

1 It's Not Easy Being Green

Kermit the Muppet frog was correct when he croaked, “It’s not easy being green.” He is lucky he isn’t playing in the current environmental arena, where he would find it even harder to be green. Why? Because green is in. It is impossible to read a newspaper or magazine, turn on the radio or television, or engage in a cocktail party conversation without the words “green” or “eco” popping up. There are green television stations, green termite killers, green cars, eco-moms, eco-fashion, eco-tours, and the list goes on. Everyone insists on being *Greener Than Thou*.

Politicians, big business, and even religious groups are also vying for the green spotlight. Whoever can out green the other gets to set the regulation, and if you don’t jump on the bandwagon you risk being left behind altogether. The race to apply red tape to green problems is being disguised as a duty of moral leadership. In terms of real environmental improvements, however, this greener-than-thou attitude is dangerous. Beware of those jockeying to make Kermit pale by comparison.

Politicians, even the red (Republican) ones, cannot resist the green glamour. Consider President George W. Bush’s stance on global warming. When Bush announced his candidacy, he questioned whether global warming was real. At the nadir of his presidency, he added polar bears to the endangered species list, blaming the listing on global warming and advocated a limited cap-and-trade program for greenhouse gas emissions—a full reversal of his original position.

Or what about the Republican Arnold Schwarzenegger, whom *The*

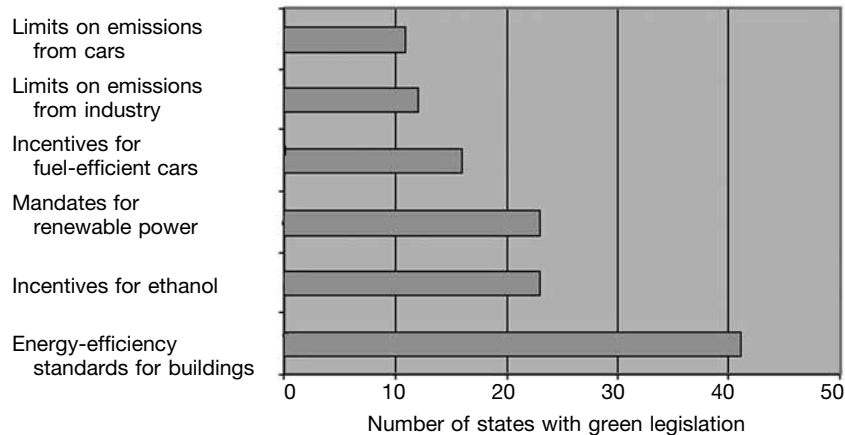


Figure 1. Green Legislation

Many states created laws or incentives to promote green legislation and thus compete to be green. The competition is especially stiff in the areas of ethanol and energy-efficiency standards for buildings.

Source: "Green America: Waking Up and Catching Up," *The Economist*, January 25, 2007, pp. 22–24.

Economist called "the decidedly green governor of California" (Green America 2007, 23). In his bid to be greener-than-thou, he required California utilities to reduce carbon dioxide emissions by 10 percent by 2020, pushed for state mandates for increased automobile fuel efficiency, and allowed the state to sue car manufacturers for damages due to global warming and to sue the Environmental Protection Agency for not regulating greenhouse gas emissions.

Although California has adopted the most comprehensive legislation, other states are not far behind (see figure 1). More than 300 bills related to climate change were introduced in forty states (Cizik 2007). And the Western Governors Association voted unanimously to approve the Clean and Diversified Energy Initiative—75 percent of the governors represented red states.

On many political issues Democrats and Republicans take opposite sides of the debate. On minimum-wage legislation, for example, Democrats push for higher wages to help improve the living standards

of low-paid workers, whereas Republicans try to keep wages down on the theory that higher wages eliminate jobs. On taxes, Democrats call for lower taxes on the poor because they are less able to pay; Republicans call for lower taxes on the rich in an effort to encourage investment and productivity.

