

# BRIDGE PAPER™

Business Roundtable  
**Institute for Corporate Ethics**

## **Environment, Ethics, and Business**

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Featuring a *Thought Leader Commentary™*  
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# FOREWORD

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The Business Roundtable Institute for Corporate Ethics is an independent entity established in partnership with Business Roundtable—an association of chief executive officers of leading corporations with a combined workforce of more than 10 million employees and \$4 trillion in annual revenues—and leading academics from America’s best business schools. The Institute brings together leaders from business and academia to fulfill its mission to renew and enhance the link between ethical behavior and business practice through executive education programs, practitioner-focused research, and outreach.

Institute Bridge Papers™ put the best thinking of academic and business leaders into the hands of practicing managers. Bridge Papers™ convey concepts from leading edge academic research in the field of business ethics in a format that today’s managers can integrate into their daily business decision making.

Environment, Ethics, and Business is an Institute Bridge Paper™ based on the experience and research of R. Edward Freeman (with Jessica Pierce and Richard H. Dodd). Originally featured in the book *Environmentalism and the New Logic of Business: How Firms Can Be Profitable and Leave Our Children a Living Planet*, published in 2000 by Oxford University Press, this paper explores various mindsets and barriers to combining business, ethics, and the environment. Freeman proposes an innovative mindset for integrating the three concepts and suggests a series of models for business use in providing leadership for one of today’s most pressing global issues.

The accompanying Thought Leader Commentary™ with Jan van Dokkum argues the case for urgency in addressing the need for integrating ethics, business practice, and a concern for the environment.

# INTRODUCTION

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Today's challenge to business leadership is ensuring profitability while doing the right thing using environmentally sustainable methods. It is possible for business leaders to make money, engage in ethical leadership, and participate in preserving the environment for future generations. It is possible to fit these ideas together, but it is not easy.

Environmentalists and business leaders have traditionally seen themselves at odds. But the concepts of business, ethics, and the environment can be aligned to create innovation rather than legislation and litigation.<sup>1</sup> There are no magic solutions; however, asking the right questions is a step in the right direction.

Instead of showing the myriad ways that business, ethics, and environmentalism conflict and lead to impossible choices, it is more useful to ask, "How is it possible to put these ideas together?"<sup>2</sup> In today's world, all three issues require serious consideration. Businesses must continue to create value for their financiers and other stakeholders. Business leaders can no longer afford the ethical missteps that led to the epidemic of scandals in the last decade. To leave a livable world for future generations, business leaders also must pay attention to environmental matters. Yet most of the methods, concepts, ideas, theories, and techniques used in business do not put business, ethics, and the environment together. Neither ethics nor regard for natural systems is typically central to the way we think about business.

Business language often is oriented toward seeing a conflict between

business and ethics. Profits are routinely juxtaposed with doing the right thing, as if making an ethical decision means profits must be reduced.<sup>3</sup> Sometimes difficult choices which distribute harms and benefits to communities and employees are qualified as "business decisions," signaling that business and ethics are not compatible.<sup>4</sup>

In a similar way, environmental considerations are frequently viewed as barriers to profitability. They are viewed as necessary evils, costs to be minimized, or regulations with which to comply. The environment is rarely considered central to business strategy unless there is some regulation that constrains business goals, a mess to clean up, or a public issue which pits executives against environmentalists. Historically, business people neither have been encouraged nor discouraged to get involved with environmental concerns. Models and theories of business traditionally have been silent on the subject of the environment. Silence, however, is no longer an option in the face of society's recognition of the potential environmental price of corporate profits.

An increasing number of citizens consider themselves to be environmentalists. Governments are increasing their cooperative actions to address worldwide environmental concerns such as global warming and biodiversity. And interest groups are beginning to propose solutions to problems that involve business decision-making outside of and beyond government regulation.

We desperately need some new ideas, concepts, and theories that allow us to

think about business, ethics, and the environment in one complete breath. We need successful business models to inspire us. To find solutions, we need to see these issues joining together rather than conflicting.

## THE ENVIRONMENT: IT'S EVERYWHERE

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Early one morning in March 1989, the super tanker Exxon Valdez ran aground on Bligh Reef in Prince Williams Sound off the coast of Alaska. In the days following the accident, every action or inaction by Exxon executives, government officials, and environmentalists was subjected to unprecedented public scrutiny.<sup>5</sup>

Sixteen years later, Hurricane Katrina made landfall in New Orleans. The storm was only the third strongest in United States history, but with a death toll of at least 1,300 and an estimated cost of \$70 billion, it was the costliest storm in U.S. history.<sup>6</sup> Many scientists and governmental organizations, including the United Nations, have linked the deadly storm season of 2005, including Katrina, to environmental issues such as global warming and wetland erosion.<sup>7</sup> *An Inconvenient Truth*, a documentary about the environmental crisis, has amassed over \$6 million in box office sales, and a recent *Time* magazine cover declared that when it comes to the natural environment, readers should “Be worried. Be very worried.” In the same issue, 85% of American respondents agreed that global warming is happening, and 87% supported governmental action in the marketplace.<sup>8</sup> Environmental concerns have become mainstream and are here to stay.

Today there is not a single aspect of the world that can escape the scrutiny of environmental analysis, and business activities stand at the crux of many issues. Some of the issues that today’s executives need to understand to be environmentally literate include: air, water, and land pollution; the production and disposal of hazardous wastes; solid waste disposal; chemical and nuclear spills and accidents; global warming and the greenhouse effect; ozone depletion; deforestation and desertification; biodiversity, and overpopulation.

Conflicting media reports circulate daily about the state of the earth. Scientists debate whether global warming is or isn’t a problem, whether it is or is not caused by solar storms, and whether it is or isn’t related to the emission of greenhouse gases and so forth. Although there is a scientific majority consensus that the environmental crisis is real, the voice of dissenters is amplified through the hope that there is no real problem. People want to know the truth about the environment, and they get disturbed by so many conflicting reports.

