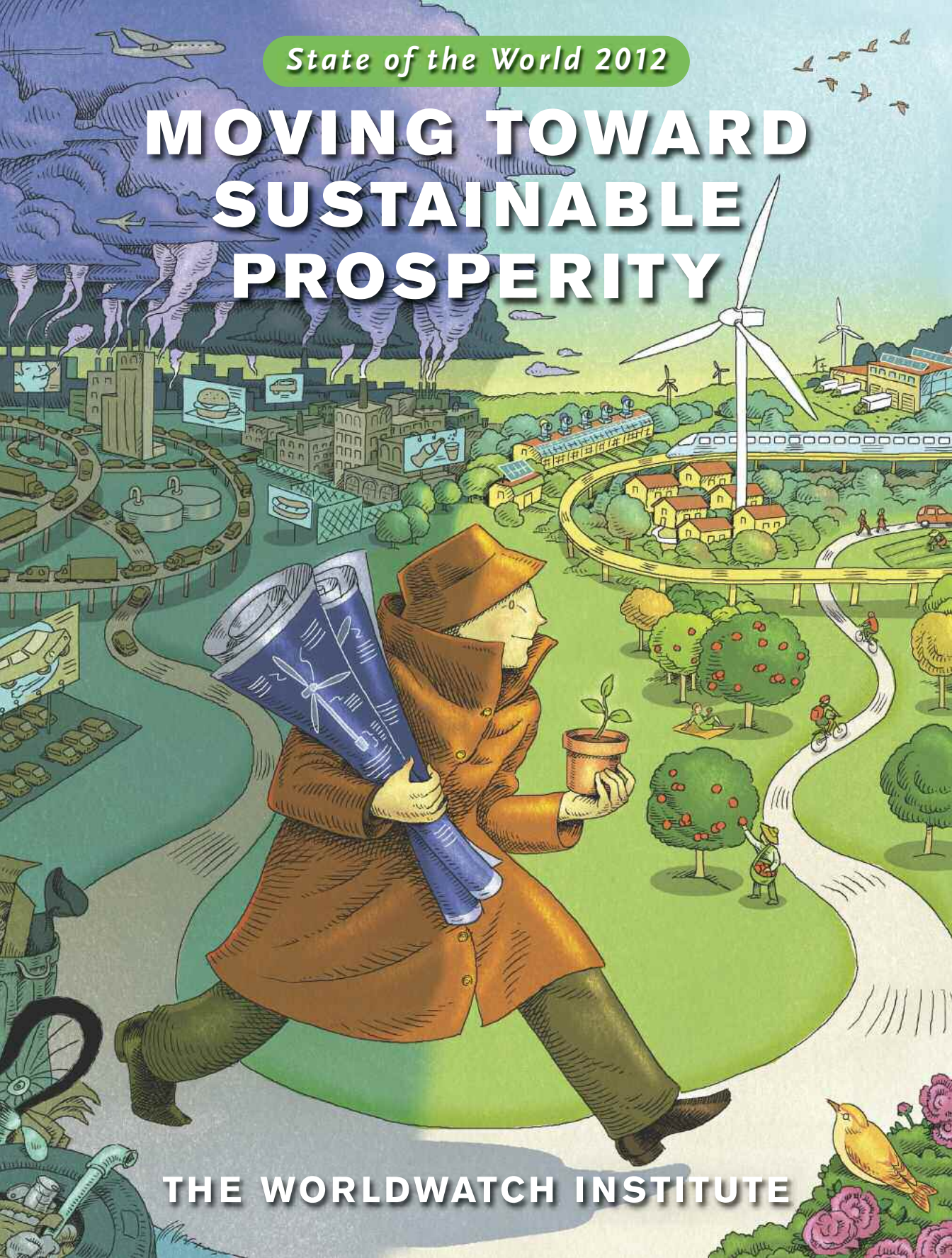


State of the World 2012

# MOVING TOWARD SUSTAINABLE PROSPERITY



THE WORLDWATCH INSTITUTE

# The Path to Degrowth in Overdeveloped Countries

---

*Erik Assadourian*

In 2010, the Second Conference on Economic Degrowth for Ecological Sustainability and Social Equity in Barcelona, Spain, convened more than 500 participants from over 40 countries to discuss how to intentionally “degrow” the global economy. (See Box 2–1 for the definition of degrowth.) A variety of academic papers were discussed—from the mechanics of economic degrowth to strategies on how to pursue and communicate this challenging concept.<sup>1</sup>

The conference even drew attention to some radical (albeit unsanctioned) approaches to building the movement. At the peak of the global financial bubble, for example, Enric Duran—claiming to be an entrepreneur starting a new technology business in Spain—approached a number of banks to seek loans. He then promptly donated most of the 500,000 euros he collected to the degrowth movement (minus interest and taxes paid). Called by some a modern-day Robin Hood, Duran used the loose lending practices of the bubble era to engage in this act of what he called “financial disobedience” and help reveal the risks of a poorly regulated financial system while simultaneously generating resources to

help fund alternatives to the current unsustainable economic system. While undoubtedly unconventional, Duran’s actions and subsequent arrest certainly drew attention to the movement.<sup>2</sup>

Degrowth in a globalized culture where growth is seen to be essential for economic success and societal well-being seems to be a political non-starter even for those who may be sympathetic. For most people, who deeply believe growth is essential to modern economies, it seems to be a recipe for economic and societal collapse. But the rapidly warming Earth and other declines in ecosystem services reveal that economic degrowth is essential and will need to be pursued as quickly as possible in order to stabilize Earth’s climate and prevent irreparable harm to the planet and, in the process, human civilization.<sup>3</sup>

Already, the conversation is changing in the media and among scientists. The hope of preventing a temperature rise of 2 degrees Celsius is weakening. Numerous studies have found that humanity is now on a path to increase the average global temperature by 4 degrees Celsius. Most recently, the journal *Philosophical Transactions of the Royal Society*

---

**Erik Assadourian** is a senior fellow at the Worldwatch Institute and director of its Transforming Cultures Project. He is co-director of *State of the World 2012*.

### Box 2–1. Defining Degrowth

Degrowth is the intentional redirection of economies away from the perpetual pursuit of growth. For economies beyond the limits of their ecosystems, this includes a planned and controlled contraction to get back in line with planetary boundaries, with the eventual creation of a steady-state economic system that is in balance with Earth's limits.

Degrowth should not be confused with economic decline. As Serge Latouche, a leading thinker on degrowth, explains, "The movement for a 'degrowth society' is radically different from the recession that is widespread today. Degrowth does not mean the decay or suffering often imagined by those new to this concept. Instead, degrowth can be compared to a healthy diet voluntarily undertaken to improve a person's well-being, while negative economic growth can be compared to starvation."

Ultimately degrowth is a process, not the end point. As Latouche notes, the end point

is abandoning faith in the promise of growth as driver of development. Economist Tim Jackson puts this idea in a user-friendly way, calling for "prosperity without growth." However, that prosperity should not be confused with what is deemed prosperity by many today—a consumer lifestyle—as that depends on a growth economic model and overuse of Earth's natural capital. Instead, as Latouche explains, a prosperous society is one "in which we can live better lives whilst working less and consuming less."

Thus degrowth will be a step toward a more secure, sustainable, sane, and just future, helping to reduce the number and size of ecologically destructive industries and to reorient economies in ways that improve well-being, strengthen community resilience, and restore Earth's systems—a path that from any sane perspective would be hard to confuse with economic decline.

*Source: See endnote 1.*

even examined projections of a 4 degree increase not by 2100 but by 2060, following the path of emissions that society is currently on. This path translates to catastrophe for human society: massive shifts in population as coasts flood, areas hit by extreme weather and droughts, and diseases spread to new areas. And the 2011 climate talks in Durban did nothing to stop the world's rush to this future.<sup>4</sup>

With governments like Canada pulling out of the Kyoto Protocol and with a new climate agreement probably stalled until 2020, the world is in all likelihood in for massive ecological shifts, which needless to say are incompatible with a growing global economy. Indeed, in 2007 the *Stern Review on the Economics of Climate Change* projected that climate change could reduce global economic well-being anywhere from 5 to 20 percent (measured in per

capita consumption terms), depending on how much human activities warm the world.<sup>5</sup>

These ecological changes are brought ever closer and made ever larger by people's continued belief that growth by all on an overtaxed planet is a useful pursuit. In the past half-century, growth has been understood as the cure-all to societal problems. In reality, while it may help sometimes, continued economic growth is at the root of ecological shifts that will cause far worse problems. As the Prince of Wales noted in May 2011, "Our myopic determination to ignore the facts and to continue with business as usual is, I fear, creating the risk of a crash which will be far more dramatic, and far harder to recover from, than anything we have experienced over the past few years."<sup>6</sup>

And while that may be evident to those who study environmental trends, society is so

committed to growth that even many environmentalists and sustainable development experts still advocate for “green growth,” or just the decoupling of growth from material consumption. As Harald Welzer, author of *Mental Infrastructures: How Growth Entered the World and Our Souls*, notes, “The current debate on decoupling...serves above all to maintain the illusion that we can make a sufficient number of minor adjustments in order to reduce the negative environmental consequences of economic growth while leaving our present system intact.” But humanity needs to radically transform the global economy, reducing its size by at least one third—based on the conservative ecological footprint indicator, which finds that humanity is currently using the ecological capacity of 1.5 Earths—even while the poorest one third of humanity needs to increase total consumption considerably in order to achieve a decent quality of life.<sup>7</sup>

## The Curse of Overdevelopment

Ultimately, overdeveloped countries (and overdeveloped populations within developing countries) will need to either proactively pursue a degrowth path or continue down the broken path of growth until coasts flood, farmlands dry up, and other massive ecological changes force them away from growth into a mad dash for societal survival. If overdeveloped populations keep ignoring the looming changes—keeping their proverbial heads buried in the sand—then this transition will be brutal and painful. But if a strategy of degrowth, economic diversification, and support for the informal economy is pursued now, before most of societal energy and capital is focused on reacting to ecological shifts, these overdeveloped populations may discover a series of benefits to their own welfare, to their long-term security, and to Earth’s well-being.