When it comes to the environment, however, both battle for the regulatory high ground. Regardless of political colors, it seems that being green equates to top-down control. Democrats criticize the environmental record of the Bush administration and recall the good ole final days of the Clinton administration when strict standards were placed on arsenic levels in streams and lakes and when millions of acres were declared roadless. And they embrace Al Gore's sermons on Capitol Hill calling for fast track regulations to curb global warming.

Republicans yearn for days even farther back in their history. They cling to the claim that Theodore Roosevelt was the original conservative conservationist, despite the fact that he greatly expanded ownership of federal land, which entrenched resource socialism on the U.S. landscape. They also point out that Richard Nixon was the first environmental president because he signed several environmental acts, including the Clean Air Act, and instituted the Environmental Protection Agency—one of the biggest and fastest-growing regulatory agencies in Washington. Although those green policies have led to some improvements, they come wrapped in red tape that has been expensive and created gridlock.

Support for environmental regulation is also growing among some unlikely groups such as evangelicals. Protection of the environment, they say, is a biblically rooted commandment, causing many religious groups to see global warming as a moral issue and thus being greener than thou as a must. As Richard Cizik with the National Association of Evangelicals stated, we should see the global warming crisis as “a note from God that says, ‘I said to be a good steward, my children. Sin has consequence, and if you pollute the earth there will be a price to pay’” (Cizik 2007, 92). The Evangelical Climate Initiative encour-



Mike Peters' Editorial Cartoon/© 2002 Grimmy Inc. All rights reserved.

aged pastors to sign a “Call to Action,” and the Evangelical Environmental Network’s website asks, “What would Jesus drive?” The combination of holier than thou with greener than thou has only strengthened regulatory environmentalism.

Even big business, although risking being strangled by environmental restrictions, is accepting that change is in the air. For example, four-fifths of utility executives polled by Cambridge Energy Research Associates expect mandatory emission caps within ten years (“Green America 2007”). If regulation is on its way, then companies that help define the rules have a better chance of winning the game. At the very least, businesses want to avoid a patchwork of conflicting local environmental regulations, a scenario that is already causing confusion as states such as California are setting stricter standards than the federal government. Moreover, many firms who caught the green wave early have been able to make some green out of green. General Electric and Goldman Sachs, for example, actively support going green—because they think there is money to be made and more influence to be had over policymakers.



"It's always cozy in here. We're insulated by layers of bureaucracy."

Frank Cotham/CartoonBank.com. All rights reserved.

So why is green equated with regulation and not with harnessing the power of markets to improve the environment? Is there another path to better resource stewardship? Is it possible to be a free market environmentalist?

Free Market Environmentalism

Traditional thinking about environmental issues has tended to emphasize incentive problems inherent in markets but ignore them in the context of political processes. Many policymakers assume that an efficient allocation of resources will be reached when government correctly accounts for all the costs and benefits.



"I do know one thing, gentlemen. If we don't plug into the environment right now, we're going to be missing out on a lot of big envirobucks."

The call for a carbon tax is a classic example. When a person or business decides to consume fossil fuels, carbon dioxide is emitted into the atmosphere. Because fossil fuel consumers do not take into account the cost of extra carbon emissions on others, the energy market is seen as failing. To correct this alleged failure, the government attempts to determine the costs being imposed on others and impose a tax on emissions to account for those costs. Thus, a carbon tax increases the cost of fossil fuel, inducing the consumer to use less, with the presumption that government regulation is necessary to reach some hypothetically optimal level of fossil fuel consumption.

Free market environmentalism (FME) challenges the assumption that the policymaker has sufficient knowledge to set the optimal tax. Knowing the optimal level of emissions and the optimal tax rate is

not, in the words of Nobel laureate Friedrich Hayek, “given to any one mind.” The policymaker needs information about production processes, production costs, and the health and consumption effects of the product. No one person or group of people, however well informed, can determine the optimal emissions or tax through a centralized process. The best mechanism we have for discovering the optimal emissions is through a decentralized process that can aggregate diffuse knowledge; this process is a market.

