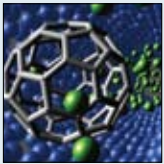


Vol. 39, No. 4

September 2008



**Nanotech:  
now in  
stores** 3



**Green is  
the new  
black** 4



**Keeping  
fish on  
the menu** 7



**Better  
than  
bottles** 10

**Where we stand** 2

**Victories from the field** 9

**GREEN LIVING  
Clean water** 10

## Getting closer: Senate majority calls for real debate on climate

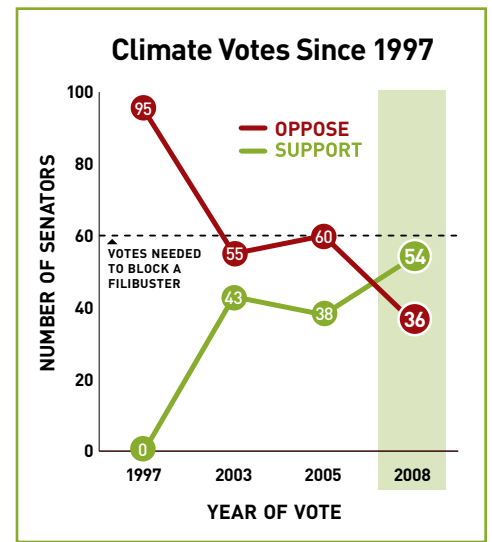
**NEXT PRESIDENT MUST ACT IN FIRST 100 DAYS**

“I did it for my children.” That’s how Florida’s Republican Senator Mel Martinez described his vote to advance the Lieberman-Warner Climate Security Act.

Martinez was joined by Max Baucus (D-MT) and nine other senators who previously voted against a similar measure—a sign of Washington’s transformation on this issue. For the first time a majority—54 senators—voiced their support for moving ahead with a climate debate.

Political game-playing ultimately blocked the measure, but the strong support helps set the stage for passage of a national climate bill in 2009. “Most of our opponents now accept the reality of climate change and the need for federal action,” says our climate campaign director Steve Cochran. “They are finally debating the details—that’s an important shift.”

Lieberman-Warner’s momentum elicited a furious counterattack from special interests—Big Coal, American Petroleum Institute and others—who



mounted a multimillion dollar campaign spreading fear that action on global warming would bankrupt America. We countered with sound science and economics, showing that a national cap on global warming pollution can improve both the environment and the economy.

*Continued on p. 2*

## Honoring ‘green ingenuity’

“We’re here to celebrate innovation,” our executive director David Yarnold recently told a roomful of corporate leaders at our San Francisco office.

California Governor Arnold Schwarzenegger agreed: “Environmental Defense Fund has again raised the bar to benefit the whole world,” he said at the project launch. “They recognized that ‘business as usual’ was changing, so they created a new way to assess environmental innovation.”

To encourage businesses to go far beyond recycled paper and efficient lightbulbs, we’re promoting new green practices that can strengthen companies’ bottom lines. Some of the most innovative are featured in our report, *Innovations Review*, at [edf.org/innovationsreview](http://edf.org/innovationsreview).

*See pp. 4–5 for some innovations worth watching.*



Issuing a challenge to business: Schwarzenegger and Yarnold urged corporate America to embrace green innovation. See a video of the project launch at [edf.org/innovationsvideo](http://edf.org/innovationsvideo).

Court Mast

# Global warming and the price at the pump



When gas prices topped \$4 a gallon this summer, Americans felt the pinch, particularly people on limited incomes. Opponents of climate legislation were

quick to pounce, claiming that capping carbon emissions would push up fuel prices even further. Such scare tactics are misplaced.

A number of analyses—from EPA to the Energy Information Administration—have found that the overall cost to the economy from capping emissions will be very small, less than a penny on the dollar in terms of household consumption. The truth is that supply bottlenecks, Mideast politics and increased oil demand in China and India dwarf the projected impacts of climate policy.

Indeed, a recent MIT study shows that a cap-and-trade policy would slash oil imports—and save the nation tens of billions of dollars annually. How? By leveling the playing field for innovative startups like Verenium, an advanced biofuels company.

Verenium hired Anheuser-Busch's former head brewmaster to ferment the waste fiber left over from sugar cane

## Capping carbon will save the United States billions of dollars annually.

processing and turn it into fuel. Dozens of companies on the brink of similar clean-energy breakthroughs are waiting for the green light from Washington.

The light will turn green when Congress enacts a carbon cap. For the

first time, a majority—54 senators—voiced support this summer for considering national climate legislation. Senate rules required 60 votes, but with both presidential candidates backing a cap, the next round should be different. Corporate support for climate action also is stronger than it ever was for the Clean Water Act or Clean Air Act.

By passing strong cap-and-trade legislation, Congress finally can answer the public's call for a solution to global warming, rising gas prices and our dangerous oil addiction.

We can transform the \$6 trillion world energy economy and slow global warming if Congress acts. Let's work together to get the United States moving quickly. The health of life on Earth depends on it.

## Momentum builds for climate action in 2009

Continued from p. 1

We ran hard-hitting ads and mobilized grassroots support through our Action Fund while other supporters worked directly with key Senators.