The truth is that there is no one truth about the environment. The factors involved are too complex, and we lack critical knowledge about causes and effects. In truth, we have not lived in ways that respect and preserve natural systems.

## GAMBLING WITH THE FUTURE

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Let’s assume an optimistic scenario that implies the gloomy forecasts are all wrong. Maybe there is enough land for landfills for generations to come.

Maybe global warming is a simple weather pattern that will reverse in five years. Perhaps many of the chemicals we believe to be toxic may well be harmless. The destruction of forests may be insignificant and worth the benefits of development. Someday, clean and healthful water may be plentiful. And it may be that technology will be invented that will compensate for whatever damage has actually been done to the earth.

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*If the majority of people value the natural environment, why have most responses to the environmental crisis been at best ineffective?*

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Should we be willing to bet the futures of our children and grandchildren on this optimistic scenario? If the optimistic outlook is wrong or even partially wrong with respect to global warming, then the world will become uninhabitable for future generations. It is logical to assume there is an environmental crisis; the consequences of being wrong are too great to bet otherwise.

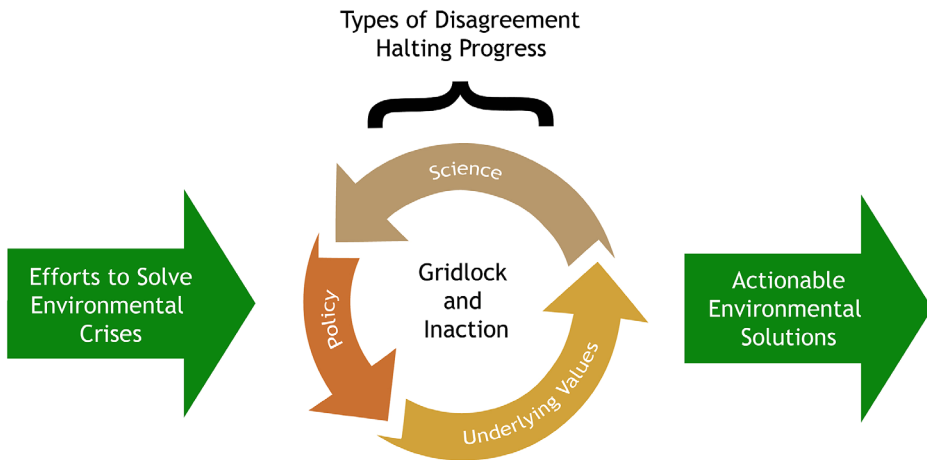
What is not logical to assume is that the current solutions offered to the environmental crises, such as increased regulation, eco-efficiency, doing more with less, and constraining the growth of business, are the only or even most viable solutions. If the majority of people value the natural environment, why have most responses to the environmental crisis been at best ineffective? The main response mode has been to marshal the public policy process to legislate that

air and water be cleaner and to assign the associated costs to states, localities, and businesses. Thirty plus years of environmental regulation in the United States have led to “environmental gridlock.” Disagreement and contention exist at three important levels:

- First, there isn’t any one truth about the state of the environment. Many individual, scientific “facts” are disputable. By their very nature, issues such as long-term effects of certain chemicals and the state of the bio-sphere are cast in the future, and thus, uncertain. There is widespread disagreement about the scientific answers to environmental questions and about how the questions should be stated.<sup>9</sup>
- Second, there is still disagreement about appropriate public policy among those who agree on the science involving a particular issue. Even if we agree that greenhouse gases lead to global warming, we may well disagree that limiting carbon dioxide emissions to 1990 levels by 2012 will solve the problem.
- Third, there is fundamental disagreement about the underlying values. Should we live with nature? Should we become vegetarians to improve our ability to feed the hungry and use land more efficiently? Should we recycle or consume green products, or should we build an ethic of “anti-consumption,” saving the earth rather than consuming it?

These three levels of disagreement lead to gridlock, especially in a public policy process that purports to base policy on facts rather than values (**Exhibit 1**).

## Exhibit 1. Environmental disagreement and resulting inactions.



Overlay these three levels of disagreement on a litigious system of finding, blaming, and punishing polluters of the past, and the result is a conversation about the environment that goes nowhere fast.<sup>10</sup>

There is another possible mode of response to the environmental crisis, one that has been proven to be the most efficient method humans have found to meet their needs and create value: business strategy. If business activity can take place systematically in environmentally sustainable ways, then the environmental crisis can be addressed in lasting, innovative, and effective ways.

### **BARRIERS TO CONVERSATION**

To rethink business in a way that incorporates ethical and environmental considerations, we must be on the lookout for barriers that may prevent us from engaging in tough issues. Most of these barriers stem from our own

inability to entertain new ideas, in other words, our mindsets. Psychologists have found that in situations of uncertainty people rely on their biases, beliefs, and assumptions to make decisions. This is neither good nor bad; it's just how people work. Because of this, it is easy for us to get locked into our own set of beliefs. If we are stuck in a particular mindset, it makes it hard to have a discussion, much less to innovate. There are at least five mindset frameworks which fail to recognize that the integration of business, ethics, and the environment is a real possibility.

#### **Regulatory Mindset**

The regulatory mindset views the environment as a part of the business-government relationship to be spelled out in terms of regulation or public policy. It discounts the possibility and wisdom of voluntary initiatives that stem from environmental values or the desire to respond to environmental preferences. Over the last 30 years, we have seen an accelerated increase in



environmental regulation. From 1870 to 1970, approximately 25 environmental regulations were enacted in the United States; today over 120 have been enacted.<sup>11</sup> The exponential increase in environmental regulation demonstrates the belief that laws, measurements, and government supervision will resolve our environmental crises. For advocates of the regulation solution, the dominant paradigm is that government is the responsible entity for resolving our environmental issues.

While recent concern with the environment typically meant the passage of laws and their attendant regulations, the debate today goes far beyond a regulatory mindset. Regulation lags the discovery of real problems, and regulation inevitably entails unforeseen consequences. Our question for the regulatory mindset is: Are you confident that government, as it currently works, will create a sustainable future?

