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Victory at the Supreme Court

ENVIRONMENTAL DEFENSE IS PARTY TO TWO HISTORIC WINS FOR CLEAN AIR

In what could become its most broadly influential decision of all time, the Supreme Court ruled in April that the federal government has the authority to regulate global warming pollution from cars and trucks. On the same day, the court also ruled in our favor that old power plants must install modern pollution controls when they expand operations and increase air pollution. It was a double win for the environment.

The ruling on vehicles affirms what Environmental Defense has long argued: Carbon dioxide and other heat-trapping gases are air pollutants and EPA should exercise its authority under the Clean Air Act to reduce them.

"This is one of the most important environmental cases in history," said our attorney Vickie Patton. "The high court ruled that law and science together compel EPA to roll up its sleeves and get serious about this urgent problem."

In its 5-4 decision, the court sided with a coalition of states and environmental groups, including Environmental Defense. The ruling refuted the Bush administration's claim that EPA lacks the power to regulate global warming pollution.

The majority concluded that the Clean Air Act gives the federal government jurisdiction over "any" air pollutant and that the sweeping statutory definition "embraces all airborne compounds of whatever stripe." Greenhouse gases fit that definition. Moreover, the court held that states have the right to sue

for stronger standards, since rising sea levels and other consequences of global warming can harm their citizens.

The Supreme Court agreed to hear the case (*Massachusetts et al. v. EPA*) last May, marking the first time it addressed global warming.

The decision has far-reaching implications. Global warming court cases around the country had been held up to await its outcome. Meanwhile, states are moving aggressively to fill the regulatory vacuum (*see map, pp. 6-7*). The high court decision boosted those efforts.

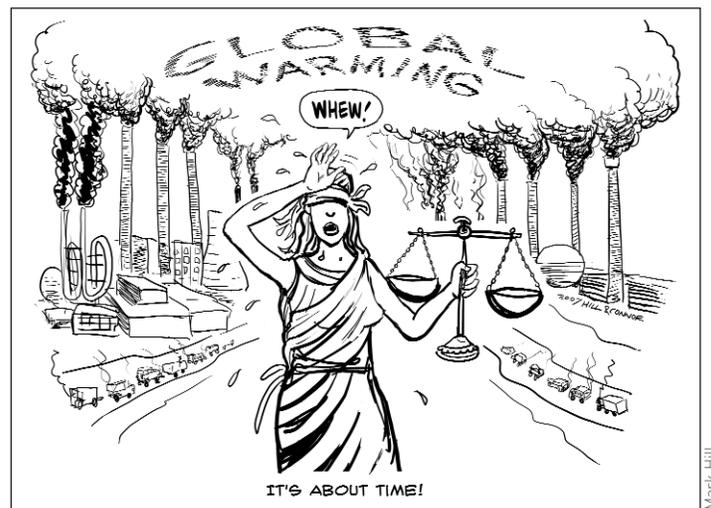
In the past year, the politics of global warming have changed dramatically, with corporate leaders and many in Congress demanding action. "[This] ruling provides another compelling reason why Congress must enact, and the president must sign, comprehensive climate change legislation,"



Justice John Paul Stevens's opinion swept away all excuses for inaction.

J. Scott Appiewhite/AP

Please see
Cover Story, p. 2



Mark Hill

The window opens for climate action



The Supreme Court's ruling on global warming pollution is momentous. Not only does it affirm EPA's authority to regulate carbon dioxide and other

heat-trapping gases, it provides a boost for state and national legislation to cap and cut these dangerous emissions.

Many factors have contributed to this momentum, from Hurricane Katrina to Al Gore, but ultimately the most influential may be the expanding list of major corporations endorsing climate action. Recently, I got a call from a senior official at a multinational. He said it seemed as if half of corporate America was on board—with the other half about to join.

We are in a rare political moment. This was evident when I went to Capitol Hill with business leaders recently to urge passage of a market-based cap on greenhouse gases. The CEOs were members of USCAP, the groundbreaking alliance of Fortune 500 companies

We are in a rare political moment.

we co-founded that is pressing legislators to cap carbon emissions and then cut them by 60 to 80%.