### EACH VOTE COUNTS

“Every Republican in a tight reelection campaign this fall broke with the majority

of their party and voted for climate action—a sign that the politics continue to change for the better,” says Cochran. “But we still have work to do on both sides of the aisle. With climate, we can't let a single lawmaker off the hook.”

In Martinez's home state, we commissioned scientific studies showing that

Florida, with 1,200 miles of coastline, is uniquely vulnerable. Our “Faces of Climate Change” TV ads featured Florida business leaders calling for action on global warming. We even sponsored the world's first carbon-neutral fishing tournament in Miami. In the end, both Florida senators voted to move the bill forward.

Now we are setting our sights on the next president. Both candidates support a cap-and-trade system for greenhouse gases, but time is critical. “We're looking for a climate proposal from the next president in his first 100 days,” says Cochran.



HELP KEEP THE MOMENTUM GOING: Visit [edf.org/climatevote](http://edf.org/climatevote)



Hiram Barreira/Corbis

The political winds are shifting.

**e ENVIRONMENTAL DEFENSE FUND** finding the ways that work **Solutions**

Editor: Peter Klebnikov

Environmental Defense Fund, 257 Park Ave. South, New York, NY 10010. Main number 212-505-2100.

Membership questions: Call 800-684-3322 or email [members@edf.org](mailto:members@edf.org)

Mailbag: Mail to address above, call 800-927-6464 or email [editor@edf.org](mailto:editor@edf.org)

©2008 Environmental Defense Fund. Published bimonthly at New York, NY. ASSN 0163-2566

New York • Austin • Boston • Boulder • Los Angeles  
Oakland • Raleigh • Sacramento • Washington  
Project offices: Beijing, China • Bentonville, AR

**Online at [edf.org](http://edf.org)**

# NANOTECH

## INDUSTRY JOINS US IN ASSESSING THE RISKS

Who knew that some face creams contain tiny anti-oxidizing particles known as buckyballs? Or that some teddy bears use nanosilver to fend off harmful bacteria and mites? Nanotechnology, in which materials are engineered atom-by-atom, may sound like science fiction, but it's already on the shelves.

Touted as a revolution in everything from energy to medicine, this science of the ultrasmall is generating new uses at a furious pace, far outstripping scientists' understanding of the potential environmental and health risks. The problem is that materials at nano scale often have radically different properties from those at normal size. For instance, at nano scale aluminum is explosive.

So, in 2005 DuPont and Environmental Defense Fund created a partnership about how to assess the environmental, health and safety risks of nanomaterials. In 2007, we released the Nano Risk Framework, intended for use by anyone interested in commercializing nanoscale materials safely.

Less than a year later, DuPont, GE, Lockheed Martin, Nanostellar and UMass Lowell all are using our framework. GE said it "arguably sets a 'standard of care' for the nanotechnology industry and beyond."

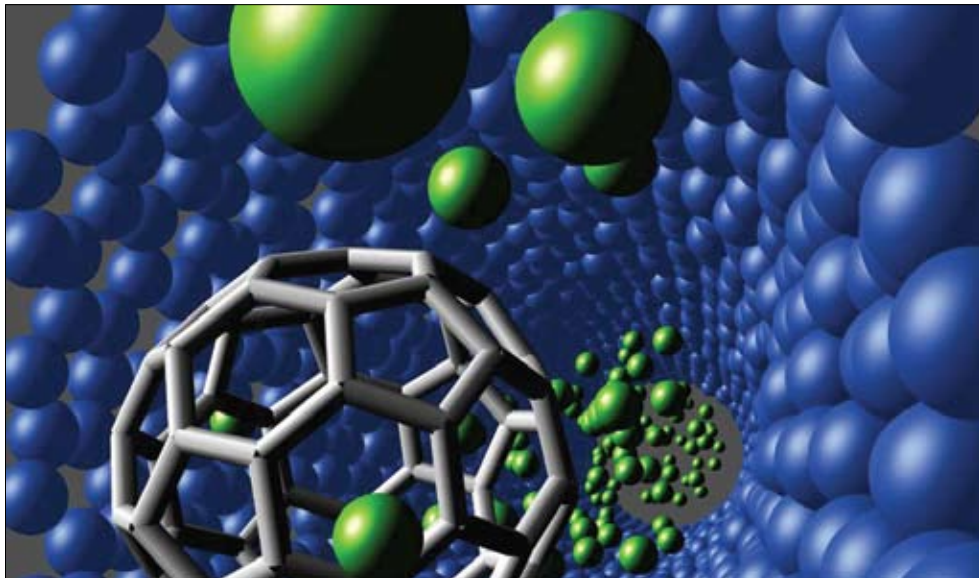
With major companies poised to adopt the framework, Lloyd's of London is encouraging its members to see that the nano projects they insure follow the framework.

"The response shows how necessary such safeguards are at this stage of nanotech's development," says our project manager Scott Walsh.

## MORE FEDERAL RESEARCH NEEDED

After testimony by our biochemist Dr. Richard Denison, the U.S. House of Representatives recently passed a bill to significantly increase federal research into the risks of nanotechnology and provide greater public information.

These precautions come not a



Named after the well-known inventor Buckminster Fuller, buckyballs are finding numerous uses in nano products.

Oak Ridge National Laboratory

moment too soon. A recent study in *Nature* reveals the sort of risk our work is designed to detect. The study found that a certain type of nanotube injected into lab mice triggered cellular changes like those caused by asbestos fibers in humans. Typically, these changes result in mesothelioma, a fatal form of cancer.