Free market environmentalism emphasizes the important role of markets, incentives, and property rights. At the heart of FME is a system of property rights to natural resources that, whether held by individuals or a group, create inherent incentives for resource users because the wealth of the owner is at stake if bad decisions are made. In short, free market environmentalists strive to transform environmental problems into assets.

FME was pioneered in the early 1980s and laid out in detail in the book by that title, *Free Market Environmentalism* (Anderson and Leal 1991; Anderson and Leal 2001). Because the ideas were controversial at the time, a reviewer called the title an oxymoron, probably because people often assume free markets mean that corporations can do whatever they please, including polluting the air and water without concern for the consequences. In such a system, landowners will overcut their trees, overflow their soil, and overgraze their pastures. How, then, can markets solve the problems they are seen as causing?

To help answer the question, let us first examine four environmental so-called truisms that plague market approaches, keeping in mind that free market environmentalists try to see the world the way it is, not the way it ought be. It is fine to wish for better stewardship and environmental quality, but ultimately good policy must focus on what really works. Understanding the fallacies behind these environmental truisms helps illuminate another path to environmental quality.

1. *Environmental quality, priceless*

Every transaction involves a trade-off, something that must be given up to get what we want. There is only so much land, so if we “put in a parking lot,” as Joni Mitchell put it in her 1975 hit song “Big Yellow Taxi,” we will have to “pave paradise,” thus sacrificing farmland, open space, or wildlife habitat. But the opposite is also true: if we don’t pave paradise, we won’t have the hospital, supermarket, or school—all of which add value to our lives. If we conserve energy, we live in cooler houses in the winter and warmer ones in the summer, we drive fewer miles, and we drive smaller cars. If we recycle, we devote time to sorting our garbage, live with the inconvenience of recycling bins, and drive or walk out of our way to the recycling center. If you are green, you are expected to oppose paving paradise and to favor conserving energy and recycling regardless of the cost. Such axiomatic rules, however, ignore the trade-offs inherent in all transactions.

We see the same problem in debates over how to confront greenhouse gas emissions and global warming. Despite there being no scientific models to suggest that proposed global warming policies will significantly reduce the effect of climate change, people continue to call for action. The pragmatist asks, what are the costs of this action? The seven-hundred-page Stern Report (2006) commissioned by the British government estimates that the costs of stabilizing greenhouse gas concentrations to be approximately 1 percent of global output per year and possibly higher. The report also contends that the cost of not stabilizing greenhouse gases could be between 5 percent and 20 percent of global output per year (see chapter 3 for a more detailed discussion).

Serious economists have little good to say about these estimates, for two reasons. First, the costs of doing nothing are unlikely to prevail because we will almost certainly find cheaper ways than we have now

to reduce carbon consumption. As just one example, ponder the rebirth of the nuclear power industry in the United States; part of that renaissance is owed to the concern over coal-fired power plants.

Second, the costs will have to be incurred now and the benefits, if any, will surface far into the future (Becker 2007). None of us are willing to take on significant costs today without some possibility of a return on our investment. So why invest trillions of dollars now to reduce carbon if we cannot expect a return in the next hundred years? Even the most liberal policy analyst must wonder whether emission-reduction policies make good economic sense. Free market environmentalists recognize that improving environmental quality comes at a cost and that these costs must be weighed against the benefits.

2. Mother nature and materialism don't mix

Because free enterprise leads to higher incomes and higher incomes lead to greater ability to consume, it is easy to see why free market ideas might be seen as promoting materialism. But as people in developing countries move beyond meeting their basic needs of food, clothing, and shelter, they begin wanting cell phones, televisions, and cars.

Of course, human welfare goes far beyond meeting material wants and needs to include health and happiness. As the late policy analyst Aaron Wildovsky liked to put it, "wealthier is healthier." On this narrow dimension, the wealth that comes with higher incomes allows people to enjoy better nutrition, improved health, longer lives, and cleaner environments (see figure 2).

