CHAPTER 1
WHAT WE DO FOR A LIVING

We are all still in the earliest stages of learning how what we do for a living both threatens nature and fails to meet our deepest human needs. The impoverishment of our world and the devaluing of the priceless undermine our physical and economic well-being.

Yet the depth and breadth of technological innovation of the past few decades shows that we have not lost our most useful gifts: humans are ingenious, adaptive, clever. We also have moral capacity, compassion for life, and an appetite for justice. We now need to more fully engage these gifts to make economic life more socially just and environmentally responsible, and less destructive to nature and the commons that sustain us.

This book aims to sketch, in light of our environmental crisis and economic sea change, the elements of business responsibility for our time, when everyone in business—at every level—has to deal with the unintended consequences of a 200-year-old industrial model that can no longer be sustained ecologically, socially, or financially.

The co-authors have been involved with Patagonia since its inception nearly forty years ago. But it is not the purpose of this book to retell our company's history in detail. That story may be found in Yvon's book, *Let My People Go Surfing*.

This book, though it draws on our experience at Patagonia, aims to be useful to all people who see the need for deep change in business practices and who work in companies quite unlike ours. Although we mostly address companies that make things, or like us, design things made by others, this book is germane to all businesses that offer a service or to nongovernmental organizations (NGOs) and nonprofits that want to treat their people well and reduce the environmental impact of their operations. This book is for anyone who works, not just business leaders and managers. It is also for business students and other young people who want to engage their best, deepest self in the working life that stretches ahead.

You should know that at its beginning Patagonia was meant to be not a risk-taking, environment-obsessed, navel-gazing company but an easy-to-milk cash cow. Yvon created Patagonia as an offshoot of the Chouinard Equipment Company, which made excellent mountain-climbing gear recognized as the best in the world, but very little money. Patagonia was intended to be a clean and easy company—desk jockey's work—in contrast to the ten hours a day sweat and toil of hammering out pitons with a coal-fired forge or drilling and cutting chocks from extruded aluminum. The clothing business required no expensive dies to amortize and had a much broader customer base than a few dirtbag climbers. Who knew then that cotton could be as dirty as coal?

At Chouinard Equipment we were used to a life-or-death standard of product quality: you did not sell an ice axe without checking it closely for a hairline fracture or any other fault. Although we applied the same standard to rugby shirts (they had to be thick and tough to survive the skin-shredding sport of rock climbing), we knew that seam failure was unlikely to kill anyone. Patagonia was to be our *irresponsible* company, bringing in easy money, a softer life, and enough profits to keep Chouinard Equipment in the black.

Our responsibilities as businesspeople came slowly and almost involuntarily to light while we focused on the "real" work of designing our clothes and getting them made and sold. In the chapters ahead, we'll describe a handful of moments that stunned us into consciousness (including the discovery that cotton, our most commonly used natural fiber, turned out to be the most toxic) to illustrate how one step makes the next step possible—a simple lesson but key.

We can't pose Patagonia as the model of a responsible company. We don't do everything a responsible company can do, nor does anyone else we know. But we can illustrate how any group of people going about their business can come to realize their environmental and social responsibilities, then begin to act on them; how their realization is progressive: actions build on one another.

We used to think that because Patagonia grew out of a small band of climbers and surfers who have a special love for the natural world and a palpable need to be in it, feel a part of it, that we were somehow exceptional as a business. Twenty years ago, we didn't think we had much to say to the woman next to us on the plane who might wear a Chanel suit and pearls and fetch a copy of *Fortune* out of her Tod's handbag (we would have been accidentally upgraded to business class to be anywhere near her). Now, though, we can think of a number of topics we might have discussed, from design to inventory control to the implications of material shortages for long-term planning. We now know, from talking to all kinds of businesspeople, that Patagonia, if exceptional at all, is so only at the margins. As mice and men share 99 percent of their genes, so do Wal-Mart, BP, and Patagonia. Patagonia may seem different because its owners are committed to social and environmental change; and our company is privately held, not publicly traded, so we can take on greater risks. But our management requires the same sets of skills, pursues the same opportunities, and faces the same competition and constraints as any other business.

We started as climbers and surfers, so our direct engagement with nature may have allowed us to recognize the environmental crisis earlier than others and begin to act on it more quickly. But eventually the crisis would become apparent to everyone in business. Soon we would trade stories with other businesses that acted out of environmental and social concerns. In our earliest days, we talked with the founders of Ben & Jerry's, The Body Shop, and Smith & Hawken. Later, conversations with REI, The North Face, and other companies in the outdoor industry led to the creation of the Conservation Alliance, a nonprofit that protects wilderness as habitat and space for recreation.

