logic should apply to environmental information on products and services;⁵⁹ early results are promising.⁶⁰ The BP DEEPWATER HORIZON disaster will provide an opportunity to view how the process drives the company, the relation between stock prices and company responses (to the criminal probe, for example), and whether there is a measurable effect on consumers.⁶¹

55. Shameek Konar & Mark A. Cohen, *Information as Regulation: The Effect of Community Right-To-Know Laws on Toxic Emissions*, 32 J. ENVTL. ECON. & MGMT. 109 (1997); see, e.g., *Date, Planning and Results: Enforcement and Compliance History Online (ECHO)*, EPA, <http://www.epa.gov/compliance/data/systems/multimedia/echo.html> (last visited Mar. 27, 2011); *Envirofacts Multisystem: Model*, EPA, <http://www.epa.gov/enviro/html/efovw.html> (last visited Mar. 27, 2011); see also Ralph Nader, *The Force of Public Awareness*, 34 PROGRESSIVE 19 (1970).

56. Clifford Rechtschaffen, *Enforcing the Clean Water Act in the Twenty-First Century: Harnessing the Power of the Public Spotlight*, 55 ALA. L. REV. 775 (2004); see also Bennear & Olmstead, *supra* note 18.

57. Cutting, Cahoon & Leggette, *supra* note 1.

58. CARLOUGH, *supra* note 52.

59. The carbon footprints and fuel economy of motor vehicles can also be viewed at the EPA Web site. It has been predicted that soon the “water footprint” will be an important measure. Josh Harkinson, *What’s Your Water Footprint?: Nice Jeans—Too Bad It Took \$2500 Worth of Water To Make Them*, MOTHER JONES, July/Aug. 2009, at 54. The EPA has just announced that another informational program, Energy Star, has gained widespread acceptance that significantly improves energy efficiency and lowers emissions: “nearly 17 percent of all single-family homes built nationally in 2008 earned EPA’s Energy Star label, up from 12 percent in 2007.” Press Release, EPA, EPA Announces Energy Star Homes Reach Nearly 17 Percent Market Share for 2008 (July 2, 2009), available at <http://Yosemite.epa.gov/admpress.nsf/6424ac1caa800aab85257359003f5337/45e75621976f6dea852575e700550e14!OpenDocument>.

60. For example, one promising result is the conversion rates for GoodGuide clicks. See Neff, *supra* note 8. Also, there has been modified firm behavior in the Sustainability Consortium. See Rockwood, *supra* note 9.

61. Hargreaves, *supra* note 14.

B. Consumers, Investors, Regulators, and Competitors All Benefit

1. Green Investing: Investors Seeking a Responsible Company That Will Avoid Huge Liabilities (from Products or Facilities) as Well as the Cost of Negative Press⁶²

The drama unfolding in the Gulf demonstrates graphically how environmental calamities can affect short-term stock prices. *CNN Money* reported on June 2, 2010 that BP's shares declined dramatically and that the effect increased on the announcement of a criminal probe.⁶³ "Since the accident happened April 20, which resulted in 11 deaths and an oil leak of up to 19,000 barrels per day, BP shares have fallen nearly 40%, wiping out nearly \$70 billion in shareholder value."⁶⁴

Ironically, analysts that were interviewed concluded that some of the stock hit was unjustified, given BP's enormous remaining capitalization. Testimony before Congress and the gaffes of the BP CEO did not help, however.⁶⁵ The effect on consumers' choice has yet to be fully measured.

At this time, however, it is difficult to deny that data on products and practices provide any potential investor with a better picture of both investment potential and potential liabilities. "Green investing" may only be a trend, but it is far more prevalent than just four years ago, especially if *avoidance of environmental liability* is included in the category. If the green collar economy or any sustainable economy is in fact our economic salvation, green investing would seem to be both a philosophical and commercially sound move.⁶⁶ Investment firms are actively seeking to provide environmental profiles to prospective clients enabling them to capitalize on the interest and technologies such as wind, solar, wave movement, and even space-based systems that need capital. This spotlight tends to encourage corporate responsibility and reduce the risk to those investing by optimizing corporate image and message while minimizing the risks of cleanup costs, personal injury, property damage, and stock value.⁶⁷ Asset management firms have begun to specialize in investing in environmental sustainability, adhering to the principle that

62. Emily T. Smith et al., *The Greening of Corporate America*, BUS. WK., Apr. 23, 1990, at 96-103. Many states, including North Carolina, have environmental stewardship programs that attract significant business interest.

63. Hargreaves, *supra* note 14.

64. *Id.*

65. Jad Mouawad & Clifford Krauss, *Another Torrent BP Works To Stem: Its C.E.O.*, N.Y. TIMES, June 4, 2010, at A1.

66. FRIEDMAN, *supra* note 13; JONES, *supra* note 13; SPETH, *supra* note 13.

67. RECHTSCHAFFEN & MARKELL, *supra* note 48, at 227. We noted this in more detail in 2006. Cutting, Cahoon & Leggette, *supra* note 1.

profitable corporate financial performance correlates with superior corporate environmental management.⁶⁸ The current market demonstrates that environmental performance and customer base are related.⁶⁹ Relatively wide-mesh screens are still used, such as whether the firm has investments in nuclear energy, tobacco, or, on the positive side, alternative energy. Information promised by the initiatives should make more focused screening practical. The question is: in these economic times, will investors again look for short-term gains to offset the recent losses, or will firms that provide green and sustainable strategies convince investors (and customers) that they offer superior long-term value?

Climate change is a good example. Some in the field of green investing argue that climate change poses a substantial risk to firm assets and customer base. These concerns are illustrated in a specific petition requesting an interpretive guidance on the subject filed in the fall of 2007 with the SEC by a coalition of major institutional investors, asset management firms, the New York Attorney General, Ceres, and Environmental Defense.⁷⁰ The SEC issued interpretive guidance in March 2010 on the obligations of public companies to disclose financial risks they face from climate change and greenhouse gas regulations.⁷¹ The point is that interest in sustainable investing is no longer driven just by morals or policy, rather, it extends to investors whose interests are primarily financial.

68. See THOMSON-REUTERS, <http://www.asset4.com/> (last visited Feb. 21, 2011).

69. One example is the Seattle-based group, Light Green Advisors. LIGHT GREEN ADVISORS, <http://lightgreen.com/index.htm> (last visited Jan. 21, 2010). Other examples include Winslow Green Growth, PAX, and the data firm KMD. A recent Winslow Green Growth proclaims: "A lot of people are starting to think green investing is a good idea. We've thought so for more than twenty-five years." *Sierra Club*, SIERRA, Nov./Dec. 2008, at 21. The entire industry is rapidly expanding, with institutional funds like TIAA-CREF now including environmental concerns in its socially responsible funds. For a good screening table, see *Socially Responsible Mutual Fund Charts: Screening & Advocacy*, SOCIAL INVESTMENT FORUM, <http://www.socialinvest.org/resources/mfpc/screening.cfm> (last visited Mar. 22, 2011). Additional resources are available online. See COUNCIL ON ECON. PRIORITIES, THE CORPORATE REPORT CARD: RATING 250 OF AMERICA'S CORPORATIONS FOR THE SOCIALLY RESPONSIBLE INVESTOR (1998); *Environment: Our Approach*, DOMINI SOC. INVESTMENTS, <http://www.domini.com/Social-Screening/Environment/index.htm> (last visited Nov. 18, 2005) [hereinafter *Environment*].

70. *Petition for Interpretive Guidance on Climate Risk Disclosure*, SEC (2007), <http://www.sec.gov/rules/petitions/2007/petn4-547.pdf>.

71. *Interpretive Release: Commission Guidance Regarding Disclosure Related to Climate Change*, SEC (2010), <http://www.sec.gov/rules/interp/2010/33-9106fr.pdf>.

2. Consumers Seeking Information on Responsible Companies To Patronize and Products/Services To Use (in Every Sector)

Consumers are taking note. It is difficult to escape the “green claims,” and nearly every supermarket features “organic” and “natural” foods and products.⁷² In fact, consumers seem prepared to pay substantially more for green products—or say they are.⁷³ Consider, for example, the markup on bottled ordinary municipal water, all the more astonishing because some soft drink manufacturers now charge nearly as much for the water as for the soft drink!⁷⁴ One interesting twist is the “Carrot Mob (carrotmob.org),” where consumers interested in greener products and services are alerted to stores that stock the products. The result in some cases has been massive buying sprees at those businesses.⁷⁵ The full impact of these positive spending events is yet to be seen, but the buzz cannot be denied.

