

programs.¹³⁸ San Francisco currently has the strongest recycling and composting laws in the United States for households and businesses and, is now diverting 72 percent of its waste—the highest rate in the country.¹³⁹

On the other side of the world, the coastal town of Kovalam in South India is also aggressively working toward Zero Waste. Kovalam transformed in one generation from a quiet fishing town to a crowded holiday destination. The explosion of Western tourists led to an explosion of waste, or “dumping tourist syndrome” as my friend there, Shibu Nair, calls it. The beach, the roads, and makeshift dumps in the area overflow with empty bottles for shampoo, sunscreen, lotion, and increasingly, for water. Concerned, the local tourism department proposed building an incinerator in 2000. Local activists organized an international e-mail campaign, in which potential visitors from all over the world wrote to the tourism department, saying they wouldn’t come to a beach anywhere near an incinerator. The tourism ministry turned to a local environmental group, and Zero Waste Kovalam was born.¹⁴⁰

The Zero Waste Kovalam activists looked for opportunities to design waste out of the system. They set up stations for people to refill water bottles with boiled and filtered water, rather than buy new bottles. They set up worker cooperatives that trained local unemployed people to make reusable cloth bags from leftovers from the tailor shops, thus eliminating the formerly ubiquitous plastic bags.

The founder of Zero Waste Kovalam, Jayakumar Chelaton, is proud of how the issue of waste connected to bigger issues like governance, environmental health, and economic justice in Kovalam. The Zero Waste philosophy for him “is about relationships. It is about people and communities and how we want to live together.”¹⁴¹

And that’s exactly why I became so passionate about waste some twenty years ago. I understood waste was connected to everything else in our world. Unraveling the story of waste is what led me to the Story of Stuff.

EPILOGUE

WRITING THE NEW STORY

When (if) people stop to think about it, we all worry at some level about the sacrifices that will be necessary to rewrite the Story of Stuff. We worry about big things like jobs lost in Stuff-producing factories, and we worry about little things like the lack of convenience when disposable bottles and cans disappear. Some worry that switching away from the growth-driven model of economic progress and redirecting our priorities away from amassing ever more Stuff will lower the quality of life, perhaps lead us back to living like cavemen.

I want to start by challenging the fear of sacrifice and describing one version of what life can look like when we focus on the quality of our life, rather than the quantity of our Stuff. This is not some pie-in-the-sky scenario of how the eco-perfect person would live if she spent less time on the work-watch-spend treadmill; this is my actual lifestyle, right now.

I’ve mentioned that I live in a tight community in downtown Berkeley, which can be considered a type of co-housing. It isn’t a hippie commune; we don’t swap partners; our children are perfectly clear on who their parents are. It’s really just a bunch of good friends who chose to live near one another—really near, like next door. We chose to relocate from various parts of the country to live in community with each other. We find life easier and more rewarding because we focus more on building community than on buying Stuff. We share a big yard; we often eat meals together; but each family has its own self-contained home into which we can retreat when we want to be alone. Some of us even watch TV, but usually together, so even that is a community activity.

We share Stuff all the time. As the older children in the community outgrow their toys, books, and clothes, the younger children inherit them. Once, after my daughter begged me to let her try skiing, I sent an e-mail

out to my community members asking for advice on where I should take her and what I'd need for the trip (not being a skier myself). When I got home from work the next day, there were three bags full of children's ski equipment and clothes waiting for me on the front step. And that's not unusual. Before buying some specialty tool that I need, I check to see if anyone else in the community already has one.

We share advice. We coach each other when making difficult decisions in our personal or professional lives. I have had the best course in parenting one could ever possibly buy, in that I've had five sets of parents to watch as role models—this, of course, has been free. We swap services. Someone who can bake makes almost all the birthday cakes while another who is handy with a wrench helps us all with plumbing emergencies. We organize carpools. We trade off watching the kids or taking them on outings to provide one another with downtime. We host parties together, sharing the costs of setup and all pitching in to clean things up the next day.