When we finally turned a cold eye to our own wasteful and polluting industrial practices, or those done in our name by our suppliers, we sought out and found other concerned companies willing to offer advice and help. Often they were huge, and included Levi Strauss, Nike, Timberland, and The Gap. We spoke with others farther afield, like the courtly carpet-tile manufacturer Ray Anderson, founder of Interface, whose spiritual epiphany upon reading Paul Hawken's *The Ecology of Commerce* led him to become, as *The Economist* noted in his obituary, "America's greenest businessman." It turned out we were not unique in our desire to become a more responsible business.

When we wanted to improve our quality without increasing our costs, we shared notes with Jack Stack, who with other employees had

bought back the failing Springfield Remanufacturing Company from International Harvester and had made it successful through innovations in participatory corporate control (i.e., listening to front-line employees) and open-book management. Jack taught us that any successful business strategy had to engage the intelligence of the people on the floor as much as of those at the top.

Along the way we've seen a tectonic shift in work culture in many businesses. During the past twenty years, Silicon Valley companies have turned old work rules on their head. Almost everyone is familiar with the free fitness rooms and free food. Fewer know that Google allows employees to spend 20 percent of their working time doing almost anything they like: We know, because some employees of Google Earth donate that time—and their technological expertise—to helping wildlands activists map migration corridors for large animals displaced by climate change and development.

We've seen the rise of specialty bakers and brewers, and of organic farms and farmers' markets, as well as the mainstreaming of what used to be called health foods. We've seen the introduction of Leadership in Energy and Environmental Design (LEED) standards revolutionize commercial construction by proving that greener building standards create healthier workspaces and that better-quality construction repays owners and investors over time.

There are many new businesses that are sensitive to their workers' needs and mindful of nature's vulnerability; and many older businesses have begun to come around. But none of us have done nearly enough.

Those who plan for the future of their businesses, in every industry, have to take into account the increasing scarcity of energy and water and their rising cost, as well as the rising cost of waste and its disposal. Every company—from Wal-Mart to the Cheese Board Collective, from BP to the makers of Fat Tire Ale, from Dow Chemical to Patagonia—is already at work, in some way, even inadvertently, to dismantle a creaky, polluting, wasteful, and increasingly expensive industrial system, and is struggling to create new, less life-draining ways to make things; we are all trying to get a new roof up over the economy before the old, sagging one caves in.

Every company faces questions from skeptical customers: Will your company's product or service hurt them or their children? Has your product hurt the workers who made it, or their community, or the ecology of the region where the product's components were drilled, mined, or farmed? Is your product worth its social and environmental cost? It may arguably have a social benefit that outweighs its cost; but everything we all do at work, unless you happen to sell organic seeds or night-soil compost, hurts the environment more than it gives back.

Your customer may not be eager to know what's wrong with your products, but if and when she finds out, she is likely to care. And she no longer has to tune into *60 Minutes* or subscribe to *Mother Jones* to find out who's dumping chemicals or mountaintops into the local creek. Any citizen with a cell-phone camera and access to a blog can now sound the neighborly alarm. And others can spread it—and will.

This is not news to the businesspeople at work on one or more of 400 new indexes to benchmark, and advance, their social and environmental practices in the outdoor, apparel, automobile, electronics, chemical, and other industries. No one wants to feel the heat of an unfavorable spotlight. Every company should be afraid, as is Wal-Mart, of teenagers, and what they will consider environmentally acceptable or socially cool as they come into adulthood. No one under forty has ever lived in a year without an Earth Day or thought the health of an ecosystem subordinate to the whims of a corporation.

Wal-Mart woke up after a survey by McKinsey & Company jarred then-CEO Lee Scott: 54 percent of customers thought Wal-Mart "too aggressive," 82 percent expected the company to be a "role model for other businesses," and 2 to 8 percent, as many as fourteen million

people, had stopped shopping at Wal-Mart altogether because they were upset by things they had heard about the company.

Some companies begin to change their ways in order to protect their reputation. Others change to reduce their cost. Still others change because they see opportunities to create new markets, whether to satisfy customers who want healthy, organic food or purchasing agents for public institutions who have to meet new environmental mandates for everything from vehicles to cafeteria napkins.

Every company faces competitors who, through their own efforts to thrive, become more adaptive, nimble, and efficient, as well as less wasteful and harmful. A company that can make environmental improvements will attract more customers. Companies that do business globally have to choose whether to adopt the toughest European standards or divide up their production and make lower-quality goods for the rest of the world. The choice they make will not go unnoticed by the watchful eyes of NGOs and competitors.

Investors, especially large institutional investors like pension funds and universities, now allocate more of their portfolios to socially and environmentally responsible mutual funds, not just to pay ethical lip service or ward off demonstrations on campus. For all investors, including individuals who rely on 401(k) accounts to fund their retirement, faith in the Modern Portfolio Theory (MPT) of diversified investment to minimize risk has been sorely tested by gyrations of the past fifteen years. According to a new Harvard Business School study, socially responsible investments, which once underperformed more enticing opportunities like subprime mortgages, now over the long term outperform the market as a whole.