As Professor Reich noted, however, another side of the equation is less clear. BP stations report that sales fell 10-30% at BP retailers and distributors after the oil spill in the Gulf, reaching the lowest point in June, but are now down 5% on average,⁷⁶ despite that there is a Facebook page to boycott BP and sporadic protests have arisen. Analysts suggest that it is more difficult to break the habits of convenience and price than to simply stop eating a discretionary item like particular apples.⁷⁷

Supplier behavior is one of the best indicators of the current effect of being green,⁷⁸ and there has been such an explosion in green

72. See Dave Gilson & Heather Rogers, *Green on the Outside*, MOTHER JONES, May/June 2010, at 59.

73. CONE, *supra* note 31; see also CARLOUGH, *supra* note 52.

74. Anna Lenzer, *Fiji Water: Spin the Bottle*, MOTHER JONES, Sept./Oct. 2009, <http://motherjones.com/politics/2009/09/fiji-spin-bottle>. *Mother Jones* noted this phenomenon back in 2000. Jake Ginsky, *Downstream Effects*, MOTHER JONES, May 26, 2000, <http://motherjones.com/politics/2000/05/downstream-effects>.

75. *Id.*

76. John Collins Rudolf, *BP Station Owners Face Long Road to Recovery*, N.Y. TIMES, Aug. 10, 2010, at B1 (“Tom Kloza, chief oil analyst for the Oil Price Information Service, said sales for major BP distributors and retailers tumbled 10 to 30 percent early in the crisis, depending on store locations. This has flattened out to an average decline of about 5 percent across the board—a significant drop, but hardly a fatal blow. ‘It peaked in late June, in terms of the damage and the backlash,’ Mr. Kloza said. ‘Most of the people are coming back.’”).

77. Sarah Wheaton, *Protesters Gather at BP Gas Stations*, N.Y. TIMES, June 3, 2010, at A24.

78. The importance of the TRI to the industry was expressed by a representative of the CMA (now American Chemistry Council), who called the TRI, “the worst thing that could possibly happen to the industry.” See John S. Guttman, *What Right-To-Know Means for Environmental Strategies*, 5 CORP. ENVTL. STRATEGY 82, 82-85 (1998); Peter Fairley et al., *Scorecard Hits Home*, 160 CHEM. WK. 24 (1998); Konar & Cohen, *supra* note 55; see also Nader, *supra* note 55, at 19-22.

advertising claims by sellers that the FTC has issued pages of new regulations to combat false or misleading claims.⁷⁹ The Federal Food and Drug Administration (FDA) published a notice to determine and establish ways food labeling affects consumer purchases (especially regarding health and nutrition values of food).⁸⁰ Companies such as DuPont, Patagonia, Timberland, TNT, REI, and GE have been commended for their efforts to reduce their ecological footprint⁸¹ and have created a market niche through Voluntary Environmental Programs (VEPs) (sponsored by industry, government, or third parties); the numbers have risen steadily since the 1990s.⁸² These programs can be the result of company initiative or the result of NGO informational efforts. Environmental groups have selectively formed partnerships with the regulated community, as in the case of McDonald's and the rainforest. In April 2006, Greenpeace accused McDonald's of supporting the large soy monocultures that are developed from newly deforested areas in the Amazon.⁸³ McDonald's responded to this information campaign with a statement of dedication to the protection of the Amazon, vowing to stop using soy from these farms in its chicken feed and honoring a two-year

79. Cutting, Cahoon & Leggette, *supra* note 1. The newest proposed guides address LCA as a method to substantiate environmental claims, and the use of ecolabels and certification. See *Green Guides Review*, FTC, http://ftc.gov/bcp/edu/microsites/energy/about_guides.shtml (last visited Mar. 22, 2011); *Complying with the Environmental Marketing Guides*, BUREAU OF CONSUMER PROT., <http://business.ftc.gov/documents/bus42-complying-environmental-marketing-guides> (last visited Mar. 22, 2011). The FTC materials do not provide guidance on LCA because the Commission lacked sufficient information to base any such guidance on. In the proposed guides, the Commission chose not to provide guidance on using LCA in marketing or substantiating environmental claims because a lack of information exists on how consumers interpret LCA and also because of the complexities involved with LCA claims. The guides also declined to advise using LCA as a methodology to substantiate claims because there is no basis to use LCA over any other method. While LCA is a developing field, the comments received by the FTC show the importance of using LCA to evaluate a product's cradle to grave impacts, and the ability of LCA to transmit quantitative and specific impact information to consumers. See *Facts for Consumers: Sorting Out 'Green' Advertising Claims*, FTC (Apr. 24, 1999), <http://www.ftc.gov/bcp/edu/pubs/consumer/general/gen02.shtml> (discussing 15 C.F.R. §§ 260.1-.8 (2010)).

The FDA has published a notice to determine and establish ways food labeling affects consumer purchases (especially regarding health and nutrition values of food). *Front-of-Pack and Shelf Tag Nutrition Symbols*, 75 Fed. Reg. 22,602 (Apr. 29, 2010).

80. *Front-of-Pack and Shelf Tag Nutrition Symbols*, 75 Fed. Reg. 22, 602.

81. *A Change in Climate, The Greening of Corporate Social Responsibility*, ECONOMIST, Jan. 19, 2008, at 8-11.

82. Janice Mazurek, *Government-Sponsored Voluntary Programs for Firms: An Initial Survey*, in *NEW TOOLS FOR ENVIRONMENTAL PROTECTION* 219-34 (Thomas Dietz & Paul C. Stern eds., 2002).

83. *McAmazon*, GREENPEACE INT'L (Apr. 6, 2006), <http://www.greenpeace.org/international/news/mcamazon-060406>.

moratorium on soy sourcing from the vulnerable areas.⁸⁴ This successful odd couple effectively encouraged Cargill, the multinational enterprise that supplied McDonald's with the soy feed, to support the moratorium and to encourage additional support from other soy traders.⁸⁵

Walmart has just increased efforts to reduce greenhouse gases voluntarily in an initiative announced with the Environmental Defense Fund (EDF) to secure reductions from its operations and those of its 100,000 or so suppliers, an illustration of preemptive cooperation.⁸⁶ The backstory is that just after the announcement was made, the EDF clarified its position in its blogs and listservs by pointing out that (1) the EDF takes no money from corporations that are the beneficiaries of its environmental advocacy, (2) the EDF approached Walmart, and (3) “[b]y working with leading corporations, we have demonstrated the business benefits of environmental innovation and created a race to the top of the green ladder. In every partnership, we aim not just to improve one company's performance, but to spur environmental gains across an entire economic sector.”⁸⁷ That said, the EDF concluded:

The Walmart announcement underscores this point. If the world's largest retailer can commit to reducing its global warming pollution, it not only cleans up a very large supply chain, but it moves the market and hopefully changes the entire industry. Not only that, but in this case, it supports our overall goal to address climate change—that America can and must move aggressively to cap and reduce our global warming pollution. We can now, for instance, go to undecided Senators with the message that if Walmart can act, we can all act to seriously address the climate crisis. For all these reasons, we think Walmart's commitment to cutting global warming pollution is a very important and worthwhile step. And we will continue to work with them and many other corporate partners to achieve transformational environmental change.⁸⁸

Walmart may be simply deflecting criticism from cases such as the recent \$27 million settlement the company paid as part of an action initiated by California District Attorneys and Attorney General for alleging the dumping of hazardous waste at every Walmart, Sam's Club,

84. *McDonald's Pledges To Help Protect the Amazon*, GREENPEACE INT'L (July 25, 2006), http://www.greenpeace.org/usa/en/news_and_blogs/news/mcvictory/.

85. Marc Kaufman, *New Allies on the Amazon*, WASH. POST., Apr. 24, 2007, at D01.

86. Dominique Browning, *Walmart Amps Up the Green Light*, ENVTL. DEFENSE FUND (Mar. 8, 2010), <http://blogs.edf.org/personalnature/2010/03/08/walmart-amps-up-the-green-light/>.

87. Letter from the Env'tl. Defense Fund to Env'tl. Defense Fund Friends (Mar. 2010), available at http://support.edf.org/site/MessageViewer?em_id=8681.0&dlv_id=15321.

88. *Id.*

and all other company sites in the state.⁸⁹ The settlement is one of the largest in enforcement history.⁹⁰ Or, it could mean that Walmart would like to minimize future surprises by proactively requiring product and process data, the effects of which might legally be charged to the company in products litigation.

According to ecolabelindex.com, there are over 80 certifications and seals in use in the United States and 350 in use worldwide.⁹¹ Certification guidelines have also been developed by groups such as the Forest Stewardship Council (FSC) Green Label and the Marine Stewardship Council (MSC) Green Label.⁹² It has taken some time for these labels to gain recognition, but more firms are now involved and more consumers are becoming aware of what these labels mean.⁹³ Another international voluntary program that may gain some traction is the International Standards Organization (ISO) 14001 certification.⁹⁴ Keyed to environmental management practices, ISO 14001 has the potential to become what ISO 9000 has become for labor practices.

