## Once Upon a Planet

Cassandra meets Dr. Pangloss — Expert's dilemma — Blues and reds, greens and whites — Assembling the operating manual — The world's largest movement — A hidden curriculum — Reversing several hundred years — Reclaiming the future — Mandates, principles, and declarations — Because it is possible

THE ENVIRONMENTAL DEBATE IS CONDUCTED IN A PREDICTABLE CYCLE: Science discovers another negative human impact on the environment. Trade groups and businesses counter, the media reports both sides, and the issue eventually gets consigned to a growing list of unresolved problems. The point is not that one side is right and the other wrong but that the episodic nature of the news, and the compartmentalization of each successive issue, inhibit devising solutions. Environmentalists appear like Cassandra, business looks like Pandora, apologists sound like Dr. Pangloss, and the public feels paralyzed.

The Worldwatch Institute's 1998 State of the World report again reported that the trend in environmental indicators was downward: "Forests are shrinking, water tables are falling, soils are eroding, wetlands are disappearing, fisheries are collapsing, rangelands are deteriorating, rivers are running dry, temperatures are rising, coral reefs are dying and plant and animal species are disappearing."

Predictably, Worldwatch's critics argued that the report was unduly gloomy. "In every single report in 15 years, [Worldwatch has] said we are outgrowing the planet's capacity. For 15 years, that's proved to be absolutely in every way false [sic]," retorted Jerry Taylor of the libertarian Cato Institute. Taylor cited increased life expectancy, decreasing child mortality, and improved nutritional intake as proving that standards of living improve as population grows.<sup>1</sup>

Ignored by the media is the likelihood that both sets of data are correct. It is unquestionable that humanity has made astonishing progress. Average life spans continue to increase, a middle-class person can travel the world, and people in developed countries have the highest standard

of living in history. But those facts do not make the Worldwatch observations wrong. Seemingly contradictory trends in the environment and society should not be portrayed as mutually exclusive. Both sets of data are credible and can be explained by the concept of overshoot: the ability to exceed temporarily the carrying capacity of the earth can help people to live longer, but put our natural capital into decline. Stated in another way, the ability to accelerate a car that is low on gasoline does not prove the tank is full.

Although such debates make good fodder for reporters and can help expose gaps in knowledge, the cacophony has unfortunate effects. One is the "expert's dilemma." If you went for your annual physical and were diagnosed by two doctors who fought and argued every step of the way as to whether you were sick or healthy, you would come away confused, numbed, and probably angry. When citizens who are not experts in climatology watch *Nightline* and hear one scientist state that automotive emissions of CO<sub>2</sub> could lead to killer hurricanes and massive crop loss while the other says that not using carbon-based fuels will signal the end of Western civilization, the citizens are left confused and disheartened. Mediagenic arguments allow little room for consensus or shared frameworks. Though great for ratings, such media-devised wrangling ignores the possibility that innovative, pragmatic solutions might exist that can satisfy the vast majority of Americans and make the wrangling irrelevant.

Remembering Einstein's dictum on mind-sets, cited at the beginning of this book, it might be useful to review a matrix of four worldviews on the emotional and intellectual frameworks that business, citizens, and governments use to negotiate and choose about economics and the environment. Biophysicist Donella Meadows, adjunct professor of environmental studies at Dartmouth College, outlined them in *The Economist*. She stated that she has become less interested in winning the environmental debate and more concerned with the "intransigent nature of the discussion." Each of the worldviews discussed below — which are color-coded with only a slight bias — is a systems view reflecting a perspective common among business, labor, environmentalists, and synthesists, in that order.<sup>2</sup>

The *Blues* are mainstream free-marketers. Such people have a positive bias toward the future based on technological optimism and the strength of the economy. They are armed with a strong statistical case, based on the vigorous and dynamic economies of Western and (until

1998) Asian nations. Their approach is deeply rooted in conventional economics, and their number-crunching reveals a world vastly improved and rapidly ascending. Blues believe that reliance on innovation, investment, and individual freedom will ensure a shining future for humankind, and a level of material well-being that has strong appeal to virtually everyone in the world. Their optimism also extends to the environment, believing that in most cases, markets will send strong and appropriate price signals that will elicit timely responses, mitigating environmental damage or causing technological breakthroughs in efficiency and productivity.