No company has to rely solely on its own resources to attract responsibly minded employees, customers, and investors. Every company can work with other companies, often under the auspices of a trade association, to co-develop more responsible business standards, practices, and benchmarks: then share information to help everyone reduce industrial harm and waste. That levels the playing field on which companies can then compete in good faith.

Every company that thinks it's a good guy or wants to be—Patagonia, Interface, Stonyfield Farms, etc.—has to make room in our little clubhouse for old villains who now don a white hat for at least part of the working day. They are legion. Nike, stung by public disgust over child labor in its contract factories, has become a global leader in the effort to improve workplace conditions throughout the supply chain and create at least minimally fair labor practices around the world.

After being criticized for polluting groundwater and sucking wells dry in India, Coca-Cola has committed to return its wastewater to the environment clean enough "to support aquatic life and agriculture."

Dow Chemical, former maker of napalm, has committed to finding alternatives to petroleum as a source for its chemicals. Dow has recently teamed with The Nature Conservancy on a five-year, $10-million exploratory project to develop methodologies that can assign dollar values to ecosystems. These new tools will allow Dow to evaluate the ecological costs of every business decision it makes. Moreover, Dow was awarded an A+ from the Global Reporting Initiative (GRI) for its 2010 Annual Sustainability Report. Both Coca-Cola and Dow have teamed with Kellogg's, DuPont, and others to develop "material-neutral" packaging (packaging is responsible for a third of all waste generated).

And Wal-Mart, the world's largest company, formerly committed to an exclusive strategy of low prices, regardless of environmental cost, has committed to use 100 percent renewable energy, create zero waste, and to "sell products that sustain our resources and environment."

Consumers, both individual and institutional, have become and will continue to be more demanding. Individual consumers are famously powerful for controlling two-thirds of the U. S. economy. For

local, state, and national governments and public institutions, who all buy "in bulk," the Prius is succeeding the late Crown Victoria as the emblematic tax-exempt fleet vehicle (although the NYPD prefers the hybrid Nissan Altima).

Whole industries are changing. The conservative but troubled U.S. dairy industry is now engaged in large-scale projects to increase the productivity and shelf life of milk without resorting to destructive factory-farm practices; to change cattle feed to reduce methane "burps" (a significant contributor to greenhouse gases); and to harvest cow patties for use as organic fertilizer.

The commercial construction industry ten years ago was no bastion of green: its old, fixed-budget business model, based on the low bid, drove down quality at every stage of design and construction. Every builder had requirements to build to code but no incentives to build in resource-saving systems that might cut the building owner's cost in the long run but not the short. Enter the LEED certification system for building to energy-efficient standards with less environmental harm. At the time it was introduced in 2000, only 635 buildings worldwide could comply. As of 2012, more than 40,000 LEED-certified projects have been built or are in the works.

LEED has educated building owners and managers to the long-term high cost of cheap heating and air conditioning (and of cleaning a building with high levels of indoor pollution), as well as to the savings inherent in new materials and design. An initial 2 percent increase in the cost of a new LEED-certified project incurs savings of ten times that amount over the life of the building. A LEED retrofit saves owners an annual 90 cents a square foot; they make their investment back in two years. LEED is becoming the standard for commercial properties and, in the process, changing the urban landscape. In big cities, for instance, look for more roofs planted with shrubs and herbs, which insulate, filter the air, reduce heating and cooling needs, and provide a garden haven for workers taking a break. Look for more of the kind of low-income housing built by developer Jonathan Rose, with more under-the-roof residential services and a lot more light: the gym of his new South Bronx project is located not in the basement but on the top floor.

Our own outdoor industry is changing as well. Its trade group, the Outdoor Industry Association (OIA), is developing an assessment tool called the Eco Index, for use by manufacturers to measure the social and environmental impact of every one of their products. Patagonia's Jill Dumain has been part of a working group of twenty companies that for two years met weekly by conference call to develop the relevant criteria. They benefited from participation by Nike, which had invested seven years of work and $6 million to create its Environmental Apparel Design Tool (which, for internal use, grades the impact of the company's products as bronze, silver, or gold).

The Eco Index measures impacts of manufacturing, packaging, and shipping, as well as customer care and use, recycled content, and recyclability. It allows a company to manage its entire supply chain to improve water use and quality, lower greenhouse gas emissions, and reduce toxic chemical use and waste, as well as monitor and improve pay and working conditions on the mill or factory floor.