### **Cost/Benefit Mindset**

The cost/benefit mindset views cleaning up the environment, or making products and services more environmentally friendly, as having costs and benefits. Thinking in traditional business terms, one should go only as far as the benefits outweigh the costs.

There are several problems with this view. The first is that when you focus strictly on costs and benefits, opportunities for innovation are missed. The argument is similar to the quality approach. By focusing on the cost of quality, managers make wrong decisions. By focusing on quality processes such as Six Sigma or lean process engineering, human innovation takes over and drives quality up and costs down. Multiple tool sets have evolved including the triple

bottom line (people, profits, planet) and full life cycle analysis. By considering the actual cost of a product through its

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*...when you focus strictly on costs and benefits, opportunities for innovation are missed.*

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entire lifecycle, many companies have unearthed savings from environmental action. Whether the cost savings are driven by reduced risk, better use of materials, or higher retention of employees, environmental issues must be considered with a broader mindset than the traditional cost/benefit mindset. The cost/benefit mindset assumes that environmental measures always incur additional cost, an assumption that leads to inaction. Many companies are discovering that by adopting environmental values, they are reducing costs.

In 2004, the industrial and consumer product giant 3M began celebrations for the thirtieth anniversary of its Pollution Prevention Pays (3P). 3M reports the program's cost savings at \$1 billion and pollution prevention at 2.2 billion pounds.<sup>12</sup> The environmental question is about waste reduction, not increased expenses. By focusing on costs and benefits, managers are inevitably led to ask the wrong questions.

The second problem with the cost/benefit mindset is that it assumes one particular set of underlying values: economic values. Many environmentalists, executives, and other thinkers have questioned the priority of our current ways of thinking about

economics. All value is not economic value. Does the last gorilla have just an economic value? What about the beauty of the Grand Tetons? Human life is rich and complex and not reducible solely to an economic calculation. It is degrading to all to think we only value people and things in simple economic terms.

### **Constraint Mindset**

This mindset argues that the main purpose of business is to create and sustain economic value, and everything else, from ethics to the environment to meaningful work, is best viewed as a side constraint. The business of business is purely business.

A more thoughtful analysis of “economic value creation” shows that it is impossible to separate the “economic, political, social, and personal” aspects of value. When Starbucks grants full benefits for part-time employees, when Johnson and Johnson recalls Tylenol,

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*Human life is rich and complex and not reducible solely to an economic calculation.*

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when Body Shop employees volunteer to help the homeless, when Mattel donates money to the part of Los Angeles destroyed by riots—all of these actions imply that it is possible for a company to be driven by economics and ethics. No one is arguing that economics is unimportant, but the reduction of all human value creation/value-sustaining activity to economic measures misses the mark. Business does more than create economic value, and reducing capitalism

to a narrow view of economics endangers our free society.

### **Sustainable Development Mindset**

It may seem strange to lump what is supposed to be a way to save the planet Earth with mindsets that prevent environmental progress. Obviously, not all goals of sustainable development act as barriers, but some ideas of this concept simply miss the mark. The Brundtland report, the basis of the Rio Earth Summit in 1992, called on governments to redefine economic activity to become sustainable. The report defines this as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs.” At first glance, the idea of sustainability is quite appealing and seems inarguable. Even if we believe this to be a good definition and goal, it is a little disturbing that some may view a nearly 20-year-old report as cutting edge thinking on a matter as important as the environment. Two problems surface from the resultant mindset.

First, we wonder if “sustaining” the same opportunities for future generations is really our goal. Do we want them to have better choices? Framing the environment in this manner leads to the concept of “do more with less” and “constrain all growth.” As sustainability thought leader William McDonough points out in *Cradle to Cradle*, while these may be noble ideas, they are not strategies for long-term success and are inherently at odds with the goals of commerce. Slowing down the system that has led to our current problems will not solve them; in fact, it leads to a false sense of security that is even more dangerous.

A second problem with this view is

that it leads quickly to the regulatory mindset discussed earlier. Based on the idea of sustainable development, the United Nations Environment Programme (UNEP) consistently calls on governments to maintain an intrusive role in the process of value creation.<sup>13</sup> If we have learned anything from the collapse of state socialism, it is that governments and centralized approaches do not work very well. Ultimately, a worldwide regime of environmental cooperation could become a worldwide hegemony of democratic

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*If we have learned anything from the collapse of state socialism, it is that governments and centralized approaches do not work very well.*

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freedom. Decisions on the future of entire industries and companies could become a matter of governmental beliefs about what is “sustainable development.”

Since there is no one truth about the environment, it is necessary to adopt a radically decentralized approach which focuses on shared values, as well as a conversation about those shared values. If such an approach is not adopted, then we will see increased social and regulatory pressures aligned against business growth as part and parcel of our failure to integrate business, ethics, and the environment.

### **Greenwashing Mindset**

The greenwashing mindset—otherwise

known as companies exaggerating trivial environmental changes to products, services, and processes—pervades many discussions of the environment.<sup>14</sup> Characteristic of this mindset is the view that business could never act on values other than profit maximization, and that whenever a company engages in something that looks like it might be good for the environment, people should be deeply skeptical. In reality, this mindset asserts that the company is probably trying to make money, create a public relations smoke screen, avoid some future cost, or engage in other narrowly self-interested schemes. In this view, many corporate environmental programs are cleverly disguised attempts to appear sustainable, while really operating in an environmentally destructive mode.

Many times the assumption is that “business is bad,” especially with groups of people who are deeply committed to environmental values but who have little real contact with the inner workings of business.<sup>15</sup>

It is true there are attempts to greenwash, and such claims should be closely examined. The assumption that all business attempts at environmental action are suspect, however, is simply incorrect.

People should be skeptical of grand environmental claims, whether they are from business, government, environmental groups, or scientists. The arena is very uncertain and complex. The greenwashing mindset makes innovation impossible, so it is impractical in seeking solutions. Of course, businesses want to make money, but it doesn't follow that the environment be left out of the equation or that profit is the only value that counts. An alternative view that many leading business leaders

are adopting is one in which values, including environmental ones, are the driving force of business.