When I got really sick (in the last weeks before the manuscript for this book was due) with a 102 degree fever, one person drove me to the doctor while another one stepped in to watch my kid and a third brought me flowers. And you can be sure that I'll return those favors the next time someone else in the community gets sick. Not out of obligation, but out of the pleasure of sharing.

Because we share and borrow many of the things we need, we are able to consume less Stuff. Because we provide one another with services like baby-sitting, repairing, and listening, we pay less for services than others do. We turn to each other first, before relying on the commercial marketplace. My point is we're living the same lifestyle as someone who's paying for those goods and services. In all these ways, we're not sacrificing; we're sharing.

And while there are material benefits to our sharing (saving money and creating less waste, because we consume less), the real benefit goes far beyond these. Rather than keep strict tabs on how many hours or how much Stuff we give one another, we cultivate a culture of reciprocity. In his book *Bowling Alone*, Robert Putnam explains that "networks of community engagement foster sturdy norms of reciprocity: I'll do this for you now, in the expectation that you (or perhaps someone else) will return the favor."¹

Putnam talks about two kinds of reciprocity: specific, in which you actually measure and negotiate individual trades ("I'll pick up both kids from school on Monday, you do it on Tuesday") and the more valuable norm of generalized reciprocity ("I'll do this for you without expecting anything specific back, confident that someone else will do something for me down

the road"). A society based on generalized reciprocity is more efficient than one that negotiates every interaction. It provides greater security and is more fun. "Trustworthiness lubricates social life," Putnam says.² We've got one another's backs. I know that I always have someone to call if I get a flat tire, if I need emergency childcare, if I'm hungry and too tired to cook. Sometimes I visualize this social fabric as an actual fabric that surrounds me and would catch me if I fall, as it has done metaphorically over the years.

Individual Response

So that's my community-rich lifestyle. Without feeling any deprivation, we save money and resources and have more fun. However, let me be crystal clear: our community is not perfect and even if it were, living with a more community-focused life alone will not solve the world's pressing environmental and social problems. If we want all six and a half billion humans on this earth plus future generations to have enough food in their bellies, fresh water to drink, and medicine when they're sick, individual lifestyle shifts like mine won't cut it. In fact, here in the United States we live inside a system so thoroughly based on fossil fuels, carbon emissions, toxic chemicals and wasted resources that no matter how much we scale back our consumption, we still can't achieve a truly sustainable lifestyle—one within the earth's capacity. That's what Colin Beavan, aka No Impact Man, found when he spent one year with his family in Manhattan living as low-impact as possible: no trash, no elevators, no subway, no products in packaging, no plastics, no air-conditioning, no TV, and no food from farther than 250 miles away. While he achieved the lowest impact of anyone I've heard of in an industrialized country, Beavan learned that in a metropolitan U.S. city today, it's just impossible to achieve a sustainable life. The only way to do it would be to disengage completely from modern life and, as Beavan says, "it shouldn't be that way."³

The shift we need to make in order to live within the planet's limits is big. It requires our government, banks, labor unions, media, cultural trendsetters, schools, and corporations and business owners to get on board. Creating change this big requires that we move way beyond the simple lifestyle changes promoted as solutions through an endless parade of lists and books on "ten easy things that you can do to save the planet." Michael Maniates, a professor of political science and environmental science at Allegheny College and an expert on consumption issues, says that the fundamental flaw of the "ten easy things" approach is that it implies: (1) our greatest source of power as individuals is in our role as consumers; (2) we humans, by nature,

aren't interested in or willing to do anything that isn't easy; and (3) change will only happen if we convince every single person on the planet to join us. Let's get real. It's simply not possible to get 100 percent agreement from nearly 7 billion people on any issue, and our ecological systems are on such overload, that we simply don't have time to try. Imagine if we had had to wait for 100 percent consensus before getting women the vote or ending slavery: we'd still be waiting.

