



A DECLARATION OF SUSTAINABILITY

Paul Hawken

Paul Hawken is author of the best-selling book *The Ecology of Commerce* and of other publications that promote sustainable economic development.

I recently performed a social audit for Ben and Jerry's Homemade Inc., America's premier socially responsible company. After poking and prodding around, asking tough questions, trying to provoke debate, and generally making a nuisance of myself, I can attest that their status as the leading social pioneer in commerce is safe for at least another year. They are an outstanding company. Are there flaws? Of course. Welcome to planet Earth. But the people at Ben & Jerry's are relaxed and unflinching in their willingness to look at, discuss, and deal with problems.

* In the meantime, the company continues to put ice cream shops in Harlem, pay outstanding benefits, keep a compensation ratio of seven to one from the top of the organization to the bottom, seek out vendors from disadvantaged groups, and donate generous scoops of their profits to others. And they are about to overtake their historic rival Häagen-Dazs, the ersatz Scandinavian originator of super-premium ice cream, as the market leader in their category. At present rates of growth, Ben & Jerry's will be a \$1 billion company by the end of the century. They are publicly held, nationally recognized, and rapidly growing, in part because Ben wanted to show that a socially responsible company could make it in the normal world of business.

Ben and Jerry's is just one of a growing vanguard of companies attempting to redefine their social and ethical responsibilities. These companies no longer accept the maxim that the business of business is business. Their premise is simple: Corporations, because they are the dominant institution on the planet, must squarely face the social and environmental problems that afflict humankind. Organizations such as Business for Social Responsibility and the Social Venture Network, corporate "ethics" consultants, magazines such as *In Business* and *Business Ethics*, non-profits including

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the Council on Economic Priorities, investment funds such as Calvert and Covenant, newsletters like *Greenmoney*, and thousands of unaffiliated companies are drawing up new codes of conduct for corporate life that integrate social, ethical, and environmental principles.

Ben and Jerry's and the roughly 2,000 other committed companies in the social responsibility movement here and abroad have combined annual sales of approximately \$2 billion, or one-hundredth of 1 percent of the \$20 trillion sales garnered by the estimated 80 million to 100 million enterprises worldwide. The problems they are trying to address are vast and unremittingly complex: 5.5 billion people are breeding exponentially, and fulfilling their wants and needs is stripping the earth of its biotic capacity to produce life; a climactic burst of consumption by a single species is overwhelming the skies, earth, waters, and fauna.

As the Worldwatch Institute's Lester Brown patiently explains in his annual survey *State of the World*, every living system on earth is in decline. Making matters worse, we are having a once-in-a-billion-year blowout sale of hydrocarbons, which are being combusted into the atmosphere, effectively double glazing the planet within the next 50 years with unknown climatic results. The cornucopia of resources that are being extracted, mined, and harvested is so poorly distributed that 20 percent of the earth's people are chronically hungry or starving, while the top 20 percent of the population, largely in the north, control and consume 80 percent of the world's wealth. Since business in its myriad forms is primarily responsible for this "taking," it is appropriate that a growing number of companies ask the question, How does one honorably conduct business in the latter days of industrialism and the beginning of an ecological age? The ethical dilemma that confronts business begins with the acknowledgment that a commercial system that functions well by its own definitions unavoidably defies the greater and more profound ethic of biology. Specifically, how does business face the prospect that creating a profitable, growing company requires an intolerable abuse of the natural world?

Despite their dedicated good work, if we examine all or any of the businesses that deservedly earn high marks for social and environmental responsibility, we are faced with a sobering irony: If every company on the planet were to adopt the environmental and social practices of the best companies—of, say, the Body Shop, Patagonia, and Ben and Jerry's—the world would still be moving toward environmental degradation and collapse. In other words, if we analyze environmental effects and create an input-output model of resources and energy, the results do not even approximate a tolerable or sustainable future. If a tiny fraction of the world's most intelligent companies cannot model a sustainable world, then that tells us that being socially responsible is only one part of an overall solution, and that what we have is not a management problem but a design problem.