## THE BASICS OF BUSINESS: WHAT DO YOU STAND FOR?

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From the start, many new ventures are incorporating concerns for the environment into their core strategies. Method, a company founded in 2001 by two young entrepreneurs, with roughly \$300,000 in start-up capital, assumed from the beginning that incorporating ecological and human health concerns into its strategy was simply good business. In 2006, the company had 45 employees and revenue of over \$40 million. The home cleaning products startup describes its mission as “People against dirty.” According to the website, dirty “means the toxic chemicals that make up many household products; it means polluting our land with non-recyclable materials; it means testing products on innocent animals...these things are dirty, and we’re against that.”<sup>16</sup>

There is a revolution afoot in business; it is a revolution with “values” at its core. Sparked by the never-ending quest for competitive advantage and the recognition of the roles of values and quality, business today is turning to values. Standards have been raised. Not only are businesses expected to provide products and services that are “better, cheaper, faster,” but the “better” is now increasingly expected to incorporate sustainable business practices among other rising demands. Companies that can deliver in this new competitive space are moving ahead of the competition.<sup>17</sup>

At one level, this emphasis on values cuts against the traditions of business. It has often been assumed that business promotes only one primary value—profits. Profits are important as they are the lifeblood of business, but there is more. Businesses can and often do stand for something more than profitability. Some, like IBM, stand for creating value for customers, employees, and shareholders. Others, like Merck, stand for the alleviation of human suffering. Still others, like Mesa Petroleum, may well stand for creating value for shareholders only, but even those companies must do so within the confines of the law and public expectations that could be turned

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into law. Many smaller companies can be a direct reflection of their leaders’ values, which may include environmental values.

Patagonia, a privately held outdoor clothing and equipment company, was founded in 1970 by Yvon Chouinard, an avid mountain climber and surfer who began the company by making and selling pitons, the pins used by climbers to secure their ropes.<sup>18</sup> The company evolved over time to a clothing line targeted at a variety of outdoor enthusiasts. Chouinard maintains a rabid personal commitment to sustainable

practices (he lives in a house made entirely of reclaimed materials) and has led his company down a similar path. In 1994, Patagonia differentiated itself when it shifted to all organic cotton, becoming the only clothing manufacturer of its size and distribution to do so. Through this and a variety of other environmental initiatives, the company has maintained a commitment to reducing its natural footprint, not for cost reduction or preferential marketing (of which it does reap the benefits) but because of the culture that has grown around its founder's love for and commitment to the natural environment.

The typical strategy process involves thinking about these questions: (1) What businesses are we in? (2) What is our competitive advantage in these businesses? (3) How can we sustain competitive advantage? What product/market focus should we take? What needs to change in order to be successful? Some set of these questions goes into every level and division of the company.

If this values revolution in business is to set the stage for an effective strategy, we first must ask a necessary question: "What do you stand for?" By articulating an answer to this question, thereby setting forth a statement of the core values of the organization, the strategy questions mentioned earlier will have a context in which they can be answered.<sup>19</sup> For instance, if you stand for human dignity and a basic idea of human rights for all, then there are probably some markets you will not serve and some products and services you will not provide. If you stand for quality, cleanliness, and value, you will forego certain business opportunities because you cannot produce quality service in a clean environment or at a price that gives good value.

Many businesses have discovered that articulating some bedrock, foundation, or basic value has enormous benefits. The business becomes focused around these values. Everyone, from executives to mail clerks, begins to believe in them and innovate because of them, or they are attracted to the firm because of these values. In short, business strategy just makes more sense in the context of values.

## **VALUES AND THE ENVIRONMENT: ADOPTING AN INNOVATIVE MINDSET**

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The logic of values provides the very engine of business. Far from the inhibiting mindsets which we mentioned earlier, an innovative mindset is central to thinking creatively about business. The innovative mindset is a perspective that believes there is not one solution to the environmental problem but many solutions to any problem. It is the belief that new problems require new solutions. Furthermore, it is the declaration that through the ingenuity of entrepreneurial innovation, driven by deeply held environmental values, business can create a better set of opportunities for future generations. By clearly declaring the values of the company, the guiding goals can become transparent to employees. When employees believe in values, they are moved to innovate to realize those values. When the organization is committed to realizing the values, there is little that is sacred other than the values. People will try new ideas if they may help them to realize what is important.

It is easy now to see how thinking about the environment and ethics is



compatible with the values revolution. By clearly stating and understanding the core beliefs that an organization has or wants to adopt about ethical issues such as honesty, integrity, dignity of individuals, or caring about others, policies that are straightforward and easily implementable can be designed. By clearly thinking through a position on the environment, whether to comply with the law or to leave the earth better than we found it, we can begin marshaling the resources to realize these basic beliefs.

Business leaders can begin to meet the challenge of leadership—being profitable, doing the right thing, and helping to save the earth—by understanding and articulating an answer to the question, “What do we stand for?” Many companies are doing this today, and it works. From huge Wal-Mart to little Ben and Jerry’s, from oil and chemical companies to retail boutiques, articulating what they stand for on the environment is the first step to an ecologically sustainable world, one that can be passed along to the next generation.

## Shades of Green

There are many ways businesses can adopt strategies that are environmentally friendly; however, none are simple. All of them must still compete in the arena of “better, cheaper, faster” while incorporating environmental principles into the business strategy. At least four primary “shades of green” exist, each of which has its own logic and many interpretations. The shades include: (1) light green; (2) market green; (3) stakeholder green; and (4) dark green. These shades can be viewed as development phases of a company’s

strategy, moving from light green to dark green, but keep in mind, each shade has its own logic. It isn’t necessary to move from one shade to the next. Each shade offers its own way to create and sustain value by bringing together business, ethics, and the environment.