3. Regulatory Framework Enhanced

From consumer protection to health and safety agencies such as first responders, more data will be available. First responder, regulatory, and law enforcement agencies could use better information on

89. Press Release, Office of the District Attorney, City of San Diego, Walmart To Pay Record \$27 Million Settlement for Environmental Violations (May 3, 2010), available at <http://www.sdca.org/files/pr100503-walmart-settlement.pdf>.

90. *Id.*

91. *Facts for Consumers: Sorting Out 'Green' Advertising Claims*, supra note 79 (addressing the environmental certifications and seals ecological labeling because of their widespread use and potential for consumer confusion). The Commission has no present intent to establish a certification process or label because the FTC views its main mission as ensuring that claims are not misleading or false. The guides also do not require certifications or labels to make standards or certification criteria public. See *id.*; *Green Guides Review*, supra note 79; *Complying with the Environmental Marketing Guides*, supra note 79. Some certification programs are defensive, again illustrating the power of negative environmental perception. Organic growers and producers have just formed an organization to certify products to be free from genetically modified ingredients. William Newman, 'Non-GMO' Seal Identifies Food Mostly Biotech-Free, N.Y. TIMES, Aug. 29, 2009, at B1.

92. Newman, supra note 91.

93. *On the Mark*, ECONOMIST, Jan. 28, 2008, http://www.economist.com/world/international/displaystory.cfm?story_id=10563590&CFID=8722366&CFTOKEN=5e50955afd039304-1EFA073F-B27C-BB00-012B41296A1246FB.

94. *Climate Change*, INT'L ORG. FOR STANDARDIZATION, http://www.iso.org/iso/hot_topics/hot_topics_climate_change.htm (last visited Mar. 27, 2011).

generators, such as out-of-jurisdiction data on compliance, to establish patterns for permits and enforcement.⁹⁵

4. Competitors That Seek a Level Playing Field in Their Industry⁹⁶

Firms generally want the public to know if their prices are higher because they manage and disclose their environmental costs. An electronic forum is a low-cost marketing tool for firms that should reduce the cost of entry for innovators. Good environmental stewardship can also pay off in contracts with major suppliers, such as those of the Sustainability Consortium.

V. RECENT INITIATIVES HERALD THE TWENTY-FIRST CENTURY MARKETPLACE: GOODGUIDE EMERGES, THEN EPA AND WALMART WEIGH IN

One technique that can signal company attitude, as well as provide information directly to consumers and investors, is “ecological labeling.” Information, such as the carbon footprint of the product, whether it is a recycled product, precise ingredients, or whether it is organic or sustainable in some other way, appears right on the label. Given that radio frequency identification (RFID) technology is already here, why not encode current information on the company and product into the chip so it can be read by the consumer? The European Economic Union (EEU) has led the way in these voluntary, informational labeling programs, including the “ecological labeling” concept since the early 1990s.⁹⁷ For that matter, the EEU has, for years, published a great deal of data on polluters in Europe.⁹⁸

95. Interviews with regulators (2008-2011) (on file with the authors). State regulators still report that it is difficult to obtain applicant and permittee information because there is not yet a fully functional information network and the usual tricks of interlocking and shell business forms still work well. We hear this from regulators in numerous states, large and small, when interviewed for this Article (all spoke on condition of anonymity). Applicants that have dismal records in other jurisdictions escape notice because of change in name and operate in violation in the new jurisdiction. But the lack of information on principal, for example, hampers investigations and prosecution even after discovery. Regulators are getting better tools, but would welcome data disclosure for these reasons and also for the deterrent effect of public disclosure.

96. See Cutting & Cahoon, *supra* note 4, at 113.

97. *Industry and Technology: EU Ecolabel*, EUR. COMM’N, http://ec.europa.eu/environment/ecolabel/index_en.htm (last visited Mar. 27, 2011).

98. See *EU Environment-Related Indicators*, EUR. COMM’N, http://ec.europa.eu/environment/indicators/index_en.htm (last visited Mar. 1, 2011).

A. *GoodGuide and Other Nonprofits Emerge*

GoodGuide appeared in 2008 and has already attracted⁹⁹ widespread attention and media awards¹⁰⁰ by providing information on product footprints as well as firm behavior related to health, environment, and social issues:

GoodGuide aggregates and analyzes data on both product and company performance. We employ a range of scientific methods—health hazard assessment, environmental impact assessment, and social impact assessment—to identify major impacts to human health, the environment, and society. Each of these categories is then further analyzed within specific issue areas, such as climate change policies, labor concerns, and product toxicity. Currently, GoodGuide’s database has over 600 base criteria by which we evaluate products and companies.¹⁰¹

GoodGuide provides a user-friendly Web site and a slick iPhone application that can recognize bar codes then display product information on the spot. It is exceedingly useful for information on labels and comparison on many levels with other similar products. There is a simplified 1-10 scale for the overall GoodGuide rating and subcategories of Health, Environment, and Society. Drilling through another layer yields more detail on the results in the category. For example, a search under “Snack Foods” yields: Kettles, Baked Lightly Salted Potato chips (highly rated overall at 8.0) compared with snack food, “Utz, Puff’n Corn, Hullless, Cheese Flavored” (rated only 4.0 overall).¹⁰² The question is if this is an overly simplified measuring technique.

GoodGuide allows access by product category and name of product. Information on particular firms may be found through the Products category or the Issues category. A variety of information is available, from label content to compliance and enforcement information, as well as political contributions. Products can also be searched by material (for example, bamboo, hemp, etc.), although

99. Michael Mullaley, *Is It Green? Scan Its Barcode To Find Out*, SIERRA CLUB (Nov. 20, 2009), <http://sierraclub.typepad.com/greenlife/2009/11/barcode-scanning-iphone-app-makes-shopping-quick-easy-and-green.html> (“Do you have trouble trying to find the most eco-friendly product in the store? Is it difficult to tell whether companies are greenwashing? Now GoodGuide has put responsible shopping just a few clicks away. The first iPhone application that scans bar codes to provide ratings on healthy, green, and socially responsible products is here.”).

100. Walsh, *supra* note 19; Reynolds, *supra* note 19.

101. *Issues Affecting GoodGuide Ratings*, GOODGUIDE, http://www.goodguide.com/browse_issues (last visited Feb. 21, 2011).

102. *Chips & Pretzel Ratings*, GOODGUIDE, <http://www.goodguide.com/browse/255774-chips-pretzels/top#> (last visited Feb. 21, 2011).

material safety data sheet (MSDS) information does not appear to be available.

GoodGuide has added a social media presence with Facebook, Twitter, and others that could multiply rapidly, including a feedback system as simple as buttons for “Recommend” and “Avoid.” Some newer features include: (1) corporate family (accessed through the “made by” button);¹⁰³ (2) reader-specific preferences for social and environmental filters; (3) constant surveys of users, concerning (a) the site and (b) product preferences; (4) user recommendations; (5) most common brands; and (6) data sources that include KWD, Assets Inc., and Environmental Working Group (EWG).¹⁰⁴

As with any new site, there can be problems with the information, and the developers encourage feedback to improve accuracy and efficacy. In this sense, it is like a university site, although the organization has plans to consult with businesses that are unhappy with their ratings and other commercial applications abound.

For example, our researchers have found it easy to locate products, but searches for brand or company were more difficult, though improved from the original version. Many of the issues buttons are not yet operable. GoodGuide apparently does not publish an action plan or timetable to add more firms and products. Given that the data gathering process involves both voluntary information from firms and collection of publicly available data, it could take some time to include the entire market. No doubt GoodGuide would like to compel information from every market participant, but it does not yet have the market power of Walmart or the regulatory force of EPA, the FTC, or the SEC. It may eventually be advantageous for all firms to participate, but voluntary compliance is often both slow and incomplete. Also missing is price information keyed to the consumer’s local market (by zip code), although the site does provide pricing for online retailers so the consumer can make an on-the-spot comparison between storefront and online and how much they will pay for environmentally-friendly products. Zip code pricing could presumably be linked later along the lines of the buying guide (Amazon) sites or the Social Security Medicare Prescription Web site.

There are also other NGOs that have long played key roles. Environmental Defense/Green Media Toolshed pioneered efforts to make federal toxic release inventory data consumer-friendly by assembling the

103. Neff, *supra* note 8.

104. *See generally* GOODGUIDE, *supra* note 19.

data with superior mapping software, particularly helpful for residents concerned about health issues and real estate inquiries (for example, Scorecard.org). Product and producer information is not readily available, although behavior can be pieced together via site-by-site analysis (that most consumers are not likely to do). The EWG's Web site provides issue-related information for consumers and investors.¹⁰⁵ The product and company data are displayed in a magazine-type format, rather than the GoodGuide outline or menu format, that focuses on products and companies. It is highly informational for the issues that are addressed, and the EWG has its own research staff to test products. The EWG also uses investigative journalism to round out the story and is already a contributor of data to GoodGuide. The EWG also provides action options to influence policy, and for some categories there are product comparisons.¹⁰⁶ For example, a recent piece on sunscreens that concluded very few are toxic-free ought to be required reading.¹⁰⁷ Consumer Reports online services has, for many years, assembled consumer product testing data from its issues in accessible Web pages for a fee. For independent product test results, this is an invaluable source but there is no real way to track company behavior or product LCA.