Not to mention that individual responsibility to save the planet can be a big drag. Let's face it: you will become wildly unpopular if you become the disposable cup police and the PVC alarmist and the Debbie Downer about the toxins in cosmetics. People will stop inviting you to their parties if you insist on resorting their recycling for them (trust me, they will). Keeping track of all the corporations you want to avoid because of their poor labor policies or their environmental impacts will cause you no end of anxiety and stress. There's too much wrong with the system for even the most obsessive-compulsive among us to get every action and every choice just right. And because that scenario is so overwhelming, the individual-responsibility model of change risks causing people to freak out, throw their hands up in despair, and sink back into overconsumptive, wasteful lifestyles. People are busy enough already: rather than offering an overwhelming range of green lifestyle choices, we need meaningful opportunities to make big choices (for example on policy) that make big differences.

In a 2007 op-ed piece in the *Washington Post*, Maniates lamented, "Never has so little been asked of so many at such a critical moment. The hard facts are these: If we sum up the easy, cost-effective eco-efficiency measures we should all embrace, the best we get is a slowing of the growth of environmental damage. . . . Obsessing over recycling and installing a few special lightbulbs won't cut it. We need to be looking at fundamental change in our energy, transportation and agricultural systems rather than technological tweaking on the margins, and this means changes and costs that our current and would-be leaders seem afraid to discuss. . . . To stop at 'easy' is to say that the best we can do is accept an uninspired politics of guilt around a parade of uncoordinated individual action. What of the power and exhilaration that comes from working with others toward bold possibilities for the future?"⁴

No doubt about it: humanity needs to undertake the much bigger and harder task of changing the way the system works. That way everyone, even those individuals too busy or too tired or too clueless to care, can still end up making low-impact choices—because that's the new default option. With a solution of proper scope, the influence we have as consumers only

gets asserted after the system has been fundamentally changed to serve sustainability and fairness—so there are entirely different choices about how to spend our money. First and foremost, the influence we have as individuals comes from our role as informed, engaged citizens: citizens who participate actively in communities and the broader political arena. And in that arena, there are an almost infinite number of policies, laws, systems, and innovations we can work toward that really would make a difference.

Many people have written into the Story of Stuff Project saying they want to make change but don't know what to do since they are only one person. But here's the thing: I'm only one person too; we're each just one person. By joining together, we can accomplish goals well beyond our reach as individuals. That's why hooking up with an organization, a campaign, or a group of like-minded friends and neighbors working toward a shared goal is an essential first step.

In terms of focusing our political engagement, one of the great things about such an all-pervasive system-level problem is that there are so many places to intervene. To figure out where to plug in, I recommend that you take an inventory of your interests, passions, and skills and then look out in the world and see which organizations are a good match. If toxics in consumer products worry you, join or form a national campaign for chemical policy reform like the Safer States coalition in the United States. If healthy food systems are your passion, you might get involved with community-supported agriculture (CSA). My daughter's school is a drop off site for a local organic farm's CSA. Would that work where you live? If you're sick of hearing your friends in Europe talk about their month-long vacations and leisure time, get involved in a national campaign for a shorter workweek and mandatory vacation law. A great place to find organizations in your region or interest area is a huge online database called *WiserEarth*, created by the sustainable business guru Paul Hawken. *WiserEarth* includes about a million organizations working for environmental and social justice and can be searched by topic and geographic region, so it's easy to find like-minded people with whom to collaborate. There's so much work to be done in overhauling our current systems that it doesn't really matter which issue you choose; what matters is that the work is done towards the broader goal of a sustainable and just world for everyone.

Paradigm Shifts

Drawing from conversations with dozens of colleagues and experts in economics, natural resources, industrial production, cultural issues, corporate accountability, and community organizing, I've compiled a list of four

major shifts that would lay the groundwork for creating an ecologically compatible life on earth—life with greater happiness, greater equity and, for many of us, less polluting, wasteful, cluttering Stuff.