**Light Green Principle: Creates and sustains competitive advantage by ensuring your company is in compliance with the law.**

The logic of light green relies on the public policy process to drive its strategy. It is a mistake, however, to think that simply because every company has to obey the law, that no competitive advantage is possible.

First, countries with strict environmental standards seem to gain an edge in global marketplaces—they become more efficient and have better technology.<sup>20</sup> Secondly, within an industry, companies can actively pursue public policies that fit with their special competitive advantage. By innovating with technology and expertise, a company gains an advantage over a competitor that cannot comply as efficiently. Ironically, light green thinking creates the possibility for competitive advantage through lobbying to support regulations that the competition must scramble to meet but are non-factors for your organization. This level rewards leaders who set the standards and go beyond legal compliance.

**Market Green Principle: Creates and sustains competitive advantage by paying attention to the environmental preferences of customers.**

Market green strategies are based on “the greening of the customer,” a fast-growing yet controversial phenomenon.

Today's customer-focused, market-driven company cannot afford to miss the fact that many customers prefer environmentally friendly products given a similar cost. Again, it is easy to see that creating and sustaining competitive advantage is still a matter of "better, cheaper, faster." The Internet has made customers more informed about every aspect of a product, including its potential environmental harms. Companies that can meet these environmental needs will be the winners. Customer perceptions about a company's "shade of green" will be crucial, but most importantly, the products and services must perform.

Market green logic just applies good, old-fashioned, "know-the-customer" thinking to the environment, and the customer doesn't even have to be an extreme environmentalist. While Whole Foods Markets successfully appeals to a demographic that values organic and local produce, Coastwide Laboratories, an industrial cleaning products company, has appealed to its customers through offering its "Sustainable Earth" formulas. Market green logic roots competitive advantage in customer needs and the ability of the customer-driven company to deliver on these needs. There is nothing unusual except giving up the costly belief that environmentally friendly products always entail higher costs and competitive disadvantages. Market green logic can apply in the industrial as well as the consumer sector and to services as well as products.

**Stakeholder Green Principle: Create and sustain competitive advantage by responding to the environmental preferences of stakeholders.**

Stakeholder green is a shade darker than market green. It applies market green logic to a variety of key stakeholder groups such as customers, suppliers, employees, communities, shareholders, and other financiers. There are many different ways to slice the stakeholder pie. Companies can seek to maximize the benefits of one group, or they can seek to harmonize the interests of all groups. Stakeholder green gets its color from responding to the needs of some or all stakeholder groups.

Stakeholder green strategies are based on a more thorough adoption of environmental principles among all aspects of a company's operations. Many companies have adopted a version of stakeholder green by requiring suppliers to meet environmental requirements and by setting strict standards for the manufacturing process. Perhaps the most powerful example has been the recent adoption of a stakeholder green mindset by the largest retailer in the world. Wal-Mart recently announced a variety of environmental goals, including cutting greenhouse gas emissions by 20% and constructing stores that are 30% more energy efficient. While these measures consider the impact on the communities in which Wal-Mart locates, other measures are impacting suppliers, for example, rewarding those who can reduce packaging.<sup>21</sup> Paying attention to recyclable material in consumer packaging, educating employees on environmental issues, participating in community efforts to clean up the environment, and appealing to investors who want to invest in green companies are all a part of stakeholder green.

This shade is different for it does not prescribe one set method or a focused set of actions. It requires, instead,

anticipating and responding to a broad set of issues related to the environment and is more complicated than the earlier shades. The logic of stakeholder green is similar to the logic of quality processes. Unless quality processes permeate a company at all levels, they are doomed to fail. There are different levels of commitment to stakeholder green, just as there are different levels of commitment to quality, but any effective commitment must be pervasive.

**Dark Green Principle: Create and sustain value in a way that sustains and cares for the Earth.**

Dark green is a shade toward which few companies strive. Being dark green commits a company to being a leader in making environmental principles a fundamental basis of doing business.

To most business people this principle will sound idealistic or fanciful, which merely emphasizes how much we have ignored the environment in our ways of thinking about business. Intuitively, most people know that this principle should be obeyed. We teach our children to care for their things and the things that we share, such as our homes and the land. It is not a large stretch of the imagination to expect that the same values are possible in business.

Companies have adopted many frameworks in their quest to achieve dark green. Interface Carpet and Starbucks Coffee have successfully adopted The Natural Step, a set of principles that do not allow removal of non-renewable substances from the earth and do no harm to the biosphere.<sup>22</sup> Other companies, such as Nike, Ford Motor Company, and textile maker DesignTex, have adopted to some extent the design idea of “cradle to cradle” rather than