It is no surprise that overdeveloped countries also suffer from a series of ailments con-

nected to overconsumption—since affluence and development decoupled long ago for many in these countries. The clearest indicator is the obesity epidemic now plaguing most industrial countries and developing-world elites. In the United States, two of every three adults are now overweight or obese, reducing their quality of life, shortening life spans, and costing the country an extra \$270 billion a year in medical costs and lost productivity due to early deaths and disabilities. This epidemic may even lead to the next generation living fewer years than their parents did, primarily due to obesity-related problems like heart disease, diabetes, and certain cancers. Tragic statistics, but there are many who prosper from this type of growth: agribusiness, processed-food manufacturers, marketers, hospitals, pharmaceutical companies, and others all profit from maintaining the status quo. The diet industry alone earns up to \$100 billion a year on obesity in the United States. And the United States is not exceptional on this front, merely a trendsetter. In 2010, 1.9 billion people were overweight or obese worldwide, up 38 percent over 2002, even though total population rose 11 percent in that time.<sup>8</sup>

Obesity, unfortunately, is not the only side effect of overdevelopment. Increased debt burdens, long working hours, pharmaceutical dependence, time trapped in traffic, even increased levels of social isolation stem at least in part from high-consumption lifestyles. Indeed, while many modern advances—personal transport, single-family homes, televisions, computers, and electronic gadgets—seem to have improved human well-being, in reality these advances may have imposed significant sacrifices on consumer populations without their knowledge or consent.<sup>9</sup>

More broadly, along with reducing the physical and societal side effects of the obsessive pursuit of growth, pursuing degrowth would reduce the ecological impacts of the human economy, as some populations would

consume less food, resources, and energy. Perhaps the most important but least tangible outcome of this would be to reduce the loss of Earth's resiliency, which humanity and all species depend on completely for their ability to survive and thrive.

Of course, it is simple to advocate for the sanity of degrowing the ecologically destructive global economy. But when growth is one of the fundamental sacred myths of modern culture, and when economists, the media, and political leaders routinely wring their hands whenever the economy contracts, shifting paradigms 180 degrees will be extremely difficult. Instead, degrowth will need to be pursued very strategically—working simultaneously on a variety of complementary fronts.

### Reducing Overall Consumption by Overconsumers

At the heart of degrowth will be dramatic shifts in individual and collective consumption patterns. A large percentage of people's ecological impact comes from food, housing, and transportation. These sectors will need to be dramatically overhauled so that people in overdeveloped countries choose to live more simply, in smaller homes, in walkable neighborhoods, traveling less by car and plane and more by foot, bicycle, and public transit, and eating less and lower on the food chain. Moreover, people will need to own less "stuff"—from electronics to appliances, from books to toys—that requires massive amounts of resources and produces considerable waste. Indeed, when adding up all indirect and direct forms of consumption, in 2000 the average American used 88 kilograms of resources a day and the average European 43 kilograms a day—numbers that need to contract tremendously to be sustainable, especially in the context of growing consumption demands by developing countries.<sup>10</sup>

This presents a formidable challenge, as

growth and consumerism are celebrated by an advertising industry that spent \$464 billion worldwide in 2011 marketing the consumer lifestyle, by Hollywood and the global film industry, and by the media more broadly. A few cracks are appearing, however, in what were once solid traditions of the growth-centric consumer culture. Some American teenagers, for instance, are no longer rushing to get their driver's licenses—previously an essential rite of passage to adulthood. In 1978, half of the 16 year olds in the country got their license; by 2008 the number had fallen to 31 percent. Even by age 19, while 92 percent of teens had a license in 1978, only 78 percent had one in 2008. And this is a trend that now seems to have persisted even beyond teenage years: the percentage of total miles that are driven by people in their twenties fell from 21 percent in 1995 to 14 percent in 2009. Between the expense of cars and gasoline, traffic, rising environmental awareness, and shifts in technologies—with teens usually now connected online with friends—young people are finding less need for cars and more barriers to using them. Of course, this shift brings problems of its own, with the average U.S. teen now spending eight hours a day consuming media, but it does reveal that even long-standing traditions can become much less relevant over time.<sup>11</sup>

These shifts in deeply rooted consumption patterns will have to be replicated hundreds of times over in dozens of sectors—food, housing, transport, electronics, travel, pets, clothing, appliances and so on. And with changes so extensive, few individuals will be willing to make what they see as sacrifices—even if the products' downsides are made clear. (See Box 2–2.) Cultures quickly normalize certain goods, shifts in infrastructure often require them, social networks reinforce use of these goods ("keeping up with the Joneses"), and it is psychologically easy to convert a luxury item into a perceived necessity. Today, more than half of Americans view air conditioning and

## Box 2–2. Sacrifice and a New Politics of Sustainability

Many commentators who argue that a sustainable society requires profound change also believe that this would involve considerable sacrifice in wealthy consumer societies. And that, they pessimistically assert, is just not going to happen: most people are too self-satisfied, apathetic, or uninformed to sacrifice willingly. But in fact sacrifice is a familiar part of everyday life and can be consistent with an inclusive sense of self-interest—although it can also be foisted on people unjustly.

A person can willingly sacrifice, giving up one thing of value for something more valuable, such as consuming less to save for a child's education. A person can also be sacrificed, as when a poor community bears the health effects of a toxic incinerator. This vital distinction about sacrifice is often overlooked—and is shaped by people's views of justice and effectiveness.

Recognizing the sacrifices that people already make can foster a more balanced consideration of political and policy choices. Rather than seeing the task as convincing people to sacrifice, it is possible to establish a dialogue about how certain luxuries or conveniences might be traded for gains in quality of life for all. The point is to neither call for sacrifice nor avoid talk of it, but to broaden the conversation about choices and challenges.

When those calling for sacrifice do not follow suit, those being called to sacrifice may perceive themselves as victims, rather than agents, and resist calls to sacrifice. When U.S. politicians push for emissions reductions in China and India, where per capita emissions remain radically lower, as a precondition for American action, it has the character of an unfair distribution of burden—of calling for others to sacrifice, rather than shared sacrifice. Sharing the

burden, and clearly acknowledging that these others are already giving up something of value, can go a long way to countering this hypocrisy and paternalism.

Sacrifice begets anxiety when people are afraid that what they give up will be wasted. To sacrifice willingly, this anxiety must be tempered with the hope that what is given up will lead to future good. But this hope can rarely be sustained through individual action alone, because the likelihood of success is diminished by collective action problems. A person might think, "If I act when others don't, I'll incur costs without social benefit; if I don't act when others do, I'll share in the benefit without cost." By contrast, when action is coordinated, new opportunities become feasible: large-scale investment in infrastructure and renewable energy, land use and urban planning to foster walkability and reduce car dependence, incentives for "green" jobs.

Such actions are not painless: public investment requires taxes; land use policy generates winners and losers; green jobs may be at the expense of "brown" ones. Yet such measures can reduce coerced and inequitable sacrifice now and temper the coerced and inequitable impact of climate change and other environmental harms in the future.

To rethink sacrifice is not to offer a specific set of policies. It is a way of thinking and talking about the challenges of sustainability that opens a political dialogue at precisely the point where it is often shut down. People must build on the radical hope that the future can be a better one for which it is worth taking action, even if that action comes with certain sacrifices. In a world with no guarantees, it is this hope that can inspire change.

