

Greenwashing

A Perfect Storm

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1 Introduction to Greenwashing

Today, it seems that every business has a “green story.” As little as two years ago there was significant debate about the validity of sustainability and green practices being a core business issue or a relevant communication platform. Times have changed—but not without controversy.¹ While some of the largest global companies have gained acclaim for high-visibility ecology campaigns—such as GE’s Ecomagination or Wal-Mart’s Sustainability 360—most have also had to fend off increasingly vocal detractors. Take the example of what Ronnie Cummins, National Director of the Organic Consumers Association, said of Wal-Mart: “This model of one-size-fits-all and ‘lowest prices possible’ doesn’t work in organic. Their business model is going to wreck organic the way it’s wrecking retail stores, driving out competitors.”² As recently noted in the “State of Green Business” report by Greenbiz.com, there is increasing scrutiny that highlights potential gaps between today’s green stories and reality.³

ecomaginationSM
a GE commitment



A perfect storm is looming, where environmental impacts, public interest, media attention and public policy combine to rapidly heighten skepticism and challenge the grand corporate environmental gestures of 2006 and 2007. Like any perfect storm, each influence individually is far less powerful and less challenging to public and private institutions than the combination of factors. From *The Wall Street Journal* to dinner party conversation, there is a growing skepticism about the validity of corporate environmental efforts. Many might be accused of “greenwashing” as is highlighted in the recent study, “*The Six Sins of Greenwashing*.”⁴ Entering into the common vernacular a decade ago, “greenwash” was added to the Oxford English Dictionary in 1999 as: “disinformation disseminated by an organization so as to present an environmentally responsible public image.” This historical definition focused on active disinformation campaigns, emphasizing the qualifiers of obfuscation and diversion, such as Exxon Mobile’s funneling of \$16 million between 1998 and 2005 to a network of advocacy organizations seeking to confuse the public on global warming science.⁵ But today, greenwashing is used to describe everything from the Swiffer® disposable mop to fuel cell vehicles. The harsh reality is that greenwashing no longer requires intent; merely embarking on an uninformed and poorly prepared sustainability initiative is enough to wreak havoc on corporate identity and brand value.



What constitutes greenwashing has become a moving target and has created a threatening backdrop for ecologically conscious efforts. In the last few years, an enormous variety of companies have made public announcements about “greening” efforts—ranging from purchasing carbon offsets to hiring a Chief Sustainability Officer—which once provided “safe” environmental footing. Today, these same first steps are subject to the court of public opinion. When Fiji Water recently announced a plan to become “carbon negative,” the blogosphere erupted with aggressive accusations of

¹ “[What Assures Consumers on Climate Change?](#)” AccountAbility (June 2007)
² “[Wal-Mart Special Report](#),” National Legal and Policy Center (November 2006)
³ “[State of Green Business](#),” GreenBiz.com/Greener World Media, Inc. (2008)
⁴ “[The Six Sins of Greenwashing](#),” Terrachoice (2007)
⁵ “[Smoke, Mirrors & Hot Air: How ExxonMobil Uses Big Tobacco’s Tactics to ‘Manufacture Uncertainty’ on Climate Change](#),” Union of Concerned Scientists (January 2007)

“greenwashing,” even though no one claimed that the company lied or was deceptive regarding its carbon-reduction efforts. Leading environmental websites such as Grist.org, Treehugger.org and GreenBiz.com have postings citing “greenwashing,” damning corporations as disparate as Chevron and SC Johnson for efforts to “green up” industries traditionally viewed as “dirty,” or for attempting to leverage a single green product to establish credibility as an environmental leader. [Greenwashing.net](#), [The Center for Media and Democracy](#), CorpWatch and its [Greenwashing Awards](#), and the [Greenwashing Index](#) by Enromedia Social Marketing are keeping track of environmental leadership success and failure.