The Reds represent the sundry forms of socialism. Although one might expect them to have been discredited by the downfall of the erstwhile Soviet Union, their worldview is very much alive. They find validation in the chaotic and horrific economic conditions that the rise of bandit capitalism has brought to contemporary Russia, a country whose economic machinery now benefits a minority at the expense of a materially and socially disadvantaged majority. The growing and worldwide gap between rich and poor confirms the Reds' analyses, which are as accurate about poverty and suffering as the Blues' observations are accurate about growth and change. While Blues focus on the promise of growth and technology, Reds focus on its shadow and try to discern its root causes. They view labor — one aspect of human capital — as the principal source of wealth and see its exploitation as the basis of injustice, impoverishment, and ignorance. The Reds generally have little to say about the environment, seeing it as a distraction from fundamentally important social issues.

The *Greens* see the world primarily in terms of ecosystems, and thus concentrate on depletion, damage, pollution, and population growth. They focus on carrying capacity and want to bring about better understanding of how large the economy can grow before it outstrips its host. Their policy focuses on how many and how much, the number of people, and the amount of impact each person can have upon the environment. Greens are not usually technophobes; most see technology as an important tool to reduce human impact. More recently, some have become interested in free-market mechanisms, and want externalities presently borne by society to be fully integrated into producer costs and consumer prices so that markets become, in David Korten's phrase, "mindful." The Greens, and to some extent the Reds, host bigger tents in that they hold a bolder and broader diversity of views. But this also

keeps them splintered and self-canceling, as Greens tend to unite their enemies and divide their friends, a good formula for political failure. They are often portrayed as caring less for people than animals, more about halogenated compounds than waterborne diseases.

The Whites are the synthesists, and do not entirely oppose or agree with any of the three other views. With an optimistic view of humankind, they believe that process will win the day, that people who tell others what is right lead society astray. Since Blues, Reds, and Greens all fall into that category, Whites reject them all, preferring a middle way of integration, reform, respect, and reliance. They reject ideologies whether based on markets, class, or nature, and trust that informed people can solve their own problems. On the environmental level, they argue that all issues are local. On business, they say the fabled level playing field never existed because of market imperfections, lobbying, subsidies, and capital concentration. On social problems, they argue that solutions will naturally arise from place and culture rather than from ideology. Leadership in the White world is reminiscent of the Taoist reminder that good rulers make their subjects feel as if they succeeded by themselves. Environmental and social solutions can emerge only when local people are empowered and honored.

While many individuals have traits of two or more of these typologies, the different views tend to become isolated and to define the others by their own internal logic. Blues see Reds as anachronistic, even fascistic. Reds return the compliment and neither think much of the Greens, who they say are hindering progress and speaking for a privileged minority. Blues win points (among Blues) by lumping Greens in with the Reds. All three tend to ignore the Whites but will take credit when any White-type scheme works in their sphere. Meadows asks:

What would we see if we were willing to approach the question of human population growth and planetary limits purely scientifically? What if we could divest ourselves of hopes, fears, and ideologies long enough to entertain all arguments and judge them fairly? What we would see, I think, is that all sides are partly right and mostly incomplete. Each is focusing on one piece of a very complex system. Each is seeing its piece correctly. But because no side is seeing the whole, no side is coming to wholly supportable conclusions.