An important relationship exists between wealth and environmental quality. In the early stages of economic development, people often are willing to sacrifice environmental quality for higher incomes; water and air quality may deteriorate and resources may be exploited to increase incomes. But as wealth rises and people move beyond

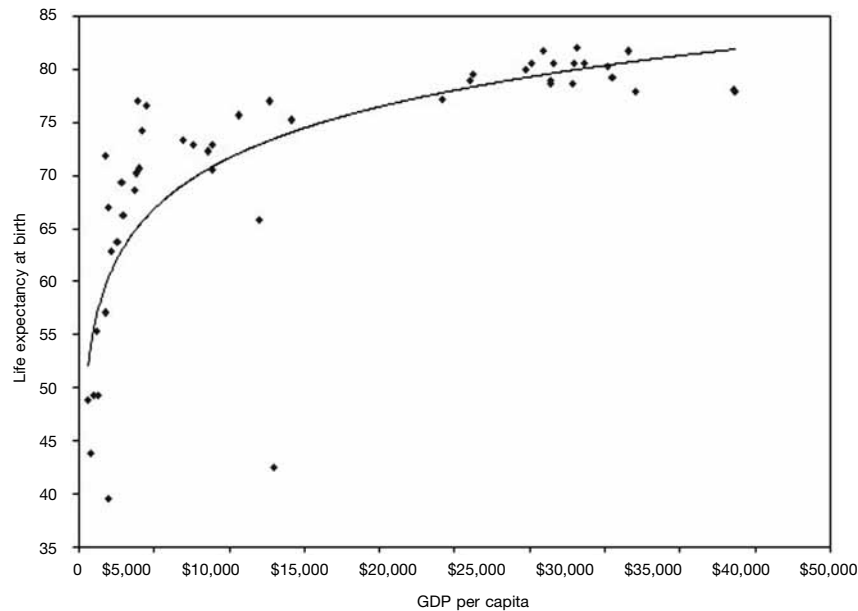


Figure 2. Poverty and Life Expectancy

As GDP increases, life expectancy does as well. The figure shows data for 48 countries, with incomes as high as \$43,500 in Switzerland and as low as \$600 in Somalia. The average life expectancy ranges from 39.5 years in Zimbabwe to 82 years in Japan. Countries such as the United States and Sweden have high incomes and a high average life expectancy. South Africa, Afghanistan, and Kenya have low incomes and a low average life expectancy.

Source: *The World Factbook*. 2007. Central Intelligence Agency. Available online at www.cia.gov/library/publications/the-world-factbook/ (accessed June 20, 2007).

subsistence, they begin to demand better stewardship and environmental quality (see chapter 3).

As the U.S. founding fathers understood, the right to pursue life, liberty, and happiness is fundamental and best met through free enterprise and private ownership. If free people choose materialism, especially as they emerge from poverty, so be it. Some might think that even those at low-income levels ought to choose spiritual, cultural, or environmental fulfillment, but freedom means accepting a person's choice to buy an iPod rather than protect endangered species. The

data show that wealth ultimately leads to better health and environmental quality.

3. Markets know no limits

Free enterprise cannot exist without secure private property rights, but those rights do not mean that the owner can do whatever he or she pleases. Property rights allow the owner to reap the benefits of ownership but also to be held responsible for how the property is used.

Property rights must be clearly defined, enforced, and transferable on a willing buyer–willing seller basis. When all those conditions are present, the owner is then able to decide how and by whom the property will be used. Definition and enforcement also mean that others cannot trespass. Hence, far from allowing people in a free society to do whatever they please, private ownership requires that people take only actions that do not harm others (Anderson and Huggins 2003).

In the context of environmentalism, secure property rights can help keep waste contained. For example, if a person throws garbage into a neighbor's backyard, the neighbor will have recourse against the dumper because the property rights are clear: the backyard belongs to the neighbor and the garbage belongs to the polluter. It is not always easy, however, to detect who is doing the dumping or who owns the backyard: Case in point, if the garbage is dumped into a river that is unowned and mixes together, it can be difficult to determine who is doing the dumping and difficult to assign responsibility.