The OIA group decided to adopt a policy of full transparency and created an advisory council that voted on all decisions. OIA also hired a consultancy firm called Zero Waste Alliance to form a collaborative framework and methodology that would work for a broad range of participating companies—some small, others quite large (among them REI and Timberland, in addition to Nike).

OIA's Eco Index council is now at work on the second stage, which will allow more than 100 companies to provide open-source tools to benchmark their practices and measure improvements through their business reporting systems. Our hope is that within five years the Eco Index will become consumer-facing (as is Berkeley professor Dara

O'Rourke's Good Guide rating system), so that a customer can scan a Quick Response (QR) code on a pair of jeans to see ratings of that product's social and environmental impact.

OIA has made the Eco Index both transparent and scaleable. As a result, the much larger Sustainable Apparel Coalition, whose members produce more than 30 percent of the clothing and footwear sold globally, will benefit from the OIA's work, shaving much time from the development of its own assessment tool.

Patagonia owes its role in the larger coalition to our relationship with Wal-Mart over the past several years. When their executives first approached us to learn more about our environmental practices, we were, from the owners to the rank and file, skeptical and bemused. How could we help them or they help us, when our two companies were so vastly different? There was the question of scale: we grossed $400 million a year, while they grossed $400 billion. There was the question of business culture: Southern California versus rural Arkansas; high quality and strong aesthetics versus rock-bottom prices and pallet racks. There was the question of values. We knew ours; what did Wal-Mart value?

By the time they approached us, in 2008, Wal-Mart had gone through a gradual environmental awakening. Shaken by its declining reputation, and a historic volume of lawsuits aimed at a single company, Wal-Mart at first adopted some basic environmental improvements of the sort corporations usually have their PR departments tout to the press. But removing excess packaging from deodorant sticks, concentrating laundry detergent in small bottles, and installing auxiliary power units in their trucks to reduce idling time turned out to save them millions of dollars. The more material they shaved from packaging, the less energy they used, the more money they made. The more carbon they removed from their operations, the less money they wasted. The word "sustainable," at first the province of the PR staff, became a business by-word.

Wal-Mart's currently low-idling truck fleet is the world's largest. If Wal-Mart were an economy, it would be bigger than Switzerland. Because its material needs—for operations but especially for products—are so great, and because it runs stores around the world, in China, India, and Brazil, as well as in Europe, Wal-Mart is in a position to understand the resource restraints to be faced over the next decade. The company understands how essential it is to reduce its environmental impact if it is to continue to do business on a habitable planet.

Patagonia's talks with Wal-Mart led to a shared David and Goliath enterprise. Yvon and John Fleming, Wal-Mart's Chief Merchandising Officer, co-signed an invitation written on joint letterhead to attend the "21st Century Apparel Leadership Consortium" to be held in New York three months hence. They sent it to sixteen of the world's largest apparel companies. One sentence on the invitation, printed in boldface, read like the crack of a ruler on a wrist:

> During the course of one half day session, we expect to achieve consensus on the need for a universally accepted approach for measuring apparel sector sustainability, and to establish a strategy for ongoing collaboration to create and implement that standard.

The invitation's final sentences, printed in italic, laid out its raison d'être:

> *Creating a sustainability standard will improve the welfare of our workers, communities, consumers, and environment far more effectively than the fragmented, incremental approaches that characterize existing efforts. Together we are better. We hope you will join us.*

Join us they did. The invitees, during their meeting in New York, agreed to become the Sustainable Apparel Coalition. The coalition members, working by consensus, drew on the work of OIA's Eco Index to define its social and environmental benchmarks. The Coalition has now launched into development of an open-source assessment tool to be shared by participants. It is our hope that this index, like OIA's, can

be converted eventually into a consumer-facing rating that will allow a customer to hold a smart phone to a QR code to read an individual rating—and compare the impact of one pair of jeans to another.

Similar efforts are underway in other industries, with over 400 indexes in effect or being considered that measure the impacts of everything from appliances (Energy Star ratings) to electronics (EPEAT) to automobiles. It's too early to tell, but these indexes could create a revolution in the way we buy: they certainly give us the information we need to be good citizens as well as informed buyers.

Every company has business partners—suppliers, dealers—with a stake in its success. These partners have also begun to adopt and develop, voluntarily or not, a more responsible business model for their own companies. Companies, suppliers, and retailers all need to help each other. As your company is responsible for everything done in its name, so are your partners responsible for your part of their social and ecological footprint. As Patagonia is responsible for the labor practices of Maxport, the factory in Hanoi that sews our Super Alpine Jacket, so REI is responsible for the environmental footprint of the Patagonia jackets it sells in its stores. How so? REI can't tell Patagonia how to make jackets, but it doesn't have to buy from us either. If it cares about reducing the environmental footprint of the jackets sold on its floor, REI can influence us to improve our practices or buy from someone else who will. And they should. As Wal-Mart has discovered, 90 percent of a product's environmental impact is determined at the design stage; it is the designer in Los Angeles who determines most of the harm to be done in Guangdong.