B. Walmart Ups the Ante in Private Sector Efforts

1. When Walmart Speaks, Suppliers Listen

Walmart has, to date, provided only the rough outline of the environmental footprint of its products and suppliers. The Walmart program is potentially a game changer, because it will command important environmental data from some 100,000 global suppliers. Walmart describes the project, which is to be introduced in three phases over several years:

Step 1: Supplier Sustainability Assessment . . . [based] on four areas: energy and climate; material efficiency; natural resources; and people and community. . . .

Step 2: Lifecycle Analysis Database . . . a global database of information on products' lifecycles—from raw materials to disposal. . . .

Step 3: A Simple Tool for Customers . . . a simple, convenient, easy to understand manner so they can make choices and consume in a more

105. ENVTL. WORKING GROUP, <http://ewg.org> (last visited Jan. 20, 2011).

106. *Kid-Safe Chemicals*, ENVTL. WORKING GROUP, http://www.ewg.org/kid-safe-chemicals-act-blog/sign-petition-b/?inlist=Y&utm_source=kscapet3resendnosign&utm_medium=email&utm_content=first-link&utm_campaign=kscapet (last visited Mar. 1, 2011).

107. Press Release, Env'tl. Working Grp., Report: Only 8 Percent of Sunscreens Recommended (May 24, 2010), available at <http://www.ewg.org/2010sunscreens/press>.

sustainable way. This will provide customers with greater transparency into the quality and history of products than they have today. . . . We are excited about this initiative and believe that if we work together, we can create a new retail standard for the 21st century.¹⁰⁸

Marc Gunther, writing for Greenbiz.com noted:

Matt Kistler, Wal-Mart's sustainability leader, . . . says the objectives of the index are to:

- Facilitate selection of an exciting basket of preferred products
- Drive innovation and continuous improvement
- Continuously track Walmart's supply chain performance
- Empower Walmart's buyers/suppliers and make them accountable.¹⁰⁹

Gunther also observes that Walmart itself wants the index to become universal and maintained by an independent entity:

Wal-Mart doesn't ultimately want to own the sustainability index, which is why it is forming the consortium. "They are willing to get the ball rolling, but they want to hand it off to someone else," an insider says. Most likely, the index will eventually be run by a nonprofit group financed by retailers and suppliers, much like the Marine Stewardship Council, which certifies the sustainability of fisheries, and the Forest Stewardship Council, which does the same for wood products.¹¹⁰

Kate Rockwood, writing for Fast Company, noted:

Activity and skepticism have been the first by-products of Walmart's audacious plan to create a label that would tell a shopper the environmental toll of every product it sells, from the greenhouse gas emissions of an Xbox to the water used to produce your Sunday bacon.

The first part of Walmart's three-phase plan—a 15-question survey asking its top suppliers to pony up info on the current state of their sustainability efforts—was completed in October. Walmart began meeting with vendors, industry by industry, to discuss the next steps last month, and

108. *Sustainability Index*, WALMART, <http://walmartstores.com/Sustainability/9292.aspx> (last visited Mar. 27, 2011); THE SUSTAINABILITY CONSORTIUM, <http://www.sustainabilityconsortium.org> (last visited Mar. 1, 2011).

109. Marc Gunther, *Inside Walmart's Sustainability Index*, GREENBIZ.COM (July 14, 2009), <http://www.greenbiz.com/blog/2009/07/14/inside-wal-marts-sustainability-index>; see also Bill Baue, *The Latest Corporate Social Responsibility News: Walmart and Sustainability: Oxymoron or Salvation—or Both?*, CSRWIRE (July 21, 2009), http://www.csrwire.com/press/press_release/27370-The-Latest-Corporate-Social-Responsibility-News-Walmart-and-Sustainability-Oxymoron-or-Salvation-or-Both.

110. Marc Gunther, *Walmart To Become Green Umpire*, BIG MONEY (July 13, 2009), <http://www.thebigmoney.com/articles/judgments/2009/07/13/Wal-mart-become-green-umpire?page=0,2>.

scientists are now starting trials to get a handle on what this labeling system might look like.¹¹¹

Environmental organizations offer qualified support: “Can you have trackable, traceable supply chains that give you full visibility?” asks Andrew Hutson of the EDF, who works with Walmart.¹¹² “It is extraordinarily difficult at this moment. But it can be done.”¹¹³ Some commentators have noted that Walmart itself could be forced to change:

[Walmart] has done consistently well by selling at low prices. Historically, however, cheap goods have often reflected careless and unsustainable environmental practices—clear-cutting entire forests, for instance, which is cheaper than selective logging. If [Walmart] successfully combines cut-rate prices with high-class environmental stewardship, other businesses should follow.¹¹⁴

However, there are some questions:

- Product Pricing: Walmart could include pricing on its Web pages and Walmart’s buyers will presumably pay attention if consumers shift patterns. In fact, Earthster, one of Walmart’s partners, forecasts that firms may even be able to short-circuit the marketing process by telegraphing desires and needs through an interactive Web site, rather than just through actual purchases.¹¹⁵
- Time: Consumer labels are not likely to appear for years.¹¹⁶ Until consumers have the information in useable form, the market cannot properly function. Is the announcement meant to capitalize on today’s buzz on being green, while allowing plenty of wiggle room left by the long lead time so that corporate interests may scuttle or dilute the plan later? Certainly it would not be the first time that industry efforts delayed governmental response (for example, greenhouse gas regulation, CAFE fuel standards), especially in an era that featured both deregulation and self-regulation as its centerpieces. We think that with Walmart’s vaunted negotiating power, it could actually happen sooner if Walmart wanted it to.

111. Rockwood, *supra* note 9.

112. Gunther, *supra* note 109.

113. *Id.*

114. *Can Wal-Mart Be Sustainable?*, N.Y. TIMES, Aug. 7, 2009, at A18.

115. *About*, EARTHSTER PROJECT, <http://www.earthster.org/content/about-0> (last visited Mar. 1, 2011).

116. *Sustainability Index*, *supra* note 108 (“How that information is delivered to consumers is still undetermined.”); *see also* Joel Makower, *Walmart and the Sustainability Index: One Year Later*, GREENBIZ.COM (July 16, 2001), <http://www.greenbiz.com/blog/2010/07/19/walmart-and-sustainability-index-one-year-later>.

- The Myth of Consumption: Commentators have already argued that it is a flawed strategy to encourage *any* mass consumption on the scale of a Walmart. The counter-argument is that if consumers are spending at that pace anyway, how can it be harmful to channel some spending toward renewable or sustainable products and to firms with good stewardship records?
- The Ultimate Product has yet to Emerge. A consumer site is envisioned, but will it be useful and meaningful, or merely superficial fluff? The labels or ratings themselves must contain information that is both understandable and meaningful to an average consumer. At least one commentator has already found that the Walmart suppliers' questionnaire lacked the depth of the criteria measured by Nike, which seems to be a correct conclusion.¹¹⁷ Walmart has assembled an impressive consortium of individuals and entities to assist, including Earthster.com (a project designed to assist firms to compile environmental data) and the Sustainability Consortium, with big-league participants such as Procter & Gamble (PG), General Mills (GIS), Tyson (TSN), and Unilever (UN), among others. Competing big box stores, including Costco (COST), Target (TGT), and Kroger (KR) have been invited. Patagonia's Yvonne Chouinard and numerous academic interests (notably from the University of Arkansas and the University of Arizona) have also been involved.¹¹⁸

2. But Can We Depend on Corporate Social Responsibility (CSR) Anyway?

The idea of CSR was mocked by economists such as Milton Friedman, who noted that business is by definition devoid of social conscience and that businessmen have a responsibility only to the financial gain of employees and shareholders.¹¹⁹ Robert Reich agrees

117. Joel Makower, *Walmart's Sustainability Index: The Hype and the Reality*, GREENBIZ (July 16, 2009), <http://www.greenbiz.com/blog/2009/07/16/walmart-sustainability-index>; *As with Everything Nike, "Good" Is Not Good Enough*, NIKEBIZ.COM, http://www.nikebiz.com/responsibility/considered_design/considered_index.html (last visited Jan. 20, 2011). Nike is a prime example of a company that modified behavior because of adverse publicity surrounding labor and environmental practices.