Such evidence, though so far inconclusive, argues for our prudent, scientific approach. An op-ed for the *Wall Street Journal* co-written by our president Fred Krupp and DuPont CEO Chad Holliday sums it up this way: "An early and open examination of the potential risks of a new product or technology is not just good common sense—it's good business strategy."



According to manufacturers, more than 500 consumer products use nanotechnology. Source: [nanotechproject.org](http://nanotechproject.org)

Photo by Ted Levine/Corbis



## Making GREEN the new business as usual



Frank Herhold/Getty Images

**I**n today's corporate America green is good. But how do you separate real innovations from mere window dressing? Environmental Defense Fund decided to find out.

We interviewed dozens of experts to assess 230 recent advances, ultimately selecting 31 for the first edition of our *Innovations Review* ([edf.org/innovationsreview](http://edf.org/innovationsreview)). Our goal is to spread the word about the best green practices and inspire change. We found a growing number of companies in all

sectors—technology, financial services, manufacturing, energy and retail—embracing environmentally preferable practices and saving hundreds of millions of dollars.

Companies once viewed pollution and waste as the cost of doing business. But soaring energy prices and global warming are changing that equation. In the new “business as usual,” waste is considered lost profit. Companies are trying to reduce waste and turn what's left into energy or new raw materials.

The innovations we've highlighted are good for the environment, good for business and ready to be implemented today. Here are a few standouts:

### BUILDINGS

Buildings are responsible for almost half of U.S. greenhouse gas emissions. In response, leading architects are creating affordable buildings that produce more energy than they use. One firm, Integrated Design Associates, transformed a 1960s building using today's technology to create America's first net-zero-energy office building. It features rooftop solar power, radiant heating and cooling, advanced insulation and workspaces lit by daylight. “The first thing we did was throw out the electric meter,” says the company's CEO David Kaneda, since the building uses no power from the grid.

Elsewhere, building owners are turning to innovative companies like SunEdison and SunPower to fund, install and maintain solar power systems. The building owners pay for the power while avoiding capital costs.

### TRANSPORTATION

America's corporate vehicle fleets are huge energy users. Seeking new ways to cut fuel use and global warming pollution, we have joined with PHH Arval, one of the world's largest fleet management companies, to launch GreenFleet.

Some GreenFleet clients use telematics systems that combine diagnostic software, wireless communication and location trackers to enable supervisors to monitor vehicles. By prohibiting excessive idling and speeding, they slash fuel consumption. This slashes fuel consumption by eliminating idling and speeding. GreenFleet recently was named Best New Service at the American Business Awards.

### INSURANCE

Americans need incentives to drive less. Auto insurance companies GMAC and Progressive are courting environmentally conscious consumers who tend to get behind the wheel less than other policyholders. Their mileage-based car insurance premiums go up or down depending on actual miles driven. This gives drivers a reason to reduce trips, thereby cutting pollution, fuel use and traffic congestion. We're helping more states change their insurance regulations to enable this pay-as-you-drive option.

### ELECTRONICS RECYCLING

Electronics trash is a major solid waste problem, clogging landfills and leaking toxic substances into groundwater. Staples has become the first national retailer to offer a consumer electronics recycling program. Consumers can recycle computers and most other equipment at all 1,400 Staples locations, regardless of where the item was purchased. Staples expects to recycle 400,000 tons of tech products per year.

Celebrating these breakthroughs at



Once tech trash, now raw materials.

LyaC/istockphoto.com

our San Francisco office, California Governor Arnold Schwarzenegger noted: “The one trait these companies have in common is leadership. This is exactly what we need to tackle the enormous challenges of climate change.”

## SPREADING THE WORD

The next step is to spread these innovations to a broad corporate audience. Environmen-

tal Defense Fund is building a web-based inventory of best environmental practices that businesses can use to improve energy efficiency, cut global warming pollution and reduce water use. We also are partnering with business schools to train the next generation of “Chief Green Officers.” We’ve already positioned top business school students inside seven major corporations to help the companies find

opportunities for environmental innovation.

“We want to shine a spotlight on innovative companies that can inform and inspire others,” says our vice president for corporate partnerships Gwen Ruta. “These solutions can create competitive advantage *and* protect the environment.”