At present, there is a contradiction inherent in the premise of a socially responsible corporation: to wit, that a company can make the world better, can grow, and can increase profits by meeting social and environmental needs. It is a have-your-cake-and-eat-it fantasy that cannot come true if the primary cause of environmental degra-

dation is overconsumption. Although proponents of socially responsible business are making an outstanding effort at reforming the tired old ethics of commerce, they are unintentionally creating a new rationale for companies to produce, advertise, expand, grow, capitalize, and use up resources: the rationale that they are doing good. A jet flying across the country, a car rented at an airport, an air-conditioned hotel room, a truck full of goods, a worker commuting to his or her job—all cause the same amount of environmental degradation whether they're associated with the Body Shop, the Environmental Defense Fund, or R. J. Reynolds.

In order to approximate a sustainable society, we need to describe a system of commerce and production in which each and every act is inherently sustainable and restorative. Because of the way our system of commerce is designed, businesses will not be able to fulfill their social contract with the environment or society until the system in which they operate undergoes a fundamental change, a change that brings commerce and governance into alignment with the natural world from which we receive our life. There must be an integration of economic, biologic, and human systems in order to create a sustainable and interdependent method of commerce that supports and furthers our existence. As hard as we may strive to create sustainability on a company level, we cannot fully succeed until the institutions surrounding commerce are redesigned. Just as every act of production and consumption in an industrial society leads to further environmental degradation, regardless of intention or ethos, we need to imagine—and then design—a system of commerce where the opposite is true, where doing good is like falling off a log, where the natural, everyday acts of work and life accumulate into a better world as a matter of course, not a matter of altruism. A system of sustainable commerce would involve these objectives:

1. It would reduce absolute consumption of energy and natural resources among developed nations by 80 percent within 40 to 60 years.
2. It would provide secure, stable, and meaningful employment for people everywhere.
3. It would be self-actuating as opposed to regulated, controlled, mandated, or moralistic.
4. It would honor human nature and market principles.
5. It would be perceived as more desirable than our present way of life.
6. It would exceed sustainability by restoring degraded habitats and ecosystems to their fullest biological capacity.
7. It would rely on current solar income.
8. It should be fun and engaging, and strive for an aesthetic outcome.

STRATEGIES FOR SUSTAINABILITY

At present, the environmental and social responsibility movements consist of many different initiatives, connected primarily by values and beliefs rather than by design. What is needed is a conscious plan to create a sustainable future, including a set of design strategies for people to follow. For the record, I will suggest 12.

1. Take Back the Charter

Although corporate charters may seem to have little to do with sustainability, they are critical to any long-term movement toward restoration of the planet. Read *Taking Care of Business: Citizenship and the Charter of Incorporation*, a 1992 pamphlet by Richard Grossman and Frank T. Adams (Charter Ink, Box 806, Cambridge, MA 02140). In it you find a lost history of corporate power and citizen involvement that addresses a basic and crucial point: Corporations are chartered by, and exist at the behest of, citizens. Incorporation is not a right but a privilege granted by the state that includes certain considerations such as limited liability. Corporations are supposed to be under our ultimate authority, not the other way around. The charter of incorporation is a revocable dispensation that was supposed to ensure accountability of the corporation to society as a whole. When Rockwell criminally despoils a weapons facility at Rocky Flats, Colorado, with plutonium waste, or when any corporation continually harms, abuses, or violates the public trust, citizens should have the right to revoke its charter, causing the company to disband, sell off its enterprises to other companies, and effectively go out of business. The workers would have jobs with the new owners, but the executives, directors, and management would be out of jobs, with a permanent notice on their resumes that they mismanaged a corporation into a charter revocation. This is not merely a deterrent to corporate abuse but a critical element of an ecological society because it creates feedback loops that prompt accountability, citizen involvement, and learning. We should remember that the citizens of this country originally envisioned corporations to be part of a public-private partnership, which is why the relationship between the chartering authority of state legislatures and the corporation was kept alive and active. They had it right.