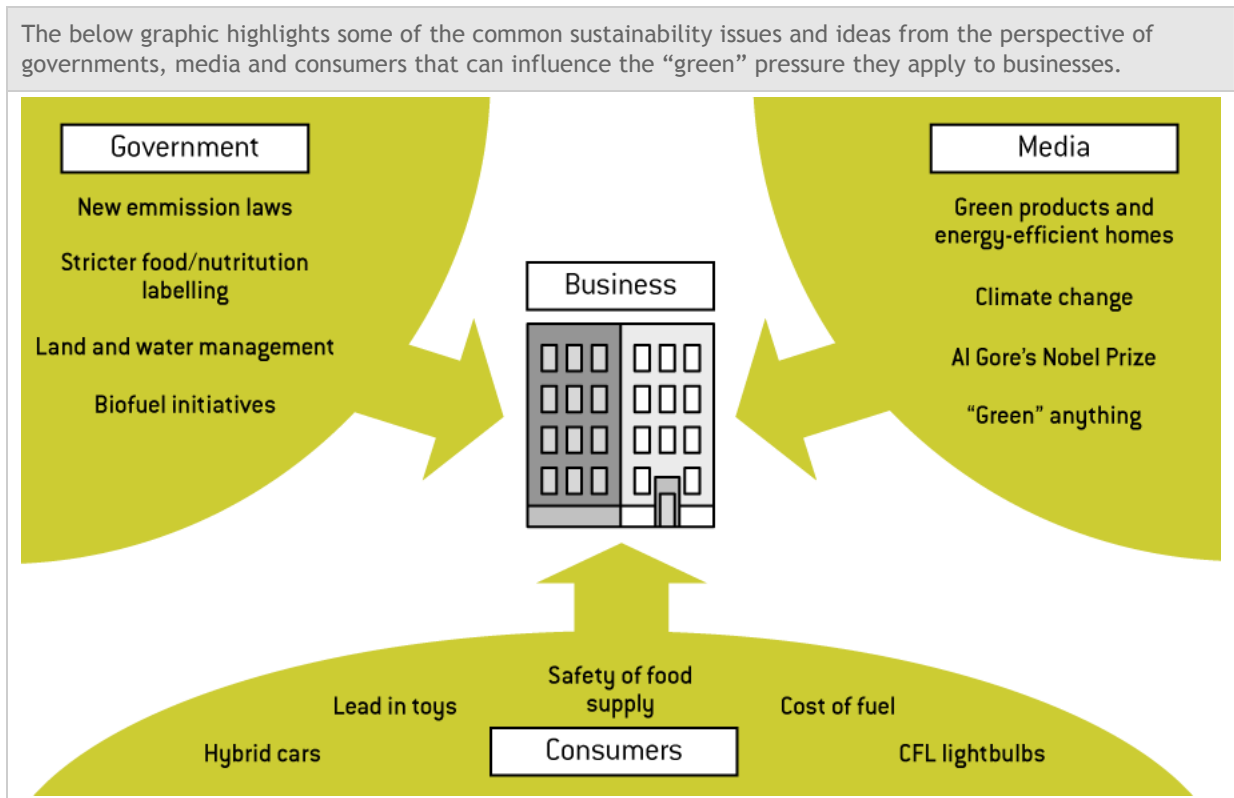


While the threats of being accused of greenwashing are very real, the opportunities of greening products, services and built environments are significant. Indeed, developing an authentic and legitimate corporate sustainability policy or climate change mitigation policy has been correlated with positive change in share value and investor perception. Financial research organizations like Innovest and TruCost have been asking these questions for several years now. The jury is in: companies that have eco strategies—ranging from green buildings to renewable energy access—outperform those that don’t. Forget the “feel good” of corporate social responsibility (CSR) and sustainability efforts. Innovest has found that socially responsible companies outperform their competitors by an average of 2 percent. That’s real money in a world in which the real rate of return on corporate ownership over the last century has been approximately 6 percent.⁶

⁶ [“Powering Profits: How Companies Turn Energy Efficiency into Shareholder Value,”](#) Green Business Letter (April 2005)