Every company now has to work to win the minds and hearts of its employees; to earn their trust, loyalty, and commitment, and to engage their intelligence to help figure out, before the old economy caves, how to put up that new roof (built out of renewable or recycled materials, to LEED standards, with a garden to reduce energy costs). To earn employee commitment and trust begs more of a company than providing competitive pay and benefits and enacting humane employment policies. Employees who grew up in the 1980s or later view it as their birthright to make the best use of their intelligence and creativity, not always for the highest pay.

Not everyone can satisfy his heart's desire working for your company, but everyone does want to feel useful at or, better yet, enlivened by what they do all day long. No one wants to be ashamed to name the company he works for. No one wants to leave her values at home when she leaves for work in the morning.

People will argue over what makes the world a better place to live (and for whom), and over what each of us would like to see more and less of in the world. It is hard to imagine anyone rejoicing over the generally accepted landscape of only a decade ago: a suburban monoculture of tilt-up malls, cracker-crumb housing, pandemic obesity, cheap distractions, and expensive services—all at the expense of nature and not much good for us as people who are part of nature. It's as though we'd handed Satan a hard hat and asked him to refashion our earth according to his plan.

A word about a word we've chosen to use as little as possible: *sustainability*. It's a legitimate term that calls us not to take more from nature than we can give back. But we do take back more than we give, we do harm nature more than we help it. We have no business applying the word sustainable to business activity until we learn to house, feed, clothe and enjoy ourselves—and fuel the effort—without interfering with nature's capacity to regenerate itself and support a rich variety of life.

We are a long, long way from doing sustainable business on a planet that now numbers seven billion human beings, including growing, appetitive (though often socially and environmentally conscious) middle classes emerging in China, India, Mexico, Brazil, and Russia. Everything we make does some damage. To produce enough gold to make a wedding band, for instance, generates 20 tons of mine waste. Closer to home: a Patagonia polo shirt is made of organic cotton from an irrigated field, whose cultivation requires nearly 2,700 liters of water, enough to meet the daily needs (three glasses a day) of 900 people. Each polo shirt, in its journey from the cotton field to our Reno warehouse, generates nearly 21 pounds of carbon dioxide, 30 times the weight of the finished product. Along the line, it generates three times its weight in waste.

No human economic activity is yet sustainable.

Twenty years ago, we at Patagonia felt compelled to include in our mission statement an industrial equivalent of the Hippocratic oath, "cause no unnecessary harm." There are degrees of harm. Our polo shirt harms less than one made of chemical-intensive, conventionally farmed cotton, which may be no cleaner than coal. Our polo would be more sustainable if it were made, as are our jeans, from less thirsty, dry-farmed cotton. But even that polo would take its toll on the natural world, through its use of energy, its carbon emissions, and its waste scrap.

Still, it makes a difference to do less harm, and lessening harm makes it possible to begin to imagine restorative and even, through biomimicry, regenerative practices for the future. It makes a difference, where harm is done on an industrial scale, to make improvements on an industrial scale. It makes a difference for businesses, as well as consumers, to use fewer materials and less energy and water, and generate less waste. To make the difference we need to restore the planet to health, or to allow the planet to restore itself to health, we need to make big changes and make them fast. But it would irresponsible not to pursue every improvement, to take action, where we can.

Many companies are doing something to behave more responsibly to the earth and the commons. And every company that learns to take a responsible step without faltering gains confidence to take the next. "Responsible" seems to us the apt, more modest, word to use while we walk the path that, we hope, leads to a place where business takes no more from nature than what it can replace.

CHAPTER 2
WHAT CRISIS?

THE PHILOSOPHER Alfred North Whitehead described how we experience nature's "creative advance" as perpetual novelty. But nature generates its changes at a much slower pace than we now allow her and in more complex ways than we can easily recognize. We need to be more aware of what we do to the planet, do much less harm—and do it far more slowly.

We harm nature by what we add to it, how we alter it, and what we take away. We have added a number of chemicals that nature didn't have to absorb before the nineteenth century, and that we didn't have to deal with as health issues. The EPA identified 62,000 industrial chemicals in 1979, without screening or proscribing their use. Only a few hundred have even been tested. You carry in your own body traces of 200 chemicals unknown to your ancestors, some of them toxic in large amounts, others slow-acting carcinogens in small amounts. And a chemical present in your blood might have no affect on its own, but prove dangerous in combination with another. Untested interactions among the various chemicals released into nature can form up to three billion combinations.