2. Adjust Price to Reflect Cost

The economy is environmentally and commercially dysfunctional because the market does not provide consumers with proper information. The "free market" economies that we love so much are excellent at setting prices but lousy when it comes to recognizing costs. In order for a sustainable society to exist, every purchase must reflect or at least approximate its actual cost, not only the direct cost of production but also the costs to the air, water, and soil; the cost to future generations; the cost to worker health; the cost of waste, pollution, and toxicity. Simply stated, the marketplace gives us the wrong information. It tells us that flying across the country on a discount airline ticket is cheap when it is not. It tells us that our food is inexpensive when its method of production destroys aquifers and soil, the viability of ecosystems, and workers' lives. Whenever an organism gets wrong information, it is a form of toxicity. In fact, that is how pesticides work. A herbicide kills because it is a hormone that tells the plant to grow faster than its capacity to absorb nutrients allows. It literally grows itself to death. Sound familiar? Our daily doses of toxicity are the prices in the marketplace. They are telling us to do the wrong thing for our own survival. They are lulling us into cutting down old-growth forests on the Olympic Peninsula for apple crates, into patterns of production and consumption that are not just unsustainable but pro-

foundly short-sighted and destructive. It is surprising that "conservative" economists do not support or understand this idea, because it is they who insist that we pay as we go, have no debts, and take care of business. Let's do it.

3. Throw Out and Replace the Entire Tax System

The present tax system sends the wrong messages to virtually everyone, encourages waste, discourages conservation, and rewards consumption. It taxes what we want to encourage—jobs, creativity, payrolls, and real income—and ignores the things we want to discourage—degradation, pollution, and depletion. The present U.S. tax system costs citizens \$500 billion a year in record-keeping, filing, administrative, legal, and governmental costs—more than the actual amount we pay in personal income taxes. The only incentive in the present system is to cheat or hire a lawyer to cheat for us. The entire tax system must be incrementally replaced over a 20-year period by "Green fees," taxes that are added onto existing products, energy, services, and materials so that prices in the marketplace more closely approximate true costs. These taxes are not a means to raise revenue or bring down deficits, but must be absolutely revenue neutral so that people in the lower and middle classes experience no real change of income, only a shift in expenditures. Eventually, the cost of non-renewable resources, extractive energy, and industrial modes of production will be more expensive than renewable resources, such as solar energy, sustainable forestry, and biological methods of agriculture. Why should the upper middle class be able to afford to conserve while the lower income classes cannot? So far the environmental movement has only made the world better for upper middle class white people. The only kind of environmental movement that can succeed has to start from the bottom up. Under a Green fee system the incentives to save on taxes will create positive, constructive acts that are affordable for everyone. As energy prices go up to three to four times their existing levels (with commensurate tax reductions to offset the increase), the natural inclination to save money will result in carpooling, bicycling, telecommuting, public transport, and more efficient houses. As taxes on artificial fertilizers, pesticides, and fuel go up, again with offsetting reductions in income and payroll taxes, organic farmers will find that their produce and methods are the cheapest means of production (because they truly are), and customers will find that organically grown food is less expensive than its commercial cousin. Eventually, with the probable exception of taxes on the rich, we will find ourselves in a position where we pay no taxes, but spend our money with a practiced and constructive discernment. Under an enlightened and redesigned tax system, the cheapest product in the marketplace would be best for the customer, the worker, the environment, and the company. That is rarely the case today.

4. Allow Resource Companies to Be Utilities

An energy utility is an interesting hybrid of public-private interests. A utility gains a market monopoly in exchange for public control of rates, open books, and a guaranteed rate of return. Because of this relationship and the pioneering work of Amory

Lovins, we now have markets for “negawatts.” It is the first time in the history of industrialism that a corporation has figured out how to make money by selling the absence of something. Negawatts are the opposite of energy: They represent the collaborative ability of a utility to harness efficiency instead of hydrocarbons. This conservation-based alternative saves ratepayers, shareholders, and the company money—savings that are passed along to everyone. All resource systems, including oil, gas, forests, and water, should be run by some form of utility. There should be markets in negabarrels, negatrees, and negacoal. Oil companies, for example, have no alternative at present other than to lobby for the absurd, like drilling in the Arctic National Wildlife Refuge. That project, a \$40 billion-to \$60 billion investment for a hoped-for supply of oil that would meet U.S. consumption needs for only six months, is the only way an oil company can make money under our current system of commerce. But what if the oil companies formed an oil utility and cut a deal with citizens and taxpayers that allowed them to “invest” in insulation, super-glazed windows, conservation rebates on new automobiles, and the scrapping of old cars? Through Green fees, we would pay them back a return on their conservation investment equal to what utilities receive, a rate of return that would be in accord with how many barrels of oil they save, rather than how many barrels they produce. Why should they care? Why should we? A \$60 billion investment in conservation will yield, conservatively, four to ten times as much energy as drilling for oil. Given Lovins’ principle of efficiency extraction, try to imagine a forest utility, a salmon utility, a copper utility, a Mississippi River utility, a grasslands utility. Imagine a system where the resource utility benefits from conservation, makes money from efficiency, thrives through restoration, and profits from sustainability. It is possible today.

