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Will Big Business Save the Earth? By JARED DIAMOND DEC. 5, 2009

Los Angeles-- THERE is a widespread view, particularly among environmentalists and liberals, that big businesses are environmentally destructive, greedy, evil and driven by short-term profits. I know — because I used to share that view.

But today I have more nuanced feelings. Over the years I’ve joined the boards of two environmental groups, the World Wildlife Fund and Conservation International, serving alongside many business executives.

As part of my board work, I have been asked to assess the environments in oil fields, and have had frank discussions with oil company employees at all levels. I’ve also worked with executives of mining, retail, logging and financial services companies. I’ve discovered that while some businesses are indeed as destructive as many suspect, others are among the world’s strongest positive forces for environmental sustainability.

The embrace of environmental concerns by chief executives has accelerated recently for several reasons. Lower consumption of environmental resources saves money in the short run. Maintaining sustainable resource levels and not polluting saves money in the long run. And a clean image — one attained by, say, avoiding oil spills and other environmental disasters — reduces criticism from employees, consumers and government.

What’s my evidence for this? Here are a few examples involving three corporations — Wal-Mart, Coca-Cola and Chevron — that many critics of business love to hate, in my opinion, unjustly.

Let’s start with Wal-Mart. Obviously, a business can save money by finding ways to spend less while maintaining sales. This is what Wal-Mart did with fuel costs, which the company reduced by $26 million per year simply by changing the way it managed its enormous truck fleet. Instead of running a truck’s engine all night to heat or cool the cab during mandatory 10-hour rest stops, the company installed small auxiliary power units to do the job. In addition to lowering fuel costs, the move eliminated the carbon dioxide emissions equivalent to taking 18,300 passenger vehicles off the road.

Wal-Mart is also working to double the fuel efficiency of its truck fleet by 2015, thereby saving more than $200 million a year at the pump. Among the efficient prototypes now being tested are trucks that burn biofuels generated from waste grease at Wal-Mart’s delis. Similarly, as the country’s biggest private user of electricity, Wal-Mart is saving money by decreasing store energy use.

Another Wal-Mart example involves lowering costs associated with packaging materials. Wal-Mart now sells only concentrated liquid laundry detergents in North America, which has reduced the size of packaging by up to 50 percent. Wal-Mart stores also have machines called bailers that recycle plastics that once would have been discarded. Wal-Mart’s eventual goal is to end up with no packaging waste.

One last Wal-Mart example shows how a company can save money in the long run by buying from sustainably managed sources. Because most wild fisheries are managed unsustainably, prices for Chilean sea bass and Atlantic tuna have been soaring. To my pleasant astonishment, in 2006 Wal-Mart decided to switch, within five years, all its purchases of wild-caught seafood to fisheries certified as sustainable.

Coca-Cola’s problems are different from Wal-Mart’s in that they are largely long-term. The key ingredient in Coke products is water. The company produces its beverages in about 200 countries through local franchises, all of which require a reliable local supply of clean fresh water.

But water supplies are under severe pressure around the world, with most already allocated for human use. The little remaining unallocated fresh water is in remote areas unsuitable for beverage factories, like Arctic Russia and northwestern Australia.

Coca-Cola can’t meet its water needs just by desalinizing seawater, because that requires energy, which is also increasingly expensive. Global climate change is making water scarcer, especially in the densely populated temperate-zone countries, like the United States, that are Coca-Cola’s main customers. Most competing water use around the world is for agriculture, which presents sustainability problems of its own.

Hence Coca-Cola’s survival compels it to be deeply concerned with problems of water scarcity, energy, climate change and agriculture. One company goal is to make its plants water-neutral, returning to the environment water in quantities equal to the amount used in beverages and their production. Another goal is to work on the conservation of seven of the world’s river basins, including the Rio Grande, Yangtze, Mekong and Danube — all of them sites of major environmental concerns besides supplying water for Coca-Cola.

These long-term goals are in addition to Coca-Cola’s short-term cost-saving environmental practices, like recycling plastic bottles, replacing petroleum-based plastic in bottles with organic material, reducing energy consumption and increasing sales volume while decreasing water use.

The third company is Chevron. Not even in any national park have I seen such rigorous environmental protection as I encountered in five visits to new Chevron-managed oil fields in Papua New Guinea. (Chevron has since sold its stake in these properties to a New Guinea-based oil company.) When I asked how a publicly traded company could justify to its shareholders its expenditures on the environment, Chevron employees and executives gave me at least five reasons.

First, oil spills can be horribly expensive: it is far cheaper to prevent them than to clean them up. Second, clean practices reduce the risk that New Guinean landowners become angry, sue for damages and close the fields. (The company has been sued for problems in Ecuador that Chevron inherited when it merged with Texaco in 2001.) Next, environmental standards are becoming stricter around the world, so building clean facilities now minimizes having to do expensive retrofitting later.