2 The Gathering Clouds of Greenwashing

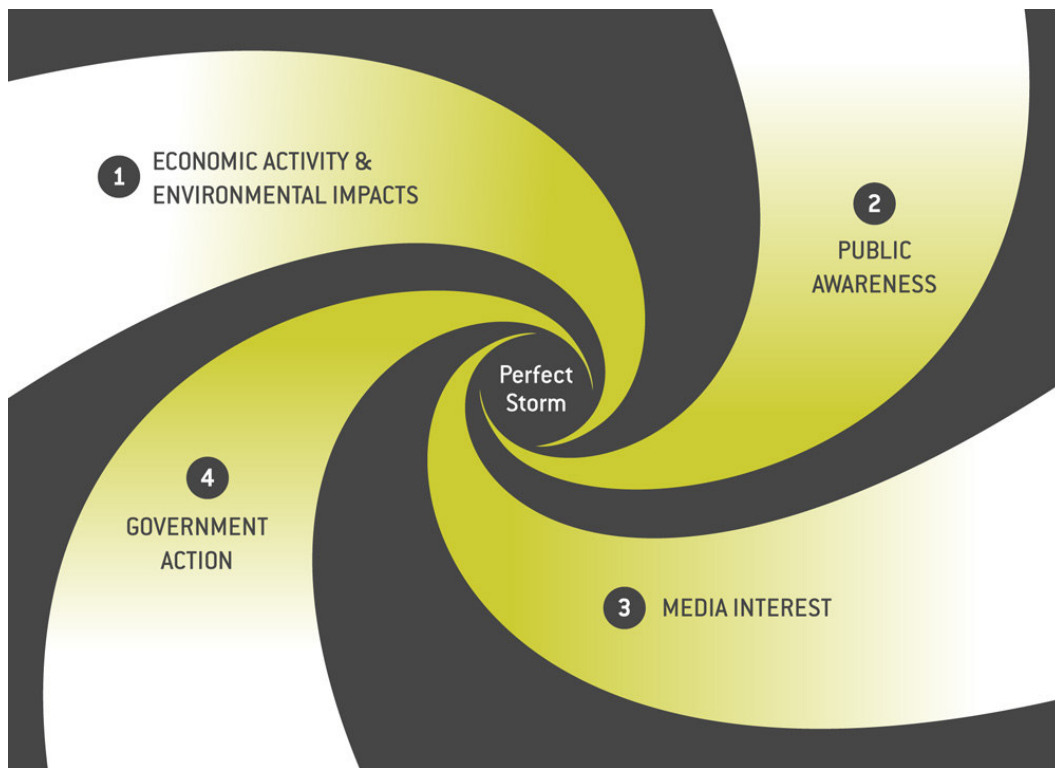
With so many shades of green and the need for organizations of all sizes to take action that will address global climate change, how can businesses create environmentally responsible, carbon-cutting initiatives that will both protect the planet from demise and provide a safe harbor for corporate reputation? An important first step is to understand the source of the greenwashing skepticism. Indeed, it is equally critical to understand the emerging pressures that are driving businesses to create effective sustainability strategies—which, by definition, must also be effective business strategies. By understanding both the sources of greenwash skepticism and the required drivers for environmental change, institutions can map out authentic and legitimate actions that support the creation of transparent and compelling communications. Together, these add measurable value; businesses that ignore this two-edged sword are at risk to be perceived as greenwashers and, perhaps, actually guilty of greenwashing.



Greenwashing, intentional or not, is the harbinger of having missed the return on investment (ROI) of sustainability. The good news is that companies can protect against this kind of challenge and increase the ROI that green leadership campaigns can deliver—not just in terms of improved public relations and well-written CSR reports—but in tangible terms of real business value. Indeed the way to maximize ROI on green initiatives is for companies to become authentic, transparent and consistent in their sustainability efforts—moving beyond compliance to leadership. Embarking on corporate sustainability efforts in this way not only creates a safety net, but also catalyzes business success.

The window for this opportunity—to act before additional mandated change—is now. The history of opinion toward the environment shows that environmental impacts drive public interest; and, where public interest goes, media and regulation follow. As dramatic shifts in technology and business have created environmental impacts that are felt as direct, personal experience, there is upsurge in public interest that is both informed and defined by an increasingly activist media. Today, each of these dimensions is global, rapidly evolving and unpredictable.