The Greens are correct: Population growth that causes people to level forests and overgraze lands exacerbates poverty. The Reds are correct: The helplessness of poverty creates the motivation for parents to have many children, as their only hope of providing for themselves. The Blues are right:

Economic development can bring down birthrates. The Whites are right: Development schemes work, but not when they are imposed by large bureaucratic institutions such as the World Bank. Capital can be the scarcest factor of production at some times and places, labor at other times and places, materials and energy and pollution-absorption capacity at still others. The limits the Greens point out really are there. So are the injustices that anger the Reds. So are the market and technical responses the Blues have faith in. And so is the wisdom of the people that the Whites respect.<sup>3</sup>

A successful business in the new era of natural capitalism will respect and understand all four views. It will realize that solutions lie in understanding the interconnectedness of problems, not in confronting them in isolation.

Moreover, it will seek a common framework of understanding about the functions of the earth itself, and the dynamics of society. While interpretation of data is subject to culture, education, and outlook, the basic principles that govern the earth are well established and commonly agreed upon by all scientists. But you would hardly know that by reading heated op-ed columns or listening to legislative debates. Although you can go to a bookstore and find books that explain the tenets, principles, and rules for everything from golf and dominoes to taxes, judo, and war, there's no user's manual for how to live and operate on the earth, the most important and complex system known.

David Brower, the éminence grise of the environmental movement, once humorously proposed such a manual years ago. The instructions might read: (1) The planet has been delivered in perfect working condition and cannot be exchanged for a new one. (2) Please don't adjust the thermostat or the atmosphere — controls were preset at the factory. (3) The biosphere was thoroughly tested and developed during a 3-billionyear breaking-in period and is powered by a maintenance-free fusion reactor that will supply energy for another 5 billion years. (4) Air and water are in limited supply and are not replaceable; they will cycle and purify themselves automatically if there are not too many aboard. (5) There is only one life per passenger and it should be treated with dignity. Instructions covering the birth, operation and maintenance, and disposal of each living entity have been thoughtfully provided, encoded in a computer language whose operation is fully automatic. If these instructions are lost or damaged, the filling of reorders is subject to long delays. (6) If there are too many passengers and conditions get crowded, read the emergency load manual and be ever more diligent

that no foreign or toxic substances are introduced into the air, food, and water.<sup>4</sup>

Why would the inhabitants of earth need a manual? Ideally, it would provide everyone with a shared mental model of the system they are influencing and participating in. A generally accepted set of standards and principles in sports, finance, education, and other sectors enables society to function efficiently, harmoniously, and safely, allowing us to drive in traffic, land jumbo jets at O'Hare, and communicate globally through telephony and computers. A critical difference between a user's manual for such societal activities, however, and one for the environment is that earth's operating guidelines are inherent, not imposed. They cannot be made up, only recognized. Author Bill McKibben put it succinctly in a speech to corporate executives: "The laws of Congress and the laws of physics have grown increasingly divergent, and the laws of physics are not likely to yield."

Tens of thousands of organizations in the world have taken on the task of assembling the ingredients of a real operating manual for the planet. Some are specifically addressing the responsibilities and opportunities of business. These include: Rocky Mountain Institute, The Natural Step, The Wuppertal Institute, World Resources Institute, SustainAbility (London), CERES, Redefining Progress, Product-Life Institute, World Business Council for Sustainable Development (Switzerland), Center for Clean Products and Clean Technologies at the University of Tennessee, United Nations Environment Programme (UNEP) and Development Program (UNDP), Institute for Sustainable Design and Commerce at the University of Virginia (Charlottesville), Forum for the Future (London), International Institute for Sustainable Development (Canada), Businesses for Social Responsibility, and the Stockholm Environmental Institute. They are joined by approximately one hundred transnational corporations and tens of thousands of smaller companies that have pledged to take an active role in reshaping the role of business in the environment and society.