118. There is active ongoing scholarly dialog on ecological labels and measures like lifecycle analysis. See, e.g., J.S. Evans et al., *Introduction to Special Issue on Life Cycle Assessment and Risk Analysis*, 22 J. INDUS. ECOLOGY 819 (2002); Jo Anne Shatkin, *Informing Environmental Decision Making by Combining Life Cycle Assessment and Risk Analysis*, 12 J. INDUS. ECOLOGY 278, 278-81 (2008).

119. Milton Friedman, *A Friedman Doctrine—The Social Responsibility of Business Is To Increase Its Profits*, N.Y. TIMES, Sept. 13, 1970 (Magazine), at 32–33, 122–26. There is a

that while voluntary measures are laudable, they must ultimately be designed to improve the bottom line.¹²⁰ Reich thus concludes that government intervention is necessary to shape behavior to socially desirable goals, such as public health, product safety, competitive business practices, and truthful advertising.¹²¹ Are firm CSR efforts real? More appropriately, does that matter? The phenomenon clearly proves that firms believe that appearing green is a valuable asset, so they modify at least some behavior. Cynics contend that (1) business actually intends primarily to neutralize opposition when entering cooperative social ventures,¹²² and (2) much of the “green” talk and advertising is really “greenwashing,”¹²³ and the information provided is not any more

fundamental problem with the idea that a corporation would express a moral code, and that is because, as Friedman so aptly puts it, a corporation is an “artificial person” and artificial personhood must be amoral, which Merriam-Webster defines as “lying outside the sphere to which moral judgments apply.” *Amoral D*, MERRIAM-WEBSTER, <http://www.merriam-webster.com/dictionary/amoral> (last visited Mar. 15, 2011). We wonder how this squares with the First Amendment rights accorded business entities by the United States Supreme Court in *Citizens United v. Federal Election Commission*, 130 S. Ct. 876 (2010).

120. REICH, *supra* note 42.

121. Friedman generally argued the opposite. We compare the economy to an NFL, NBA, or NHL game. Everyone would like to watch a free-for-all without referees, but no serious player would risk it, and eventually, only the toughest would be playing nearly unrecognizable games.

122. Philip Mattera, *Is Big Business Buying Out the Environmental Movement?*, CORPWATCH (June 5, 2007), <http://www.corpwatch.org/article.php?id=14504>.

123. An interesting historical footnote: Greenwashing was originally called “ecopornography” in the 1970s. Companies began using marketing schemes in the 1960s, working colorful, earth-friendly words such as “clean” and “safe” into their advertisements. Then in 1990, *Business Week* published an article on the potential benefits of corporate greening that stimulated, or reflected, firm interest. Smith et al., *supra* note 62.

One example of alleged modern greenwashing includes BP, which is one of the world’s largest corporations and oil companies. The entire landscape will change again in the wake of the massive BP offshore oil blowout in the Gulf of Mexico.

Though BP was the first oil company to acknowledge a link between energy use and global warming, the company lost its green credibility when it abruptly withdrew from the Global Climate Coalition, Adweek writes. So in 2000, after a 1998-merger with Amoco, BPAmoco invested heavily in its “Beyond Petroleum” campaign to reintroduce itself as a socially conscious company. That campaign, notes this article, was quite polarizing.

But it also seemed to work. Sales from 2004 to 2005 rose from \$192 billion to \$240 billion then to \$266 billion in 2006. Moreover, a Landor Associates survey of consumers found that 21% of them thought BP was the greenest of oil companies, followed by Shell at 15% and Chevron at 13%. The campaign also won a 2007 gold Effie from the American Marketing Association. BP said that from 2000-2007, its brand awareness went from 4 percent to 67 percent.

‘Beyond Petroleum’ Pays Off for BP, ENVTL. LEADER (Jan. 15, 2008), <http://www.environmentalleader.com/2008/01/15/beyond-petroleum-pays-off-for-bp/>; see also *UK Consumers Ripe for Green Business*, LANDOR (May 1, 2007), <http://www.landor.com/?do=news.pressrelease&rs&storgid=508>. BP has also publicized its purchase of Solarex, the largest solar energy

objective or reliable than advertising in general,¹²⁴ which by definition is not objective.

There is also recent evidence that government involvement, in fact, may be critical in establishing program credibility, financial stability, and long-term viability. In a comparison of Australian, European, and Canadian labeling systems (both government backed and private), government involvement in labels improved uptake and consumer recognition and leveled the playing field for producers.¹²⁵

Still, cooperative programs seem to be preferable. Multistakeholder involvement was also found to be essential to label uptake, indicating the need of involvement from the business community to ensure that consumers have easy access to the most accurate and understandable information.

C. EPA Aims To Provide More Useful Public Information That Will Also Make EPA Operations More Transparent

Walmart has the market power to compel some substantial changes over time, starting with its 100,000 suppliers. That will tend to level the global playing field because even offshore facilities could be included

corporation. “The success of the ongoing campaign has compelled *Adweek* to ask if advertising, as much as action, can change public perception.” *‘Beyond Petroleum’ Pays Off for BP, supra*.

But is the company greener? The Gulf oil spill made headlines in the wrong way, tarnishing whatever green image remained after the Climate Coalition debacle. Like the EXXON VALDEZ oil spill, the BP spill will be in the headlines for years as the damages and costs unfold, and rebranding might be in order. Ironically, it does not appear that the EXXON VALDEZ cost Exxon Mobil much in earnings. REICH, *supra* note 41. On top of the spill, BP previously received the largest criminal fine for air pollution, along with approximately \$168 million in other fines and penalties for Occupational Safety and Health Act violations. Press Release, EPA, BP Products to Pay Nearly \$180 Million to Settle Clean Air Violations at Texas City Refinery (Feb. 19, 2009), <http://Yosemite.epa.gov/opa/admpress.nsf/0/70AFE4F098BEB51F85257562006C2581>. Critics claim BP has simply co-opted green language to distract the public, but even they admit to the ad campaign’s effectiveness: “‘BP is running a greenwashing campaign,’ said John Stauber, founder of the *Center for Media and Democracy*, ‘and from a sales and marketing perspective, it is brilliant. They’ve positioned themselves where everyone wants to be today, especially oil companies.’” *‘Beyond Petroleum’ Pays Off for BP, supra*. BP withdrew from the Climate Coalition, and in fact, BP has now apparently abandoned the term “Beyond Petroleum” amid signs that its overall commitment was weakening even before the DEEPWATER HORIZON explosion. BP has cut its alternative energy budget by as much as 64%, its unit head has resigned, and the company stands to profit from large inventories of natural gas (lower carbon limits make it more valuable) and the controversial Canadian “tar sands.” Josh Harkinson, *BP = ‘Back to Petroleum?’*, MOTHER JONES, June 30, 2009, <http://www.motherjones.com/blue-marble/2009/06/bp-back-petroleum>. Now where does the ad campaign go? Stay tuned.

124. See *GreenGuides Review, supra* note 79; *Complying with the Environmental Marketing Guides, supra* note 79.

125. See Banerjee & Solomon, *supra* note 24; Horne, *supra* note 24; Marla Sanchez et al., *Savings Estimates for the United States Environmental Protection Agency’s Energy Star Voluntary Labeling Program*, 36 ENERGY POL’Y 2098 (2008).

via life cycle analysis. The EPA and other federal agencies have the legal authority to require and post information for the *entire* business community and could do so in more depth, more expeditiously, and completely.¹²⁶ Among other things, the EPA would not be subject to the claim that an industry-sponsored index often sets the bar for information lower than consumers or investors might actually want and need. An even greater circle of interested firms could be expected in a national partnership to create a fair data port for all participants. To increase credibility, the raw data would still be available to firms and NGOs. Most importantly, a single national portal would be available to assist consumers and investors, rather than many different sources.

Current EPA data are of limited utility for products and services. The EPA focuses on enforcement and compliance data, as well as toxic releases, hazardous materials sites, and permits. There are useful geographic features when consumers are considering real estate purchases or health issues that exist in an area. However, most consumers would really like to evaluate consumer products and services (as Walmart notes!).¹²⁷ It would be straightforward to use barcode databases and to link the product picture, description, and firm, as can be done with Apple iPhone applications now.¹²⁸ The Obama Administration EPA has certainly provided better access to raw data.¹²⁹ There is also a

126. The Consumer Product Safety Commission, the National Highway Transportation Safety Administration, the FTC, the SEC, and the various state business registration functions could also supply extensive information and even reduce the ultimate workload by offering direct upload of required data. The National Association of Insurance Commissioners also issued a requirement for disclosure of corporate actions to address climate change. But, in a surprise move, the commissioners voted to make the survey voluntary, suggesting that if consumers are interested, they should call the companies individually—precisely the problem now. Generators will not comply voluntarily and millions of consumers will not call each company they are thinking about patronizing!

