

washingtonpost.com

Cost of Saving the Climate Meets Real-World Hurdles

By David A. Fahrenthold and Steven Mufson
Washington Post Staff Writers
Thursday, August 16, 2007; A01

On the Internet, erasing your role in climate change seems as easy as ordering a DVD -- and cheaper than a cup of coffee a day.

With a click, a credit card and \$99, visitors can pay a [Silver Spring](#) nonprofit group, Carbonfund.org, to "offset" a year's worth of greenhouse-gas emissions. Whatever the customer put into the atmosphere -- by flying, driving, using electricity -- the site promises to cancel out, by funding projects that reduce pollutants.

Sites such as this one, offering absolution from the modern nag of climate guilt, have created a \$55 million industry that once would have been beyond the greenest of imaginations. The market for "voluntary carbon offsets" now encompasses dozens of sellers and thousands of buyers, including individuals and corporations.

But in some cases, these customers may be buying good feelings and little else.

A closer look reveals an unregulated market in which some improvements bought by customers are only estimated, extrapolated, hoped-for or nil. Some offsets support projects that would have gone forward anyway. Others deliver results difficult to measure.

Carbonfund.org, for example, has advertised offsets that finance wind farms and tree-planting projects. But some wind farms said the donations haven't led to anything new. And the benefits from some tree projects were unclear enough that Carbonfund.org no longer uses them to back offsets.

"People can feel very comfortable that they're reducing their carbon footprint" by buying Carbonfund.org offsets, Executive Director Eric Carlson said.

Many offset sellers do seem to deliver measurable cuts to pollution. One [Vermont](#) company, for instance, has been praised for offering customers a chance to support projects in development, effectively guaranteeing positive future impact.

Critics say that offset sellers usually have good motives. But the market is confusing enough that, this month, the [Federal Trade Commission](#) said it would look into whether consumers are being adequately protected.

"It's just like the Wild West," said Frank O'Donnell of the group Clean Air Watch. "There are no controls, no standards."

The offset is among the most unusual of commodities. Its substance is intangible, the absence of something.

Advertisement

The advertisement features a blue background with a red border. At the top center is a stylized Uncle Sam hat with red and white stripes and a blue band with a white star. Below the hat, the text reads "American Dream Savings Account™" in white. Underneath that, "5.05%" is written in large white font, with "ANNUAL PERCENTAGE YIELD" in smaller white text below it. At the bottom left, the "EmigrantDirect.com™" logo is displayed in white, with the tagline "More Money For Your Money™" below it. To the right of the logo is a red arrow pointing to the text "Learn More".

Some pollution would have existed, somewhere, sometime, the seller says, but now it won't.

But the market for the product grew by 80 percent in 2006 alone, according to a report last month from the market analysts New Carbon Finance and Ecosystem Marketplace. That was apart from the [Chicago Climate Exchange](#), where companies can trade credits for greenhouse-gas reductions among themselves. That exchange has made efforts to verify that carbon offsets sold represent real pollution reductions.

Large corporations have bought offsets by the millions. Last month, one utility, [American Electric Power](#), agreed to offset about 4.6 million tons of carbon dioxide by paying for projects that reduce methane -- a powerful pollutant -- seeping from farm manure.

For individual consumers, an offset can be a tempting alternative to a radical lifestyle makeover. People concerned about climate change could sell their cars and cover their roofs with solar panels. Or, on an offset site, they could become "carbon neutral" with a click.

"That means I . . . keep my current gas-guzzling car," said Brian Schilling, an [Arlington](#) writer who paid the company TerraPass about \$108 to offset his home and auto for a year, "and make up for it some other way."

But scientists and academic researchers have begun to warn consumers that it's not that simple.

"Companies can basically sell whatever they want," said Anja Kollmuss, who helped compile a report on the industry for the [Tufts University](#) Climate Initiative. "I didn't find downright fraud. I think most companies want to do the right thing."

"Quite a few just don't know the industry very well and just don't know how complex the issues are."

One case in point: trees. Some offset vendors promise to plant them, saying that they naturally draw carbon dioxide out of the air.

But researchers say that it's hard to know what is being offset because the impact of a tree depends on species, location and other factors. If the tree burns or is chopped down, the benefit disappears.

Even more head-spinning are the questions about "renewable energy certificates" from wind farms and solar plants, certifying that they made a certain amount of clean energy.

Offset companies buy these pieces of paper. Then, they use them to claim credit for pollution "avoided" -- reasoning that they helped produce energy that would otherwise have come from a polluting coal or natural-gas plant.

Some of the money paid for these certificates stays with the offset vendor or with a middleman. The rest usually winds up with the energy project's builder or the utility that buys its electricity. In some cases, this can amount to something like a donation to a for-profit company: American Electric Power, which sold an undisclosed amount of certificates from wind farms last year, earned more than \$1 billion in profit.