One U.S. senator told us that this breakthrough alliance made him want to dance on the table—and he wasn't alone. Congress is considering at least seven climate bills.

The question on everyone's mind is: Should we press for federal legisla-

tion now or wait for the next administration? Science reminds us there's no time to waste.

Curbing global warming pollution will entail a shift in how energy is produced and used. The sooner the nation acts, the more options it will have and the less costly the solutions will be. Using the same rigor that we applied to help convince the Supreme Court, Environmental Defense will ensure that any legislation that moves forward contains no hidden loopholes.

From my experience, the spotlight doesn't linger, even on critical issues. We can't assume the window for climate action will stay open. Shakespeare said, "Delays have dangerous ends."

Court victories will advance lawsuits nationwide

Continued from p. 1

said Rep. John Dingell (D-MI), an auto industry ally. Businesses are on notice that they soon may be held accountable for their global warming pollution.

As historic as this ruling is, EPA may delay action and avoid responsibility. "We need Congress to swiftly pass a nationwide carbon cap to address the clear and present danger of global warming," said our chief scientist Dr. Bill Chameides. "Science tells us we don't have time to wait."

ENVIRONMENTAL DEFENSE LED PETITIONERS IN CLEAN SMOKESTACKS RULING

In the second case, *Environmental Defense et al. v. Duke Energy*, the Supreme Court ruled 9-0 that power plants and industrial facilities must install modern pollution controls when they expand and increase air pollution. At issue was a bedrock provision of the Clean Air Act known as New Source Review.

Our suit concerned plants in North and South Carolina. Many of these facilities were due to be retired. Instead, Duke Energy rebuilt them extensively, increasing air pollution. "Installing scrubbers on power plants is one of the most cost-effective investments in healthy air we can make," says our attorney Patton. "This is a huge win for communities across

America." It could immediately affect dozens of aging plants in the South and Midwest that have lawsuits pending.

In both Supreme Court cases, the court took the high ground. "The cases testify to the durability of the Clean Air Act, which was designed to respond to emerging science," said Patton. In the end, public health won the day.



The real winners

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ENVIRONMENTAL DEFENSE
finding the ways that work

Solutions

Editor: Peter Klebnikov

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

Membership questions: Call 800-684-3322 or email members@environmentaldefense.org

Mailbag: Mail to address above, call 800-927-6464 or email editor@environmentaldefense.org

©2007 Environmental Defense. Published bimonthly at New York, NY. ASSN 0163-2566

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Online at www.environmentaldefense.org

Thank you, Les.

Les Imboden produces more than soybeans and corn. He also produces clean water, clean air and habitat for wildlife.

Each year, Les manages 5,000 acres of Ohio farmland to protect surrounding rivers and streams and to provide habitat for dozens of wildlife species.

Unless we reward private landowners like Les, we can't meet some of America's toughest environmental challenges, such as clean drinking water and saving rare species. Unfortunately, three out of four farmers are rejected by USDA when they offer to share the cost of a healthy environment, because of misplaced federal spending priorities.

Renewal of farm and food policies by Congress this summer creates a rare opportunity to reward—rather than reject—farmers and ranchers when they offer to help meet our environmental needs.

Read "A Dozen Fresh Ideas for Farm and Food Policy" and learn what you can do to help farmers like Les Imboden at:

www.environmentaldefense.org

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ENVIRONMENTAL DEFENSE
finding the ways that work



Ads like this one appeared in local papers across the country recently, as 50 farmers joined Environmental Defense on Capitol Hill to press for reforms to the \$170 billion Farm Bill.

The current bill expires this year. An improved Farm Bill could do far more to help farmers and the environment, with huge benefits for water quality, wildlife habitat, sprawl and global warming.

We are backing measures to increase conservation spending and reward more farmers, ranchers and forest owners who take extra steps to be good stewards of the land.

Nearly 175 members of Congress have declared their support, and we've created a national campaign to build the pressure for change.



MAILBAG

Editor:

Regarding your recent article on Wal-Mart (*April Solutions*), consider the downside of these Big Boxes and how much money they take out of a community.