Because we know so little, it is difficult to track our diseases back to their environmental source. Certain diseases have become prevalent in affluent countries at much higher rates than in the less developed world, and they may reflect a reduced physical resilience. These include inflammatory autoimmune disorders like asthma, allergies, lupus, and multiple sclerosis. Nonsmokers who reach middle age can now expect to have levels of chronic obstructive pulmonary disease (COPD), a precursor to emphysema, equal to that of smokers. Breast cancer rates for women have tripled during the past thirty years, and only 5 to 10 percent of breast cancers are considered hereditary.

Scientists are slow to link specific cancers to specific environmental causes, such as high-voltage wires, PCBs in the river, your cell phone. Few cancer catalysts have been studied as closely or confirmed as positively as cigarette smoke. But some environmentally caused illnesses can be traced: mercury poisoning, for instance, has been proven to result from eating too many large predatory fish, such as tuna and swordfish.

We have added significantly, through runoff from sewage and fertilizer, to the nitrogen and phosphorus in the water supply; the extra nutrients create algae blooms that choke off oxygen and kill fish. Half of the lakes in Asia, Europe, and North America suffer from this process, called eutrophication, as does much of the Gulf of Mexico.

We have altered nature.

The atmospheric concentration of carbon dioxide, up by 19 percent since 1959, has now reached its highest level in 600,000 years

and continues to grow, making hot air hotter, cold air colder, and increasing the ferocity of storms. Arctic winter ice decreases 9 percent each decade, and every winter more of western Antarctica's ice shelves calve into the ocean. The Larsen B Ice Shelf alone was the size of Rhode Island and took only 35 days to collapse.

We have borrowed from nature what we can't pay back.

In 1960, humanity consumed about half of the planet's potential resource capacity. By 1987, we exceeded it. Twenty-five years later we are using the resource capacity of one and a half planets, though the pattern of consumption is unequal. Europe, proportionate to its population, consumes the equivalent resources of three planets; North Americans, seven. The consumers are unevenly distributed, and so is the consumption, though China and India, the world's most populous countries, now have sizeable, growing, appetitive middle classes.

Biologists agree that we're in the midst of the planet's sixth extinction crisis (the fifth was that of the dinosaurs). A 2009 study in *Nature* named biodiversity as the "planetary boundary" that humans have violated more than any other, among nine identified "Earth-system processes and associated thresholds, which, if crossed, could generate unacceptable environmental change." Their proposed threshold for extinction was ten species per million per year. We are losing species now at the rate of 100 per million per year, or 1,000 times (not a typo) the normal rate. Thirty percent of amphibians and 21 percent of mammals are among the most imminently vulnerable, including the polar bear, rhinoceros, tiger, giraffe, and gorilla. Twelve percent of bird species are threatened with extinction, as are 73 percent of flowering plants, 27 percent of corals, and 50 percent of fungi and protists.

Water withdrawals from lakes and rivers have doubled since 1960. As more of the earth's major rivers—on which huge populations depend—fail to reach the sea, the ocean's coastal eutrophic, or dead, zones expand. The dammed Colorado River is now rarely allowed to flow into the Gulf of Mexico, and its former delta is a toxic swamp. By 2025, no Chinese river will meet the ocean all year long, which will devastate wetlands, and decimate bird- and fishlife. China's rivers will no longer be lifelines for her people.

Worldwide, wetlands diminish and disappear year by year, as do coral reefs and mangroves; major fisheries are collapsing. Loss of rainforest continues in poorer countries. Conventional plowing and planting without crop rotation has led to significant loss of topsoil—at the rate of one inch a year in the American Midwest. It takes 500 years for an inch of topsoil to form naturally.

The human consequences of ecological overreach are magnified in poor countries and in countries like China and India, which have large poor populations: shrinking resources only aggravate the basic challenges of inadequate food, water and sanitation.

In short, the world is becoming a desert. Globalization, a man-made but not humanly controlled process, is largely responsible for the current speed at which life turns to sand. Globalization moves with great speed to identify, then harvest resources for human needs but crawls slowly to repair the devastation it has left in its wake. It is fast but stupid, brutal, and imprecise; to cull a tree, it takes out a forest.

Those who watch the forest be cut and raise their voice against it cannot be heard when the company that did the cutting does not belong to the community. And there is little community representatives can do. When local politics becomes subservient to distant economic power, the concept of citizenship, of its duties and possibilities, loses its meaning. The human commons loses its value; it too becomes desert.

Because Yvon has his roots in climbing and surfing, as does our company, we can't leave undiscussed the loss of wilderness or wildness, which is as much a spiritual concept as a definition of place. By

naturalist Margaret Murie's definition, wilderness is where the hand of man does not linger.