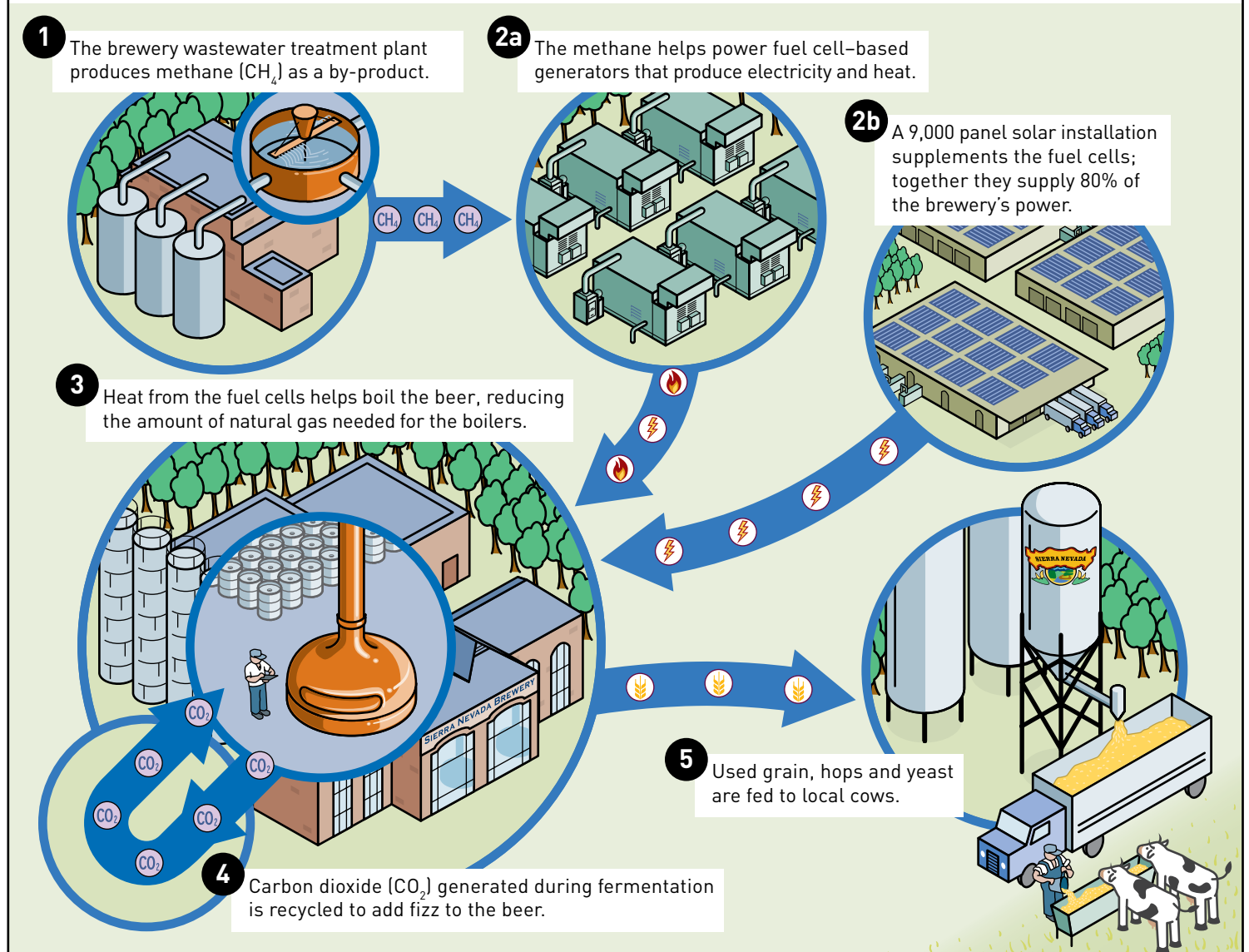
Find out more about some of America’s most innovative companies at [edf.org/innovationsreview](http://edf.org/innovationsreview)

## Brewing up a better source of power

It was 2000 and blackouts were roiling California. Ken Grossman, founder and CEO of Sierra Nevada Brewing, was sweating—and not because the office lacked air-conditioning. Without refrigeration, thousands of gallons of ale could spoil. So the Chico, CA, brewery opted for alternative, affordable sources of power. With help from the state, it built an integrated power generation system

that cut electricity purchases in half and reduced fuel costs by about 40% while slashing air pollution.

In Sierra Nevada’s system almost nothing is wasted. The total cost, factoring in tax credits and offsets: about \$5 million. No wonder brewery giants like Anheuser-Busch are lifting their glasses and following Ken Grossman’s example. Here’s how it works:





# Regional update

## Cleaner hog farms in North Carolina could be a national model

With an astonishing ten million pigs in North Carolina's hog industry, animal waste stored in open lagoons is a major environmental and health threat.

Now a program Environmental Defense Fund worked to enact last summer is poised to begin the installation of cleaner technologies, bringing relief to hog farmers, their long-suffering neighbors and the environment.

This June, under its new Lagoon Conversion Program, the state awarded grants of up to \$500,000 each to two hog farms and a nearby plant that will use new technology to turn the waste from 60,000 hogs into fertilizer.

"This is a great beginning for the state's push to convert all open-air lagoons to modern systems," said our scientist Dr. Joseph Rudek.

---

### New technology will turn waste into fertilizer

---

In recent years Rudek and his colleagues in our Raleigh office helped document air and water pollution from the open lagoons and shaped legislation that permanently banned new lagoons. Rudek also served on the committee that evaluated alternatives and chose the new waste treatment system, which cuts ammonia 80% and virtually eliminates pathogens and odor.

Along with Frontline Farmers, a coalition from the hog industry, we are working to make conversion to the new systems economically feasible. "Once we get these systems working on the ground, we can develop a market and bring down installation and operating costs," Rudek said.



Joel Satore/NGS

This little piggy...



Jeff Greenberg/Photo Edit

In the San Joaquin Valley, we helped enact the nation's first rule to hold developers accountable for pollution from sprawl.

## In California, a victory for sustainable growth

A California superior court judge recently upheld the San Joaquin Valley's innovative Indirect Source Rule, which we helped design and advocate. The rule requires real estate developers to use energy-saving and traffic-reducing designs to cut air pollution—or else pay a fee to reduce nearby pollution. It's a vital tool for combating the unhealthy effects of traffic and sprawl.