Scott Richardson, the insurance commissioner of South Carolina, who offered a motion at the final meeting of a five-day conference for regulators that led to the change [says,] “[i]t was becoming a litmus test of whether you’re a green state or not a green state, or a green commissioner or not a green commissioner To me, that was very dangerous. If somebody wants to know whether an individual insurance company has environmental issues that they’re doing, then why don’t you call them up and ask them? You don’t need this survey to do it.”

Evan Lehman, *Sudden Revolt by Insurance Regulators Scales Back Climate Rule on Industry*, N.Y. TIMES, Mar. 10, 2010, <http://www.nytimes.com/cwire/2010/03/30/climatewire-sudden-revolt-by-insurance-regulators-scales-8154.html>.

127. WALMART, *supra* note 108.

128. See, e.g., *Fast Price Check*, APPLE.COM, <http://www.apple.com/webapps/searchtools/fastpricecheck.html> (last visited May 10, 2010).

129. See, e.g., *Envirofacts Multisystem: Model*, *supra* note 55; see also *Envirofacts*, EPA, <http://www.epa.gov/enviro/> (last visited Jan. 20, 2011). We developed a demonstration portal

short section entitled “Protecting the Environment: While Shopping” keyed in part to the Design for the Environment Program.¹³⁰ Beyond that, the EPA counsels consumers to file a Freedom of Information Act (FOIA) form.¹³¹

EPA Administrator Jackson signaled a sea change in EPA policy on transparency, as well as information as regulation, in a memo issued July 2, 2009:

The first step is to improve transparency. Americans have a right to know how their government is doing in enforcing laws to protect the nation’s water, and government has an obligation to clearly inform the public about water quality and our actions to protect it. An informed public is our best ally in pressing for better compliance. Therefore I am directing you to improve and enhance information that is available through the EPA web site on compliance with the Clean Water Act and the level of enforcement activity in each state, showing connections where possible to local water quality. This information should be user-friendly and provide a way to look at performance of individual businesses as well as state and national performance. State-by-state performance reports that have already been released under the Freedom of Information Act should also be posted to the web, together with tools to analyze the data EPA prepared for those reports. Second, we need to raise the bar for clean water enforcement performance. . . .¹³² Third, we need to move EPA’s information technology

designed to do some of what we suggested as a result of that data and GoodGuide does make use of enforcement data.

130. *Protect the Environment: While Shopping*, EPA, <http://www.epa.gov/epahome/shopping.htm> (last visited Mar. 27, 2011). The EPA has some resources currently available to help consumers make buying decisions with environmental impacts in mind. They are not easily accessible to consumers and do not cover the wide range of consumer products sites that GoodGuide encompasses, or the potential products the Sustainability Consortium could impact. The EPA has its consumer page buried deep within its Web site: <http://www.epa.gov/epahome/shopping.htm>. Here, the EPA provides tools for consumers to observe the environmental impacts of vehicles, cleaners/detergents, and electronics. The EPA has provided funding for third-party tools like EPEAT that take some type of lifecycle analysis into account when labeling electronics and enabling consumers to easily judge the environmental impacts of popular desktops, laptops, and netbooks. EPEAT, <http://www.epeat.net/> (last visited Jan. 21, 2011). However, major PC manufacturers such as Dell, HP, and Toshiba appear to have dropped the EPEAT program to get behind the Sustainability Consortium.

131. The data now available postdate our original FOIA in 2005. *See Data, Planning and Results*, EPA, <http://www.epa.gov/compliance/data/systems/index.html> (last visited Mar. 1, 2011). Visit, for example, the *Data Finder*, EPA, <http://www.epa.gov/data/> (last visited Mar. 22, 2011).

132.

We must make sure that strong and effective action is taken when serious violations of law threaten water quality, and we must boost EPA’s enforcement presence against serious violators, recognizing that authorized states have the first opportunity to act. EPA must also improve its own enforcement performance in states where EPA directly implements the clean water program. And we must assure that we are doing the work

into the 21st century. We need to transform EPA to be not only a collector and disseminator of information but an analytical resource that can present information in a form that is easily understood and useable by the public. We have seen that when information is made public, it can be a powerful tool to help improve the environment directly. We need to launch into a major shift of EPA's Clean Water Act information systems—so that data on both facilities' discharges and compliance and water quality and other environmental conditions will be readily available and transparent to both federal and state regulators and the public, over the web, on a real-time basis.¹³³

One thing is certain: information and Web pages will be much less expensive than most enforcement options, such as additional staff. While we clearly concur with these promising goals, we do have several recommendations.¹³⁴

Our overriding concern is that the process could take a long time; the longer it takes, the better the chances for politicization and funding issues, especially given a likely hostile House of Representatives. The EPA has limited the major effort focused on water as a pilot program despite a recent study validating the efficacy of information on water purveyor performance on subsequent compliance.¹³⁵ As the agency acknowledges, it should extend to all programs as soon as possible, so consumers (voters) can see some useful end product. The data must be both wide-ranging and user-friendly, including product lifecycle analysis

that is most important to clean up our nation's waters. Because EPA and the states face significant and competing demands for resources, we need to place a high priority on the problems that have the biggest impact on water quality, such as wet weather pollution, which are not currently well represented in the information we have on Clean Water Act compliance.

Memorandum from Lisa P. Jackson to Cynthia Giles, *supra* note 3.

133. *Id.*

134. One data feature currently available on water, air, and toxic releases has been made available on the State Review Framework, which the EPA describes as:

[A] program management tool to consistently assess EPA and state core Clean Water Act . . . , Clean Air Act . . . and Resource Conservation and Recovery Act . . . enforcement and compliance assurance programs. The Framework enables EPA and states to jointly assess the effectiveness of their programs, improve management practices, and ensure fair and consistent enforcement and compliance across all regions and states.

State Partners, EPA, <http://www.epa.gov/region4/ead/states/index.html> (last visited Jan. 20, 2011). This dataset will be useful to researchers, but it is still an overall review of state practices (much of it in summary form) with the EPA's recommendations, rather than user-friendly access to compliance and enforcement data on products and the firms that produce them. We do not intend to be too critical, though, as the expressed intent and the concrete steps are all in the right direction.

135. Benneer & Olmstead, *supra* note 18, at 117-30.

in addition to firm behavior. Specifically, consumers and investors should be able to search by firm and by product, and those data should be linked to environmental quality data similar to GoodGuide. Given the partnerships between hardware manufacturers and developers, and the interest by the business community in the Walmart and EPA cooperative efforts, there is great promise. But the form of the EPA program is not yet in view. The EPA's "Environmental Exchange Network"¹³⁶ is a good model, because it can currently accommodate sophisticated processes such as real-time interstate tracking of hazardous waste, but the EPA currently has no planned public access. Finally, the data sources need to be expanded through more extensive cooperative efforts with regulated entities and other levels of government.

D. State Experiments Improve—Slowly

The reality is that many states have little incentive to provide the information at present: (1) most states are in budget cutting mode, (2) the data would generally be limited to that state, and (3) the seemingly endless "race to the bottom" continues.¹³⁷ The Feds are the logical repository. Many state agencies like the North Carolina Department of Environment and Natural Resources (DENR), the California EPA, and other agencies, notably those in Illinois and New Jersey, attempt to provide good information. While several states have shown improvement and others have taken the lead exploring new methods of data display, the current media do not even approach the prototype of "product-by-product" search engines that we have argued to be vital to the success of information as a market tool.¹³⁸ New Jersey,¹³⁹

136. *How Does It Work?*, EXCHANGE NETWORK, http://www.exchangenetwork.net/basics/how_it_works.htm (last visited Mar. 1, 2011).

137. In February 2009, we conducted another survey of the states' efforts to display enforcement and compliance information to the public. The states were organized in a data matrix, using a similar set of parameters to the 2005 survey, such as the abundance, variety, and accessibility of information available. Every state was evaluated based on whether its Web site contained links to violations, enforcement actions, and compliance listings for businesses. In addition, the presence of search engines for individual products and facilities was factored into the assessment of states' progress over the last four years. We found that while several states had taken the initiative to make enforcement and compliance information available to the public, the majority of state agency Web sites lacked even the most basic displays of information regarding pollution levels and judicial actions associated with environmental crimes. Few states provided the positive side, either: compliance records. This may be because firms generally do not want it known that they are also dischargers. Despite the lack of uniformity and comprehensive data display, several states are worthy of mention here to illustrate the range of information that is available and various methods to display it.