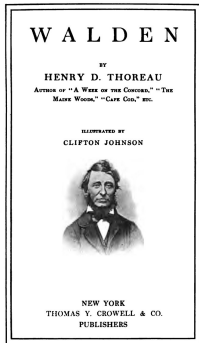
As outlined below, corporate America has already seen two tectonic shifts in the way businesses must learn to work with the environment. Today, the world is facing a third period when our public and private institutions will be forced, often through negative publicity, to make dramatic changes in the way they do business. As outlined in this paper, the United States has seen a series of factors at the intersection of ecology and commerce that have created the perfect storm:



1. Economic activities create significant environmental impacts
2. Unprecedented and massive increase in public awareness
3. Exponential growth of media on environmental issues, accelerated by advancements in communication technology
4. Regulation and government action

In short, the whole of society is intensely focused on the environmental and social challenges that are simultaneously experienced in daily life and amplified in the public mind by growing media focus, and to which policy makers and business leaders must respond.

3 Media Creates the Pressure System



The First Storm
 The US ecology community can trace its roots back to the mid-19th century, long before the first Earth Day on April 22, 1970. The first perfect storm was spurred by a massive increase in pollution from industrialization. Early writings of Ralph Waldo Emerson and Henry David Thoreau in the mid-1800s reflected public concerns about abuse of the natural environment. At the same time, there was the birth of a new kind of journalism—muckraking—that leveraged significant advancements in technology, as well as competition between newspapers and magazines, to use journalism as an agent of social and corporate change.⁷ The merging of public sentiment and mass-media—encouraged by an erosion of the natural, healthy environment and increased awareness of social ills—catalyzed the first significant governmental action on resource management and unbridled business. An era of conservation began, with government as a major partner in the movement to create national parks and antitrust legislation.

The Second Storm
 After solidifying the course of the environmental movement in the first half of the 20th century, the second perfect storm struck in the 1960s as the public was repeatedly confronted with a host of new, environmentally damaging commercial activities and impacts. The effects of the booming petrochemical industry impacts were highly visible, such as Love Canal and the Cuyahoga River. Combined with Rachel Carson’s description of a *Silent Spring* (1962)—where bird life was destroyed by agricultural pesticides—public concern about the environment soared. This was again fueled by a radical transformation in media—mass access to broadcast technology—that leveraged images (the Grand Canyon, Yosemite) and environmental icons (Ansel Adams, Ralph Nader and David Brower), to push forward one of the most important decades in environmental protection. Corporate entities were forced into significant changes in the use of toxic and hazardous materials, by a mammoth jump in regulation and pressure from local interest groups.

Environmental Regulation

In just 10 short years, heightened awareness of impacts drove a landside of core environmental regulations, including the Water Quality Act (1965), the Clean Air Act (1967) and National Environmental Policy Act (NEPA, 1969). Enforcement agencies—including the Environmental Protection Agency (EPA, 1970) and the Department of Energy (1977)—were granted increase power to enforce laws such as the Endangered Species Act (1973) Safe Drinking Water Act (1974), spurred on by significant eco developments, such as Love Canal, Three-Mile Island and the creation of the Superfund.

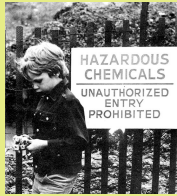


Photo by William D. Cecil, Jr.

⁷ [“A Brief History of American Alternative Journalism in the Twentieth Century,”](#) by Randolph T. Holhut

4 Today's Perfect Storm and Greenwashing

The climate crisis has set the context for the third perfect storm, intensified by regular front-page news with a spectrum of visible and tangible impacts—from melting ice caps to unparalleled economic threats—affecting every sector of society. The very real environmental effects of global economic expansion have driven a groundswell of public interest, with the vast majority of the population now self-identified as “an environmentalist.”⁸

The impacts of the third storm have been amplified by dramatic developments in the media—24/7 news, mass-market films and the Internet—adding a new level of impact. Global governmental intervention with the private sector is just beginning, as this perfect storm is intensified by the scale and speed of international business. Global sourcing and worldwide supply chains—affecting everything from children’s toys to data centers—create a direct and visible link between business decisions, corporate communications and environmental health impacts. The recent lead scandals of Mattel demonstrate these phenomena, where breakdowns in this link threatened the health of the world’s children—not to mention business profits, sales and share value. From carbon buildup to deadly pet food, the public is increasingly vocal that business as usual must include sustainability.

