Save The Environment, and Get Rich (Book Review)

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Natural Capitalism, by Paul Hawken, Amory Lovins, and L. Hunter Lovins, Boston: Little, Brown and Co., 396 pages, $26.95

Natural Capitalism, by Paul Hawken, Amory Lovins, and L. Hunter Lovins, brings some real news to the authors' presumed audience of hard-core environmentalists. Hawken is an environmentalist and the author of The Ecology of Commerce; the Lovinses are co-founders of the Rocky Mountain Institute, a non-profit consultancy that advises firms on saving resources. Perhaps it's not as entertaining as a two-headed Marilyn Monroe clone marrying Michael Jackson, but to many greens who associate economic growth with shrinking environmental quality, Natural Capitalism's thesis might be even more shocking than the tabloids: Economic growth needn't coincide with environmental degradation.

The kind of industrial activity that upsets environmentalists involves the wasteful use of huge amounts of natural materials to create products that then dump pollutants back on Mother Nature. Do you see the hidden solution? The authors do, and that's what they call "natural capitalism," though the adjective isn't necessary--it's exactly the same kind of capitalism that free-market economists have been pushing for about 200 years.

Capitalism--the search for profits through making and selling in free markets--should move us toward both a healthy economy and clean air and water. Why? Because pollution and waste are inefficient and expensive. Is your factory polluting the air? You are wasting money. Polluting the water? You are wasting money. Using too much energy? Still wasting money. Add in the property rights of those downstream and the link between capitalism and environmentalism becomes still clearer. Factor in the true value of the clean air and water that nature produces each and every day for "free," and it becomes obvious that we will be richer with a cleaner environment.

This is where the greedy capitalists come in. Money can be made preventing the waste that causes resource depletion and pollution. Entrepreneurs clever enough to tap into this massive potential will make themselves and their companies wealthy. The government needn't order anyone to act.

That three authors generally associated with the environmental movement now realize capitalism can help save the environment is news indeed, and fairly good news for much of this book. Natural Capitalism's greatest virtues are in pointing out the tremendous waste caused by many of our activities and in laying out alternate, less-wasteful ways of doing things. Some of this waste, they note, is due to perverse government meddling. Interestingly--and more controversially--they attribute some of it to businesses' failure to maximize profits.

The authors devote a handful of chapters to stories of entrepreneurs who saved huge amounts of resources by thinking clearly at the start of investment projects. In example after example, they tell how various businesses came up with new ways to save energy and other wasted resources, with nice results for the bottom line. They also point out, disturbingly, that many businesses insist on about a 1.9-year payback for investment in energy savings, which is another way of saying that they insist on a rate of return of more than 50 percent. The necessary consequence is that many very profitable energy-saving investments are not being made.

Even a free-market economy isn't a perfectly efficient world where all opportunities are grasped and acted upon instantaneously; sometimes businesses make mistakes because they are stuck in a mind-set that, say, puts a higher threshold payback period on energy savings than on other investments. This doesn't mean government needs to step in--time and competition usually guarantee that profit opportunities will eventually be seized--but it does mean that a certain amount of educating is necessary.

One of the best chapters, "Aqueous Solutions," documents how water is wasted. The authors note that people in industrialized countries "rely on the highest-quality water for every task, flushing toilets and washing driveways with drinking water." They write that we also "build big dams and water projects by reflex, rather than asking what's the best solution and the right size for the job."

What they write about toilets is so compelling that I haven't been able to flush a toilet since without thinking about how absurdly wasteful they are. "Many sanitation experts have come to view [the toilet] as one of the stupidest technologies of all time: In an effort to make waste products 'invisible,' it mixes pathogen-bearing feces with relatively clean urine. Then it dilutes that slurry with about 100 times its volume in drinking water and further mixes the mess with industrial toxins in the sewer system, thus turning `an excellent fertilizer and soil conditioner' into a serious, far-reaching, and dispersed disposal problem."

They don't mention, though, that government bears much responsibility for our sewer system. University of Alabama historian David T. Beito has written that, as late as 1880, more than two-thirds of urban U.S. households used "privy vaults," brick-lined holes in the ground that were emptied by companies that sold the wastes to farmers for manure. Government-sponsored sewage systems changed all that. The authors do note, however, that two-compartment toilets in Sweden separate the feces from the nutrient-rich urine, allowing both to be sold for fertilizer.

In writing about cars, the authors think the market could make cars much more fuel-efficient without making them any less safe. "Blending today's best technologies," they write, "can yield a family sedan, sport-utility, or pickup truck that combines Lexus comfort and refinement, Mercedes stiffness, Volvo safety, BMW acceleration, Taurus price, four- to eight-fold improved fuel economy (that is, 80 to 200 miles per gallon), a 600 to 800 mile range between refuelings, and zero emissions." Although their claims may sound far out, the Lovinses' Rocky Mountain Institute was early in seeing the "hybrid" car--running on both an internal combustion engine and a battery--as the car of the future. Honda's recent introduction of such a car suggests the Lovinses may be right.