—John M. Meyer  
Humboldt State University  
Source: See endnote 12.

clothes dryers as necessities, while new products like smartphones and high-speed Internet are also becoming quickly perceived the same way. Thus to reduce overall consumption, just encouraging people to change their behavior will be far from sufficient. Rather, government and business will need to play a central role in editing consumers' choices.<sup>12</sup>

"Choice editing," at its simplest, is exactly as it sounds—editing people's choices toward a certain end. Unfortunately, for the past 50 years that end was to stimulate economic growth and consumption. But the same strategies can be applied to promote degrowth and sustainability. Shifting the billions in government subsidies toward healthy sustainable goods—such as providing subsidies for small-scale organic farms rather than giant commodity producers or shifting tax credits from homeownership to living in small, efficient homes that are owned or rented—could make consumption patterns much more sustainable. Of course, choice editing takes finesse: total bans on some goods can lead to hoarding and political reactionism. But even subtle taxes significantly shift consumption behaviors. When Washington, DC, added a 5¢ tax on plastic bags in January 2010, use of these bags plummeted from 22.5 million to 3 million—in one month. And the \$2 million in annual revenue collected from the tax is being used to help clean up the tons of consumer refuse polluting the Anacostia River, a long-suffering waterway that flows through the nation's capital.<sup>13</sup>

Businesses, too, can play a role in choice editing, making it clear to customers what the healthiest and most sustainable choices are, such as by labeling products using health and sustainability criteria or by pricing healthier and more-sustainable products favorably. Walmart announced in early 2011 that it would lower the price of its produce, reducing costs to customers by up to \$1 billion, and would work to lower the amount of salt, added sugars, and unhealthy fats in their pack-

aged foods. These behind-the-scenes changes could do a lot to shift consumers' behaviors, leading them to eat more vegetables and fewer processed foods.<sup>14</sup>

While many companies are open to editing their product lines to be more sustainable—and are already doing so—few companies will be bold enough to encourage people to not buy their products at all, as their bottom line depends on total sales. But one company in September 2011 garnered considerable attention for doing just that. Patagonia, an outdoor clothing manufacturer, urged its customers to not buy its products unless they really need to. And even then, Patagonia encouraged potential customers to consider buying its products used instead, as "the environmental cost of everything we make is astonishing." The company set up a partnership with eBay to help customers resell used Patagonia products—a surprising move, as the company receives no share in those sales.<sup>15</sup>

Although Patagonia's primary motive is to prevent "environmental bankruptcy," which, as the company notes, is being driven by the consumer culture, there is business savvy present too. The marketing value of these efforts may more than make up for any lost sales, as they increase loyalty of their "green consumer" customer base. And there's a first-mover benefit too. As the company's forecasters are reading the economic and ecological tea leaves, they already must recognize that in coming decades more people will most likely buy less stuff and more products that will last—so developing that brand advantage now will lead to long-term returns for Patagonia, even in an overall contracting economy.<sup>16</sup>

Beyond choice editing, there are also many groups helping to change specific consumption patterns. Take burials. In the United States, 3 million liters of embalming fluid, 104,000 tons of steel, and 1.5 million tons of concrete are used each year to bury the dead. Burials there produce more than 1.5 million tons of

carbon dioxide (CO<sub>2</sub>) emissions and cost the average family about \$10,000, in what is essentially a tax on the grieving. The good news is that there are efforts to shift these trends, burying people without chemicals in natural burial grounds that create new community parklands, which in turn create new space for biodiversity and help serve as new carbon sinks—a much better model than today’s pesticide-sprayed, grass-covered cemetery. And these shifts in burial process are helping transform this essential human ritual so that it reminds mourning families of humanity’s part in the broader cycle of life—replacing efforts to delay decay with a celebration that with this loss comes new life.<sup>17</sup>

Similarly, the Slow Food movement is working to shift dietary norms away from meat-centric, highly processed, ecologically destructive, unhealthy food back to enjoying the preparation, cooking, and eating of “good, clean, and fair food.” As food is such an emotionally evocative topic, Slow Food has tapped enormous interest in how people eat, and today it has over 100,000 members in chapters in 132 countries.<sup>18</sup>

Even when a broader transformation of diet is beyond the reach of some—as not everyone has time to slow down when they are simply trying to make ends meet—there are gentler entry points for shifting food and other consumption patterns toward lower-impact norms. The Meatless Monday Campaign, for example, encourages individuals to forgo meat once a week as a way to reduce the significant health and ecological impacts of meat consumption. While this campaign was launched by The Johns Hopkins Bloomberg School of Public Health in 2003, the practice was actually first instituted by the U.S. government during World War I, and then again in World War II, in order to ration meat for the troops. During the first war, over 10 million American families and 425,000 food dealers pledged to go meatless on Mondays. Although the new cam-

paign has not reached that level, it has spread to a variety of countries, including the United Kingdom, Belgium, Israel, and India. The French cafeteria management company Sodexo has also come aboard, spreading the initiative to the 2,000 corporate and government and the 900 hospital cafeterias it manages.<sup>19</sup>

Altering such deeply set cultural norms will take continual intervention at a number of levels by as many actors as possible. As an exhibit on the government’s effect on the American diet noted, to shift Americans’ diets during war time “the battle was fought with squadrons of celebrities, anthropologists, and cartoon characters, and a flotilla of films, radio programs, pledge drives, and posters.” This deep level of intervention will once again be necessary to shift current consumption patterns.<sup>20</sup>

## Distributing Tax Burdens More Equitably

Today, the gap between wealthiest and poorest has grown to dramatic proportions. (See Chapter 1.) While this is a social justice issue, it is also an environmental issue, for the more wealth someone possesses, the more that person consumes. Ultimately, on a planet with 7 billion people, an ecologically sustainable annual income is on the order of about \$5,000 per person per year (in purchasing power parity terms)—far below the current understanding of western poverty levels. Beyond this level, individuals purchase larger homes, more appliances, air conditioning, electronic gadgets, even air travel.<sup>21</sup>

But how does society intentionally converge global incomes toward a lower norm? Shifting tax burdens will play a central role, as will redistribution of job hours—reducing the length of the average work week will free up work and income for others while also helping to reduce overall incomes of the overworked. In the process, there would be not only ecological and economic benefits but considerable

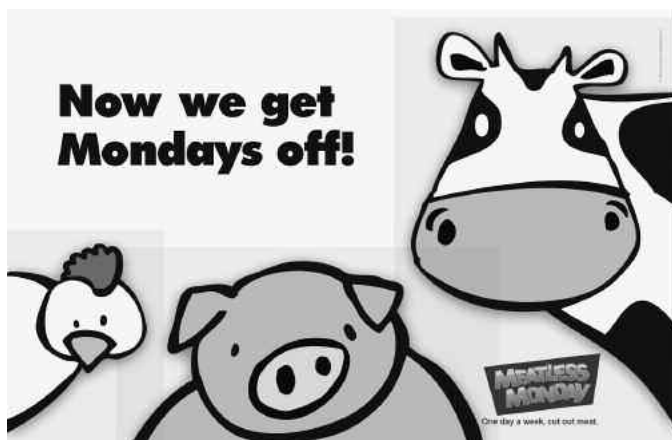


social benefits as well. Research has shown that more-equitable societies have less violent crime, higher literacy levels, are healthier and less overweight, and have lower teen pregnancy and incarceration rates.<sup>22</sup>

Better distribution of incomes has a clear impact on human development, as the *Human Development Report 2011* reinforced. This report by the U.N. Development Programme found that when inequalities in income, health, and education are taken into account, several of the wealthiest nations fall dramatically in human development rankings. The United States falls from fourth to twentieth in the rankings, for example, while countries with high equity fare better: Sweden goes from tenth to fifth and Denmark increases from sixteenth to twelfth.<sup>23</sup>

One of the most direct routes to shifting taxes is simply adjusting income tax burdens. This may sound politically impossible in countries like the United States—where anti-tax political movements like the Tea Party exist. But efforts like Occupy Wall Street may open up new political possibilities, especially if Americans start to recall their history. During World War II, marginal income tax rates on those earning more than \$200,000 a year peaked at 94 percent. And while greater levels of influence by moneyed interests over the political system will make this more challenging now, there is no legal barrier that would prevent Americans from doing this again. Given that the threat of today's environmental crisis is even graver for U.S. national security than World War II was, this type of shift should be on the table. Activists and researchers could benefit from studying the messaging used to get these tax increases through Congress and try to apply those lessons to current tax reform efforts.<sup>24</sup>

Extremely high income tax rates are not necessarily the only (or the best) path to take



Poster of self-interested creatures encouraging people to go meatless on Mondays

if other taxes are adjusted as well. Recently, much attention has been given to a small tax on financial transactions, which could both help make financial markets less volatile and generate revenue for sustainable development. While this has been advocated by some since first proposed by economist James Tobin in 1972, the idea suddenly has new life behind it. Occupy movement protestors have included this in their demands, and several influential individuals—including billionaires Bill Gates and George Soros—have publicly backed it, urging that the tax be used for development aid. The European Commission is now considering a fee of \$10 per \$10,000 of financial transactions by 2015, which could generate \$77 billion annually in new tax revenue. And while the idea has critics, the United Kingdom already imposes a \$50 tax on \$10,000 of stock trades, so the tax is clearly workable, both financially and politically.<sup>25</sup>

Ecological taxes could also be strengthened and even be used to offset burdens on the individuals most affected by the contraction of certain polluting industries and disruptions brought about by degrowth. In late 2011, Australia passed a tax of \$23.78 per ton of carbon, which is projected to cut CO<sub>2</sub>



Billboard Liberation Front



*McDonald's billboard before and after being "jammed" by Billboard Liberation Front activists*

emissions by an annual 160 million tons by 2020 while generating \$15.5 billion a year by 2015. This is good news, since earlier in the year the Australian government announced it had to cut funding for environmental programs due to costly flooding—flooding that environmentalists connected to climate change. Governments will clearly need revenue both to prevent additional environmental disasters and to adapt to a warming, more disaster-prone, world.<sup>26</sup>