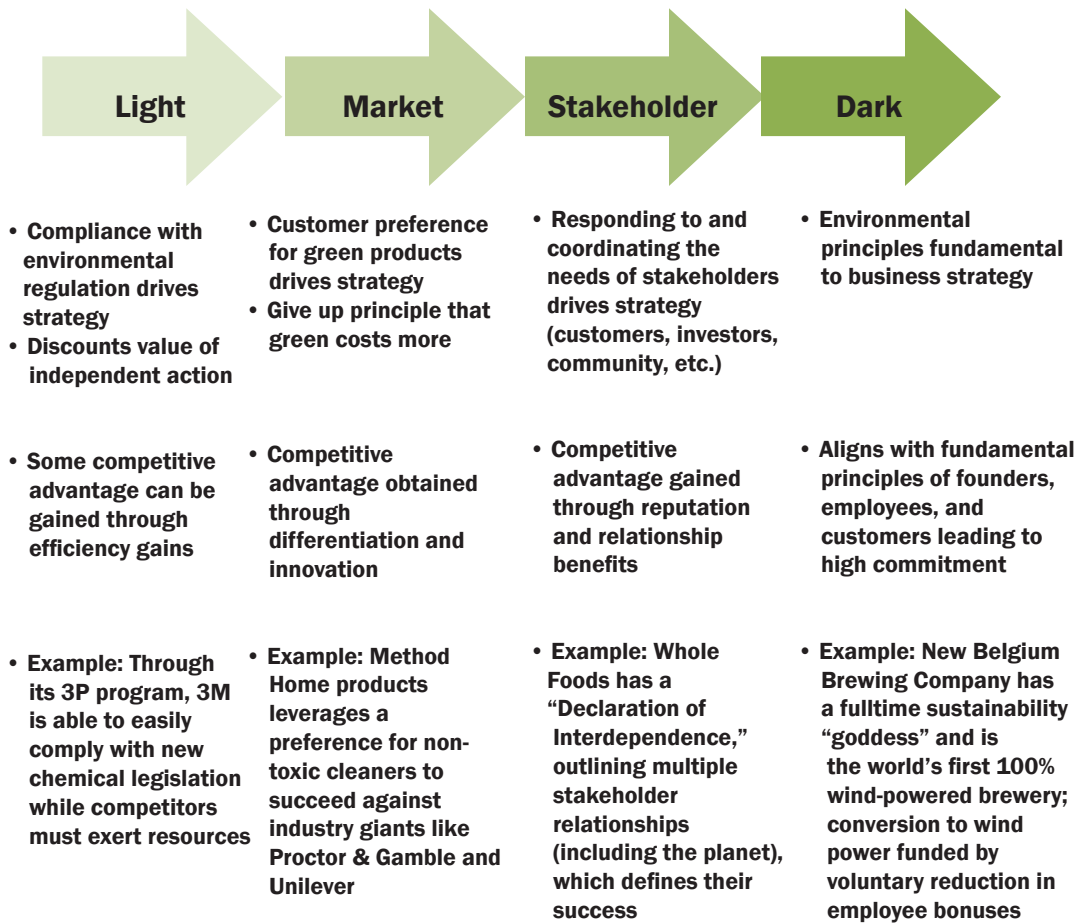
“cradle to grave.”<sup>23</sup> These companies are seeking to design products that can be reduced to reusable materials, with whatever is not reused harmlessly decomposing into nutrients for the earth. There are a number of viable frameworks, but what is important is a deep commitment to environmental and business values, not the particular tool the company uses. Dark green logic is not anti-business, though many people will believe that it is. Humans create value for each other, and “business” is the name we have given that process. Dark green logic simply says that the belief that we must respect and care for the Earth is one of the deep values we share. **Exhibit 2** gives examples of all four shades of green.

There are more than four shades of green. Managers can invent their own shade for their company. These four shades provide a framework which can help define what is possible for one’s own company. In practice, dark green may not be for everyone, while light green may well be more universal. Even in such cases it is useful to recognize the dark green mindset as a real possibility, a perspective that serves as an effective tool for business leaders who wish to align their firms’ activities with environmental values.

There is no optimal shade for everyone; variation is good. Imagine a world in which there are thousands of enterprises, each trying to realize competitive advantage through environmental means. Undoubtedly, many of these innovations will fail, but many others will succeed, and many still will lead to different and even more important innovations. It is only through a large scale process of many small innovations that real, lasting change can occur. This modest, workable



## Exhibit 2. Shades of green and their examples.



approach can lead to incremental lasting change, rather than pinning all of our hope on revolutionary pollution-solving technology or a “perfect” set of regulations.

In light of the best evidence available, it is difficult to believe that our environment is secure or that our current institutions, as well meaning as they may be, are doing all that is necessary. Free enterprise is the most efficient and effective system mankind has discovered for solving problems.

It is clear that if business leaders incorporate consideration of the natural environment into the strategic process, real progress can result. The challenge is for companies to formulate their own environmental principles and discover their own innovative answers to creating an economically and ecologically sustainable future.

## A THOUGHT LEADER COMMENTARY™ with Jan van Dokkum, President, UTC Power

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**Q:** Before joining UTC Power, you were involved with the traditional electric power industry. What prompted the career change?

**Jan van Dokkum:** My motivation for the transition was the opportunity to develop and launch innovative, efficient energy technologies that have minimal impact on the environment yet still provide the reliability our society demands.

I'm a true believer that global climate change is an immediate concern, so I manage my career accordingly. I am thrilled to be at UTC Power, a world leader in providing environmentally responsible power solutions. We develop and produce fuel cells for onsite power, transportation, space and defense applications, as well as renewable energy systems and combined cooling, heating, and power systems for the distributed energy market. UTC Power products are much more in line with my personal vision for protecting our natural resources and lessening the now inevitable effects of global climate change.

The traditional power grid doesn't capture the efficiencies we can achieve by generating power onsite with new technologies. For example, with conventional central power plants, nearly 70% of the energy can be lost to the atmosphere as waste heat and through transmission and distribution losses. On the other hand, combined cooling, heating, and power solutions can recover waste heat and convert it to usable energy. UTC Power's fuel cells generate less carbon dioxide than



*Jan van Dokkum*

conventional power generation because of the high efficiency of onsite generation and create little or no criteria pollutants such as NO<sub>x</sub>, SO<sub>x</sub>, and particulate matter. Our onsite power products also save water compared to conventional power products, which is becoming increasingly important in many parts of the world. In short, it's a much more sustainable approach.

**Q:** UTC Power provides products and services that help other companies become more sustainable. What do you see as the barriers to change?

**Van Dokkum:** The biggest hurdle is simply reluctance to entertain new ideas. Leaders get comfortable with a specific business model and don't want to change.

There is also what I call "sustainable window dressing." Some people will hand out business cards on recycled paper, but if you go behind the doors of their operations, you see no change.

There's no real conservation inside their buildings, no removal of materials of concern, no forethought on product recyclability. If you are really going to be green, you consider the entire lifecycle of your operation. It has to be part of your culture to find every opportunity to reduce or eliminate your impact.

In our business, we are seeing these barriers falling fast. Two years ago, companies felt they had time to study options and decide to act...or not. Now, the "do nothing" or "business-as-usual" approach has become unacceptable to their stakeholders. We have companies coming to us saying they must do something about their energy use or their environmental footprint or both. Because the impetus to act is so intense, they are much more open to new ideas.