1. Redefine Progress

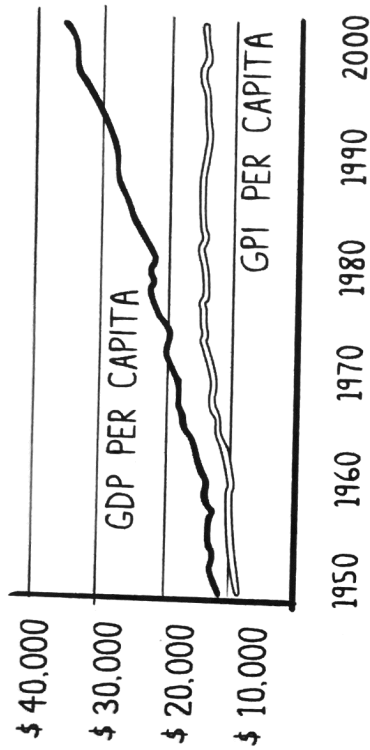
We pay attention to what we measure. Establishing a system of measurement helps us clarify our goals and mark our progress toward them. Currently, the main measure of how well a country is doing is the gross domestic product (GDP). As I've discussed, GDP doesn't distinguish between economic activities that make life better (like an investment in public transportation) and those that make it worse (like building a big new belching incinerator). And it fully ignores activities that make life sweeter but that don't involve money transactions, like planting a vegetable garden or helping a neighbor. We need a new metric that matches the new paradigm, measuring the things that actually promote well-being: the health of the people and environment, happiness, kindness, equity, positive social relations, education, clean energy, civic engagement. These, not economic metrics alone, are a measure of how well we're doing.

Alternatives to the GDP include the Index of Sustainable Economic Welfare, developed in the late 1980s, which evolved into the Genuine Progress Indicator (GPI). This measure evaluates a number of factors beyond traditional economic activity, including pollution, resource depletion, amount of leisure time, and income distribution, although some have criticized it for operating from within the same fundamental pro-growth paradigm as the GDP.⁵ The United Nations' Human Development Index also looks at broader development goals, beyond economic growth. Then there's the previously mentioned Happy Planet Index, combining environmental impact with human well-being to measure the environmental efficiency with which, country by country, people live long and happy lives.

How do we actually promote adoption of a different metric as an official macroeconomic welfare indicator at the international, national, and local levels? John Talberth, a senior economist at the Center for Sustainable Economy who worked on the GPI, says that community-based sustainability planning processes provide fertile ground: community leaders often need help defining key environmental, economic, and social objectives and measuring progress toward those objectives.⁶ Many organizations, including the Center for Sustainable Economy and Earth Economics, track public planning processes and legislation that promotes sustainability. To find out more, visit www.sustainable-economy.org and www.earthconomics.org.

Of course, we're not measuring for measurement's sake. The new indica-

U.S. REAL GDP AND GPI PER CAPITA 1950-2004
(IN YR. 2000 DOLLARS)



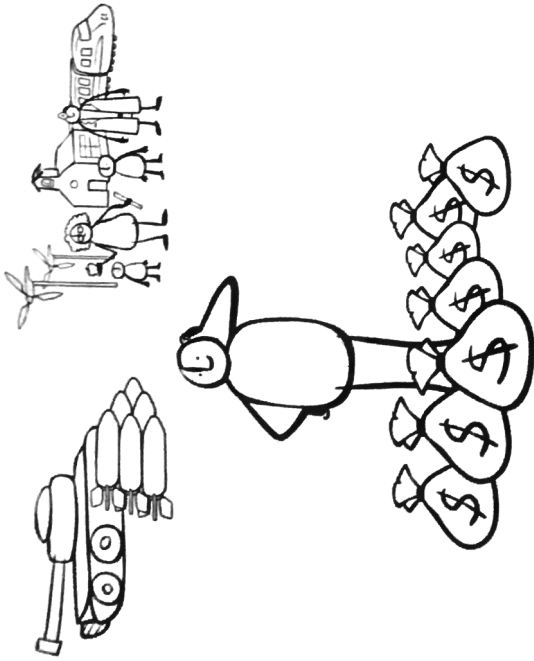
Source: Redefining Progress, 2007.

tors must inform and evaluate a comprehensive set of goals, policies, and systems that prioritize the well-being of people and the planet.