Also, clean operations in one country give a company an advantage in bidding on leases in other countries. Finally, environmental practices of which employees are proud improve morale, help with recruitment and increase the length of time employees are likely to remain at the company.

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In view of all those advantages that businesses gain from environmentally sustainable policies, why do such policies face resistance from some businesses and many politicians? The objections often take the form of one-liners.

**We have to balance the environment against the economy.** The assumption underlying this statement is that measures promoting environmental sustainability inevitably yield a net economic cost rather than a profit. This line of thinking turns the truth upside down. Economic reasons furnish the strongest motives for sustainability, because in the long run (and often in the short run as well) it is much more expensive and difficult to try to fix problems, environmental or otherwise, than to avoid them at the outset.

Americans learned that lesson from Hurricane Katrina in August 2005, when, as a result of government agencies balking for a decade at spending several hundred million dollars to fix New Orleans’s defenses, we suffered hundreds of billions of dollars in damage — not to mention thousands of dead Americans. Likewise, John Holdren, the top White House science adviser, estimates that solving problems of climate change would cost the United States 2 percent of our gross domestic product by the year 2050, but that not solving those problems would damage the economy by 20 percent to 30 percent of G.D.P.

 **Technology will solve our problems.** Yes, technology can contribute to solving problems. But major technological advances require years to develop and put in place, and regularly turn out to have unanticipated side effects — consider the destruction of the atmosphere’s ozone layer by the nontoxic, nonflammable chlorofluorocarbons initially hailed for replacing poisonous refrigerant gases.

 **World population growth is leveling off and won’t be the problem that we used to fear.** It’s true that the rate of world population growth has been decreasing. However, the real problem isn’t people themselves, but the resources that people consume and the waste that they produce. Per-person average consumption rates and waste production rates, now 32 times higher in rich countries than in poor ones, are rising steeply around the world, as developing countries emulate industrialized nations’ lifestyles.

 **It’s futile to preach to us Americans about lowering our standard of living: we will never sacrifice just so other people can raise their standard of living.** This conflates consumption rates with standards of living: they are only loosely correlated, because so much of our consumption is wasteful and doesn’t contribute to our quality of life. Once basic needs are met, increasing consumption often doesn’t increase happiness.

Replacing a car that gets 15 miles per gallon with a more efficient model wouldn’t lower one’s standard of living, but would help improve all of our lives by reducing the political and military consequences of our dependence on imported oil. Western Europeans have lower per-capita consumption rates than Americans, but enjoy a higher standard of living as measured by access to medical care, financial security after retirement, infant mortality, life expectancy, literacy, and public transport.

NOT surprisingly, the problem of climate change has attracted its own particular crop of objections.

 **Even experts disagree about the reality of climate change.**That was true 30 years ago, and some experts still disagreed a decade ago. Today, virtually every climatologist agrees that average global temperatures, warming rates and atmospheric carbon dioxide levels are higher than at any time in the earth’s recent past, and that the main cause is greenhouse gas emissions by humans. Instead, the questions still being debated concern whether average global temperatures will increase by 13 degrees or “only” by 4 degrees Fahrenheit by 2050, and whether humans account for 90 percent or “only” 85 percent of the global warming trend.

 **The magnitude and cause of global climate change are uncertain.** **We shouldn’t adopt expensive countermeasures until we have certainty.**In other spheres of life — picking a spouse, educating our children, buying life insurance and stocks, avoiding cancer and so on — we admit that certainty is unattainable, and that we must decide as best we can on the basis of available evidence. Why should the impossible quest for certainty paralyze us solely about acting on climate change? As Mr. Holdren, the White House adviser, expressed it, not acting on climate change would be like being “in a car with bad brakes driving toward a cliff in the fog.”

 **Global warming will be good for us, by letting us grow crops in places formerly too cold for agriculture.** The term “global warming” is a misnomer; we should instead talk about global climate change, which isn’t uniform. The global average temperature is indeed rising, but many areas are becoming drier, and frequencies of droughts, floods and other extreme weather events are increasing. Some areas will be winners, while others will be losers. Most of us will be losers, because the temperate zones where most people live are becoming drier.

 **It’s useless for the United States to act on climate change, when we don’t know what China will do.** Actually, China will arrive at this week’s Copenhagen climate change negotiations with a whole package of measures to reduce its “carbon intensity.”

While the United States is dithering about long-distance energy transmission from our rural areas with the highest potential for wind energy generation to our urban areas with the highest need for energy, China is far ahead of us. It is developing ultra-high-voltage transmission lines from wind and solar generation sites in rural western China to cities in eastern China. If America doesn’t act to develop innovative energy technology, we will lose the green jobs competition not only to Finland and Germany (as we are now) but also to China.

On each of these issues, American businesses are going to play as much or more of a role in our progress as the government. And this isn’t a bad thing, as corporations know they have a lot to gain by establishing environmentally friendly business practices.