The eight-county Valley (whose population increased 60% from 1980 to 2000) stands to lose one million acres, much of it now prime farmland, to development by 2040. With that increase in sprawl will come more air pollution in an already dangerously affected area. Kids in the valley are 35% more likely to have asthma than children nationwide.

Kathryn Phillips, manager of our Clean Air for Life campaign, successfully intervened when a building trade association challenged the rule. But the association is now appealing the court's decision.

"Their concern is that the San Joaquin rule is just the camel's nose under the tent—and they're right,"

---

### Asthma rates among Valley kids are 35% above average

---

Phillips says. "Our role is to make sure that camel gets inside every air district where this rule can help." To that end, we're working to include similar development rules in California's plan to implement the Global Warming Solutions Act.

# New life for a West Coast fishery

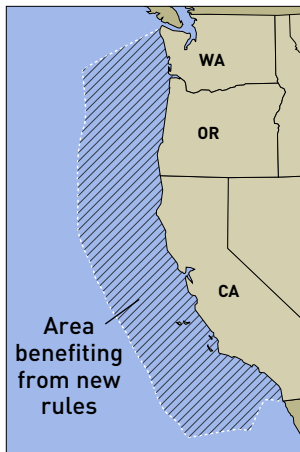
INNOVATIVE PROGRAM WILL KEEP POPULAR PACIFIC FISH ON THE MENU

In a major breakthrough, the Pacific Fishery Management Council approved a preliminary plan this summer to revive the West Coast's largest fishery, which has been severely depleted in recent years. The "catch share" approach we've advocated will cover about 80 bottom-dwelling species collectively known as groundfish.

The West Coast catch of rockfish, a type of groundfish often marketed as red snapper, plunged by 70% during the last two decades. In 2000, the federal government declared the fishery a disaster and closed much of the area to trawling.

"The problem is not the fishermen," says Johanna Thomas, our Pacific fisheries projects director. "Fishermen have done everything that fishery managers have asked them to do."

Regulators have historically responded to overfishing by shortening the season. But such regulations set up a "race for fish," which leads to dangerous fishing conditions, overinvestment in boats and gear, market gluts and excessive bycatch (the capture of unwanted species that are dumped overboard).



## CATCH SHARES WORK

With catch shares, each trawler is simply assigned a percentage of the scientifically determined total allowable annual catch. Captains can go out whenever they want and also have the option to instantly trade

their shares with other boats if the need arises. For example, if a fisherman takes more than his share, he can buy available shares from someone else, still keeping the total catch within the limits.

As the fishery recovers, each share becomes more valuable, giving fishermen a long-term financial stake in the health of the system.

"It is a sophisticated approach because it rewards fishermen for conservation," says Thomas. A catch share program we helped develop for red snapper in the Gulf of Mexico has reduced bycatch by 50% and fishermen report a 30% increase in dockside fish prices.

Catch shares have proven successful in dozens of fisheries worldwide. Our goal is to make them the standard for reviving ailing U.S. fisheries.

"Without Environmental Defense Fund, I don't think the fishing community would have learned about the science and economics of the fishery," says Brian Mose,



With catch shares, trawlers are safer and waste less fish.

a trawl fisherman in British Columbia. Canada introduced a catch share system for groundfish that has led to healthier fish stocks, better prices and less waste.

## AN OBSERVER ON EVERY BOAT

One critical aspect of the Pacific plan is its call for full monitoring. It will put official observers, backed up by video cameras, on each of the boats. Monitoring allows regulators to eliminate the guesswork that has long plagued fisheries management.

Before the final vote on the plan in November, our team will work with conservation and fishing allies to protect these strong environmental measures.

"It's been a long, hard process," said Donald Hansen, the council's chairman. "But when it's over, we'll have a cleaner way of fishing."



## MEET YOUR HEIRS

They soar through the air... roam the land... swim the seas. These creatures big and small will benefit from your bequest to Environmental Defense Fund. A gift through your will, living trust, IRA,

401(k) or life insurance is also deductible from your estate, so those close to you will also benefit. A bequest to Environmental Defense Fund is a powerful way to make certain that your values endure.

For details on including us in your estate plans, contact Nick Pitaro at Environmental Defense Fund, 257 Park Avenue South, New York, NY 10010; 877-677-7397; [ospreys@edf.org](mailto:ospreys@edf.org).

# Wal-Mart steps forward on solar power

OUR NEW ALLIANCE TRIES OUT NEXT-GENERATION TECHNOLOGY

Last year, the world's largest retailer introduced its biggest product ever: the sun.

Wal-Mart began installing solar photovoltaic panels to turn sunlight into electricity at 22 of its sites in California and Hawaii. The panels are a step toward the goal of using 100% renewable energy, just one example of the retailer's ambitious environmental initiatives.

Although Environmental Defense Fund has worked with Wal-Mart for several years, our alliance really took off when we opened a new office in May 2007 near the company's Bentonville, AR, headquarters. Since then, our team has been on the scene to take part in direct conversations with Wal-Mart decision makers.

"We've become integrated into projects that we wouldn't have been able to work on when everything was being done long-distance," says

our project manager Michelle Harvey.

