

# Clean air for sale: Investing in the environment

by [Katherine Ellison](#) in the [March 8, 2003](#) issue

Can you put a price on the value of forests or wetlands? Adam Davis thinks you can, and that doing so will help save precious ecosystems.

The California businessman dreams of starting a Conservation Exchange that would allow people to trade in the beneficial natural processes that take place in undeveloped forests, wetlands and other areas. For example, a company seeking to make amends for its high emissions of CO<sub>2</sub>, a leading greenhouse gas, could buy a “carbon credit” from a forest owner whose trees absorb CO<sub>2</sub>. A company that is polluting streams might buy a credit from a landowner whose wetlands help purify water.

Davis’s plan isn’t that far from reality. Governments around the world are trying to provide businesses with ways to make up for the damage they wreak on the environment. Under the U.S. Clean Water Act, developers who destroy wetlands have been allowed to make amends by investing in restoration projects elsewhere, even by buying “credits” in conservation “banks” managing large areas of undeveloped land. And the Kyoto Protocol, the draft international treaty on climate change, makes it possible for corporations to earn credits for investments in new forests and thus cancel out or “offset” their emissions of greenhouse gases.

A Conservation Exchange would make it easy for developers who need credits to buy them from conservation-minded landowners. And as growing populations and human appetites reduce the supply of undeveloped land, the law of supply and demand will kick in to ensure that the value of the credits increases over time.

That means that a forest might be more profitable left standing than reduced to timber. Financial incentives would encourage conservation instead of development, and careful stewards would be rewarded for their efforts.

“These services have value,” Davis says. “Not just tree-hugging value, but real, financial value.”

Davis, along with theorists Paul Hawken and Amory and L. Hunter Lovins, is trying to change how we think about planetary life-support systems. They are advocates of “natural capitalism,” which encourages us to think of natural resources as vital assets that we should identify, measure and tend just as we do physical capital such as factories and machines. Historically, we’ve taken natural resources for granted, perhaps because they’ve always been plentiful. But recently we’ve come to an alarming threshold, where our natural wealth is dwindling before our eyes.

The good news is that pioneers are confronting the challenge with a medley of projects. One particularly dramatic experiment, set to launch in a few months, is the Chicago Climate Exchange, or CCX. It is a pilot market that will trade credits in six greenhouse gases. Probable participants include more than 40 companies—their combined greenhouse gas emissions are almost equal to Germany’s national output. The U.S. government doesn’t restrict a business’s right to emit greenhouse gases, despite an overwhelming consensus by scientists that emissions released from the burning of fossil fuels are contributing to climate change. Yet Ford, American Electric Power, DuPont and other major firms are convinced that such a law is likely in the future. They are preparing to agree to a voluntary limit that would start out small, then increase in size over time.

The CCX is inspired by the world’s largest and most successful trading program in pollution permits—the “cap-and-trade” market used by the Environmental Protection Agency to cut back emissions of sulfur dioxide (SO<sub>2</sub>), the toxic gas responsible for acid rain. The EPA launched the trading market by giving each of the nation’s 200 or so largest power plants a cap on SO<sub>2</sub> emissions, and then reducing that limit each year. Companies seeking to meet their cap can choose: invest in new technology, pay costly fines or buy allowances from plants that are able to reduce their SO<sub>2</sub> with less expense. The result? EPA officials say the program has reduced SO<sub>2</sub> levels to 30 percent of what they were in 1990, at a fraction of the originally anticipated cost.

Financial inventor Richard Sandor, the brains behind CCX, has studied how to market environmental commodities. In the 1990s he helped Costa Rica package and sell “carbon credits” based on the amount of carbon dioxide absorbed by tropical forests. Sandor believes that market forces must establish formal values, or prices, for environmental services. “Without prices being set, nature becomes like an all-

you-can-eat buffet—and I don't know anyone who doesn't overeat at a buffet," he says.

Like the Kyoto Protocol, the CCX will allow companies to invest in offsets, agreements to make up for pollution in one place by reducing it in another. Conservation groups, including the Nature Conservancy, are participating in the exchange in hopes of selling offsets based on investments in threatened forests in Brazil and Mexico.

To be sure, both allowances and offsets boil down to permits to pollute—a divisive tactic. Critics see the potential for exploitation, and claim that environmental credits will make it easier to pollute. Others warn that the strategy is too modest, and that we must make huge cutbacks in our fossil fuel dependence to combat the risks of climate change. A trade in greenhouse credits “is still best used as a fine-tuning instrument,” says climate activist Ross Gelbspan, author of *The Heat Is On*. “It is not the workhorse vehicle needed to propel a global energy transition.”

Despite these criticisms, many are accepting pollution permits as at least a temporary strategy. Paul Gorman, executive director of the Religious Partnership for the Environment, is wary of the approach. “I . . . sigh and wait to be convinced that it's for the common good,” he says. “It doesn't represent human ingenuity and purpose at its most evolved. But the reality is we have some immediate needs to meet.”

Gorman and others are already applying the offset strategy to personal purchasing decisions because they are, as he says, “committed to making a contribution to sustainability.” When he needed a second car, for example, and couldn't afford a hybrid vehicle, Gorman settled for a car with normal gas mileage, then decided to donate to organizations that would “offset” the greenhouse gases that his new car will emit. Private companies, including nonprofits, are making offset alternatives available to businesses and individuals who want to “neutralize” their impact on the climate. The options range from investments in forests to upgrading public school boilers.

We'll be hearing more about experiments such as the Chicago Climate Exchange and the Conservation Exchange. As long as humans can't agree on a more sustainable course, and as long as self-interest continues to guide individual behavior, it's not a matter of whether or not we'll be investing in such strategies, but

how successful they'll be.

As Gorman says, "We make compromises with sustainability every day. The question is how conscientious and informed are we going to be about them?"