5. Change Linear Systems to Cyclical Ones

Our economy has many design flaws, but the most glaring one is that nature is cyclical and industrialism is linear. In nature, no linear systems exist, or they don’t exist for long because they exhaust themselves into extinction. Linear industrial systems take resources, transform them into products or services, discard waste, and sell to consumers, who discard more waste when they have consumed the product. But of course we don’t consume TVs, cars, or most of the other stuff we buy. Instead, Americans produce six times their body weight every week in hazardous and toxic waste water, incinerator fly ash, agricultural wastes, heavy metals, and waste chemicals, paper, wood, etc. This does not include CO₂, which if it were included would double the amount of waste. Cyclical means of production are designed to imitate natural systems in which waste equals food for other forms of life, nothing is thrown away, and symbiosis replaces competition. Bill McDonough, a New York architect who has pioneered environmental design principles, has designed a system to retrofit every window in a major American city. Although it still awaits final approval, the project is planned to go like this: The city and a major window manufacturer form a joint venture to produce energy-saving super-glazed windows in the town. This partnership company will come to your house or business, measure all windows and glass doors,

and then replace them with windows with an R-8 to R-12 energy-efficiency rating within 72 hours. The windows will have the same casements, molding, and general appearance as the old ones. You will receive a \$500 check upon installation, and you will pay for the new windows over a 10- to 15-year period in your utility or tax bill. The total bill is less than the cost of the energy the windows will save. In other words, the windows will cost the home or business owner nothing. The city will pay for them initially with industrial development bonds. The factory will train and employ 300 disadvantaged people. The old windows will be completely recycled and reused, the glass melted into glass, the wooden frames ground up and mixed with recycled resins that are extruded to make the casements. When the city is reglazed, the residents and businesses will pocket an extra \$20 million to \$30 million every year in money saved on utility bills. After the windows are paid for, the figure will go even higher. The factory, designed to be transportable, will move to another city, the first city will retain an equity interest in the venture. McDonough has designed a win-win-win-win-win system that optimizes a number of agendas. The ratepayers, the homeowners, the renters, the city, the environment, and the employed all thrive because they are "making" money from efficiency rather than exploitation. It's a little like running the industrial economy backwards.

6. Transform the Making of Things

We have to institute the Intelligent Product System created by Michael Braungart of the EPEA (Environmental Protection Encouragement Agency) in Hamburg, Germany. The system recognizes three types of products. The first are *consumables*, products that are either eaten, or, when they're placed on the ground, turn into dirt without any bio-accumulative effects. In other words, they are products whose waste equals food for other living systems. At present, many of the products that should be "consumable," like clothing and shoes, are not. Cotton cloth contains hundreds of different chemicals, plasticizers, defoliants, pesticides, and dyes: shoes are tanned with chromium and their soles contain lead: neckties and silk blouses contain zinc, tin, and toxic dye. Much of what we recycle today turns into toxic by-products, consuming more energy in the recycling process than is saved by recycling. We should be designing more things so that they can be thrown away—into the compost heap. Toothpaste tubes and other non-degradable packaging can be made out of natural polymers so that they break down and become fertilizer for plants. A package that turns into dirt is infinitely more useful, biologically speaking, than a package that turns into a plastic park bench. Heretical as it sounds, designing for decomposition, not recycling, is the way of the world around us.

The second category is *durables*, but in this case, they would not be sold, only licensed. Cars, TVs, VCRs, and refrigerators would always belong to the original manufacturer, so they would be made, used, and returned within a closed-loop system. This is already being instituted in Germany and to a lesser extent in Japan, where companies are beginning to design for disassembly. If a company knows that its products will come back someday, and that it cannot throw anything away when they do, it creates a very different approach to design and materials.