In addition, tens of thousands of institutes, associations, foundations, colleges, universities, churches, outdoor clubs, land trusts, and nongovernmental organizations are addressing the complete range of environmental issues. These include such remarkable groups as Ecotrust, Ashoka, the Society for Ecological Restoration, Worldwatch Institute, Friends of the River, Environmental Research Foundation, Development Alternatives (Delhi), Land Stewardship Council, The Just

Transition Consortium, Instituto de Ecología Politica (Santiago, Chile), International Society of Ecological Economics, International Institute for Industrial Environmental Economics (Lund), Earth Island Institute, Congress for the New Urbanism, American Farmland Trust, the Energy Foundation, Southwest Organizing Project, RIVM (Holland), Center for a New American Dream, One Thousand Friends of Oregon, the Cenozoic Society, Indigenous Environmental Network, World Wildlife Fund, IUCN, Friends of the Earth, and many more. Together, these thousands of organizations, however they may be collectively identified, have quietly become the world's largest and fastest-growing activist movement. Arguably they have now become the world's real capitalists. By addressing such issues as greenhouse gases, social equity, chemical contamination, and the loss of fisheries, wildlife corridors, and primary forests, they are doing more to preserve a viable business future than are all the world's chambers of commerce put together.

The largest institution addressing mental models is our schools. Colleges, universities, and public schools can change their impact on the environment in two fundamental ways. They create the citizens, MBAs, engineers, and architects that create our world. At the same time, they spend \$564 billion a year to do so, including \$17 billion annually in new construction on colleges and universities. Oberlin Professor David Orr, the leading spokesperson for integrating the environment and education, points out that a large segment of that money is spent to purchase energy, materials, food, and water in ways that are every bit as inefficient as this book outlines. Orr believes that changing the procurement, design, and investments made by our educational systems represents a "hidden curriculum" that can teach, as "powerfully as any overt curriculum, a more comprehensive way of seeing the world that is the foundation for a radically different curriculum than that presently offered virtually anywhere. In every respect this is a challenge of how we think which makes it a challenge for those institutions purporting to improve thinking. Much of the change in outlook and perspective called for will not happen in the time available unless schools, colleges, and education get it."5

Only once in the history of this planet — now — have total flows and movement of materials by one species matched or exceeded natural planetary flows. Humans place more than three hundred times more lead into the environment than can dissipate naturally, twenty-three times more zinc, and thirty-eight times more antimony. 6 Scientific analysis of

bubbles in the Vostok ice core from Antarctica show CO<sub>2</sub> in the atmosphere at the highest level in 420,000 years; it took only 100 years of industrial combustion to bring this about.<sup>7</sup> Global temperatures in the next century are expected to exceed a 10,000-year record.

Traditional forecasting examines prior events and present trends and traces both forward to a probable tomorrow. Most of the time this method works, even with natural events, so long as projections don't extend too far into the future. Sometimes, however, traditional planning fails catastrophically, as when an unforeseen event changes all the terms of the equation. When the Soviet Empire fell, Southern California went into a near-depression as 250,000 defense jobs were lost. Real estate prices plummeted, taxes declined, alcoholism and abusive behavior increased among the unemployed, and the ripple effects were partly responsible for increased racism, anti-immigration laws, and the social uprising that occurred in South Central Los Angeles. Conventional economic forecasts of Los Angeles's future proved to be wrong simply because no one had projected an "optimistic" scenario in which the United States finally "won" the Cold War.

A big question for society is whether it is willing to place its faith in so-far-so-good forecasts that presume there will be no significant environmental problems in the future. Increasingly, it makes more sense to take into account possible downsides so that if some environmental crisis does occur, it will have the least possible effect. The rub here is that the environment never really goes "wrong" but merely changes according to the principles of nature. In that context, the most unlikely environmental scenario is that nothing unlikely happens. The biggest surprise would be no surprises. While it is unwise to believe in any one environmental projection of the future, it is important to bear in mind that nature bats last *and* owns the stadium.