My friends in the business world keep telling me that Washington can help on two fronts: by investing in green research, offering tax incentives and passing cap-and-trade legislation; and by setting and enforcing tough standards to ensure that companies with cheap, dirty standards don’t have a competitive advantage over those businesses protecting the environment. As for the rest of us, we should get over the misimpression that American business cares only about immediate profits, and we should reward companies that work to keep the planet healthy.

Jared Diamond, a professor of geography at the University of California at Los Angeles, is the author of “Guns, Germs and Steel” and “Collapse.”

A version of this op-ed appears in print on December 6, 2009, on Page WK12 of the New York edition with the headline: Will Big Business Save the Earth?. [Today's Paper](http://www.nytimes.com/pages/todayspaper/index.html)|[Subscribe](http://www.nytimes.com/subscriptions/Multiproduct/lp839RF.html?campaignId=48JQY)

# LETTERS; How Green Is That Big Company? December 13, 2009

To the Editor:

Re ''Will Big Business Save the Earth?'' (Op-Ed, Dec. 6):

Jared Diamond highlights three of this country's largest polluters as green advocates. In each example -- Wal-Mart, Coca-Cola and Chevron -- he acknowledges the enormous footprint that each company has. After each example, we hear the concessions that these companies are prepared to make toward resource conservation.

Unfortunately, no concession that these companies make at this point will make up for Wal-Mart's carbon footprint across its corporate history, all the clean water thus far consumed by Coca-Cola, and the ecological resilience and indigenous food security that have been lost through Chevron's trial-and-error prospecting.

Mr. Diamond's and these companies' apologetics will do nothing to stay the environmental crisis that we face as a species. In the end, attempts to appease green consumers, readers and voters are really an admission of the endgame that we are in.

In answer to the headline question, ''Will Big Business Save the Earth?'': No it won't; it is probably too late.

David John Goldstein   
Columbia, S.C., Dec. 8, 2009

The writer is a visiting scholar of historical ecology at the University of South Carolina.

To the Editor:

It was refreshing to read Jared Diamond's essay about various corporate initiatives to be more ecologically conscious.

I love to vilify the petrochemical and disposable merchandise companies as much as the next liberal, but I suspect that the biggest improvements will be made in conjunction with these megacorporations rather than against them. I can ride my bicycle everywhere I go, compost, go to bed at sundown, generate my own electricity and wear only hemp clothing. I can live off the grid entirely and still not make the kind of dent that Wal-Mart can simply by switching off its lights at night.

There is still a place for my humble attempt at conservation and low-impact living. My choices apply economic pressure that indirectly affects corporations hoping to get my business.

The problem is that vilifying the giant corporations is a favorite pastime of environmental organizations. This plays nicely to the choir and may raise some more funds for more vilifying, but it turns off everybody else.

If Wal-Mart has found profit in more ecological business practices, the more power to it. I still don't have plans to go to a Wal-Mart, but maybe I will someday when it starts selling a line of designer hempwear.

Daniel Newsome   
Elizaville, N.Y., Dec. 6, 2009

To the Editor:

We cannot rely on the good intentions of business leaders to solve today's critical environmental challenges. Many companies are trying hard to be ''greener'' because it improves shareholder value. But even if the entire business community adopted current best practices, their incremental improvements would be swamped by economic growth, especially in developing nations.

While we endlessly debate carbon policy, many leading scientists believe that we have already exceeded the ''safe operating space'' for humanity in three key indicators -- greenhouse gas emissions, nitrogen flows and biodiversity loss.

To reverse these trends will require dramatic innovation and lifestyle modification. We need a global public-private collaboration led by bold and decisive policy makers.

Joseph Fiksel   
Columbus, Ohio, Dec. 7, 2009

The writer is executive director of the Center for Resilience at Ohio State University.

To the Editor:

Jared Diamond's essay prompts the question of whether large corporations are becoming environmentally progressive as a matter of principle, or whether there are occasions where enlightened environmental policy and business imperatives happen to align.

Alas, one need only look at the slow progress of efforts to protect the environment and become more energy-efficient to know the answer. Chevron may be taking environmental precautions with its oil fields in Papua New Guinea, but fear of lawsuits is not the same as striving for a lighter environmental footprint because it is good for the planet.

Part of Chevron's explanation for its policies is telling. Environmental regulations are becoming stricter, so it makes economic sense to get out in front of that. Intelligent legislation and regulation can create the conditions where this alignment would be the rule.

Barry Kresch   
Westport, Conn., Dec. 6, 2009

To the Editor:

Multinational corporations have a long way to go before they earn my trust as ''eco-saviors.''

Believe me, the inherent contradiction between Coca-Cola's new bottle made partly from plant-based polymers and the waste represented by essentially repackaging tap water is not lost on your readers.

Isaac Skelton   
Palo Alto, Calif., Dec. 7, 2009

The writer is communications manager at World Centric, which makes compostable products and promotes ecological awareness.

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