Last, there are *unsalables*—toxins, radiation, heavy metals, and chemicals. There is no living system for which these are food and thus they can never be thrown away. In Braungart's Intelligent Product System, unsalables must always belong to the original maker, safeguarded by public utilities called "parking lots" that store the toxins in glass-lined barrels indefinitely, charging the original manufacturers rent for the service. The rent ceases when an independent scientific panel can confirm that there is a safe method to detoxify the substances in question. All toxic chemicals would have molecular markers identifying them as belonging to their originator, so that if they are found in wells, rivers, soil, or fish, it is the responsibility of the company to retrieve them and clean up. This places the problem of toxicity with the makers, where it belongs, making them responsible for full-life-cycle effects.

7. Vote, Don't Buy

Democracy has been effectively eliminated in America by the influence of money, lawyers, and a political system that is the outgrowth of the first two. While we can dream of restoring our democratic system, the fact remains that we live in a plutocracy—government by the wealthy. One way out is to vote with your dollars, to withhold purchases from companies that act or respond inappropriately. Don't just avoid buying a Mitsubishi automobile because of the company's participation in the destruction of primary forests in Malaysia, Indonesia, Ecuador, Brazil, Bolivia, Canada, Chile, Canada, Siberia, and Papua New Guinea. Write and tell them why you won't. Engage in dialogue, send one postcard a week, talk, organize, meet, publish newsletters, boycott, patronize, and communicate with companies like General Electric. Educate non-profits, organizations, municipalities, and pension funds to act affirmatively, to support the ecological CERES (formerly *Valdez*) Principles for business, to invest intelligently, and to *think* with their money, not merely spend it. Demand the best from the companies you work for and buy from. You deserve it and your actions will help them change.

8. Restore the "Guardian"

There can be no healthy business sector unless there is a healthy governing sector. In her book *System of Survival*, author Jane Jacobs describes two overarching moral syndromes that permeate our society: the commercial syndrome, which arose from trading cultures, and the governing, or guardian, syndrome that arose from territorial cultures. The guardian system is hierarchical, adheres to tradition, values loyalty, and shuns trading and inventiveness. The commercial system, on the other hand, is based on trading, so it values trust of outsiders, innovation, and future thinking. Each has qualities the other lacks. Whenever the guardian tries to be in business, as in Eastern Europe, business doesn't work. What is also true, but not so obvious to us, is that when business plays government, governance fails as well. Our guardian system has almost completely broken down because of the money, power, influence, and control exercised by business and, to a lesser degree, other institutions. Business and unions have to get out of government. We need more than campaign reform: We need a vi-

sion that allows us all to see that when Speaker of the House Tom Foley exempts the aluminum industry in his district from the proposed Btu tax, or when Philip Morris donates \$200,000 to the Jesse Helms Citizenship Center, citizenship is mocked and democracy is left gagging and twitching on the Capitol steps. The irony is that business thinks that its involvement in governance is good corporate citizenship or at least is advancing its own interests. The reality is that business is preventing the economy from evolving. Business loses, workers lose, the environment loses.

9. Shift from Electronic Literacy to Biologic Literacy

That an average adult can recognize one thousand brand names and logos but fewer than ten local plants is not a good sign. We are moving not to an information age but to a biologic age, and unfortunately our technological education is equipping us for corporate markets, not the future. Sitting at home with virtual reality gloves, 3D video games, and interactive cable TV shopping is a barren and impoverished vision of the future. The computer revolution is not the totem of our future, only a tool. Don't get me wrong. Computers are great. But they are not an uplifting or compelling vision for culture or society. They do not move us toward a sustainable future any more than our obsession with cars and televisions provided us with newer definitions or richer meaning. We are moving into the age of living machines, not, as Corbusier noted, "machines for living in." The Thomas Edison of the future is not Bill Gates of Microsoft, but John and Nancy Todd, founders of the New Alchemy Institute, a Massachusetts design lab and think tank for sustainability. If the Todds' work seems less commercial, less successful, and less glamorous, it is because they are working on the real problem—how to live—and it is infinitely more complex than a microprocessor. Understanding biological processes is how we are going to create a new symbiosis with living systems (or perish). What we can learn on-line is how to model complex systems. It is computers that have allowed us to realize how the synapses in the common sea slug are more powerful than all of our parallel processors put together.