Today, comprehensive planning is critical for any institution. Business faces increasing demands on all fronts, including globalization, shorter product life-cycles, the Internet, overcapacity, complex regulations, currency volatility, and changing governmental policies. In such a world, it is critical to have a long-term view that will be responsive to and complement future events. Businesses and governments often avoid the task of planning for issues related to the environment or society because the time frames for environmental and social change always seem over the horizon, whereas the challenges and modification times required in other areas are measured in years if not months. Yet

any attempt to form a coherent assessment of the future that does not take into account what is happening to the natural and human capital is incomplete strategic thinking.

The lesson of this book with respect to forecasting is simple and clear: No matter what future one believes in, building the principles of natural capitalism into our planning will make the foundations of society firmer. In scenarios in which the environment begins to change rapidly (or in which its services are clearly declining), resource productivity can also buy time, buffering society against sudden changes. As futurist Peter Schwartz counsels, the best option for an uncertain future is the one that leaves the most options open.

University of North Carolina Business School Professor Stuart Hart has asked whether corporations are ready for the natural capitalism revolution. Typically, business revolutions do not arise within existing industries but from forces outside. Hart believes meeting the multitude of challenges facing business and society will bring about economic discontinuities that are unprecedented in rate and scope and will require business to adopt new approaches. It will have to leapfrog over existing technologies rather than incrementally improve them. This may mean abandoning research in core products while they are still "winners," simply because new products or systems offer vastly improved performance. Why would anyone have wanted to create incremental improvements in vacuum tubes when the transistor was coming over the horizon? Similarly, the Big Three automakers will have to determine at just what point the internal combustion engine will simply become uneconomical to re-engineer. That point may already be here.<sup>8</sup>

To understand the opportunities offered by the resource productivity revolution and the other principles of natural capitalism, business will need to move across industrial sectors and solicit cooperation from competitors, critics, and perceived adversaries alike. This may seem like something no sane business would ever do, but an increasing number of leading companies are doing just that. Such organizations as World Resources Institute and Rocky Mountain Institute consult regularly for companies as well as for governments and communities. One of the largest forest products companies in the world is meeting with Rainforest Action Network and Greenpeace, its former archenemies, to formulate a strategic plan for their futures. Mitsubishi Electric worked with 160 nongovernmental environmental organizations to forge a new vision for the company.

The success of resource productivity as a societal strategy may augur an entirely new relationship between business and government. Just as traditional industrial activity may no longer be economic when natural capital becomes the limiting factor, relaxed governmental regulations that once "benefited" business may now actually harm it. Once business realizes that its existence is threatened by decreasing functions of ecosystems, it may need to take positions diametrically opposed to its prior stands and even argue for stricter regulations. For example, the oil industry, with few exceptions, has led the fight against global emissions limits for CO<sub>2</sub>. This strategy makes as much sense as defending typewriters. Although the oil industry faces a cloudy future in the long run, energy companies and especially energy service companies do not. But regulation can exert selective pressures favoring the agile, alert, and green. By fighting the wrong battle, most oil companies delay innovation and ensure potent new competition.

In contrast, OK Petroleum, Sweden's largest refiner and retailer of gasoline, fought for higher carbon taxes because it no longer sees itself as being in the petroleum business: It is a clean energy company. After formulating low-carbon gasoline, it found that it was being penalized by the per-liter fuel taxes levied in Sweden. Since the taxes were assessed on the quantity of the gasoline rather than the content of carbon that creates greenhouse gases, OK joined with twenty-four other companies to lobby the government to increase carbon taxes. Those businesses were thinking long-term. Having already achieved large improvements in resource productivity, they wanted a "boost" from incentives to go further. By raising resource prices, Swedish companies also thought they (like Germany and Japan before them) might gain greater advantages over their competitors in the United States, rendered somnolent by artificially cheap energy. Similarly, the U.S. firms working to create totally recyclable or compostable carpets are all fierce competitors, yet if they jointly lobbied for prohibitions on landfilling carpet, it would give them a competitive advantage, seriously putting the screws to laggards in their industry.