Finally, one other industry ripe for taxation is advertising. In the United States, corporations' advertising budgets are currently tax write-offs, but ending this and even modestly taxing these expenditures could yield significant new revenues. In 2011, advertising expenditures in this one country alone were \$155 billion. Assuming the elimination of a tax write-off at a modest 20 percent corporate tax rate, that translates into \$31 billion in new tax revenues. Add to that a tax on advertising for unhealthy and unsustainable products—such as junk food, fossil fuels, and automobiles—and this could provide new funds for marketing the elements necessary for normalizing a less-consumptive society; it could also deter the marketing of unsustainable and unhealthy products.<sup>27</sup>

What would all these new taxes be used for? First, not all taxes need to go into gov-

ernment programs; they can be redistributed in a way that increases societal equity and that compensates groups most affected by the shift to a degrowth economy—providing people with transitional support, key social services, and training in new skills. But simply rebuilding public infrastructures would use up a sizable percentage of the taxes collected. At the most basic, this includes improving public water and sanitation systems, accelerating the transition to the efficient use of renewable energy, and replacing car-centric infrastructure with one centered on bicycles and public transit. To these upgrades could also be added new community centers, swimming pools, hiking trails, and libraries that lend not just books and media, but games, toys, and tools—all of which will help convert what are increasingly private luxuries once again into public goods. In the process, these new developments could ease people's frustration with shrinking levels of wealth and diminished reserves of private goods by providing new opportunities to play, learn, and socialize.

The new funds can also be used to prepare for an unstable future. Governments have key roles to play in, for example, restoring ecosystems like forests and wetlands, supporting entrepreneurs to create new small, local farms, and actively preparing for the now inevitable

changes that a warming world will bring (including in some cases abandoning certain areas altogether). The Netherlands is already proactively addressing climate change—not surprising, considering much of the country is just above or even below sea level. In *Hot: Living Through the Next Fifty Years on Earth*, Mark Hertsgaard describes the extensive lengths to which the Dutch government is going to prepare for a warming world—steps many people would find too extreme.<sup>28</sup>

The Dutch government has created a 200-year plan to adapt to climate change, spending \$1 billion a year to implement it. Coastal hotels are being closed to make way for new protective dikes, and farms are being converted to lakes, with the long-term public interest taking precedence over short-term private interests (though owners are compensated when dislocated). These significant investments will need funding support—an estimated \$2–6 billion a year in the case of the Netherlands—as will simply adapting to surprise weather disasters. Twelve disasters in the United States in 2011 cost over \$1 billion each—causing \$52 billion of damage (more than the global total of disaster damage in 2009) and setting a new record for total number of devastating disasters to hit the country in one year. With growing instability from a changing climate, new tax revenue will be necessary to ensure that there is enough money in the coffers to respond to the next surprise that nature throws at humanity.<sup>29</sup>

## Sharing Work Hours Better

Another way to improve access to incomes—one that may more easily get through conservative legislatures—is to do a better job distributing work hours. Since World War II, the 40-hour workweek has been seen in many western countries as “normal.” Few countries have reduced working hours from this standard—even as technologies and productivity

have improved and as reductions could help shrink unemployment. More striking is that if the true average workweek were calculated—taking into account the unemployed, the underemployed, the part-time workers and full-time workers, and those working excessive hours—it would be much lower. The New Economics Foundation found that the average Briton worked 21 hours a week in 2010.<sup>30</sup>

A better distribution of job hours among all working-age individuals will not only help reduce poverty, it could significantly improve the quality of life for the many people working too much and it could reduce their ecological impacts. Psychologists Tim Kasser and Kirk Brown have found that longer working hours correlate negatively with life satisfaction levels and positively with ecological footprint. Moreover, if the work-hour reductions are actively supported by the right social marketing messages, more of people’s time could be directed toward living more sustainably: bicycling instead of driving, drying clothes on clotheslines, cooking instead of buying packaged foods or going to restaurants, taking local “staycations” instead of exotic vacations, playing board games instead of going out for expensive entertainment, going to the library instead of the bookstore, gardening, volunteering, and taking care of children and elderly parents, all of which could help improve health, social connectedness, and community engagement—in other words, well-being.<sup>31</sup>

Although many people would be willing to earn and spend less, few have the opportunity to choose this, as businesses receive incentives to hire full-time employees. Some countries have already taken steps to remedy this. The Netherlands, for example, helps people cut their working hours to three-quarters time by requiring employers to maintain individuals’ same hourly rate of pay and pro-rated benefits at the reduced working rates. During the recession, the German government helped businesses retain employees they might oth-

erwise have laid off in a program called *Kurzarbeit*. The program, meaning “short-work,” enabled companies to pay workers only for the hours worked while the government made up the difference (at up to two-thirds time). The program has supported 1.5 million workers across 63,000 companies, reducing layoffs by 300,000–400,000 and helping to keep the unemployment rate in Germany to a 17-year low. Through innovative programs such as these, governments can help save overall costs and avoid societal disruptions caused by unemployment while also helping with the transition to shorter hours.<sup>32</sup>

Companies can also create more space for leave time—such as through more vacation time, more maternity and paternity leave, or opportunities to job share. Some advocacy groups like *Right2Vacation.org* are lobbying to get a minimum one-week vacation for all U.S. workers, as the country has no law requiring vacation, and half of all workers there get a week or less of annual vacation time. The more vacation time built into work schedules, the shorter the average work week will be and the more overall jobs will be available. The same is true with parental leave. The United States is one of only four countries in the world that does not have paid maternity leave. Providing generous maternity leave not only helps mothers bond with new infants and increases the probability of breastfeeding, it also reduces total hours worked across the population and thus helps distribute job hours more broadly. In Sweden, new parents receive a combined 480 days of parental leave, with 390 days supported at 80 percent of their salary—which, not surprisingly, encourages many of these new parents to work less.<sup>33</sup>

Overall, there will need to be better distribution of job hours and in due course a contraction of the consumer economy. But mostly the contraction—if managed—could be of goods and services that are artificially stimulated solely to make a profit and that cause both ill

health and ecological degradation. Cigarettes, junk food, cars, weaponry, alcohol, cosmetics, disposable packaging, and many other sectors of the economy produce jobs, but should these oftentimes socially irresponsible industries be maintained at current levels just to sustain overall employment levels? Or should society shift the economy to provide a healthy and sustainable way of life along with work that does not undermine the planet and humanity’s long-term well-being? Shrinking and even phasing out certain economic sectors and replacing them (when beneficial) with other economic pursuits will be an essential step in degrowth, even if to some it looks like “reverse progress.”

### Cultivating a Plenitude Economy

Sociologist Juliet Schor has spent decades studying work hours and the high levels of consumption that accompany working too much. She has drawn attention to these issues in popular books like *The Overspent American* and *The Overworked American*. In 2010 she published *Plenitude*—a term that refers to great abundance or the condition of being bountiful. In this book, Schor calls for the controlled reduction of the consumer economy, with more people supporting themselves with a diverse set of formal and informal economic activities, including self-provisioning and trading of food and artisan goods as well as maintaining and repairing goods for longer periods. Ultimately, shifting some portion of the household economy to these informal economic activities “expands a household’s options with respect to employment choices, time use, and consumption,” notes Schor. “The more self-provisioning one can do, the less income one has to earn to reproduce a standard of living.”<sup>34</sup>

The combination of intentional shifts in working hours and inevitable market contractions could help accelerate this plenitude model. The recession in the United States has played a role in increasing the number of peo-

ple living in multigenerational households to 51.4 million Americans, up 10 percent between 2007 and 2009. When different generations share a home, living costs can be reduced considerably—in housing, utilities, and transportation. This helped keep U.S. poverty rates of multigenerational households lower than those of other households, even as their median income levels were lower. In addition, elderly parents can help with children (and also be looked after if necessary), lowering both child and elderly care costs. And more household economic activities can be taken on—such as gardening or raising livestock. Although these are time-intensive activities, they can be done more easily when more people share the time burdens.<sup>35</sup>

Multigenerational housing should be actively celebrated by popular culture and supported with government incentives, as it will significantly reduce ecological and economic costs while redeveloping social capital and neighborhood density. It may even open up new entrepreneurial opportunities: Lennar, a U.S. housing developer, has created a new line of multigenerational houses to sell to people embracing this demographic shift.<sup>36</sup>

Strategic social marketing could help this. Marketers have been targeting multigenerational households in the United States since the recession began, primarily to sell them more stuff. But if the government and public interest groups also reached out to these households—offering pamphlets, online videos, and workshops on canning, basic repair, sewing, and so on—this could help encourage diversification of household livelihoods and help normalize both this housing strategy and broader aspects of plenitude living.<sup>37</sup>

The contribution of this sector should not be underestimated. In the United States, during World War II, 40 percent of vegetables



*U.S. government social marketing poster from 1917*

consumed by households were grown in home and community gardens. Gardening could reduce both household food costs and the ecological impacts of agriculture if people are taught food cultivation strategies that emphasize organic and integrated pest management methods. As climate change disrupts large-scale agriculture and as food-insecure countries ban the export of grain, backyard and community gardens could play a substantial role in food security and community resiliency. Individual gardens have played an essential role in Cuba, for example, since the collapse of the Soviet Union reduced its access to cheap oil. In Havana alone, more than 26,000 food gardens are spread across 2,400 hectares of land, producing 25,000 tons of food annually.<sup>38</sup>