More companies are proving it is possible to make money and actively help to slow the degradation of the planet for future generations. Within these companies, the push for change comes from the top—it's all about leadership.

UTC Power has great success working with organizations whose leaders are visionary about how their business affects the environment. They are concerned about where their companies need to be 30 or 40 years down the road. It's the vision of the leadership that moves them toward using power solutions like ours.

**Q:** You commented recently that the use of hydrogen fuel cell buses for public transit offers a number of noteworthy benefits: smoother acceleration at low speeds, higher fuel efficiency, greatly reduced air-polluting emissions, and quiet operation. What are the obstacles to moving forward in this arena?

**Van Dokkum:** It is 100 years of experience with internal combustion engines. Again, change is difficult.

However, excitement about fuel cell buses is building around the world as concern increases over environmental and health issues caused by diesel emissions. The world market for buses is estimated at about 250,000 per year—a staggering number. While nearly all of the buses purchased today are diesel, heavily populated urban areas recognize that zero-emission fuel cell buses can play a key role in addressing their pollution and health problems.

Buses and other fleet vehicles are the perfect avenue to introduce fuel cell power plants into the marketplace. Because the vehicles return to a central station each night, they can fill up with hydrogen without the need for an extended hydrogen infrastructure.

We are pleased with how our fuel cell power system has performed during revenue service in buses in California, Connecticut, and Belgium. Our customers have been impressed with the performance and fuel efficiency of the power plants, and passengers enjoy the comfortable, quiet, and odor-free ride of the bus. We are proving that reliable fuel cell buses are a reality now.

This technology is a natural bridge to other transportation applications, with the ultimate goal being its widespread use in automobiles. Of course, the hurdle is developing the hydrogen infrastructure to support this transition.

**Q:** The *Shades of Green* model outlined in this paper details several benefits and challenges for companies in adopting environmental business strategies. How would you characterize UTC Power along this spectrum?

**Van Dokkum:** We are at *Stakeholder Green*, with our eye on the very tough target of *Dark Green*. We definitely get our color from anticipating and responding to our stakeholders' needs. Our goal is to lead in sustainability, not only with our products and services, but also with the way we run our everyday operations throughout our entire value stream.

This approach comes from being part of United Technologies Corp. (UTC), a \$54 billion company with a large presence across the globe. UTC's products include some familiar names, including Carrier air conditioners, Otis elevators, Pratt & Whitney aircraft engines, and Sikorsky helicopters.

UTC continually proves it's possible to provide stakeholders with a balance of environmental, social, and economic value. Our performance has been outstanding, with total shareholder return at 24% in 2007, and cumulatively 388% for the decade ended December 31, 2007. We have achieved these results while maintaining principles of good corporate citizenship, including the highest ethical and environmental standards.

From 1997 to 2006, UTC reduced absolute energy use by 19% and water use by 49%, while doubling revenues. We voluntarily began eliminating materials of concern from our products in 2001. Finding safe, effective substitutes that are also acceptable to our customers has been a challenge, but we have achieved 44% elimination in new products. Our goal is to eliminate materials of concern in new products by the end of 2010.

Since 1997, UTC has invested more than \$26 billion in customer- and company-funded research and development, \$3.6 billion in 2007 alone.

Much of this went toward projects that directly benefit the environment.

We're also involving our suppliers. Last year, more than 1,000 key suppliers representing approximately 40% of UTC's product spend completed self-assessments against our baseline EH&S expectations. Eighty-one percent have met these criteria already.

**Q:** As an emerging technology company, UTC Power is often in the unusual position of designing products and creating markets simultaneously. How is collaboration with industry, government, and policymakers essential to this effort?

**Van Dokkum:** At this point in our industry's evolution, it's important to have government involvement. Incumbent technologies, such as internal combustion engines for transportation and the electrical power grid, have a huge head start and, in many cases, the rules of the game are written to support their continuation. Our society is comfortable with these technologies and has depended on them for many generations.

Because we are not yet producing products at high volume, we are often faced with an initial cost disadvantage compared to traditional, less sustainable power generation methods. Our customers may have more up-front expense, but there is a much greater value long term, especially when external costs like the impact of global climate change and the quality of the air we breathe are considered. We work side-by-side with government and policymakers to make sure there are proper incentives to help with initial costs for clean technologies. Until the playing field is leveled, there has to be some help to allow new, better technologies to win.

When governments promote more sustainable methods by enacting new environmental policies, it results in action from people still following the “Regulatory Mindset” discussed in this paper. But I have to say, I believe regulations are a necessary stopgap solution. This is especially true when the rules are written around business models of incumbent technologies.

One example is paying utilities simply to generate power and transmit it through their lines instead of rewarding them for making investments in their business. Under this current structure, there is no incentive for utilities to invest in alternative solutions because it reduces their traditional revenue. Governments can help advance the concept of decoupling so utilities get paid for their capital investment and expand this definition to include energy-efficiency projects. This is a long but vital process to ensure rapid adoption of onsite power technologies. UTC Power’s job is to bring these barriers to the attention of governments and engage with them and other stakeholders on workable solutions.

We cannot put all the responsibility for resolving our environmental issues on the government. We can drive change through personal choice. With individuals making the right decisions and governments providing support for the use of environmentally responsible technologies, we can look forward to a bright future.

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*We cannot put all the responsibility for resolving our environmental issues on the government. We can drive change through personal choice.*

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## ABOUT THE AUTHORS

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### **Environment, Ethics, and Business**

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Freeman has written or edited 10 books on business ethics, environmental management, and strategic management. His book, *Environmentalism and the New Logic of Business, How Firms Can be Profitable and Leave Our Children a Living Planet*, helps executives meet the challenge of being profitable while being environmentally responsible. He has also authored more than 40 Darden case studies. Freeman serves on the advisory board of the Institute for Practical Ethics and Public Life at the University of Virginia.

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### **Thought Leadership Commentary™**

JAN VAN DOKKUM is president of UTC Power, a company of United Technologies Corp. He assumed his current position in October 2002.