Just as businesses are beginning to see the loss of natural capital or ecosystem function as harmful to both their short- and long-term interests, they may also come to realize that social inequities are harmful to their interests as well. When the African writer Ken Saro-Wiwa and seven of his colleagues were hanged by the Nigerian military dictatorship after being convicted in a kangaroo court for leading the

protests against the environmental degradation in Ogoniland caused by multinational petroleum companies, Shell stations in Germany were burned to the ground, boycotts in Holland slashed sales, and employees in London were chastised by family and friends. Since that time, Shell has begun to reexamine all its racial, economic, and environmental policies. Nevertheless, Shell has yet to apologize for its actions in Nigeria that helped lead to Saro-Wiwa's execution, and protests against the company continue.

While facing such challenges, it is easy to overlook the social part and go straight to the technical. Social issues are human and messy. Social includes children, women, the elderly, the next generation, and government. It is hard to grapple with what may seem unrelated issues, starting with the rights, health, education, and economic opportunities available to women. But the example of Curitiba shows that design integration of social and technical innovations is necessary and can enhance both.

It will not be trivial to establish sensible policies. Emphasizing resource productivity will require the reversal of two hundred years of policies in taxes, labor, industry, and trade meant to encourage extraction, depletion, and disposal. Trade policies will need to be recast so as to protect environmental capital, cultural heritage, indigenous rights, and social equity. At present, worldwide trade policies are going in exactly the opposite direction. The global economy that is presently envisaged and imposed upon the world can, in Wendell Berry's words, "only institutionalize a global ignorance, in which producers and consumers cannot know or care about one another and in which the histories of all products will be lost. In such a circumstance, the degradation of products and places, producers and consumers is inevitable."

In finance, central banks, lenders, investors, pension funds, and regulatory agencies will need to be engaged so that capital allocations properly account for the loss of natural and social capital. These institutions will need to create a financial system where all value is placed on the balance sheet, and where nothing is marginalized or externalized because social or biological values don't "fit" into accepted accounting procedures.

In a decade characterized by mega-mergers in the banking industry, one hopeful sign has been the vigorous emergence of the community development finance movement. From small-scale loan funds to start-up banks, and with private and federal support, a whole set of new

community institutions provide credit in innovative ways at the community level, rebuilding human and social capital in hundreds of towns and cities. Not surprisingly, it is here rather than in mainstream commercial banks that banking with a natural capital focus has taken root. Shorebank Corporation, the community development pioneer, teamed up with Portland, Oregon, based Ecotrust to create ShoreBank Pacific, a commercial bank dedicated to community development and environmental restoration in the coastal and metropolitan Pacific Northwest. The bank and its nonprofit affiliate Shorebank Enterprise Pacific have together lent millions of dollars to small and medium-size businesses that enhance profitability through improved environmental management and dedication to social equity. The bank's loans are backed by "ecodeposits" from all fifty states.

In short, business has to begin to take on and engage in questions and dialogue that it has, until now, largely avoided. If natural capital is diminishing while manufactured capital is expanding, business must ultimately create production and distribution systems that reverse the loss and eventually increase the supply of natural capital. That will involve more than product design, more than marketing and competition. It will mean a fundamental reevaluation of business's roles and responsibilities.

As this book has shown, however, business will find large, unexpected benefits. While increasing labor productivity to improve competitiveness requires huge investments in capital, materials, and energy supplies to sustain its momentum, increasing resource productivity frees up large amounts of capital that can be invested in strengthening the company and in rebuilding human capital and restoring natural capital. Businesses that are moving toward advanced resource productivity are also discovering an unexpected cultural consequence to their actions. Yes, they save energy and money, create competitive advantage, and help restore the environment. But even more important, they also save people. Not only do they rebalance the roles of workers and of resource-fed machines, but they also create a renewed sense of purpose and mission. For the first time, employees' activities at work are fully and directly aligned with what is best for their children and grandchildren at home.