138. Many cannot even provide uniform or composite data from all the subagencies, divisions, boards, and commissions within their own structure because of politics or different

California,¹⁴⁰ and Illinois¹⁴¹ provide useable sites that can be searched by a variety of criteria, including date, county, and zip code, but not company, industry, or products. Still, better coordination and data sharing among agencies is needed for the general public to find information that is actually useful for consumer and investor decisions.¹⁴²

information technology systems. The agencies themselves cannot secure national data on permit applicants. This imperils public health when significant violators move from state to state under different business shells. In North Carolina, a central data portal was promised for at least the last three years during the previous administration, but has not been mentioned for some time. Interviews with N.C. Dep't of Env't & Natural Res. Staff (2006-present). In our previous analysis, we were unable to find a system, at any level, that provided the information in an easy to use format. We found no Web site that invited data download. Most agencies also do not collect real-time information from generators of pollutants, but could easily and inexpensively do so by requiring online reporting. Most have FOIA links, but making FOIA inquiries for each consumer transaction is not practical for the public and no one has created anything like Scorecard.org, probably in part because of the difficulty of framing inquiries to obtain the correct information.

139. *Compliance & Enforcement*, N.J. DEP'T OF ENVTL. PROTECTION, <http://www.nj.gov/dep/enforcement> (last visited Jan. 20, 2011) (listing violations by county, as well as reader-friendly explanations and associated enforcement actions); see also *DEP Data Mine*, N.J. DEP'T OF ENVTL. PROTECTION, http://datamine2.state.nj.us/DEP_OPRA/OpraMain/categories?category=Enforcement%20Actions (last visited Mar. 27, 2011) (providing enforcement action summaries). The available data include the fees assessed and collected, a common feature and a deterrent to potential violators.

140. While New Jersey's agency Web site (like most) was designed for specific searches and included comprehensive reports for the general public, California's organization of information was based on the nature of the violation, what natural resource it affected, as well as the location. The state's Air, Water, and Toxic Waste Boards offered detailed reports on violations and enforcement actions in a manner similar to New Jersey, but the data display format differed between each division and a user must access each individually. One could search for water quality violations alphabetically by agency, facility, order number, effective date, and program type, with links to descriptions of permits violated, as well as enforcement documents. *Enforcement Orders*, CA. STATE WATER RES. BD., <http://ciwqs.waterboards.ca.gov/ciwqs/enforcementOrders.jsp> (last visited Jan. 20, 2011). Other California agencies must be searched individually. *Enforcement Orders & Judgments*, CA. STATE WATER RES. BD., <http://www.calepa.ca.gov/Enforcement/Orders/default.asp#Links> (last visited Feb. 22, 2011).

141. Illinois provides enforcement orders and court cases involving permit violations and more serious environmental crimes. However, there are no compliance lists for businesses and no search engines for facilities, counties, or categorization by nature of the violation. *Search Enforcement Orders*, IL. EPA, <http://www.epa.state.il.us/cgi-bin/en/orders/orders.pl> (last visited Feb. 22, 2011).

142. States could do more: requiring additional disclosure should be a routine economic regulation. In many states, the general goal could also be accomplished through the appropriations process. In North Carolina, for example, the goal could be accomplished through the budget process, and this proposal was considered up until the last minute, but ultimately was dropped because of the overall budget shortfalls. The costs to the state should be manageable, especially compared with the cost of even one additional staffer. As noted in 2006, this is not a massive amount of data. In North Carolina, the most recent information as of 2006, from an official within the North Carolina Department of Environment and Natural Resources, is that it would cost no more than \$200,000 to implement a central Web site with compliance and enforcement data that included the necessary standardization of sub-agency data (presumably not a problem in states that have always had standardized data systems), something that is fundamental to any credible management strategy. Real-time posting of reports and other data

VI. THE PROPOSAL: EPA CAN DO IT; GOODGUIDE, WALMART CAN HELP

The public, including both consumers and investors, wants information on *products* and on companies (including “families” of companies). GoodGuide is the new standard in accessibility. The “Industry” category in the EPA’s Enforcement and Compliance History Online (ECHO) almost works, but the categories offered may make use difficult and the results are still individual facilities. Consumers would rather have a system that recognizes queries by name, bar code, RFID tag, type of product (name or some menu), or even the new picture recognition applications for iPhone and others.

The Walmart initiative to require suppliers to provide at least the outline of a product/company footprint is a significant step in the right direction, but it is limited to suppliers, is several years off, and the utility of the data is unknown. The key pieces that the Walmart initiative contains are: (1) at least some data on the product and service footprint will be available and (2) that there is already a certain degree of buy-in by the business community (at least at the depth of the Walmart questions). On the other hand, the EPA has both the credibility and the authority to amass and disseminate good information. The EPA has, or can easily obtain, all federal and state permitting and discharge data, as well as compliance and enforcement information down to informal contacts. The EPA could reasonably require much more information from permittees that firms already have about their products and their business practices. Enormous databanks already exist through the Consumer Product Safety Commission, the SEC, the FTC, among others, as well as state agencies, not to mention GoodGuide and the Sustainability Consortium. The FTC could review data for accuracy, as it currently does for advertisements.

The EPA could then merge the information and display it to anyone at any time. Sources like GoodGuide could beam their interpretations

would likely add some small additional costs for the state and for permit holders, but the technology is readily available. There could even potentially be cost savings if agency employees were freed from some informational work because so many data would be available on the Internet. Permit fees, already low in many jurisdictions, could be increased by a small margin to cover any costs associated with the publication. Enabling legislation might be required to add requirements to periodic firm reports, especially more controversial provisions such as disclosure of related entities, key employees, and shareholders. As occurred with global warming, states could also push the EPA to adopt uniform requirements for all states. We have suggested legislation that could provide a wealth of useful information on products, services, and firms, including subsidiaries and suppliers. That legislation is available online at <http://people.uncs.edu/cuttingr/>.

directly to consumers standing in a supermarket aisle through their smartphones. A collaborative effort would add even more credibility and there would likely be many willing participants in the effort. Sites would include at least two broad categories: (1) sites that expand on the raw data or ratings, such as those that offer critical commentary, sponsored by NGOs or the regulated community and (2) linked sites to the above as well as to other data banks, such as MSDS product information and even “where to buy options.”

Ultimately, a system like the one now used for comparison of Medicare Prescription Drug plans could be implemented.¹⁴³ Anyone could search individually or enter a complete shopping list from lifestyle templates (such as after a preferred list had been compiled and updated automatically as GoodGuide has begun to offer).

The impact on the regulated community should be tolerable. Because firms presumably know their products and facilities, this process should not be difficult or expensive, although some more sophisticated measures will take time (such as LCA). The portal must be efficient for firms, of course. Firms, for example, should be able to review and supplement existing agency data and to make multi-agency filings, all of which could simplify the paperwork overall. If necessary, though, a small business exemption could be created. There should also be links to the firm Web site for further information, so that it would also be a cost-effective marketing tool.

Information on company basics, from corporate structure and key personnel to locations (including GIS data), is routinely filed with agencies (and much of it may already be available on company Web pages). Business entities typically already file informational reports with both licensing agencies (such as secretaries of state) and securities agencies,¹⁴⁴ so an integrated process could actually save time and money.

143. *Medicare Plan Finder*, MEDICARE.GOV, <http://www.medicare.gov/MPDPF/Public/Include/DataSection/Questions/MPDPFIntro.asp> (last visited Mar. 1, 2011).

144. North Carolina and California statutes are illustrative:

According to G.S. 55-16-22(c), business corporation annual reports eligible to be delivered to the Secretary of Revenue are “due by the due date for filing the corporation’s income and franchise tax returns. An extension of time to file a return is an extension of time to file an annual report.”

Frequently Asked Questions, N.C. DEP’T OF THE SEC’Y OF STATE, <http://www.secretary.state.nc.us/corporations/pdf/AnnualReportsFAQs.pdf> (last visited Apr. 12, 2011). At the option of the filer, an annual report may be filed directly with the Secretary of State in electronic form:

An Annual Report required to be delivered to the North Carolina Secretary of State is due by the fifteenth day of the third month following the close of the corporation’s fiscal year. Professional corporations and Non-profit corporations are not required to

The tradeoff seems reasonable. Business entities receive essentially a franchise to raise capital and limit shareholder (owner) liability, as well as special tax considerations. Firms that discharge pollutants also receive a franchise from the state to dispose of waste materials into the air, water, or soil. For these valuable features and capabilities, it would seem reasonable to require the entities to provide fundamental information about the nature of the business as well as its specific environmental practices.

There is no significant reason why a central portal could not also link to data on products (including product safety) as well as data on compliance with consumer protection and investor protection laws, as GoodGuide does.¹⁴⁵ Links could be added to the firm site or NGO sites, and even sites for sales.¹⁴⁶ The cost should be minimal given current efforts at the federal and state levels.

file Annual Reports. According to G.S. 57C-2-23(c), Limited Liability Company (LLC) Annual Reports are due by April 15th of each year.