Juliet Schor is optimistic that, over time, people will get disillusioned with the 9-to-5 work/spend/consume lifestyle and more of them will actively seek out a plenitude lifestyle, working fewer hours at paying jobs and helping to rebuild local economies. Some civil society organizations are working to accelerate this transition in a variety of ways. For decades there have been efforts to encourage people to live more simply—working less, buying less,

and enjoying the greater amount of time they have with friends, family, or hobbies. “Voluntary simplicity” initiatives have taken on many forms—from study circles and Simple Living television shows to annual “Buy Nothing” boycotts and websites that help people share and exchange unneeded goods. They have helped millions of individuals to “downshift” their spending.<sup>39</sup>

logical impact, alter choices and behaviors to reduce their carbon footprint, and advocate for better care of God’s creation. Initiatives in the religious community along these lines are still fairly small. But given that 80 percent of the people in the world identify themselves as religious, expanding the leadership role of religions could dramatically accelerate the transition to a plenitude society.<sup>40</sup>

In the United States, Common Security Clubs have started working over the past few years to proactively rebuild social capital and links in the informal economy. Community members come together in groups of 10–20 to assess how they could help each other, exchanging skills and resources—from tools and trucks to time and an extra room in someone’s home. Neighbors are once again starting to do what neighbors used to do: help each other. Facilitated by the Institute of Policy Studies, these clubs are spreading around the country, growing especially in church communities or small towns where a basic level of social cohesion already exists.

Along with fostering community resilience, these groups also teach people about broader economic issues and mobilize members to become politically active.<sup>41</sup>

On a larger scale, the Transition Towns movement founded in 2005 is working to reduce community energy usage and relocalize economies and food systems in order to make communities more resilient in the increasingly constrained future. There are now nearly 400 communities in 34 countries recognized as official Transition Town Initiatives. These towns have brought together diverse sectors of society to create community gardens, tool exchanges, and waste exchanges between businesses, for instance. There is even an eco-circus in Shaftesbury, England, that uses clowns, humor, and performances to teach children



karina y

*Outdoor oven at the Sirius Community, an ecovillage in Massachusetts*

Many religions have been active in encouraging adherents to live more simply as well—a role their ancient teachings deeply support. From Pope Benedict XVI advocating for a less commercialized and more meaningful Christmas, to Jews developing a new Eco-Kosher standard to encourage more-sustainable food choices, to Muslims advocating for a Green Ramadan—with the annual fasting ritual being expanded to include eating more locally grown food and reducing carbon footprints by 25 percent—a wide variety of religious efforts are encouraging simpler living. In 2009, the Catholic Church created the St. Francis Pledge, named after the monk who lived an ascetic life in the thirteenth century and is the patron saint of the environment. People who take the pledge are asked to reflect on their eco-

and their families about climate change and sustainable living.<sup>42</sup>

One U.S. effort—the Oberlin Project—is taking the Transition Town model to a new level, working to sustainably redevelop the region around Oberlin College in Ohio. By using the creative energy, talent, and financial resources of the college community, this project—if successful—could help drive progress toward the participants’ deep green vision of a carbon-neutral city and a “20,000 acre green-belt of farms and forests” that will form the backbone of a robust local economy. As David Orr, Oberlin professor and visionary behind the project, notes, the entire effort will also serve “as an educational laboratory relevant to virtually every discipline.”<sup>43</sup>

Ecovillages also play an essential role in modeling the plenitude economy. With hundreds spread around the world, many of these communities have pioneered a sustainable and resilient way of life for decades—exploring the frontiers of permaculture, alternative building materials, renewable energy systems, even lost skills like horse-powered agriculture. The majority of these ecovillages also make it a central mission to spread these skills to broader society, regularly holding retreats and workshops for visitors from around the world.<sup>44</sup>

Ecovillages have also rediscovered traditional wisdom that will play an important role in a constrained future. At The Farm, in Tennessee, for instance, some midwives are a repository of knowledge about skills that had been lost as the U.S. medical system eagerly embraced modern technologies in delivering babies. Today, in the United States, one third of pregnant women have their babies by Cesarean section (C-section)—putting themselves and their babies at often unnecessary risk. Many of these procedures are due to misinformation, cultural pressures, even time pressures on hospital staffs. The Farm’s midwifery program has helped train many new midwives and has drawn attention to the overmedical-

ization of childbirth, showing that Cesarean sections are rarely necessary. Of the 3,000 births handled by The Farm’s program since 1971, under 2 percent have been C-sections. Considering the ecological and financial resources needed for surgery (along with the risks to mother and baby), the degrowth of unneeded medical interventions will be essential, and society will need to look to innovators like these for inspiration and advice on how best to treat medical needs sustainably and safely.<sup>45</sup>

Government can play a valuable role in cultivating a plenitude economy as well. As the consumer economy has come to dominate, many of the skills needed for a plenitude economy have been lost and will need to be relearned. Governments could support training—both directly and through funding non-profit or community organizations—to help redevelop basic household skills. This is already happening in several European countries. More than 1,200 “social farms” have been established in France, for example, and over 700 in the Netherlands. These ventures use farming as a means of creating jobs and new skills, as well as offering opportunities to reconnect with nature, build community connections, and in some cases help rehabilitate mentally handicapped populations—not to mention provide sustainable and local sources of produce.<sup>46</sup>

Governments could also help individuals and communities get involved in the management and restoration of public and marginal lands. Although this certainly would not appeal to everyone, growing numbers of people seek opportunities to lead a more-traditional lifestyle. With support, a new, bolder version of “the back to the land” movement of the 1970s could take off. At the moment, the financial downturn in Greece has led to a growth in the agricultural sector of 32,000 jobs, even as unemployment shot from 12 to 18 percent. This agrarian way of life, with the right training, would not just be low impact but could be actively eco-restora-

tive, if it is based on proactive, sustainable management of ecosystems.<sup>47</sup>

The Colombian village of Gaviotas demonstrates just how much can be achieved by a small community committed to ecological restoration. This village of 200 people was established on degraded savanna 30 years ago and since then has replanted over 8,000 hectares of surrounding land with forest—an area larger than Manhattan. This forest now provides the village with food and tradable forest products, while absorbing 144,000 tons of carbon a year as it grows. Supporting this type of community-driven ecological restoration—particularly in ways that encourage extremely low-consumption lifestyles—could help greatly in the pursuit of sustainability.<sup>48</sup>

The last important point about a plentitude economy is that it will free up ecological capacity for people who are living in true poverty and maintain the key services that society does not want to lose in a constrained future—hospitals, vaccines, antibiotics, basic education, energy production, clean water infrastructure, and so on.

## Moving Toward Degrowth

Ultimately the idea of decoupling growth and prosperity is no longer a utopian dream but a financial and ecological necessity, as Tim Jackson puts it. Right now, however, prosperity is deeply understood as consuming ever more and growing ever larger. Thus, moving toward degrowth will involve redefining prosperity altogether—resurrecting traditional understandings of what this word means: health, social connectedness, freedom to pursue hobbies, and interesting work.<sup>49</sup>

Communicating this shifted meaning will be a challenge, especially with 1 percent of the global economic product spent each year marketing consumer goods and services and the romanticized idea that they will bring happiness. To succeed, effective communication strategies

will need to be pursued across many realms—from the Internet and the classroom to the voting booth and the living room. Fortunately, some promising initiatives may point the way.<sup>50</sup>

First, “social marketing” strategies are being used to challenge overconsumption and even growth. The Story of Stuff project has been effective in challenging the use of cosmetics, electronics, bottled water, and even the spending of unlimited funds on political marketing. The New Economics Foundation also created a short film that captures the absurdity of infinite growth flawlessly, applying this goal to a hamster. As the film reveals, if a hamster did not stop growing as it reached adulthood, it would be 9 billion tons on its first birthday and “could eat all the corn produced annually worldwide in a single day. And still be hungry.” As the narrator concludes, “There is a reason why in nature things grow in size only to a certain point, so why do economists and politicians think that the economy can grow forever?” Similarly, and seen by much larger audiences, popular Hollywood films like *Avatar* and *WALL·E* are also playing an important role in drawing attention to the possible devastating outcomes of a continued obsession with growth and consumerism—literally the destruction of planet Earth.<sup>51</sup>

Beyond film, there is now a degrowth movement, with annual conferences on this topic and a budding political movement; degrowth political parties exist in several countries, including France and Italy. A variety of publications and websites are devoted to the subject, including a monthly magazine in French, *La Décroissance*, and an Internet hub for the topic at DegrowthPedia.org. As degrowth is brought more openly into dialogues and as progressive politicians articulate positive visions of it, the concept can move from the realm of the taboo to the more normal, creating space for mainstream media and political parties to break away from assumptions that growth is always good.<sup>52</sup>