## A SOLAR SKIN FOR BUILDINGS

For solar power, Harvey is helping Wal-Mart expand beyond conventional rigid panels. Although the California and Hawaii sites are bolting heavy panels onto existing roofs, that method is problematic in Northern states, where many facility roofs could not handle the combined weight of solar panels and snow.

This got Wal-Mart interested in next-generation solar cells, including flexible thin films and "building-integrated photovoltaics," whose cells are incorporated into building materials such as roofing or windows. Speeding such new technologies to

market is the focus of our new project with Wal-Mart.

We'll work with Wal-Mart to conduct pilot projects at sites around the country to assess the performance of new solar technologies. Says Harvey: "Our hope is that the project will shorten the time required to make the most promising solar products commercially available."

And what has surprised Harvey most about working with Wal-Mart? "Their absolute openness to new ideas," she said. "In retrospect it really shouldn't be that surprising. Wal-Mart didn't get to be the world's biggest company by being stuck in a groove."



Here comes the sun: Our aim is to bring better solar products to market sooner.

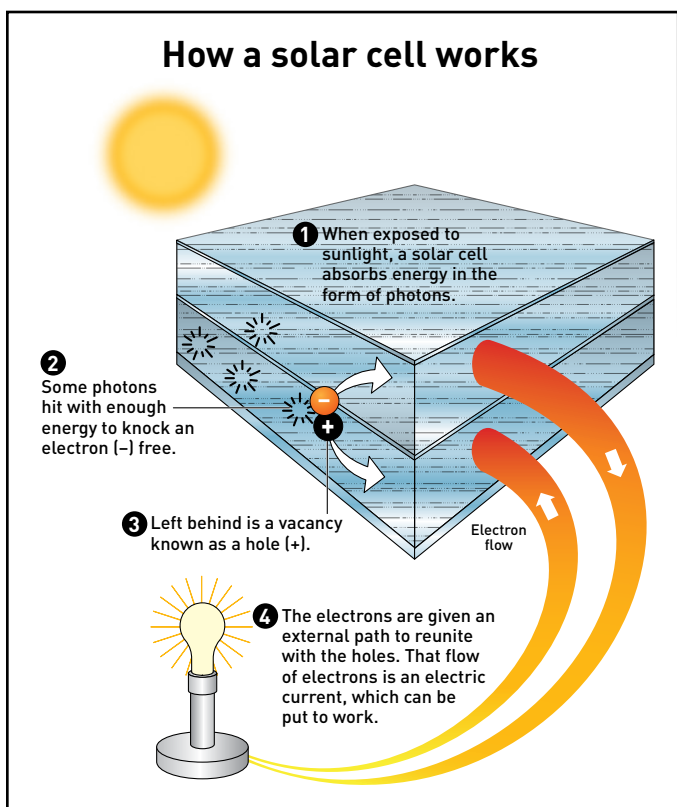
## DEMANDING BETTER PRODUCTS

Wal-Mart also has been making its mark with initiatives aimed at reducing packaging, increasing recycling and even turning waste into energy—while inspiring other retailers, suppliers and manufacturers to follow suit. How will all these changes measure up? That's where we come in.

Harvey and her Environmental Defense Fund colleague Andrew Hutson are now helping Wal-Mart develop ways to calculate such sustainability attributes as energy efficiency and greenhouse gas emissions of products throughout their life, from manufacture to use to recycling or disposal. The product sustainability standards being developed will give Wal-Mart's corporate buyers the information they need to choose the most environmentally friendly products to stock.

Our goal is to have these sustainability criteria adopted by the entire retail industry.

By demanding more from its 60,000 suppliers, Wal-Mart is creating ripples everywhere. "A company might wonder, 'Why do we have to do this stuff if it's only Wal-Mart who wants it?'" Harvey said. "But Wal-Mart's just the first. If Wal-Mart wants it, everybody is going to want it."



Conventional solar cells are made from rigid crystalline silicon, but new technologies are enabling the manufacture of cheaper, thinner, flexible solar films.



On the web: More on our Wal-Mart alliance [edf.org/walmartproject](http://edf.org/walmartproject)



## Tax break for trees

After championing the idea for more than a decade, our North Carolina office is celebrating a new state law that gives landowners the flexibility to protect and restore wildlife habitat on their land without paying significantly higher taxes. Before the new law, landowners who cut their timber or farmed their land got large tax breaks, but those who managed their land for wildlife or water quality paid the highest tax bills.



The new NC law helps landowners preserve forests as wildlife habitat.

Higher taxes often force owners to sell their land. North Carolina, which loses more than 100,000 acres of forest every year, also leads the nation in the loss of farms. Under the new law, however, landowners who have rare species or certain types of habitat can enroll in a new tax classification to protect their property.

“This bill gives equitable tax treatment to landowners, whether they actively grow trees to be harvested and sold or use their land to protect wildlife and clean water,” says our forestry specialist William McDow.

## Mama turtles return, thanks to a cross-border rescue mission

Endangered Kemp’s ridley sea turtles spend their lives in the ocean but when the time is right, the females return to lay their eggs on the same beaches where they themselves were hatched. This year, 193 turtles nested on Texas beaches, setting a record for the fifth straight year.