2. Do Away with War

In 2008 governments around the world spent a record amount of money on upgrading armed forces—and that amount continues to increase. They spent \$1.46 trillion in 2008, which is 4 percent more than in 2007 and 45 percent more than a decade ago. The United States continues to be the largest arms spender, followed by China.⁷ The nonprofit National Priorities Project (NPP), which maintains an ongoing tally of the costs of war, calculates that as of July 2009, U.S. spending since 2001 on the wars in Iraq and Afghanistan has topped \$915 billion.⁸

In our work for clean renewable energy and carbon reduction, public transportation, nontoxic alternatives in industrial production, cleanup of polluted sites—as well as health care for all, excellent public schools, and just about any social good—how often do we hear that our suggestions are nice but are too expensive? That there just isn't the money to pay for the changes we seek? It is infuriating to hear this while we're hemorrhaging billions for needless wars that destroy lives and communities and devastate the environment. And don't forget, many of our wars are fought primarily to maintain access to oil, a substance from which we absolutely need to be weaning ourselves! Imagine how we could have built the electric grid that



would enable decentralized renewable energy generation, or the high-speed train network which would replace millions of individual cars—not to mention how many lives we could have saved—had we invested the war money in real solutions instead. As mentioned earlier, the top ranking on the Happy Planet Index is Costa Rica, which abolished its military in 1949 and redirected those funds to social goals.⁹

In my home state of California, we have a severe financial crisis. Our news is filled with stories about additional teachers being laid off, libraries and state parks being closed, and cuts in health care for poor children. The NPP calculates that taxpayers in California have paid about \$115 billion for the wars in Iraq and Afghanistan since 2001.¹⁰ For the same amount of money, we could have had:

- 47,712,271 people with health care for one year, or
- 206,545,462 homes with renewable electricity for one year, or
- 346,992 affordable housing units, or
- 1,664,958 elementary school teachers for one year, or
- 2,070,973 public safety officers for one year, or
- 1,464,132 port container inspectors for one year.¹¹

Enough of letting our leaders cut vital public services or deny funding for transitioning our economy toward sustainability, claiming there's no

money. There is money, plenty of it, being wasted on wars around the world. It's our right and responsibility as citizens to make sure that our government's spending is consistent with our values. Funding wars while cutting schools and health clinics and other vital social needs doesn't work for me and I hope it doesn't work for you.

3. Internalize Externalities

As you've seen throughout this book, many costs of making, transporting, and disposing of all the Stuff in our lives are basically ignored by businesses, which set artificially low prices to attract consumers. Yet those "externalized costs" are piling up—stress, disease, and other public health crises, environmental impacts, social erosion, and damage to future generations—while none of these are reflected in the price tags on Stuff. The *New York Times* recently ran a front page story about indigenous communities around the world that are threatened with actual extinction because of climate-related changes in the natural systems on which their survival depends. The Kamayurá tribe in the Amazon depends on fish for survival, but as water warms and disappears, fish populations have collapsed. Dr. Thomas Thornton of the Environmental Change Institute at the University of Oxford was quoted as saying, "They didn't cause the problem, and their lifestyle is being threatened by pollution from industrial nations."¹² The extinction of whole cultures is among the most serious hidden costs of polluting industries I can imagine.

Many economists still argue that the miraculous hand of the free market will adjust prices and influence supply and demand such that everything will stay in some "optimal" balance. But optimal for whom? The failure to account for externalized costs encourages excessive consumption and unfairly leaves others to pay the real cost of our systems of production and consumption, while business owners earn illegitimately high profits since they aren't paying the full expenses of their operations. That's a market failure if ever there was one.

Paul Hawken notes, "Instead of markets giving proper information, everything else is giving us proper information: our air sheds and watersheds, our soil and riparian systems, our bodies and health, our society, inner cities and rural counties, the breakdown of stability worldwide and the outbreak of conflicts based on environmental shortages. All these are providing the information that our prices should be giving us but don't."¹³

Calculating costs for social and ecological losses ranges from straightforward to impossible. How do you adjust the price of a laptop to reflect the cancer and neurological damage in workers, the loss of habitat for gorillas

in the Congo's coltan reserves, and the contamination of soil and groundwater after the computer gets trashed? Prices go way up, that's for sure.