This century has seen the birth of a new kind of corporate environmentalism—which has mesmerized today’s real-time, all-the-time media. This new “beyond compliance” approach has been as much about seizing opportunities as minimizing risk. But, if everyone—from CEOs to mail clerks—is an environmentalist, what happens when everyone is a journalist? Greenwashing becomes the cause célèbre. After decades of prior experience that show the intersection of media coverage and eco-regulation, we are just beginning to see the effects of a new citizen media (e.g., bloggers) and the ability of a single human being to amplify a message, drive an issue, or affect a well-cultivated corporate brand. We can be confident that these forces—instant communication, public interest, and the most significant environmental challenges facing the planet—are going to accelerate. While certain elements of this new era are unpredictable, history demonstrates a very clear lesson: government policy will drive a new level of transparency and change in corporate structures. As more reporting on everything from supply chains to energy use is required and considered public information, both the citizenry and the media will actively pursue the truth of corporate promises to reduce footprints, mitigate climate change and “go green.”

The Impact of Greenpeace

While all of the major environmental groups used the press and to grow public opinion, no other group has done more to apply journalist principles to address specific environmental and social issues than Greenpeace. In the decade from 1969 to 1979, Greenpeace transformed itself into a mobilized, global “eco-navy,” using the power of media to disrupt American and French nuclear bomb tests, Japanese and Russian whaling ships, and Norwegian infant harp seal hunters. With outlandish pranks and media savvy, they pressured governments, corporations, and private citizens to take a fresh look at their responsibility to the earth and future generations.

⁸ A 1990 Gallup poll found that 76 percent of Americans called themselves “environmentalists”—a number that has held steady through the last 15 years.

5

How Do You “Go Green” Without Greenwashing? Be Authentic

As discussed, greenwashing is no longer the purview of a self-selected group of activists, nor that of a few “tree-hugging” bloggers. Even the Federal Trade Commission has fast-tracked review of its 1998 regulations on green marketing, because the largely unregulated area of “green advertising” is seen as a primary target for consumer deception. With a market worth \$227 billion in the US alone, greenwashing has become serious business.⁹ The combination of rapidly growing pressure on businesses to “act” and a groundswell of market desire for business-based solutions, creates the perfect setting for greenwashing. Unfortunately, greenwashing challenges—growing stronger and louder by the day—can damage reputations, devalue brands and impact products and services around the world at Internet speed.

The FTC’s position on environmental claims made by marketing

“It’s deceptive to misrepresent—directly or indirectly—that a product offers a general environmental benefit. Your ads should qualify broad environmental claims—or avoid them altogether—to prevent deception about the specific nature of the benefit. In addition, your ads shouldn’t imply significant environmental benefits if the benefit isn’t significant.”

—[Guides for the Use of Environmental Marketing Claims](#), Federal Trade Commission, Bureau of Consumer Protection

Does this mean that companies should not take environmental action, or that businesses should refrain from making any claims about their activities or their larger environmental and social goals? Absolutely not. Nearly 71 percent of businesses agree that the marketplace is demanding more environmentally responsible behavior.¹⁰ In fact, with businesses accounting for more than half of the world’s largest economies, and even the smallest organizations sourcing globally, businesses are at the eye of this storm.¹¹ Based on what we’ve learned from other perfect storms, 2008 and beyond will require institutions of all sizes to integrate operational and sustainability challenges with a new level of expertise and sophistication. Moreover, organizations that undertake sustainable strategies on supply chain, energy use and the like, must engage in pro-active, transparent communications (including “green bulletproofing”) to fend off accusations of greenwashing and realize the total ROI available from effective sustainability strategies.

So how does a company “go green” in the right way? By being authentic. In a world where enforced transparency reigns on a topic as passionately held as the environment, the only choice is to be authentic and open. Real action based on an authentic story that is open and vetted by trusted partners is the best offensive *and* defensive strategy. Authenticity in the green arena comes from developing alignment between core customer needs and the larger external needs raised by emerging global sustainability challenges. Integration of business goals and sustainability goals creates the foundation for planning, action and communication that is, at the same time, both logical and defensible.¹² This alignment is at the core of authenticity.