More aggressive efforts in the classroom and academic settings may help too. In 2009, the Adbusters Media Foundation—which is credited with starting Buy Nothing Day, Turnoff the TV week, and Occupy Wall Street—started a campaign to get economics students to challenge their professors to adapt the flawed neoclassic economic model to ecological realities of life on a finite planet. By putting up posters, starting debates, sending open letters, and even walking out of class—as a group of Harvard students did in November 2011—students hope Economics Department curricula will start teaching a “new economics—open, holistic, human-scale.” In a similar but less confrontational manner, groups like Net Impact, which has 20,000 members across six continents, are working with Business School professors and administrators to integrate sustainability and social responsibility courses into academic curricula and to help find socially responsible business opportunities for graduates.<sup>53</sup>

Subtly harnessing popular culture icons to question growth can also play an important role. One example is a new eco-educational scenario for *The Settlers of Catan*, an award-winning board game with over 18 million copies in print in 30 languages. The scenario, *Catan: Oil Springs*, not only incorporates clear side effects of growth, such as pollution and climate change, it also questions whether continued growth can be the definitive goal in a finite sys-

tem—in this case, the island of Catan. By offering ways to win based on responsible environmental stewardship instead of just growth, and by making too much growth potentially lead to all players losing, this board game can



Leo Murray

*Perpetually growing hamster after having consumed most of Earth*

help players wrestle with the limits of growth.<sup>54</sup>

In the end, whether societal leaders accept it or not, the natural limits of Earth—brought into view by increasing numbers of a population of 7 billion striving to live as consumers—will shatter the myth of continued growth, most likely due to dramatic changes to the planet’s systems. Thus degrowth is part of humanity’s future. Will people pursue this agenda proactively? Or will Earth and its limits drive the contraction of the global economy?

58. The 1 percent and the 15 million estimate from Chris Bonner, “Waste Pickers Without Frontiers,” *South African Labour Bulletin*, vol. 32, no. 4 (2008); additional calculation from Population Reference Bureau, *2011 World Population Data Sheet* (Washington, DC: 2011).
59. Martin Medina, “The Informal Recycling Sector in Developing Countries,” *Gridlines*, October 2008; Sonia M. Dias, “Overview of the Legal Framework for Inclusion of Informal Recyclers in Solid Waste Management in Brazil,” *WIEGO Urban Policies Briefing Note No. 8*, May 2011; Sonia M. Dias and F. C. G. Alves, *Integration of the Informal Recycling Sector in Solid Waste Management in Brazil* (Berlin: GTZ, 2008); “Brazilian President Launches the “Cata Açã” Program,” *AVINA 2009 Annual Report*, at [www.informeavina2009.org/english/reciclaje.shtml](http://www.informeavina2009.org/english/reciclaje.shtml); “Brazil Sanctions National Policy that Formalizes the Work of 800,000 Recyclers,” *AVINA 2010 Annual Report*, at [www.informeavina2010.org/english/reciclaje.shtml](http://www.informeavina2010.org/english/reciclaje.shtml).
60. CWG and GIZ, op. cit. note 56; WIEGO, “Waste Pickers,” at [wiego.org/informal-economy/occupational-groups/waste-pickers](http://wiego.org/informal-economy/occupational-groups/waste-pickers); WIEGO, “Laws & Policies Beneficial to Waste Pickers,” at [wiego.org/informal-economy/laws-policies-beneficial-waste-pickers](http://wiego.org/informal-economy/laws-policies-beneficial-waste-pickers).
61. Chris Bonner, “Foreword,” in Samson, op. cit. note 57.
62. Box 1–2 based on the following: U.S.-China wind case from United Steelworkers’ Section 301 Petition, from Jonathan Watts, “China Moves to Defuse Trade Row with US over Green Technology,” (London) *Guardian*, 23 December 2010, from Doug Palmer and Leonora Walet, “China Agrees to Halt Subsidies to Wind Power Firms,” *Reuters*, 7 June 2011, from Kevin Gallagher, “US Should Exercise Green Power,” (London) *Guardian*, 6 January 2011, from Ed Crooks, “Washington’s Energy Rift with China Unpopular,” *Financial Times*, 19 October 2010, and from Dale Jiajun Wen, “Pointing the Finger the Wrong Way,” *China Dialogue*, 19 October 2010; U.S.-China solar trade case from Keith Bradsher, “U.S. Solar Panel Makers Say China Violated Trade Rules,” *New York Times*, 20 October 2011, from Keith Bradsher, “Chinese Trade Case Has Clear Targets, Not Obvious Goals,” *New York Times*, 21 October 2011, from James Kanter, “Trade Disputes Hurt Renewable Energy, Chinese Executive Asserts,” *New York Times*, 27 October 2011, and from Stephen Lacey, “Chinese Cheaters? How China Dominates Solar,” *Grist*, 10 September 2011; Japan-Ontario case from Todd Tucker, “Corporations Push for WTO Attack on Green Jobs,” *Eyes on Trade*, Public Citizen’s Global Trade Watch, 24 June 2011, from Gloria Gonzalez, “EU Joins Japan in Attacking Ontario’s Renewables Tariff,” *Environmental Finance*, 15 August 2011, from Shira Honig, “Japan Renewable Feed-in-Tariff Passes, While Ontario Faces Battles,” *Climatico*, 7 September 2011, from John Landers, “Legal Issues for Ontario’s Feed-in-Tariff Policies,” *Energy Trend*, 18 August 2011, and from Paul Gipe, “Japan Feed-in Tariff Policy Becomes Law,” *Wind-Works*, 27 August 2011.
63. DESA, op. cit. note 22, pp. xx–xxi, with detailed discussion in Section VI (pp. 161–86).
64. Energy Conservation Center, at [www.eccj.or.jp/top\\_runner/index.html](http://www.eccj.or.jp/top_runner/index.html). The World Economic and Social Survey discusses Japan’s experience and suggests a global top runner program; see DESA, op. cit. note 22, pp. 47, 61.
65. “Increasing Price with Volume,” in UNEP and GRID-Arendal, *Vital Water Graphics*, 2nd ed. (Arendal, Norway: 2008).
66. David Schweickart, “A New Capitalism—or a New World?” *World Watch*, September/October 2010; Tom Prugh, “Band-aids for Capitalism? Or Something Completely Different?” (blog), *World-watch Green Economy*, 28 August 2009.

## Chapter 2. The Path to Degrowth in Overdeveloped Countries

1. Number of participants from “Degrowth Conference Barcelona 2010,” at [degrowth.eu](http://degrowth.eu). Box 2–1 from the following: Serge Latouche, “Growing a Degrowth Movement,” in Worldwatch Institute, *State of the World 2010* (New York: W. W. Norton & Company, 2010), p. 181; Serge Latouche, *Farewell to Growth* (Cambridge, U.K.: Polity Press, 2009), pp. 8–9; Tim Jackson, *Prosperity Without*

*Growth: Economics for a Finite Planet* (London: Earthscan, 2011).