As men and women we are part of nature. If we were to have no experience of wild nature, or no way to know of it, we would lose entirely our sense of human scale. We derive our sense of awe from our ability to feel nature's force. We better know ourselves when we come face to face with the magnificence of the unknown. Emerson, Thoreau, and other transcendentalists learned and taught these lessons in New England in the 1830s through 1860s. They showed us that we can learn directly from nature about who we are and how to live.

After an accident left him sightless in a darkened room for eight months, John Muir, a native of Scotland, began his long walking journeys, first from Indiana to Florida, then famously to Yosemite. During his wandering years, Muir carried a tin cup, a handful of tea, a loaf of bread, and a copy of Emerson. (The two men were to meet one day in 1871 in Yosemite). Muir's writings on the geology and botany of the Sierras gained him fame, respect, and economic independence. Perhaps his greatest achievement was to persuade Teddy Roosevelt to abandon the comforts of Yosemite's government camp and go off with him to sleep in bedrolls directly under the stars. That night might be regarded as the birth of the conservation movement: Muir talked Roosevelt into creating Yosemite National Park.

It might surprise some to know that, in 1972, Roosevelt's political descendant Richard Nixon, on signing the Endangered Species Act, said:

> This is the environmental awakening. It marks a new sensitivity of the American spirit and a new maturity of American public life. It is working a revolution in values, as commitment to responsible partnership with nature replaces cavalier assumptions that we can play God with our surroundings and survive. It is leading to broad reforms in action, as individuals, corporations, government, and civic groups mobilize to conserve resources, to control pollution,

to anticipate and prevent emerging environmental problems, to manage the land more wisely, and to preserve wilderness.

If the United States is the birthplace of conservation, of the very idea of wilderness as its own value, of nature as a teacher, we have not kept stride with the rest of the world. Forty years after Nixon gave that speech, we are still the leading practitioners of the kind of high-growth, material-intensive capitalism that is to blame for the destruction of nature. The respected Environmental Performance Index (EPI) in 2010 ranked the world's five top countries as Iceland, Switzerland, Costa Rica, Sweden, and Norway. Germany, the U.K., France, and Japan are all in the top twenty. The U.S. has fallen to the sixty-first position.

This decline reflects Americans' growing environmental apathy. In a 2011 poll, Pew Research Center reported that only 40 percent of Americans considered protecting the environment a high priority, down from 63 percent ten years earlier.

Will this continue? In the 1960 book *Growing Up Absurd: Problems of Youth in the Organized System*, an analysis of juvenile delinquency in an overorganized world, Paul Goodman predicted the youth movement that would rise up in the decade that followed. The civil rights and women's rights movements also arose in response to conditions that looked unshakably stable and hegemonic at the time.

Any situation keenly out of balance eventually reveals itself to large numbers of people as absurd. So it will be with our own current social and environmental disequilibrium. The authors hope that those born in the 1980s and coming into their own now will, all their lives, pursue meaningful work and do the right thing, which is to say be responsible to other people and to nature. The authors hope they reject the official story told by governments and corporations that a healthy economy relies on the suppression of social, ecological, and individual health.

It's a competitive world: Will Iceland win?

CHAPTER 3
THE RESPONSIBLE COMPANY IN OUR TIME

THAT MANY COMPANIES now act on some recently recognized responsibilities to nature and the commons does not mean that they are delighted to do so. Nor does it mean that a new, happier age of more responsible capitalism is at hand. Nothing is certain, except that the shift to more conscious, cooperative business practices will be hard, and that whatever you do, for good or ill, will matter, wherever you work.

How is a company responsible? Should it profit its shareholders, provide for the well-being of its employees, make excellent products, be a good force in the community, and protect nature? We think that a responsible company bears all these obligations. But getting into the details of how business might deal with the environmental crisis and intensive, local jobs in agriculture and boutique, handicraft industries, or a shorter work week.

Finally, more companies are likely to follow entrepreneur Jack Stack's advice to offer equity to a broad base of employees to increase their engagement with their jobs.

Customers: As everything becomes more expensive, customers will become choosier and buy less. They will increasingly demand to know whether products qualify as healthy and humane. And broad, innovative applications of those 400-plus social and environmental indexes will help customers choose products made by companies that pay fairly and work to tangibly reduce their environmental damage.

Communities: As travel and shipping become more expensive over the next fifty years, we are likely to see at least the partial restoration of a company's sense of locality. This can help make local communities stronger and more resilient, and more active in the effort to attract and keep beneficial employers.

Responsible businesses will have to work more closely with NGOs and interest groups to reduce environmental harm and improve working conditions throughout the supply chain. Trade associations and third-party verification organizations will become more important as more companies benchmark their social and environmental standards, work to raise the bar, and have their efforts to meet them monitored and verified by independent parties. Above all, companies will have to work as true partners with their suppliers, in a climate of trust. Profit will come not from taking advantage of one another, but from efficiencies gained by understanding each other's problems and meeting each other's needs.