It’s an astonishing recovery. By the late 1970s, Kemp’s ridleys had disappeared from Texas. Their last remaining nesting site was in Mexico. To head off extinction, a remarkable binational coalition of scientists managed to “imprint” hatchlings from Mexico to return to Texas.

Environmental Defense Fund and allies then helped protect turtles



Silver dollar-sized Kemp’s ridley babies scramble across a Texas beach to their new ocean home.

by persuading Gulf shrimpers to install “excluder devices” that allow turtles to escape their nets. Later, we helped draft regulations to keep shrimp boats out of sensitive inshore waters during egg-laying season.

“Bringing a species back from the brink is possible,” says our marine biologist Pamela Baker.

## Court rejects EPA’s bad mercury rule

In a major win for public health, a federal appeals court ruled in our favor recently and invalidated EPA’s so-called Clean Air Mercury Rule. The regulation would have established a cap-and-trade program for mercury pollution from power plants. Environmental Defense Fund filed suit along with a broad coalition of doctors’ groups like the American Academy

of Pediatrics, other advocacy organizations and 17 states.

Although we advocate cap and trade for pollutants like sulfur dioxide and carbon dioxide, we opposed it for a potent neurotoxin like mercury because trading could lead to toxic hot spots. We also publicized how EPA was strong-arming states into adopting weaker laws. That news received nationwide coverage. Driven by stronger state standards, utilities across America now are installing advanced mercury controls that just two years ago critics claimed weren’t commercially viable.

“States took the lead to protect their citizens,” notes our deputy general counsel Vickie Patton. “Now EPA needs to follow the law with national mercury standards that will protect every community in America.”



We sued to stop toxic mercury ‘hot spots.’

## TAPPED OUT

### THE ENVIRONMENTAL COST OF BOTTLED WATER

It's ironic. In many parts of the world, there is no access to safe drinking water. Here in the United States, clean, drinkable water flows straight from the tap, and yet Americans buy a staggering amount of bottled water. We pay big bucks for it, too—more than \$20 billion a year.

Twenty percent of Americans drink only bottled water, with many believing that their municipal supplies are unfit for human consumption. Recently some of us have begun turning back to the tap, but the bottled water industry is still growing, just more slowly—6.3% last year vs. 8.9% in 2006.

Bottling water has major environmental consequences. Production of the 30 billion plastic bottles that entered the waste stream in 2006 (fewer than 20% were recycled) used the equivalent of 17 million barrels of oil and created 2.5 million tons



Bob Torres/PhotoEdit

Still best for your health and the environment: a good old glass of water.

of carbon dioxide. Three gallons of water were wasted for every gallon bottled.

We pay only .002 cents per gallon for municipal water, which makes bottled water 1,000 times more expensive. That's a lot to pay for convenience! Here are a few more facts to consider:

- **BOTTLED-WATER STANDARDS MAY BE WEAKER.** If water is bottled and sold within the same state, the standards that govern it are far weaker than those for tap water, although 44% of bottled water actually originates from municipal

sources. Elizabeth Royte, author of the new book *Bottlemania*, says that “abandoning our municipal water supplies would be a tragedy.”

- **HAULING WATER HAS HIGH COSTS.** An Environmental Defense Fund report finds that 25% of bottled water is shipped across national borders. For instance, Fiji Water must travel 5,000 miles or more from its source in the South Pacific to your supermarket. Manufacturing and shipping a one-liter Fiji bottle produces half a pound of global

## Wondering what's in the water?

RESOURCE CENTER

**The Environmental Protection Agency's Safe Drinking Water Hotline** is 800-426-4791. To locate state-approved testing labs or local health authorities: [epa.gov/safewater/labs](http://epa.gov/safewater/labs)

To detect the presence of chlorine, lead or other contaminants in your water at home: **The Watersafe All-in-One Drinking Water Test Kit** (\$20), [h2okits.com](http://h2okits.com)

An excellent overview on the problems with bottled water can be found at our **Climate 411 Blog**: [environmentaldefenseblogs.org/climate411/category/green-living/drinking-water/](http://environmentaldefenseblogs.org/climate411/category/green-living/drinking-water/)

**Bottlemania: How Water Went on Sale and Why We Bought It** by Elizabeth Royte (\$24.99), Bloomsbury.

Guest columnist Jim Motavalli writes for *E/The Environmental Magazine* (for subscription information: 800-967-6572 or [emagazine.com](http://emagazine.com)). Opinions are the author's and not those of Environmental Defense Fund staff.



warming pollution and uses almost seven times as much water as the bottle contains. The clamor over this waste (and the fact that half of Fiji's people don't have reliable drinking water) reached such a crescendo that the company recently announced it would offset all its carbon emissions.

- **REUSABLE CONTAINERS CAN BE PROBLEMATIC.** Although most bottled water comes in single-use containers made of PET plastic, some recent news reports focused on the danger of heavier reusable plastic bottles made of polycarbonate. These can leach the endocrine-



Photos.com

Think your designer water comes from here? Not likely.

disrupting chemical bisphenol-A (BPA) into the water. BPA has been linked to low sperm counts and both breast and prostate cancer.

- **WATER FILTERS WORK.** According to *Consumer Reports*, the best water filters are suitable for removing many common contaminants from tap water, including chlorine, lead (still found in many older household pipes) and *E. coli*. Thirty-five percent of U.S. homes have a Brita water pitcher.