⁹ “[Understanding the LOHAS Consumer](#),” The Natural Marketing Institute (2003)

¹⁰ Source: [Terrapinn 2007 Survey](#) of world’s top executives (September 2007)

¹¹ “[Top 200: The Rise of Corporate Global Power](#),” Institute for Policy Studies (2000)

¹² “[Ecological Sustainability: The Dominant Corporate Communications Issue of the Decade](#),” Bite Communications (July 2007)

6 Greenwash Bulletproofing: Building an Authentic Green Campaign

With the scale and scope of today’s challenges, almost any business can find some legitimate positions as an environmental leader—*without greenwashing*. Sun Microsystems, a supplier of IT hardware and open-source software—not the most obvious green mascot—has created the SunEco effort that focuses on increasing energy-efficiency performance in products, as well as creating an “open source” platform for businesses—OpenEco.org—to share the company’s experience of significant cost reductions through energy efficiency measures. Similarly, Applied Materials, a leader in the semiconductor field is becoming a leader in solar photovoltaic (PV) production technology, as well as in increasingly efficient production of the semiconductors that power the analysis of sustainability challenges. Applied Materials has used its commercially available environmental technology to decrease its own liquid waste by 90 percent while recovering copper that was previously lost.¹⁶ In both of these cases a legitimate and authentic sustainability platform has been found that benefits the business, and vice versa.¹⁷

What should successful green corporate initiatives do in order to develop an authentic, legitimate, effective and profitable sustainability and communications platform—a platform that both proactively communicates the “good works” being done, while preempting greenwashing threats. These businesses should use a “Leadership Ladder.” The Ladder includes four steps:

1	System	Parameters of leadership: Understanding key components of the system you are part of and will affect with your green initiatives (from business and sustainability perspectives)
2	Success	Desired internal and external goals: Creating a clear picture of what success looks like considering key aspects of your “system”
3	Legitimacy	Including required actions and proof points: Developing your legitimate place of leadership and the actions and proof that it requires
4	Position	Stories and explanations that capture system, success and legitimacy: Crafting your authentic story that will inform your actions, both inside and outside your business

This ladder can create an effective, proactive approach to “going green,” while also clearly identifying liabilities and creating an authentic platform for both internal and external communications.

¹⁶ Applied Materials’ “[Environmental Responsibility Report](#),” (2007)

¹⁷ Full disclosure: Sun Microsystems and Applied Materials are clients of Bite Communications

1. System

How does a company address the perfect greenwash storm that sits on the global business horizon? Especially when 70 percent of consumers expect them to take the lead for environmental solutions, but fewer than 10 percent believe what businesses say about it?¹⁸ First and foremost, an environmental leadership platform must clearly define and communicate the area in which a business can lead. The system of influence, both real and perceived, establishes the parameters that create a defensible, reasonable and meaningful basis of “greener” operations and initiatives. It also establishes the basis for communications and messaging, which successfully integrates business, green and sustainability dimensions. It is an understanding of the dual nature of the green arena that enables an authentic strategy.

Indeed, defining the system of influence—both a business’ influence and what influences the business—forms the foundation of the green measures a business can authentically take. The system (be it the business, the entire value chain or simply a factory floor) creates a baseline for expectations and bounds the measurements of success. The challenge highlighted by the rising tide of greenwashing concerns, is that while a business may desire to set its boundaries at its “factory walls,” it must consider its influence on the entire global issue of sustainability.

If taking the world into account is critical for green leadership, taking one’s “business system” into account is equally important. While taking the larger world into account when designing business actions (e.g., climate change or waste reduction), business must align objectives and related green promises closely to their scale (e.g., what you can actually do regarding climate change or waste) and objectives. An international company should define its system for environmental leadership as more than just its local community—it needs to reflect the breadth of its operations. In one example, international technology company, AMD has defined the system for its AMD Green initiative as a “lasting commitment to customers, partners, communities and employees.”¹⁹ Good neighbor policies are a significant part of green leadership, but this focus alone would miss an opportunity for influence, aim too low, and be open to greenwashing interpretation.