North Carolina Corporation Annual Report, PCF, INC. <http://www.getincnow.com/north-carolina-corporation-annual-report.php> (last visited Apr. 18, 2011). California's requirements are similar. See *Annual/Biennial Statements*, CA. SEC'Y OF STATE, <http://www.sos.ca.gov/business/be/statements.htm> (last visited Mar. 1, 2011).

145. See *infra* Tables 1 through 4.

146. Valance, *supra* note 25. For that matter, links to (1) representatives from districts that include polluting facilities and (2) campaign contributions from those firms could easily be added, because some state groups have demonstration sites. The Conservation Council of North Carolina, for example, links significant polluters to political districts. Efforts to link campaign contributors failed because of inadequate data to identify connections between donors and firms, but could easily be done with cooperation within the agency. See the unpublished Master's thesis of Cynthia Shurling, from Duke Nicholas School of the Environment. Cynthia Shurling, Final Draft Master's Thesis (unpublished Master's thesis) (on file with author).

Table 1: Suggested Design

Example Portal Website

(all menus should use plain-English terminology)

Firm	Industry	Product	Location
<ul style="list-style-type: none"> • Menu of names and trade names • Linked to Industry, Product and Geography categories for that firm 	<ul style="list-style-type: none"> • Links to firms within chosen Industry type 	<ul style="list-style-type: none"> • Product lookup by name, photo identification, RFID or Bar Code as well as product category • Links to all firms that make the products 	<ul style="list-style-type: none"> • Menu to entry city, state, zip code and map services • Linked to Firm, Industry and Product Menus • Links to EPA's Enviromapper or Envirofacts

Table 2: Products

<h3>Individual Product Menu</h3>	<ul style="list-style-type: none"> • Firm Data (Link) • Violations (SNC*/Minor) • Discharges • Carbon Footprint • Water Footprint • Energy Use • Waste • Certifications • MSDS • Consumer Comparison • Information Graphs • Firm Links
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Identification of Product through: (1) menus as used by retailers plus search engines, (2) product name, (3) visual (icon, picture identification), and (4) RFID Tag reader. Once the product is identified, all products could be displayed:

Table 3: Firm Data—ABC Corp

Individual Firm Menu

- Link to Industry Menu
- Links to Products Manufactured
- Links to Geographic Menus
- Firm Data
- Firm Compliance and Violation History

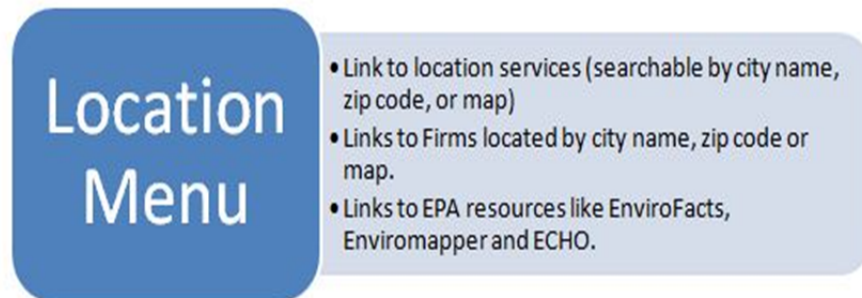
Detail

Fines/Penalties: ABC Corp.							
Violation	#	Releases	Date	Location [click for map]	Action	Result	Details
Water Quality	2	12	[LIST]	5 states	Admin	\$5,000 Admin	X
Air Quality	5	35	[LIST]	6 states	Civil Admin Informal	\$10,000 civil \$5000 VEP N/A	X X X
Hazardous Materials		12,000 MT	[LIST]	5 states	N/A (permitted)	N/A	
Resource	1		[LIST]	1 state	Admin (coastal)	Restoration	X
Other Compliance History Certifications							

Each entry in that table would be linked to subpages:

Table 3A: Firm Violation (or Compliance) Detail

Violations—ABC Corporation Details	
Facility	Gold Mine #2
Violation	Clean Water Act permit violated on Clear Run Creek
Date	1/1/99 concluded 11/2001
Agency	Cal. EPA (link)
Action	Civil Action for injunction and civil penalty filed by CA Attorney General
Result	Stipulated injunction and \$15,000 civil penalty + SEP
Firm Response	(Link to ABC Corporation Web site)
Link to More Information	



SUPPORTERS: Likely supporters should include nearly every group that supports transparency in government, including stalwarts such as Common Cause and AARP. Specific segments of support might include:

- Environmental organizations: NGOs can themselves dissect and disseminate the data to suggest improved performance at every stage as part of their function to seek accountability in government.
- Press associations and media: press organizations ought to embrace the concept of downloadable data to supplement the cumbersome FOIA process. As they convert to online news sources, they may also display the information.
- Investors
- Consumer groups (Consumers Union, Scorecard)
- Regulators¹⁴⁷

147. Cutting, Cahoon & Leggette, *supra* note 1. Organizations such as the Environmental Council of States and the Regional Alliance for Information Networking do great work but not to the level of the criminal systems like the National Crime Information Center.

- Firms that invest in pollution control: they want to distinguish themselves from greater polluting competitors that may offer cheaper products and services.

OPPONENTS: The Walmart initiative represents a significant move toward these overall goals. As it unfolds, a wide pool of the business community will be included. It, and other firms, may see the benefit of an all-inclusive program administered uniformly. However, there is no question that some industry groups would oppose any attempt to publicize data: recall the reaction of the Chemical Manufacturers Association to the announcement of the TRI. Firms are usually very sensitive to publicity surrounding an enforcement action.¹⁴⁸ Opposition would be expected in the regulated community, because:

- Direct costs: while some costs might be involved, it is difficult to accept the argument that the cost should be a deterrent, because this information exists for internal legal reasons and, in many cases, for state regulatory if not federal regulatory purposes. LCA will take time and money, but all firms will do only their products, presumably assisted by templates from trade associations and academia.
- Politicians at all levels avoid the perception of a less-than-friendly business climate.
- The “no-regulation” position: this position is always interesting because there would be no business entity were it not for regulation. Even Locke recognized that the state that protects private property has the right to condition ownership.¹⁴⁹
- Objections to disclosure of specific information: shareholder and key employee information has been protected, and one can understand the desire of owners and managers to remain anonymous. Given the value of state-sanctioned business entities that reduce the risk of entrepreneurship to both owner and manager of a business entity (and which, because Citizens United, have many of the rights of natural citizens), as well as the free-market

148. See *supra* text accompanying note 78. The content of any release is a serious matter of negotiation, as is whether the case becomes public at all. Many prosecutors have a policy not to negotiate on whether a press release is to be made, but the posture of the case as well as the wording of pleadings and press materials is frequently the subject of negotiation.

149. “[I]t would be a direct contradiction for any one [sic] to enter into society with others for the securing and regulating of property, and yet to suppose his land . . . should be exempt from the jurisdiction of that government to which he himself, and the property of the land, is a subject.” John A. Humbach, *Evolving Thresholds of Nuisance and the Takings Clause*, 18 COLUM. J. ENVTL. L. 1, 6 n.25 (1993) (emphasis omitted) (quoting JOHN LOCKE, TWO TREATISES OF GOVERNMENT 120 (1690)).

responsibility to identify and contain external costs, it is difficult to justify withholding information that could be key to public health and safety and law enforcement. That information could still be protected as confidential just as trade secrets are routinely protected in other statutes.

VII. CONCLUSION

The prospect of information for the marketplace and a market-based regulatory tool is within reach. In 2005, we expected to find prolific data on the Web and found little. In 2009, we found little progress until GoodGuide, Walmart, and the EPA made their blockbuster announcements.

GoodGuide and the Walmart campaign underscore the importance of product information and the interest from consumers. The renewed EPA commitment highlights the value of data required by regulation versus VEPs. The conclusion seems inescapable that the efforts should be combined to provide consumers and investors a straightforward, reliable, and comprehensive source of information. It seems equally clear that the EPA is the logical hub because:

- The EPA has or can get the data
- The EPA has a solid national web presence and IT capability already
- Federal operation minimizes competition among states
- The perception of impartiality more likely applies to the EPA than to Walmart or industry consortia. Credibility is especially great for cooperative efforts
- The EPA is likely to be more transparent

Throwing the spotlight on global practices may help level the playing field internationally. Restricting imports based on environmental practices in the nation of origin creates international trade issues under the World Trade Organization. Information on those practices affects LCA, however. Information on firm practices elsewhere must be included for an accurate calculation of LCA, a requirement that applies equally to all imports, much as do other health and safety requirements such as mercury level. The bottom line is that global LCA will provide a more accurate number for comparison.

Until a standard for LCA is adopted, firms are free to experiment with presentation, within the bounds of the misleading advertising guidelines (from both the FTC and states).