Nature: As customers learn more about the consequences of ravaging the natural world at our current pace, they will pressure companies to do far more, more quickly, to reduce the damage they cause. Rising cost will constitute its own pressure on companies to adopt

more responsible practices. Expenses will rise for natural resources (especially energy and water) and for waste disposal. Companies, not individuals, generate 75 percent of the trash that reaches the landfill or incinerator. Packaging, for which the producer is responsible, is disposed of almost instantly by the consumer and comprises a third of all waste.

The need to use less energy and generate less waste will in turn require companies to conduct life-cycle analyses (LCA) of their products. The LCA teaches a company how to reduce the environmental impact of its products from their origins as raw materials (derived from water, the soil, or underground) through their manufacture, useful life, and eventual disposal. Finally, companies will have to track environmental performance through all business reporting systems.

It is essential to decouple the definition of economic health from economic growth in the use of materials and energy. It is not pie in the sky to say so. Germany, Japan, and China, among other governments, have announced their intention to create "circular economies" that promote reduction, reuse, and recycling of materials. Japan passed a law in 2000 to increase resource productivity by 60 percent, increase recycling by 40 to 50 percent, and reduce waste disposal by 60 percent by 2010. As of 2008, it was on track, according to World Watch's 2011 report.

The U.S. needs to follow suit and create its own circular economy. This would require eliminating government subsidies and tax breaks for industrial agriculture, oil and gas production, and other nonrenewable resources, so that prices would reflect true costs. The U.S. Treasury, for example, pays $2 billion a year to support the price of chemically intensive conventional cotton grown in California and Texas.

In a post-consumerist society, it's critical that we stop using the gross domestic product (GDP) as a barometer of social health. As economist Joseph Stiglitz puts it, we need to expand the idea of GDP to include noneconomic factors. In October 2010, the U.K., following the lead of Bhutan, Canada, and France, adopted (with some nervousness on the part of its Conservative government) a "happiness index" that defines quality of life more broadly than does GDP. The U.K. index includes metrics on job satisfaction and economic security, satisfying relations with friends and relatives, having a say on local and national issues, health, education, environmental health, personal security, and volunteer activities.

Were we to grow less distracted by our consumerism and consumption, and to spend more time with friends and family, or work with people we want to help, or learn something we have always wanted to be able to do, wouldn't that make up for missing yet another sale at the mall? The pursuit of national wealth through trade of increasingly useless things has for a few decades kept us in more clothes than we need, but has nothing to do with the pursuit of happiness. And it simply no longer works.

It is financially unsustainable for the world economy to require 3 percent annual growth, which corresponds to the 3 percent growth a company must now maintain to outpace inflation and prevent job loss. Yet the economy in advanced societies no longer creates sufficient well-paid jobs; the speed of automation outpaces that of job creation. All rich countries face high levels of debt because fewer well-paid workers pay the taxes to sustain outlays for health care, education, and the military.

Can a company do many things right and be *irresponsible*? Imagine a business that returns a tidy profit, treats its employees well, makes the best-quality product possible, gives generously to the community, rebuilds its headquarters to LEED standards and throws in a rooftop garden—but makes land mines. Not in the U.S., where it has been illegal to make land mines since 1997, but offshore, through its supply chain.

Land mines hurt mostly civilians: 158 countries (the U.S. not included) have called for an international ban.

Many companies, some of them highly admired in the pages of business journals and on Wall Street, do make, in this country, things like cigarettes, the extra-large version of the Cadillac Escalade, Lucky Charms, hollow-point bullets, baby toys containing endocrine-disrupting phthalates, and lead-containing lipstick. Companies that behave responsibly in some important way may also hire teams of lobbyists to discredit worthy but unfavorable science, or export to developing countries harmful or dirty products banned in the U.S., Europe, and Japan. It isn't enough for companies to argue that they're simply meeting customer demand: to make a bad product is to do bad business.

In the coming decades, as customers become more insistent, environmental laws become more restrictive, resources become less plentiful and more costly, and investors more demanding, every company will face competitors who embrace all the elements of business responsibility—not always because it's the right thing to do, but because it is essential to being successful. To compete, a company will have to be at least as responsible as its competitors.

More than thirty-five years ago, the authors of this book had lunch together at Myrt's Cottage Café, a greasy spoon a block away run by beehived waitresses who had for decades dished out biscuits and gravy and grilled cheese sandwiches to workers in the oil fields up the street: Johnny Cash may have had coffee and a smoke at Myrt's at some point during the mid-fifties, when he played the honkytonk across the street.

At the time of our workingman's lunch, Yvon was paying himself $800 a month, and Vincent, because he didn't surf and hung around to answer the phones, had recently been promoted to sales manager, with