The price of gasoline, for example, was about three dollars per gallon in the United States in 2007, which reportedly reflected the costs of discovering the oil, pumping it to the surface, refining it into gasoline, and delivering the gas to service stations. It did not include the cost of providing tax subsidies to the oil companies, building public infrastructure to facilitate their operations, health care in communities where the oil is drilled or processed, or, of course, the significant costs associated with climate change. It also excluded the enormous costs of maintaining a military presence in the oil-producing regions of the Middle East to secure our access to that oil. A study by the International Center for Technology Assessment found these costs would total nearly twelve dollars per gallon of gasoline—bringing the total to fifteen dollars per gallon.¹⁴

Economist Dave Batker adds that while internalizing externalities is necessary, it's not the whole solution: "Rather than figure out the economic cost of poisoning a child with mercury and adding that to the bill for your coal-fired electricity, the companies should have to stop emitting mercury, period. Let's ban these toxic products and processes outright. For those costs that don't threaten to push us across a critical ecological threshold or damage people's rights to life and health, internalizing those costs into the price of the product corrects for market failures."¹⁵

4. Value Time over Stuff

There's ample evidence now that working too much leads to greater stress, social isolation, overconsumption, health problems, and even climate change. Reducing work hours is good for people and the planet. As economist Juliet Schor explains, "The key to achieving a more sustainable path for consumption is to translate productivity growth into shorter hours of work instead of more income."¹⁶ A study by the Center for a New American Dream found between one-fifth and one-third of people want to trade income for time.¹⁷ They're exhausted by the work-watch-spend treadmill and realize that the benefits of reduced stress and more time with friends and family will actually contribute more to their happiness than a marginal pay increase with which to buy more Stuff.

But what will happen if we all work less and shop less? Won't the economy collapse, since it's currently disproportionately driven by consumer spending? Yes, if it happened overnight. But don't worry; that's not likely. Working less and buying less need to be phased in gradually and simultaneously to make the transition as smooth as possible. We can do it. We've

got massive productivity in this country. The key is that the consumer demand side and the labor market side both shift down in tandem. As Schor says, "Depending on how the policy aspects of the transition are managed, it can expand employment opportunities by reducing the average number of hours worked in every job."¹⁸ We need gradual, structural changes to enable people to reduce their work without being penalized. Some policies that would advance this are a mandatory vacation law, career options that allow for career advancement without full-time work, and the development of job-sharing programs. Many European countries have such structures. In the Netherlands and Denmark, for example, up to 40 percent of the population works part-time, protected by nondiscrimination laws.¹⁹ Another way to decrease work hours is to increase vacation. Only 14 percent of Americans get a vacation of two weeks or longer, and unlike 127 other countries, we don't currently have a law requiring paid vacation.²⁰

Perhaps the single most effective tool for facilitating a reduction in working hours is the separation of benefits (especially health care) from full-time work. Currently, many people who would like to work less can't, for fear of losing health benefits. The best way to accomplish this would be by implementing a national universal health care program that ensures quality health care to everyone who needs it, regardless of their employment status. Pending that, a short-term transitional proposal is to have employers pay for health care costs by the hour, or by a percentage of salary, rather than by the number of employees. When organizations pay for health care by employee, they have built-in incentive to hire one overworked employee rather than two healthier part-time workers. The interesting thing is that, absent a systems view, most environmentalists wouldn't identify health care reform as a top priority. Yet it turns out that obtaining a national health care program would be a significant step toward reducing our overall environmental impact—because, again, if people don't need to work full-time to get health benefits, many will choose to work fewer hours and earn less and will therefore buy and trash less Stuff and have more time to engage in community and civic activities that help the planet.

New World Vision

We know what the world of today looks like: climate chaos, toxic chemicals in every body on the planet including newborn babies, growing social inequity, disappearing forests and fresh water, increasing social isolation and decreasing happiness. So how might the future look after we make the necessary shifts? Here's one scenario, inspired by my dreams and informed by the projections of various scientists and economists.²¹ Of course our

society's new vision will be collaboratively developed and may diverge from this one, but the important thing is to keep in clear sight a vision of what we are fighting for, because the things we are fighting against are all around us:

It's 2030. There is the sound of laughter and birdsong here in the city. Children everywhere are playing in the streets, just out of the line of vision of grown-ups hanging laundry to dry in the breeze and tending to the vegetable gardens planted in former lots and lawns. The high-density housing is built with community life in mind: bicycle paths, shaded gathering places, fruit and vegetable stands, and cozy cafés fill the streets.