The authors also welcome an expansion of capitalist markets into the world of air pollution, specifically an emissions quota market for greenhouse gases, which they want to see restricted internationally along the lines of the 1997 Kyoto treaty. That way, people who want to emit more than their quota could buy emission rights from those who use less. That would provide a profit incentive for finding ways to emit less, since you could then profit from selling permits if you can emit under the legal limit.

But the authors undercut the need for either the Kyoto treaty or emissions credit markets by arguing that, quotas aside, producers will find it profitable to cut carbon emissions below the Kyoto-treaty level. So, for example, if the treaty would place a 100-unit limit on emissions, they argue that companies on their own would want to emit only, say, 80 units. If this is so, even those who fear global warming can comfortably oppose the Kyoto treaty. Who needs a treaty to stop people from doing things they wouldn't be doing anyway? And the value of emissions credits would also be zero if they are correct, making the market pointless--if people want to emit less than is allowed, they will pay nothing for the right to emit more.

Despite its virtues, this is not a great book, largely because the authors deeply misunderstand some key views of mainstream economic thinkers and of what they call "conventional capitalism." This misunderstanding prevents them from seeing just how many natural allies they have among mainstream and free-market economists. They write, for example, that the economic theory analyzing the past 200 years of economic growth is "based on the fallacy that natural and human capital have little value as compared to final output." That would have surprised the late Theodore Schultz and would shock Gary Becker, both strong advocates of free markets and both winners of the Nobel Prize in economics. Schultz and Becker developed the concept of "human capital"--capital produced by investing in knowledge and residing in people's heads. Hawken and the Lovinses' ignorance of economics shows itself perhaps most clearly in their discussion of the gasoline lines that followed the 1973 Arab oil embargo: They don't mention that such lines would not have existed if the U.S. government hadn't used price controls to keep gas prices below the market-clearing level. The authors also think that "natural capitalism" is superior to "conventional capitalism" because the former treats nature as if it's valuable. But in conventional capitalism, much of nature is treated as valuable. If I own a farm, I care about how the addition of various pesticides and fertilizers affects the value of my land. I might not care about what the pesticides and fertilizers do to the surrounding rivers, but that's because no one has well-defined property rights in those rivers. If they had, they could hold me liable for the damage I do.

The book's authors are right that we often don't take account of the damage we do to nature, but that's because private property is not complete enough. No one "owns" nature, though as technologies of demarcation improve (the way that the invention of barbed-wire fences made it practicable to own and manage cows and land on the wide-open range), we can expect to find private property spread in areas in which it is currently absent, like water and air sheds.

If people owned nature, we wouldn't treat it nearly as badly as we sometimes do now. If I owned the water off Pacific Grove, California, to take a recent controversy in my town, I would never let the local government spill sewage into it the way they do now, or at least I would charge the government enough to compensate for the damage. Economists at the Political Economy Research Center in Bozeman, Montana, and other environmentally conscious "conventional capitalists" have written hundreds of articles and books extending these insights. The authors of Natural Capitalism, not well-versed in the body of thought known as "free market environmentalism," never mention this work of people who are truly their allies.

They are also mistaken about the level of government subsidy involved in transportation. They argue that transportation "is the most subsidized and centrally planned sector of the majority of the world's economies--at least for such favored modes as road transport and aviation." We do have a centrally planned (the old word was socialist) system of roads, airports, and air traffic control, as does virtually every other country. But it's certainly not one of the most subsidized. Drivers pay, in the form of gasoline taxes, for the roads they use, and not all the taxes go to build roads--a substantial fraction now goes to subsidize the buses and subways of municipal transit.

Interestingly, the authors admit that roads are not on net subsidized, writing, "In fairness, the federal subsidies to the U.S. oil industry, unlike other fossil-fuel industries, are approximately offset by federal excise taxes collected on its retail products." They confine this admission, which undercuts their whole case, to a note at the end of the book. That's too bad, because they could have made the point that even though there is no net subsidy to roads, roads are probably not built where they should be and are overcongested because government control means that the price system is not allowed to direct resources. Government rarely charges people for their specific choices as to what roads to drive on and when, and almost never prices them higher at peak times of the day.

The authors realize, though, that much urban sprawl is caused by government zoning regulations that prevent "clustering" of housing, jobs, and shopping, though they ignore Jane Jacobs' pioneering work on that issue in her modern classic, The Death and Life of Great American Cities. They also note that widespread building regulations requiring developers to provide parking for each new shop, office, and apartment effectively subsidize drivers.

Despite its flaws, Natural Capitalism does provide some good arguments for a good message, even if the authors might not fully agree with all the implications of their analysis. But Hawkens and the Lovinses are essentially saying: Get rid of government restrictions that prevent us from using resources efficiently, tear down socialism in our transportation sector, and, if you're a businessperson who wants to be environmentally conscious, pay close attention to all available profit opportunities, even if they seem new. Then go out and get rich.