In a few decades, historians may write a history of our times that goes something like this: Now that the private sector has taken its proper place as the main implementer of sustainable practices, simply because they work better and cost less, the 1970s and 1980s approach of

micromanagement by intensive government regulation is only a bad memory. Battles between industry and environmentalists are confined to backward countries, where inefficient and polluting industries cling to life beneath a shield of central planning. Today, the central issues for thoughtful and successful industries — the two being increasingly identical — relate not to how best to produce the goods and services needed for a satisfying life — that's now pretty well worked out — but rather to what is worth producing, what will make us better human beings, how we can stop trying to meet nonmaterial needs by material means, and how much is enough.

For many, the prospect of an economic system based on increasing the productivity with which we use natural capital, eliminating the concept of waste, and reinvesting in the earth's living systems and its people is so upbeat that it calls into question its economic viability. To answer that question, just reverse it and ask: How is it that we have created an economic system that tells us it is cheaper to destroy the earth and exhaust its people than to nurture them both? Is it rational to have a pricing system that discounts the future and sells off the past? How did we create an economic system that confuses capital liquidation with income? Wasting resources to achieve profits is far from fair, wasting people to achieve higher GDP doesn't raise standards of living, and wasting the environment to achieve economic growth is neither economic nor growth.

To make people better off requires no new theories, and needs only common sense. It is based on the simple proposition that all capital be valued. While there may be no "right" way to value a forest, a river, or a child, the wrong way is to give it no value at all. If there are doubts about how to value a seven-hundred-year-old tree, ask how much it would cost to make a new one. Or a new atmosphere, or a new culture. What is remarkable about this period in history is the degree of agreement that is forming globally about the relationship between human and living systems. The tens of thousands of organizations that are working toward a sustainable world are, on the whole, diverse, local, underfunded, and tenuous. Scattered across the globe, from Siberia to Chile to Kenya to Bozeman, Montana, people and institutions are organizing to defend human life and the life of the planet. Although largely uncoordinated and mostly disconnected, the mandates, directives, principles, declarations, and other statements of purpose drafted by these groups are extraordinarily consonant. Now they are being joined

by the deeper voices of international organizations, and companies, large and small. The Brundtland Report ("Our Common Future"), the World Conservation Strategy by the International Union for the Conservation of Nature, the CERES Principles, the Siena Declaration, the United Nations World Charter for Nature, the Convention on Biological Diversity and the Framework Convention on Climate Change from the Earth Summit, the Hannover Principles, and hundreds more documents obscure and known are being published, circulated, and acted upon. They are important for three reasons. First, the statements are not just about preferences: Often they suggest practical solutions that flow from the principles of whole-system thinking and design. Second, the statements represent a broad consensus that is emerging from the breadth of society rather than only from its ruling structures. Third, never before in history have such disparate and independent groups created common frameworks of understanding around the world. This has never happened in politics, economics, or religion, but it is happening in the growing movement — increasingly joined now by both religion and science — toward what is being called "sustainability." Businesspeople and governments should pay close attention. In these statements, the future is writ large and in the plainest of languages.

Ernst von Weizsäcker, member of the German Bundestag, has put it this way: "We are entering the century of the environment, whether we want to or not. In this century everyone who considers himself a realist will be forced to justify his behavior in light of the contribution it made toward the preservation of the environment." <sup>12</sup>

Away from the shrill divisiveness of media and politics, people are remarkably consistent in what kind of future they envision for their children and grandchildren. The potential outcome of natural capitalism and sustainability also aligns almost perfectly with what American voters are saying: They want better schools, a better environment, safer communities, family-wage jobs, more economic security, stronger family support, lower taxes, more effective governments, and more local control. In this, we are like all people and they are like us.

Natural capitalism is not about fomenting social upheaval. On the contrary, that is the consequence that will surely arise if fundamental social and environmental problems are not responsibly addressed. Natural capitalism is about choices we can make that can start to tip economic and social outcomes in positive directions. And it is already occurring — because it is necessary, possible, and practical.