Cleantech Too

Green technology businesses may feel that they are ahead or even outside of this discussion since they are in “the business” of cleaner and greener market solutions. The opposite is true. Because being cleaner and greener are central to these brands and their business goals, these companies—many of them only 2-3 years old—must address sustainability from day one. From biofuels to distributed generation—we’re just beginning to learn about the ‘dirty’ side of cleantech, which is often buried in production (e.g., ethanol and impacts “at the farm”) or in the entire lifecycle (solar PV production and future take-back issues). These challenges and stories highlight the absolute need for clean and green technology businesses to take a very large systems perspective.

2. Success

Creating the right internal and public vision of success—something that is both aspirational and achievable—is incredibly important to developing the most relevant environmental leadership opportunity for any company. The right vision of success helps focus all initiatives, and, when well crafted, must map back to the company’s broad business objectives, market position and sustainability issues. The vision must also be supportable by appropriate operational efforts—ranging from “cleaning up” supply chains to retrofitting buildings with energy efficient technology to partnering with other organizations. This is critical in matching communications to business actions. By articulating an appropriate definition of success any organization will be able to create

¹⁸ “[What Assures Consumers on Climate Change?](#)” AccountAbility (June 2007)

¹⁹ Full disclosure: [AMD](#) is a client of Bite Communications

a clearly understandable, repeatable and replicable communications strategy to support it. An excellent example of clearly articulated vision for success is found with Interface, a carpet and flooring company that was founded on the principles of sustainability. As Interface puts it: “Interface will become the foremost in our industry and prove that environmental responsibility makes good business sense.”²⁰

3. Legitimacy

To step from a clear vision of success to a legitimate leadership position relies on authentic, measurable and reportable action. The most believable green initiatives in the public eye have clear proof points and timelines for implementation of all action items. Failing to develop a suite of proof points that provide legitimacy is one of the most obvious, and regular, mistakes that environmental leadership efforts make. As discussed, all companies claiming environmental



leadership can expect an increasing number of citizen journalists and traditional media to challenge green claims, often in response to aggressive leadership goals (e.g., the Green Guerrillas and the PG&E “Let’s Green This City” campaign, which spawned a [Let’s Greenwash This City](#) microsite).

Knowing where your business stands today is critical in establishing legitimacy, and taking legitimate green actions. As a first step to protect a company from greenwashing skepticism, an appropriate inventory should be undertaken of all corporate initiatives that can be considered environmental in nature—and the formulation of clear, concise “green timelines” that demonstrate commitment over time (the past, as well as the future). The description of the System above can help to define the scope of the inventory. This inventory must be as complete as possible and endorsed, when possible, by reputable “witness” organizations, such as the US EPA or well-respected and appropriate environmental organizations. With this inventory in hand, a business can integrate where they are today with actions to get them where they want to be tomorrow.

Another pillar of legitimacy is partnership. Within the green arena, no single business can succeed alone. Indeed, a recent UK study highlighted that without partnerships between businesses, environmental leaders and scientists, fewer than 10 percent of consumers believed business’ green claims.²¹ Given business’ understanding of the system and definition of success, it is critical to develop strategic partnerships that support internal efforts and lend third-party credibility to external communications. As important, a strategic set of partners can allow a business to legitimately extend its influence to bridge areas where key stakeholders expect and demand action, but an individual business cannot deliver. Moreover, when public and private forces combine, eco-business initiatives are legitimized and demand is created for greener products and services. Take the example of California’s award-winning “Flex Your Power” campaign that



combined a state-funded public awareness effort with co-branded marketing with a range of companies—from Southern California Edison to Whirlpool. Not only did the campaign keep California from the rolling blackouts of 2001, but the effort drove market transformation—increasing sales of some energy-efficient products by 1000 percent.²²

²⁰ Read more about Interface’s goals by visiting their corporate [website](#).