10. Take Inventory

We do not know how many species live on the planet within a factor of ten. We do not know how many are being extirpated. We do not know what is contained in the biological library inherited from the Cenozoic age. (Sociobiologist E. O. Wilson estimates that it would take 25,000 person-years to catalog most of the species, putting aside the fact that there are only 1,500 people with the taxonomic ability to undertake the task.) We do not know how complex systems interact—how the transpiration of the giant lily, *Victoria amazonica*, of Brazil's rainforests affects European rainfall and agriculture, for example. We do not know what happens to 20 percent of the CO₂ that is off-gassed every year (it disappears without a trace). We do not know how to calculate sustainable yields in fisheries and forest systems. We do not know why certain species, such as frogs, are dying out even in pristine habitats. We do not know the long-term effects of chlorinated hydrocarbons on human health, behavior, sexuality, and fertility. We do not know what a sustainable life is for existing inhabitants of the planet, and certainly

not for future populations. (A Dutch study calculated that your fair share of air travel is one trip across the Atlantic in a lifetime.) We do not know how many people we can feed on a sustainable basis, or what our diet would look like. In short, we need to find out what's here, who has it, and what we can or can't do with it.

11. Take Care of Human Health

The environmental and socially responsible movements would gain additional credibility if they recognized that the greatest amount of human suffering and mortality is caused by environmental problems that are not being addressed by environmental organizations or companies. Contaminated water is killing a hundred times more people than all other forms of pollution combined. Millions of children are dying from preventable diseases and malnutrition.

The movement toward sustainability must address the clear and present dangers that people face worldwide, dangers that ironically increase population levels because of their perceived threat. People produce more children when they're afraid they'll lose them. Not until the majority of the people in the world, all of whom suffer in myriad preventable yet intolerable ways, understand that environmentalism means improving their lives directly will the ecology movement walk its talk. Americans will spend more money in the next 12 months on the movie and tchotchkes of *Jurassic Park* than on foreign aid to prevent malnutrition or provide safe water.

12. Respect the Human Spirit

If hope is to pass the sobriety test, then it has to walk a pretty straight line to reality. Nothing written, suggested, or proposed here is possible unless business is willing to integrate itself into the natural world. It is time for business to take the initiative in a genuinely open process of dialogue, collaboration, reflection, and redesign. "It is not enough," writes Jeremy Seabrook of the British Green party, "to declare, as many do, that we are living in an unsustainable way, using up resources, squandering the substance of the next generation however true this may be. People must feel subjectively the injustice and unsustainability before they will make a more sober assessment as to whether it is worth maintaining what is, or whether there might not be more equitable and satisfying ways that will not be won at the expense either of the necessities of the poor or of the wasting fabric of the planet."

Poet and naturalist W. S. Merwin (citing Robert Graves) reminds us that we have one story, and one story only, to tell in our lives. We are made to believe by our parents and businesses, by our culture and televisions, by our politicians and movie stars that it is the story of money, of finance, of wealth, of the stock portfolio, the partnership, the country house. These are small, impoverished tales and whispers that have made us restless and craven: they are not stories at all. As author and garlic grower Stanley Crawford puts it, "The financial statement must finally give way to the narrative, with all its exceptions, special cases, imponderables. It must finally give way to the story, which is perhaps the way we arm ourselves against the next and always unpredictable turn of the cycle in the quixotic dare that is life: across the rock and cold of

lifelines, it is our seed, our clove, our filament cast toward the future." It is something deeper than anything commercial culture can plumb, and it is waiting for each of us.

Business must yield to the longings of the human spirit. The most important contribution of the socially responsible business movement has little to do with recycling, nuts from the rainforest, or employing the homeless. Their gift to us is that they are leading by trying to do something, to risk, take a chance, make a change—any change. They are not waiting for "the solution," but are acting without guarantees of success or proof of purchase. This is what all of us must do. Being visionary has always been given a bad rap by commerce. But without a positive vision for humankind we can have no meaning, no work, and no purpose.

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