This, however, is what courts are in the business of resolving. Consider the case of *Jacobs Farms, Inc. v. Western Farm Services*. In a coastal city in central California, Western Farm Services legally applied pesticides to a conventional farm; fog turned the pesticide to liquid droplets and air currents carried them to the organic Jacobs Farms, destroying \$500,000 worth of dill. Under state law, the sprayer's responsibility ends once the chemicals have been applied; Western Farm

Services thus did not violate the law. Attorneys representing Jacobs Farms, however, argued that neighboring farms were responsible for the pesticide that contaminated the organic crops, convincing a Santa Cruz County Superior Court judge to order Western Farm Services to stop spraying pesticides (Bookwalter 2007).

For free market environmentalists, one of government's most important roles is to define and enforce property rights, thus encouraging environmental stewardship. Water rights in the American West provide a good example. In the early days of mining camps and farming communities, people claimed water by diverting it for beneficial uses, basing their claims on who had diverted the water first. Associations such as irrigation districts were formed to monitor water use. Known as the prior appropriation system, those well-defined and enforced water rights created the basis for trade and reallocation of water from lower-valued to higher-valued uses. Thus, the farmer wanting to increase irrigated acreage in a valuable crop such as grapes can purchase water from farmers with low-valued crops such as hay. Growing cities can purchase water from farmers to quench their thirst. Such exchanges encourage water conservation if the conserved water can be sold in the marketplace.

Unfortunately, proof of beneficial use required diversion and did not count water left in streams as a beneficial use. If water for fish and wildlife habitat and pollution dilution is valued more than water for agricultural, municipal, or industrial uses, those seeking additional water cannot purchase diversion rights and leave the extra water in the stream. Moreover, the irrigator who cannot sell her water to trout fishers for fish habitat has no incentive to worry about the value of water for instream uses; if she can sell and chooses not to do so, she bears the cost of saying no and thus has an incentive to at least consider purchase offers.

Fortunately, as we will see in chapter 5, growing demands for environmental water uses have pressured state legislatures to change the rules. As a result, in states such as Oregon, Montana, and Colo-

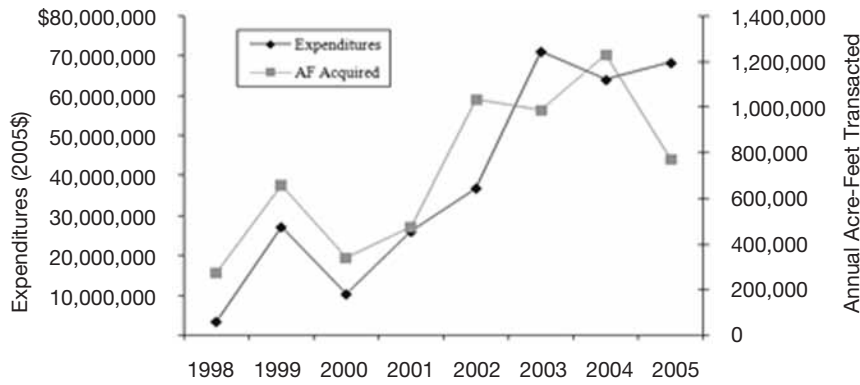


Figure 3. Acquisitions of Water (1998–2005)

In most western states, markets for instream flow water rights have grown. The figure shows total expenditures and the quantity of water acquired for instream flows in ten western states: Washington, Oregon, California, Arizona, New Mexico, Colorado, Nevada, Utah, Idaho, and Montana.

Source: Brandon Scarborough and Hertha L. Lund. *Saving Our Streams: Harnessing Water Markets*. (Bozeman, MT: Property and Environment Research Center [PERC], 2007).

rado, environmentalists are using water markets to increase instream flows. The Oregon Water Trust, for example, offers to replace ranchers forgone hay crops if they will leave their irrigation water instream for salmon and steelhead. Such win-win trades have encouraged similar organizations to form in Montana and Washington and spurred an exponential increase in the environmental water market (see figure 3).