2. Martín Mucha, “Robin Bank, Héroe Juvenil,” *El Mundo*, 12 October 2010; Erik Assadourian, “A Tale of a Modern-Day Robin Hood” (blog) *Transforming Cultures*, 4 November 2010; Enric Duran, “I Have ‘Robbed’ 492,000 Euros to Whom Most Rob Us in Order to Denounce Them and Build Some Alternatives for the Society” (blog) *enricduran.cat*, 27 August 2010; Giles Tremlett, “€500,000 Scam of a Spanish Robin Hood,” (London) *Guardian*, 18 September 2008.
3. Millennium Ecosystem Assessment, *Living Beyond Our Means: Natural Assets and Human Well-Being: Statement from the Board* (Washington, DC: World Resources Institute, 2005), p. 2; Johan Rockström et al., “A Safe Operating Space for Humanity,” *Nature*, 24 September 2009, pp. 472–75.
4. Andrei Sokolov et al., “Probabilistic Forecast for 21st Century Climate Based on Uncertainties in Emissions (without Policy) and Climate Parameters,” *American Meteorological Society Journal of Climate*, October 2009, pp. 5,175–204; David Chandler, “Revised MIT Climate Model Sounds Alarm,” *TechTalk* (Massachusetts Institute of Technology), 20 May 2009; Juliet Eilperin, “New Analysis Brings Dire Forecast of 6.3-Degree Temperature Increase,” *Washington Post*, 25 September 2009; Elizabeth R. Sawin et al., “Current Emissions Reductions Proposals in the Lead-up to COP-15 Are Likely to Be Insufficient to Stabilize Atmospheric CO<sub>2</sub> Levels: Using C-ROADS—a Simple Computer Simulation of Climate Change—to Support Long-Term Climate Policy Development,” draft presented at the Climate Change—Global Risks, Challenges, and Decisions Conference, University of Copenhagen, Denmark, 10 March 2009; Mark G. New et al., eds., “Four Degrees and Beyond: The Potential for a Global Temperature Increase of Four Degrees and Its Implications,” *Philosophical Transactions of the Royal Society A*, 13 January 2011; “Royal Society Special Issue Details ‘Hellish Vision’ of 7°F (4°C) World—Which We May Face in the 2060s!” *Climate Progress*, 29 November 2010; Richard Black, “Climate Talks End with Late Deal,” *BBC News*, 11 December 2011.
5. “Canada to Withdraw from Kyoto Protocol,” *BBC News*, 13 December 2011; Fiona Harvey, “Rich Nations ‘Give Up’ on New Climate Treaty Until 2020,” (London) *Guardian*, 20 November 2011; Executive Summary, *The Economics of Climate Change: The Stern Review* (Cambridge, U.K.: Cambridge University Press, 2007), p. 10.
6. Harald Welzer, *Mental Infrastructures: How Growth Entered the World and Our Souls* (Berlin: Heinrich Böll Foundation, 2011), p. 12; “Prince of Wales: Ignoring Climate Change Could Be Catastrophic,” (London) *Telegraph*, 24 May 2011.
7. Welzer, op. cit. note 6, p. 10; WWF, ZSL, and GFN, *Living Planet Report 2010* (Gland, Switzerland: 2010); World Bank, “New Data Show 1.4 Billion Live On Less Than US\$1.25 A Day, But Progress Against Poverty Remains Strong,” press release (Washington, DC: 26 August 2008).
8. Overweight Americans from Trust for America’s Health, *F as in Fat: How Obesity Policies Are Failing in America* (Washington, DC: Robert Wood Johnson Foundation, 2008); medical and productivity costs from Society of Actuaries, “New Society of Actuaries Study Estimates \$300 Billion Economic Cost Due to Overweight and Obesity,” press release (Schaumburg, IL: 10 January 2011), and from Robert Preidt, “Cost of Obesity Approaching \$300 Billion a Year,” *USA Today*, 12 January 2011; Institute for Health Metrics and Evaluation, “Life Expectancy in Most US Counties Falls Behind World’s Healthiest Nations,” press release (Seattle, WA: 15 June 2011); David Brown, “Life Expectancy in the U.S. Varies Widely by Region, in Some Places Is Decreasing,” *Washington Post*, 15 June 2011; S. Jay Olshansky et al., “A Potential Decline in Life Expectancy in the United States in the 21st Century,” *New England Journal of Medicine*, 17 March 2005, pp. 1,138–45; Laura Cummings, “The Diet Business: Banking on Failure,” *BBC News*, 5 February 2003; global obesity from Richard Weil, “Levels of Overweight on the Rise,” *Vital Signs Online*, 14 June 2011.
9. Juliet Schor, “Sustainable Work Schedules for All,” in Worldwatch Institute, op. cit. note 1, pp. 91–95; Gary Gardner, Erik Assadourian, and Radhika Sarin, “The State of Consumption Today,” in Worldwatch Institute, *State of the World 2004* (New

- York: W. W. Norton & Company, 2004), pp. 3–21; Sonia Shah, “As Pharmaceutical Use Soars, Drugs Taint Water and Wildlife,” *Yale Environment* 360, 15 April 2010; Miller McPherson, Lynn Smith-Lovin, and Matthew E. Brashears, “Social Isolation in America: Changes in Core Discussion Networks over Two Decades,” *American Sociological Review*, June 2006, pp. 353–75.
10. Sustainable Europe Research Institute, GLOBAL 2000, and Friends of the Earth Europe, *Overconsumption? Our Use of the World’s Natural Resources* (September 2009).
11. Zenith Optimedia, “Quadrennial Events to Help Ad Market Grow in 2012 Despite Economic Troubles,” press release (London: 5 December 2011); Jack Neff, “Is Digital Revolution Driving Decline in U.S. Car Culture?” *Advertising Age*, 31 May 2010; Lisa Hymas, “Driving Has Lost Its Cool for Young Americans,” *Grist*, 27 December 2011; Victoria J. Rideout, Ulla G. Foehr, and Donald F. Roberts, *Generation M2: Media in the Lives of 8- to 18-Year-Olds* (Washington, DC: Kaiser Family Foundation, 2010).
12. Erik Assadourian, “The Rise and Fall of Consumer Cultures,” in Worldwatch Institute, op. cit. note 1, pp. 3–20; Paul Taylor and Wendy Wang, “The Fading Glory of the Television and Telephone,” Pew Research Center, Washington, DC, 19 August 2010. Box 2–2 is based on Michael Maniates and John M. Meyer, eds., *The Environmental Politics of Sacrifice* (Cambridge, MA: The MIT Press, 2010).
13. Michael Maniates, “Editing Out Unsustainable Behavior,” in Worldwatch Institute, op. cit. note 1, pp. 119–26; Brian Merchant, “Plastic Bags Used in DC Drop From 22 Million to 3 Million a Month,” *Treehugger*, 31 March 2010; “Good News, Bad News on D.C.’s Plastic Bag Tax,” *Washington Examiner*, 5 January 2011.
14. Sheryl Gay Stolberg, “Wal-Mart Shifts Strategy to Promote Healthy Foods,” *New York Times*, 20 January 2011; Bruce Blythe, “UPDATED: Wal-Mart’s Health Kick Cuts Prices on Produce,” *The Packer*, 20 January 2011; Tom Philpott, “Is Wal-Mart Our Best Hope for Food Policy Reform?” *Grist*, 29 April 2011.
15. Adam Aston, “Patagonia Takes Fashion Week as a Time to Say: ‘Buy Less, Buy Used,’” *GreenBiz*, 8 September 2011; Tim Nudd, “Ad of the Day: Patagonia,” *Ad Week*, 28 November 2011.
16. Nudd, op. cit. note 15.
17. David Reay, *Climate Change Begins at Home* (New York: MacMillan, 2005); estimate from National Funeral Directors Association, “Statistics: Funeral Costs,” at [www.nfda.org/media-center/statisticsreports.html](http://www.nfda.org/media-center/statisticsreports.html), viewed 28 December 2011, and from Selena Maranjian, “How Much Does a Funeral Cost?” *Fool.com*, 5 March 2002; Joe Sehee, “Presentation: Eco-Friendly End of Life Rituals,” Green Burial Council, 2010.
18. Helene Gallis, “The Slow Food Movement,” from Worldwatch Institute, op. cit. note 1, p. 182.
19. The Meatless Monday Campaign, “The Movement Goes Global,” at [www.meatlessmonday.com/the-movement-goes-global](http://www.meatlessmonday.com/the-movement-goes-global); Marc Gunther, “Sodexo’s Meatless Mondays Give ‘Where’s the Beef’ a New Meaning,” *GreenBiz*, 2 May 2011.
20. “What’s Cooking, Uncle Sam?” exhibit at U.S. National Archives, viewed 16 December 2011; Erik Assadourian, “Uncle Sam Says Garden...And Eat Vitamin Donuts” (blog), *Transforming Cultures*, 17 December 2011.
21. Calculation based on Global Footprint Network, *The Ecological Footprint Atlas 2008* (Oakland, CA: rev. ed., 16 December 2008); G. Ananthapadmanabhan, K. Srinivas, and Vinuta Gopal, *Hiding Behind the Poor* (Bangalore: Greenpeace India Society, 2007); Assadourian, op. cit. note 12.
22. Richard Wilkinson and Kate Pickett, *The Spirit Level: Why More Equal Societies Almost Always Do Better* (London: Penguin Group, 2009).
23. U.N. Development Programme, “2011 Human Development Index Covers Record 187 Countries and Territories, Puts Norway at Top, DR Congo Last,” press release (Copenhagen: 2 November 2011).
24. “U.S. Federal Individual Income Tax Rates

History, 1913–2011 (Nominal and Inflation-Adjusted Brackets),” Tax Foundation, Washington, DC, 9 September 2011.

25. Steven Greenhouse and Graham Bowley, “Tiny Tax on Financial Trades Gains Advocates,” *New York Times*, 6 December 2011.

26. James Grubel, “Australia Passes Landmark Carbon Price Laws,” *Reuters*, 8 November 2011; Enda Curran and Ray Brindal, “Australia’s Carbon Tax Clears Final Hurdle,” *Wall Street Journal*, 8 November 2011; “Australia Makes Green Cuts to Fund Flood Relief,” *Radio Australia*, 28 January 2011.

27. Zenith Optimedia, op. cit. note 11; Zoe Gannon and Neal Lawson, *The Advertising Effect: How Do We Get the Balance of Advertising Right* (London: Compass, 2010).

28. Mark Hertsgaard, *Hot: Living Through the Next Fifty Years on Earth* (New York: Houghton Mifflin Harcourt, 2011), pp. 107–27.

29. Ibid.; Jason Samenow, “NOAA: 2011 Sets Record for Billion Dollar Weather Disasters in the U.S.,” *Washington Post*, 7 December 2011; Petra Löw, “Losses From Natural Disasters Decline in 2009,” *Vital Signs Online*, 25 March 2010.

30. Anna Coote, Jane Franklin, and Andrew Simms, *21 Hours: Why a Shorter Working Week Can Help Us All to Flourish in the 21st Century* (London: New Economics Foundation, 2010).

31. Tim Kasser and Kirk Brown, as cited in Juliet Schor, *Plenitude: The New Economics of True Wealth* (New York: Penguin Press, 2010), pp. 113–14, and 178; Gary Gardner and Erik Assadourian, “Rethinking the Good Life,” in Worldwatch Institute, op. cit. note 9.