The air is clean nowadays, for two main reasons. The first is that personal cars have almost totally disappeared, while the punctual public transit system now serves every corner of the city, powered on clean, renewable energy. The second is that polluting industries have become extinct, driven out by the one-two-three punch of high taxes on carbon, waste, and pollutants; the high price of virgin raw materials; and government incentives for clean industries.

Because of the strict ban on toxic chemicals, on top of the costs of repairing their past damages to public health and the environment, industries can no longer afford to use hazardous chemicals in products. Green chemists and biomimicry experts have stepped in to provide nontoxic alternatives for everything from parabens and phthalates in cosmetics to fire retardants in furniture to PVC in toys. Inefficient and toxic buildings have been retrofitted and people are no longer allergic to their homes and offices.

We are well under way with the conversion to an ecologically compatible economy. Governments around the world have collaboratively instated a team of biologists, climatologists, and ecologists to work out what levels of consumption and emission are sustainable within the earth's limits and in keeping with social equity. We don't use natural resources faster than they can be replenished by the planet; we distribute those precious resources fairly and sensibly; and we are near our target of zero waste. There is no such thing as extraneous packaging now, eliminating a gigantic portion of the former waste stream. We generate organic wastes at levels at which they can be composted, returning their valuable nutrients to the soil.

Designers, engineers, and technology types constantly invent and improve on ways to do more with the resources we already have. Businesspeople cooperate to maximize resource efficiency and minimize waste, and "industrial ecology," in which the waste of one factory is used as the raw materials of the next, is widespread. An increasing number of businesses are worker owned, and in those that aren't, union membership is welcome.

We have a different relationship with Stuff. Because externalized costs have been internalized at every stage from extraction of natural resource to product distribution, Stuff is much more expensive. We have realized that much of the Stuff we used to buy just wasn't worth it—neither in terms of its impact on the planet or the amount of our own time we devoted to paying for and maintaining it. There are other things we'd rather devote our time to now. Most communities have vibrant local economies with a healthy margin of goods, especially food, textiles, and energy, sourced from local production. Disposable goods are extremely expensive and rare. Products are built to last, and many of them are leased with service agreements, rather than purchased by consumers. At the end of their useful lives, products are taken back by the companies that made them and repaired or disassembled for parts.

This means that maintenance, repair, and disassembly—as opposed to production—are much more important sources of employment than before. So are science and technology. Without as much economic growth as before, we can't maintain full employment—but nobody's complaining. Instead, people work part-time with full benefits, often with an ownership stake in the business.

Resource use is taxed, allowing for basic-needs-based levels of use with minimal or no taxes, but placing higher taxes on higher-volume use. This raises the price of those resources and encourages people and industries to use them efficiently and sparingly. To tackle the staggering inequality of wealth we inherited from the old growth-based system, we are gradually redistributing resources by setting upper limits for income inequality. Hard work and extra contributions are still rewarded, but not as extremely as before. (In the U.S. corporate sector back in the early twenty-first century, executive pay was as much as five hundred times the lowest salary.) We have lowered the range to a factor of fifty, so if the lowest salary in a company is \$20,000, the highest is \$1,000,000. Plans are in place to close the gap even further in the coming years. One measure of progress widely used is the Happy Planet Index, which reflects how efficiently we use natural resources to achieve well-being.

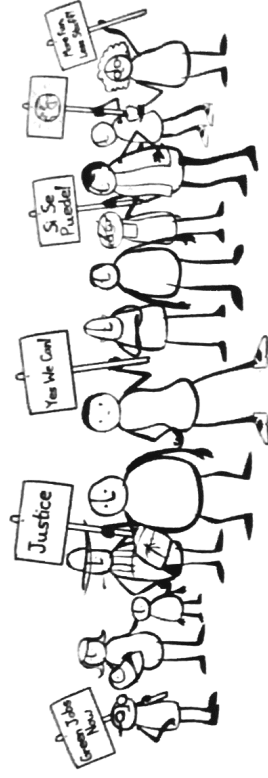
The whole pace of life is more relaxed: "slow and low(-impact)" is the new mantra. Incomes are lower but we are rich in something that many of us had never experienced before: time. There is far more leisure time. Levels of obesity, depression, suicide, and cancer are down. Library and civic memberships are up, as are basketball, soccer, and bocce clubs. While people spend less time working and watching TV alone, they spend far more time engaged in civic activities. People are voting in record numbers, as well as volunteering and