Some environmentalists balk at this. If the certificate is bought only after the energy is produced, they wonder, how can an offset vendor know the energy wouldn't have been produced anyway?

Analysts say it is hard, given the scientific and philosophical questions that come with the field, to judge the players in the offset markets. But, in recent months, some researchers have begun to single out certain

vendors for praise or criticism.

One offset seller winning praise has been NativeEnergy, a Vermont company that offers customers the chance to fund projects being developed. Yesterday, for instance, its Web site said offset funds could help build a wind farm on the Rosebud Sioux Indian reservation in [South Dakota](#). This way, the company says, donors can be sure that their offset funds helped create something.

Caroline Kenney, a special education assistant from Arlington, bought offsets from TerraPass on Earth Day last year. She said it took care of one climate-unfriendly aspect of her life that she couldn't change.

"I have never been able to find a way to get to my job without using my car," she said. So she offset it, for about \$50.

Some offset-sellers have been controversial. One is Planktos, a [California](#) company that says it can pump up ocean plant life known as phytoplankton -- which absorbs carbon dioxide -- by scattering iron particles on the surface of the Pacific. Although scientists have said they doubt the plan will have the desired impact, Planktos officials say that it is built on solid science.

Even TerraPass, the offset provider to the Academy Awards and one of the best-known vendors, has been criticized for relying partially on problematic renewable energy certificates.

[Tom Arnold](#), chief environmental officer for the [San Francisco](#)-based company, said TerraPass is doing the best it can but has been hampered by a lack of agreement about what an "offset" is supposed to mean.

"The real problem is that there is not even a consensus among environmental groups" about how to define a worthwhile project, Arnold said. "Companies like TerraPass are kind of stuck in the middle."

Analysts also have concerns about the methods used by Carbonfund.org, the Silver Spring nonprofit. It was founded by a former [Environmental Protection Agency](#) official, with the goal of providing low-cost offsets - at \$5.50 per ton, they cost less than half the price of NativeEnergy's.

One example: Carbonfund.org donated \$16,249 to the National Arbor Day Foundation, which promised to plant trees in U.S. national forests. But officials at the foundation said it would be difficult to know exactly how much carbon the trees, \$1 each, would offset.

"You cannot say, 'We can nail it down to the exact pound of CO₂,'" said Kevin Sander, the foundation's director of corporate partnerships.

Carlson, Carbonfund.org's executive director, said his organization estimated the offset value of the trees, using what he said are common industry standards. He said the group actually purchased more trees than the models showed were needed.

But this year, Carlson said, the organization stopped counting offsets from these projects and is using others whose benefits are more certain.

Also, Carbonfund.org bought renewable energy certificates, often from middlemen, that came from a number of wind farms in the western United States. But, at several facilities, officials said the group's donations had not produced anything new.

"We've invested in wind generation" as a way of having a diverse portfolio, said Melissa McHenry of American Electric Power, whose subsidiary buys power from an [Oklahoma](#) wind farm that Carbonfund.org says it supports. "It's not related at all to Carbonfund."

Carlson responded that, even if a particular utility is not aware of Carbonfund.org's purchases, buying the certificates is a good thing overall -- as it stimulates the building of wind farms.

Still, in response to a reporter's queries, Carlson said that the Carbonfund.org Web site would add a clarification, reading in part, "The above carbon offset figures are ESTIMATES."

Recently, U.S. [Rep. Edward J. Markey](#) (D-Mass.) asked the EPA and the FTC to consider setting standards for the industry.

The [Sierra Club](#) advises avoiding offsets, unless you have remade your life to be climate-friendly.

"We would recommend that, instead of taking that \$100 and buying a carbon offset, that you take that \$100 and invest in something" such as energy-saving compact fluorescent light bulbs or an insulating blanket for a home water heater, spokesman Joshua Dorner said.

Post a Comment

Ad

Join the discussion. Sponsored by Cisco.  welcome to the human network. **cisco**

[View all comments](#) that have been posted about this article.

Your washingtonpost.com User ID, jliuchicago, will be displayed with your comment.

You must be logged in to leave a comment. [Log in](#) | [Register](#)

Comments that include profanity or personal attacks or other inappropriate comments or material will be removed from the site. Additionally, entries that are unsigned or contain "signatures" by someone other than the actual author will be removed. Finally, we will take steps to block users who violate any of our posting standards, terms of use or privacy policies or any other policies governing this site. Please review the [full rules](#) governing commentaries and discussions. You are fully responsible for the content that you post.

© 2007 The Washington Post Company

Ads by Google

[SunPower For Your Home](#)

Up to 50% more solar power. Free evaluation at 1-877-SUN-0123
www.SunPowerCorp.com

[Guide to Carbon Funds](#)

Analysis of carbon funds for investors, buyers & sellers
www.icfi.com/carbonfunds

[Carbon Dioxide](#)

Learn More About New Initiatives To Combat Pollution & Climate Change.
[BP.com](#)