By Jim Motavalli

## Cleaner energy will help address poverty worldwide

### OUR PROJECTS IN BANGLADESH AND CHINA GIVE HOPE FOR THE FUTURE

How will the developing world grow without becoming entrenched in polluting practices? As the economies of countries like India and China gallop forward, they must choose between dirty and cleaner fuels. Giving these countries access to pollution-reduction credits in a global carbon market can tilt the balance toward cleaner fuels.

#### 'We need a new economic paradigm'

Environmental Defense Fund projects in Bangladesh and China are demonstrating this combination.

In Bangladesh, the use of charcoal, kerosene and wood for fuel causes severe air pollution. Dinnertime in poor areas of Bangladesh can mean a room filled so thickly with smoke from cooking, you can't see to the other wall. Every year, more than 1.6 million people die prematurely from breathing polluted air.

Our partnership with Grameen Shakti, a division of Grameen Bank and E+Co, seeks to change this. Grameen is opening a factory in Bangladesh to build biogas digesters, a far cleaner source of fuel. The digesters take organic waste like cow dung and capture the gases from its decomposition. This fuel burns cleanly, so homes are less polluted.

A vital added benefit: Digesters keep tons of greenhouse gases out of the atmosphere. These tons have monetary value in the global carbon market. Environmental Defense Fund and E+Co, a nonprofit investment company,

have agreed to sell 8,000 tons worth of pollution-reduction credits from the project, cutting the cost of the digester for families. We aim to reach 20,000 households in the first pilot phase, potentially reducing 80,000 tons of carbon.

In China, we've already had success combining greenhouse gas reduction with poverty alleviation. After our experts taught poor Chinese farmers how to adopt climate-friendly practices such as no-till agriculture, American International Group (AIG) agreed to buy the resulting carbon reduction of 310,000 metric tons over three years.

Next we aim to expand our work to other developing nations. A prime focus is India, where rapid growth has just begun and industry is not yet dependent on dirty fuel. "The path toward climate stability and the path out of poverty have to be the same," says Goldmark. "Otherwise, we're going nowhere."



Peter Arnold Inc.

Safer fuels in Bangladesh mean less global warming pollution.



# A rare bird returns to Texas ranches

'SAFE HARBOR' HELPS LANDOWNERS HELP WILDLIFE

“Every year we go out and listen for the birds: nothing. This year, suddenly birdsong was everywhere.” That’s how Environmental Defense Fund ecologist David Wolfe described his thrilling encounter with endangered black-capped vireos on Kerry Russell’s ranch in central Texas this spring.

Since 2001, Russell has worked with us to restore habitat for the tiny songbird on his 130-acre ranch, which sits just beyond the reach of Austin sprawl. He participates in Safe Harbor, our program that encourages landowners to protect species while avoiding new restrictions on their land.

Before Safe Harbor, some people actually destroyed valuable habitat to avoid Endangered Species Act regulations. Today, the owners of nearly four million acres nationwide are welcoming endangered species under Safe Harbor agreements.



John Rae

Unlikely birdwatching pair: Our ecologist David Wolfe (left) and rancher Kerry Russell.



Greg Lasley

Smaller than a sparrow, the black-capped vireo courts its mate with song and dance.

Dozens of Texans signed on to Safe Harbor, and now their efforts are starting to pay off: Sixteen vireos are nesting in restored habitat. “Many ranchers may not call themselves conservationists,” says Russell, “but I believe our love for the land makes us natural allies with those wanting to leave a positive legacy for future generations.”

Now, conservation-minded landowners also can get federal tax relief. A provision we won in the recent Farm Bill gives farmers and ranchers a tax deduction for the money they spend creating habitat for rare species, up to 25% of gross income. The measure garnered support from across the political spectrum—from the American Farm Bureau to Defenders of Wildlife.

“Farmers and ranchers manage more than half the continental U.S., so they are critical to protecting wildlife,” notes our endangered species specialist Margaret McMillan. “They deserve financial help for their good deeds.”

## LESSONS FROM THE FLOOD

As residents of the Midwest faced near-record flood waters this summer, some questioned whether this disaster was really all that natural. Over the past century farms have overtaken nearly all the region’s wetlands and streamside forests—areas that once retained and absorbed floodwaters. Extensive levee networks have often worsened the problem by cutting rivers off from their natural floodplains.

In the recent Farm Bill, we helped secure \$4 billion for farmers to restore streamside forests and wetlands and take other conservation steps. Sadly, this still falls short: Since 2002, \$13.5 billion in requests for conservation assistance have gone unfunded.

Meanwhile, billions in environmentally harmful agricultural subsidies continue, thanks to lobbyists who fought back efforts at reform. We want to end this travesty in the next Farm Bill in 2012. “Americans need to know how dramatically farm policy affects every one of us,” says our attorney Sara Hopper. “We can no longer allow special interests to dominate this debate.”



AP Photo

This summer’s Midwest floods—a ‘natural disaster’?



Solutions

Environmental Defense Fund  
257 Park Avenue South  
New York, NY 10010

Address Service Requested

Totally chlorine-free 100% recycled (75% post-consumer) paper

NON-PROFIT ORG.  
U.S. POSTAGE  
PAID  
ENVIRONMENTAL  
DEFENSE FUND