Prior to joining UTC Power, van Dokkum was with Siemens for 17 years where he served as president and chief operating officer at Siemens Power Transmission & Distribution, Inc. from 1997.

Van Dokkum is a member of the U.S. Department of Energy, Hydrogen and Fuel Cell Technical Advisory Committee. He serves on the board of directors of WestStart-CALSTART and is chairman of the California Fuel Cell Partnership.



# NOTES

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1. Arguments presented in this paper were originally developed in R. Edward Freeman, Jessica Pierce, and Richard H. Dodd, *Environmentalism and the New Logic of Business* (New York: Oxford University Press, 2000). In this paper we have refined and expanded these initial ideas.
2. **There are multiple conflicts which are a result of the conceptual schemes we (as a society) have traditionally brought to bear on these issues.** We need a new conceptual scheme that considers the possibility that these ideas can fit together. An argument about what may be possible is fundamentally different from arguments which assess and judge what has been and is the case. By focusing on the possibility of how these ideas might work together, we hope to escape some of the morass which usually encumbers more academic arguments in business.
3. **For a review of literature on business ethics see Patricia H. Werhane and R. Edward Freeman, “Business Ethics: The State of the Art,”** *International Journal of Management Reviews* 1, no. 1 (March 1999): 1–16.
4. **These “business decisions” are moral in nature. The idea that business and morality have nothing to do with each other is called “The Separation Thesis.”** If business is thought to be amoral and separate from ethics, and if ethics is thought to have nothing to say about the underlying process of value creation in society, then we have a logical explanation for why “business ethics” often appears as a joke. The Separation Thesis has long outlived any usefulness which it may have had. See R. Edward Freeman, “The Politics of Stakeholder Theory,” *Business Ethics Quarterly* 4, no. 4 (1994); and “Stakeholder Capitalism,” *The Financial Times*, 26 July 1996.
5. **For additional information, see Patricia Bennett and R. Edward Freeman, “The Exxon Valdez Oil Spill,”** UVA-E-0085 (Charlottesville, VA: Darden Business Publishing, 1996); or Art Davidson, *In the Wake of the Exxon Valdez*, (San Francisco: Sierra Club Books, 1990).
6. Associated Press, “Death Toll from Katrina Likely Higher than 1,300,” February 10, 2006, <http://www.msnbc.msn.com/id/11281267/> (accessed March 14, 2007); Kathleen Pender, “The True Cost of Katrina,” *San Francisco Chronicle*, September 27, 2005, <http://www.sfgate.com/cgi-bin/article.cgi?file=/chronicle/archive/2005/09/27/BUGADEUAO01.DTL> (accessed March 14, 2007).
7. United Nations Environment Programme, *UNEP Annual Report 2005*, [http://www.unep.org/Documents\\_multilingual/Default.asp?DocumentID=67&ArticleID=5125&l=en](http://www.unep.org/Documents_multilingual/Default.asp?DocumentID=67&ArticleID=5125&l=en) (accessed March 14, 2007).
8. Jeffrey Kluger, “Global Warming Heats Up,” *Time* 167 (March 2006): 36–39.
9. **For more information on this argument, see Norman Myers and Julian Simon, *Scarcity or Abundance?: A Debate on the Environment*** (New York: W.W. Norton, 1994).
10. **Combine this argument with the trend in many countries toward the devolution of government and an increasing disenchantment with government as the solution rather than market mechanisms, and note that the level of gridlock increases exponentially.**
11. P.T. Anastas, “Meeting the Challenges of Sustainability through *Green Chemistry*,” *Green Chemistry* (April 2003): 29–34.
12. *3M 2004 Annual Report*, 17, [http://media.corporate-ir.net/media\\_files/NYS/MMM/reports/2004ar.pdf](http://media.corporate-ir.net/media_files/NYS/MMM/reports/2004ar.pdf) (accessed March 6, 2007).
13. United Nations Environment Programme, *UNEP Global Environment Outlook 2000*, <http://www.unep.org/geo/geo2000/> (accessed March 14, 2007); *UNEP Annual Report 2004*, [http://www.unep.org/Documents\\_multilingual/Default.asp?DocumentID=67&ArticleID=4722&l=en](http://www.unep.org/Documents_multilingual/Default.asp?DocumentID=67&ArticleID=4722&l=en) (accessed March 14, 2007); *United Nations Global Biodiversity Outlook 2006*, <http://www.biodiv.org/doc/gbo2/cbd-gbo2.pdf> (accessed March 14, 2007).
14. For an example of this mindset, see Sharon Beder, *Global Spin: The Corporate Assault on Environmentalism* (Devon: Green Books, 1997).
15. For a more careful analysis of this idea see R. Edward Freeman, “The Business Sucks Story,” *The Darden Graduate School of Business Administration Working Papers* (1996).

16. [www.methodhome.com](http://www.methodhome.com) (accessed March 14, 2007).
17. This shift to values is not always in moral terms. Many executives see these values as a tool leading to profits. For additional discussion on this topic, see R. Edward Freeman and Daniel R. Gilbert, Jr., *Corporate Strategy and the Search for Ethics* (Englewood Cliffs, NJ: Prentice Hall, 1988), Chapter 3.
18. [www.patagonia.com](http://www.patagonia.com) (accessed March 14, 2007).
19. The question “What do you stand for” is also known as “enterprise strategy” and is traceable to Peter Drucker. See R. Edward Freeman, *Strategic Management: A Stakeholder Approach* (Boston: Pitman Publishing Inc., 1984).
20. See Michael Porter, *On Competition* (Boston: Harvard Business School Press, 1998).
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22. Brian Nattress and Mary Altomere, *The Natural Step for Business: Wealth, Ecology & the Evolutionary Corporation* (British Columbia, Canada: New Society Publishers, 1999).
23. William McDonough and Michael Braungart, *Cradle to Cradle: Remaking the Way We Make Things* (New York: North Point Press, 2002).



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