²¹ From page 23: “[What Assures Consumers on Climate Change?](#)” AccountAbility (June 2007)

²² Full disclosure: Co-author Kristina Skierka worked with Flex Your Power from 2001-2006

4. Position

Finally, with an understanding of the key elements of the system the business operates within, a cohesive and success-aligned vision and an action plan that maps success to specific and timely action, a business is well positioned to communicate its green story. For some businesses whose brands are directly aligned with a greener tomorrow, such as renewable power, organic food or green consumer products, a story that sets the bar high will be required. For other businesses that are not so directly aligned, their stories will need to highlight where they have legitimate leadership opportunities and how they are executing. For both, backing up goals and promises with actions will be critical. It is also important to note that in every case, positioning a business to be open about what it cannot do will be central to avoiding greenwashing accusations.

7 Conclusion

If 2007 was a tipping point for embedding “green” in the business world, 2008 is the beginning of the perfect greenwashing storm. History has highlighted a number of dimensions that come together to force alignment between corporate promises and public action. Today’s businesses designed without eco-sustainability in mind will increasingly become subject to an expanding and increasingly aggressive media and external pressure. The pressure to have a “green story” will only increase.

A raft of policy shifts signal that the storm is here. Ranging from California’s AB 32 to the European REACH chemical accords, governments are reacting to global environmental impacts combined with the scale of global sourcing and production, demanding that producers shoulder an increasing burden to ensure their products and materials are environmentally safe. Take-back legislation on consumer electronics, common goods like bottles and cans, and big-ticket items such as cars, are increasingly pushing businesses to think in terms of product stewardship and of the entire “life cycle” of their business outputs. These shifts in policy represent a globalized economy that is grappling with the adaptations that must be made to have a sustainable and successful future. The pressures will not go away.

Although regulation will continue to force change, the real business ROI of “green” is found in getting ahead of the curve and going beyond compliance. Actions—from recycling cans and paper, to increasing supply-chain efficiencies, to using cleaner energy in factories and offices—all add up to create a foundation of trust and deliver real cost savings. A host of businesses that are tackling sustainability issues head-on through innovation, transparency and partnership are finding opportunity that they did not know existed.

The bottom line in establishing authenticity via a green Leadership Ladder—and creating protection from greenwashing—is finding ways that being more sustainable matches up with being a better business. Increased efficiency by reducing waste, using fewer inputs and, thereby, decreasing costs, makes business sense. Getting out ahead of regulation—and having insight and input into producing better regulations—benefits any business in rapidly evolving markets. Finally, aligning your brand, business strategy, operations and communications with the reality of the environmental and social sustainability arenas means a better-run business that is able to more effectively develop and adopt new technologies and successfully enter new markets for increased shareholder and customer value.

8 Author Biographies

George Basile, Ph.D., Senior Sustainability Consultant

George is an advisor on sustainable business practices and helps develop internal and external communications campaigns. George received his undergraduate training in Physics at the University of California, Irvine and his doctorate in Biophysics from the University of California, Berkeley. He is co-author of the textbook *Strategic Leadership towards Sustainability*. He has served on the faculty at Stanford University, been an executive in start-up technology ventures, and co-developed a research field in emerging technology and sustainability at the University of California, Berkeley. He currently serves on advisory boards for both nonprofit organizations and new business ventures. George publishes widely in the field of sustainability, including research articles such as “Strategic Sustainability” in the *Journal of Cleaner Production* and lay articles for a broader audience.

Kristina Skierka, Director Cleantech and Green Products Practice

As part of the Cleantech and Green Products Practice at Bite Communications, Kristina has helped to develop the cleantech team’s unique approach for today’s audience-centric, channel-neutral, values-based communications that integrates marketing, advertising and public relations in the green marketplace. Kristina’s expertise has informed some of the most well-known environmental leadership campaigns in the marketplace today—including Sun Microsystems (energy-efficient products), Applied Materials (solar and energy-efficient fabs), 3 Degrees (renewable energy credits and carbon offsets), EcoSMART (botanical pesticide) and Green Rubber Global (rubber devulcanization technology). Prior to Bite, Kristina helped save California from rolling blackouts during her tenure at Flex Your Power, considered to the most successful energy-efficiency awareness campaign in history. An expert in social marketing and public awareness campaigns, Kristina has also been trained by Vice President Al Gore to present *An Inconvenient Truth* to audiences around the world. Kristina serves on the board of Sustainable Silicon Valley.

Contact Information

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