4. *Don't worry, be happy*

In response to concerns from doomsayers that population growth was our greatest environmental problem, the late Julian Simon, a professor of business administration at the University of Maryland, was fond of saying, “With every mouth comes two hands and a mind” and that human ingenuity is “the ultimate resource.”

Professor Simon’s position was not based on a simple faith in human ingenuity but on evidence. If property rights to natural re-

sources, physical capital, and intellectual capital (human ingenuity) are secure and tradable as described above, people will respond to scarcity by investing in technologies that allow us to better cope.

Confident that these incentives were in place, Simon challenged Paul Ehrlich, the Bing Professor of Population Studies at Stanford and author of the *Population Bomb* (1968), to a bet. Simon, hypothesizing that growing scarcity should result in higher resource prices, bet Ehrlich that such prices would not materialize because of human ingenuity. Ehrlich accepted the wager and was allowed to choose five natural resources that he thought would rise in value between 1980 and 1990. On the basis of \$1,000 divided equally among the five metals that he chose, Simon agreed to pay Ehrlich the difference between \$1,000 and the price to which the hypothetical bundle rose, and Ehrlich agreed to pay the difference between \$1,000 and the price to which it fell (both adjusted for inflation). At the end of the period, not only had the value of the bundle fallen in nominal terms but it had fallen in real terms. Ehrlich mailed Simon a check for \$576.07. Simon, confident in the powerful influence of incentives, suggested that they bet again and up the ante to \$10,000; Ehrlich declined.

David McClintick and Ross B. Emmett (2005) take the Simon-Ehrlich bet one step further by tracking a composite index of the prices of Ehrlich's five metals from 1900 to 2000. Their finding was that the index was approximately 50 percent lower at the end of the century than at the beginning. They also found, however, that the index was, as Simon suspected, highly volatile. Both of Simon's hypotheses were confirmed: (1) that human ingenuity can overcome the effects of increasing demand and (2) that ingenuity will take time to manifest itself (see chapter 3, figure 5, page 37).

Free market environmentalists are optimistic about human ingenuity and the environment because history shows that resourcefulness leads to positive results. Environmental conditions are improving by almost any measure in areas where incomes are high and growing (the

focus of chapter 3). In the United States, for example, air and water quality have improved dramatically from sea to sea. “Don’t waste energy worrying about the wrong issue” is a better motto than “Don’t worry, be happy.” Rather than worrying about the fossil fuel depletion crisis, for example, why not focus on how to use energy more efficiently and on how to create alternative fuel sources.

A Green Thumb for the Invisible Hand

The notion of the power of the “invisible hand,” a metaphor for free enterprise, has traveled a long way from its roots in Adam Smith’s *The Wealth of Nations* (1776). Today’s global marketplace has lifted millions of people out of poverty and has the potential to continue doing so. It has the same potential for improving environmental quality, but most policymakers see markets and globalization as the cause of environmental degradation.

Combating the tendency to equate being green with environmental red tape requires rethinking the role of markets in providing environmental quality. Whether the issue is management of public lands, water or air quality, or global warming, free market environmentalism can provide an alternative to command-and-control regulation.

In what follows, we suggest ways in which FME can do that. The first step is to recognize what Aldo Leopold, the father of modern conservation, realized, namely, that incentives matter. As he put it, “conservation will ultimately boil down to rewarding the private landowner who conserves the public interest” (Leopold 1934, 202). With this in mind, we will show how incentives are leading to environmental improvements. When one considers the evidence, “you have to admit it’s [the environment] getting better,” as the Beatles’ song put it. Just as “no one washes a rental car,” people do not take care of natural resources they don’t own. If property rights can be estab-

lished, numerous examples show that “markets are a frog’s best friend.” By forming local coalitions around market principles, liberals and conservatives can find ways of “dancing with environmentalists” and discover pragmatic solutions that improve environmental quality without increasing regulation.