32. Juliet Schor, *The Overworked American: The Unexpected Decline of Leisure* (New York: Basic Books, 1993); Netherlands from John de Graff, “Reducing Work Time as a Path to Sustainability,” in Worldwatch Institute, op. cit. note 1, pp. 173–77; “Employers and Unions Brace for a Downturn,” *Der Spiegel*, 20 October 2011; Christian Vits and

Jana Randow, “The Price of Saving Jobs in Germany,” *Business Week*, 29 July 2010; Nicholas Kulish, “Aided by Safety Nets, Europe Resists Stimulus Push,” *New York Times*, 26 March 2009.

33. De Graff, op. cit. note 32; Michael Maniates, “Struggling with Sacrifice: Take Back Your Time and Right2Vacation.org,” in Maniates and Meyer, op. cit. note 12, pp. 293–312; Sweden from Organisation for Economic Co-operation and Development, “PF2.1: Key Characteristics of Parental Leave Systems,” 15 April 2011, at [www.oecd.org/dataoecd/45/26/37864482.pdf](http://www.oecd.org/dataoecd/45/26/37864482.pdf), pp. 6 and 14. Note: Sweden has a ceiling of 43,070 euros for parental leave.

34. Juliet Schor, *The Overspent American: Why We Want What We Don’t Need* (New York: Harper Perennial, 1999); Schor, op. cit. note 32; Schor, op. cit. note 31.

35. Rakesh Kochhar and D’Vera Cohn, *Fighting Poverty in a Bad Economy, Americans Move in with Relatives* (Washington, DC: Pew Research Center, 2011); Catherine Rampell, “As New Graduates Return to Nest, Economy Also Feels the Pain,” *New York Times*, 16 November 2011.

36. Jessica Silver-Greenberg, “When Kids Come Back Home,” *Wall Street Journal*, 26 November 2011.

37. Beth Snyder Bulik, “Boom in Multigenerational Households Has Wide Implications for Ad Industry,” *Advertising Age*, 23 August 2010.

38. “What’s Cooking, Uncle Sam?” op. cit. note 20; Peter Rosset and Medea Benjamin, *Two Steps Backward, One Step Forward: Cuba’s Nationwide Experiment with Organic Agriculture* (San Francisco: Global Exchange, 1993); The Community Solution, *The Power of Community: How Cuba Survived Peak Oil* (Yellow Springs, OH: 2006); Mario Gonzalez Novo and Catherine Murphy, “Urban Agriculture in the City of Havana: A Popular Response to a Crisis,” in N. Bakker et al., eds., *Growing Cities Growing Food: Urban Agriculture on the Policy Agenda: A Reader on Urban Agriculture* (German Foundation for International Development, 2001), pp. 329–47.

39. Juliet Schor, “Exit Ramp to Sustainability: Building a Small-scale, Low-footprint, High-knowledge Economy,” presentation at SCORAI workshop, Princeton, NJ, 16 April 2011; Cecile Andrews and Wanda Urbanska, “Inspiring People to See Less Is More,” in Worldwatch Institute, op. cit. note 1, pp. 178–84; Shareable.net: Sharing By Design, at shareable.net; Gardner and Assadourian, op. cit. note 31.
40. Nicole Winfield, “Pope Laments Christmas Consumerism, Urges People to Look Beyond ‘Superficial Glitter,’” *Huffington Post*, 24 December 2011; Gary Gardner, “Engaging Religions to Shape Worldviews,” in Worldwatch Institute, op. cit. note 1, pp. 23–29; Gary Gardner, “Ritual and Taboo as Ecological Guardians,” in Worldwatch Institute, op. cit. note 1, pp. 30–35; St. Francis Pledge from Catholic Climate Covenant, at catholicclimatecovenant.org.
41. Chuck Collins, presentation on Common Security Clubs, Washington, DC, 18 January 2011; Common Security Clubs website, at localcircles.org.
42. Transition Network website, at [www.transitionnetwork.org/initiatives/map](http://www.transitionnetwork.org/initiatives/map); Andrews and Urbanska, op. cit. note 39; Shaftesbury Transition Town website, at [www.transitiontownshaftesbury.org.uk](http://www.transitiontownshaftesbury.org.uk).
43. David Orr, “The Oberlin Project: What Do We Stand for Now?” *Oberlin Alumni Magazine*, fall 2011.
44. Erik Assadourian, “Sustainable Communities Become More Popular,” *Vital Signs 2007–2008* (New York: W. W. Norton & Company, 2007), pp. 104–05; Jonathan Dawson, “Ecovillages and the Transformation of Values,” in Worldwatch Institute, op. cit. note 1, pp. 185–90.
45. Jennifer Block, *Pushed: The Painful Truth About Childbirth and Modern Maternity Care* (Philadelphia: De Capo Press, 2007); Steven Reinberg, “C-section Rate in U.S. Climbs to All-Time High,” *USA Today*, 22 July 2011; Jennifer Block, “Midwife Q&A: Are We Having Babies All Wrong?” *Time*, 25 May 2011; A. Mark Durand, “The Safety of Home Birth: The Farm Study,” *American Journal of Public Health*, March 1992, pp. 450–52.
46. Kevin Green and Erik Assadourian, “Making Social Welfare Programs Sustainable,” in Worldwatch Institute, op. cit. note 1, p. 141; Francesco di Iacovo, “Social Farming: Dealing with Communities Rebuilding Local Economy,” presentation at Rural Futures Conference, University of Plymouth, U.K., 1–4 April 2008.
47. Rachel Donadio, “With Work Scarce in Athens, Greeks Go Back to the Land,” *New York Times*, 8 January 2012.
48. Richard E. White and Gloria Eugenia González Mariño, “Las Gaviotas: Sustainability in the Tropics,” *World Watch Magazine*, May/June 2007, pp. 18–23; Friends of Gaviotas website, at [www.friendsofgaviotas.org](http://www.friendsofgaviotas.org).
49. Jackson, op. cit. note 1, p. 185.
50. Assadourian, op. cit. note 12, p. 12.
51. New Economics Foundation, *The Impossible Hamster*, Script: Andrew Simms, Animators: Leo Murray and Thomas Bristow, London, 2010.
52. Latouche, “Growing a Degrowth Movement,” op. cit. note 1; see also Degrowthpedia, at [degrowthpedia.org](http://degrowthpedia.org).
53. Kick It Over! website, at [www.kickitover.org](http://www.kickitover.org); Kick It Over Manifesto, at [kickitover.org/sites/default/files/downloads/adb\\_poster\\_manifesto.pdf](http://kickitover.org/sites/default/files/downloads/adb_poster_manifesto.pdf); Michael C. George, “Group Endorses Walk Out in Economics 10,” *Harvard Crimson*, 2 November 2011; “An Open Letter to Greg Mankiw,” *Harvard Political Review*, 2 November 2011; Net Impact from Erik Assadourian, “Maximizing the Value of Professional Schools,” in Worldwatch Institute, op. cit. note 1, p. 78; Net Impact website, at [netimpact.org](http://netimpact.org).
54. Worldwatch Institute, “Oil Discovered on the Island of Catan,” press release (Washington, DC: 19 October 2011); rules of *Catan Scenarios: Oil Springs* at [www.oilspings.catan.com](http://www.oilspings.catan.com).

2012  
**STATE OF THE WORLD**  
*Moving Toward  
Sustainable Prosperity*

In 1992, governments at the Rio Earth Summit made a historic commitment to sustainable development—an economic system that promotes the health of both people and ecosystems. Twenty years and several summits later, human civilization has never been closer to ecological collapse, one third of humanity lives in poverty, and another 2 billion people are projected to join the human race over the next 40 years. How will we move toward sustainable prosperity equitably shared among all even as our population grows, our cities strain to accommodate more and more people, and our ecological systems decline?

To promote discussion around this vital topic at the Rio+20 U.N. Conference and beyond, *State of the World 2012: Moving Toward Sustainable Prosperity* showcases innovative projects, creative policies, and fresh approaches that are advancing sustainable development in the twenty-first century. In articles from experts around the world, this report presents a comprehensive look at current trends in global economics and sustainability, a policy toolbox of clear solutions to some of our most pressing environmental and human challenges, and a path for reforming economic institutions to promote both ecological health and prosperity.

*Moving Toward Sustainable Prosperity* is the latest publication in the Worldwatch Institute's flagship *State of the World* series, which remains the most recognized and authoritative resource for research and policy solutions on critical global issues. *State of the World 2012* builds on three decades of experience to offer a clear, pragmatic look at the current state of global ecological systems and the economic forces that are reshaping them—and how we can craft more-sustainable and equitable economies in the future.

**“Top-ranked annual book on sustainable development.”**

—GlobeScan survey of sustainability experts

**“The most comprehensive, up-to-date, and accessible summaries . . . on the global environment.”**

—E. O. Wilson, Pulitzer Prize winner



Washington | Covelo | London

[www.islandpress.org](http://www.islandpress.org)

All Island Press books are printed on recycled, acid-free paper.

Cover design by Lyle Rosbotham

Cover illustration by Wesley Bedrosian, [wesleybedrosian.com](http://wesleybedrosian.com)

ISBN 13: 978-1-61091-037-8

ISBN 10: 1-61091-037-0

90000 >



9 781610 910378