campaigning for the things they care about. Citizens, not big corporations, have the greatest influence. Now that government is accessible, inviting, and responsive, there are nearly infinite possibilities for ways to make life even better. A sense of optimism and hope prevails.

Change And Hope

System change is inevitable. The question is not *if* we will change, but *how*. Will we be forward thinking enough to change by design, or will we wait until we're forced to change by default? If we change by design, it's going to require hard work, some hardship, but more gain. If we dig our heels in and maintain, as George Bush the First said (or Dick Cheney, it's attributed to both), that the American way of life is not negotiable, and we refuse to budge on our resource use as though we had a second planet on reserve, then there's going to be a lot more violence, suffering, and injustice than need be. Even in that scenario, change is still going to happen. Faced with serious, life-threatening resource scarcity as the planet runs out of things like clean water, productive farmland, and fossil fuels, the people around the world with the least access—those with no water, no fish, no shelter—will eventually not tolerate the vast inequity in resource use. When this happens, we will hit not only physical limits of the planet's capacity, but also social and moral limits. At that point, change will be forced upon us.

People ask me all the time how I remain hopeful, given the seeming intractability of the dysfunctional take-make-waste system and the grimness of statistics regarding climate chaos and the loss of natural resources. The thing is, I really believe there's hope for us yet. My unshakable optimism stems both from the knowledge that alternatives systems exist and the belief that if enough people want change, together we can chart a very different path. Four-fifths of Americans favor mandatory controls on greenhouse gases; nine-tenths of us want higher fuel efficiency standards; and three-quarters want cleaner energy, even if they have to pay a little more for it.²² More Americans are relearning how to live within their means and save for the future—since 2008 the personal savings rate has been climbing for the first time in nearly a decade.²³ More of our voting-age population turned out for the federal elections of 2008 (nearly 57 percent) than in any year since 1968.²⁴ These are good signs. Eco-visionary Paul Hawken recently said, "If you look at the science about what is happening on earth and aren't pessimistic, you don't understand data. But if you meet the people who are working to restore this earth and the lives of the poor, and you aren't optimistic, you haven't got a pulse."²⁵



I constantly meet with people from all over the planet who are working to restore the biosphere and promote social equity. Their very existence, alongside the practical solutions they are nurturing and implementing, is a powerful antidote to despair and hopelessness. They reinforce my confidence in our ability to realize an alternative world. How can we give up when we know that it is totally feasible to meet our energy needs through conservation and renewables, to make our Stuff without toxics and waste, and to replace the culture of consumerism with one of community and civic engagement?

In mid-2009, I had to travel to England for a family gathering. While there, a friend took me on a weeklong tour of rural Wales. Though my impressions were formed in just seven days, we covered much of the small country in that time, and I was impressed by what I saw, or actually, what I didn't see. And yes, Wales is a small and relatively homogenous country. But that doesn't mean we can't learn from its successes, in the same way we can learn from all the Latin American and Asian countries that rank higher than us on the Happy Planet Index.

There were two things in particular I was shocked not to see in Wales. First, I saw almost no advertising, and not a single billboard. We went from town to town without seeing any blaring signs telling us to buy something. I felt like I'd gone back in time one hundred years. Being free of the constant assault of ads was such a relief. It was like experiencing silence again after growing accustomed to the jackhammers of a never-ending construction project. All week I saw only one mall and two big-box stores along the highway; the stores in the towns were mostly small and locally owned, selling a mix of imported and local products, thus keeping more money in the community. It made me realize yet again how commercially saturated our landscapes are in the United States and I wondered how that relentless assault affects us all on a daily basis.

Second, I noticed the absence of something even more important: home-