**Dorothy Stearns
Wilson, WY**

Our managing director of corporate partnerships Elizabeth Sturcken responds:

Wal-Mart critics have raised a number of issues—from community impacts to labor and ethical sourcing practices—that we take very seriously. Our goal is to improve Wal-Mart's practices, focusing on our area of expertise, the environment. We also hope that demonstrating the value of environmental innovations at Wal-Mart will help open the door for

progress on a wide range of social issues.

Wal-Mart has enormous environmental impact, but its market clout also represents an unprecedented opportunity for environmental change. The company has made some impressive progress, but Wal-Mart has much further to go to be an environmental leader. Environmental Defense will hold Wal-Mart accountable. It must set aggressive goals and achieve measurable environmental progress—we expect no less.

Regional update

Mayor's plan aims to make New York the nation's greenest city

On Earth Day, Mayor Michael Bloomberg unveiled PLANYC, an initiative hailed by our Living Cities director Andy Darrell as “one of the most ambitious environmental sustainability plans of any city on the planet.” The plan, which we helped create, will revamp New York City’s energy, water and transportation systems by 2030—helping Bloomberg meet his goal of a 30% reduction in global warming pollution. “The plan is visionary,” Darrell says, “because it attacks both climate and health in a broad way.”

The link between traffic congestion and air pollution is highlighted in our recent report, *All Choked Up: Heavy Traffic, Dirty Air and the Risk to New Yorkers*, showing that noxious vehicle emissions pose serious health risks near busy streets. Over two million New Yorkers live in such zones, which also contain many hospitals, schools and playgrounds. The city’s child asthma hospitalization rates are twice the national average.

We advocated congestion pricing as part of the solution. London, Singapore and other cities use sensors to charge tolls on vehicles entering the most heavily trafficked areas. As a result, traffic moves more efficiently and added revenue is used to improve mass transit. “Congestion pricing is a smashing success in London, a world capital comparable to New York,” says Darrell. “We believe it can work here too.”

Key to a healthier city: Fewer cars

 Learn more about cars and cities: Find our report *All Choked Up* at allchokedup.org.



Ahh...springtime. Stop and smell the fumes.



The typical fisherman earns 30% less than the average worker for a job that is 35 times more dangerous.

For fishing communities, a bridge over troubled waters

This summer, as families take to the seaside, they might consider that many of the nation’s fisheries are on the brink of collapse.

A comprehensive new report by Environmental Defense charts a course to rebuild those fish populations and revive struggling fishing communities. The study has created a buzz in the nation’s regional fishery management councils. “It points out workable solutions that will restore fish and fishermen to our waterfronts,” says Paul Parker, director of the Cape Cod Commercial Hook Fishermen’s Association.

We brought together a team of more than 30 scientists and economists to analyze ten catch share programs,

from Alaska’s halibut fishery to New England’s surf clam industry. Catch shares allocate a percentage of a fishery’s allowable catch to individual fishermen or associations.

Says Gulf snapper fisherman David Krebs: “We used to go out in dangerous conditions. With catch shares our jobs are safer and we deliver a higher quality product.”

“This study provides the hard data showing that catch shares work,” adds our Oceans director David Festa. The challenge for us now is to convert the buzz about catch shares into programs on the water—for Gulf grouper, Pacific groundfish and other depleted fisheries.

 Find the full report at sustainingfisheries.com

‘Catch shares’ work! Our report’s conclusions:

- Fewer fatal fishing accidents
- Healthier fish populations
- Revenues per boat up 80%, thanks to higher yields and dockside prices
- Bycatch [unintentional killing of fish] down 40%

New voices speak up for Caribbean's great barrier reef

Conservationists have a new set of allies—local fishermen—in the struggle to save the Western Hemisphere's largest barrier reef, the Mesoamerican Reef. Valuable habitat and fisheries have been lost along the reef's 180-mile length, and now the pristine coastlines are attracting mega-resort developers.

So what's a 68-year-old fisherman to do? That's what Captain Carlton Young, Sr., an elder of the Belize fishing industry, asked himself when he learned of plans for a massive resort in Placencia, a delicate peninsula ringed by uninhabited atolls. At capacity, the resort would accommodate 13,000 people, compared with the peninsula's current population of about 2,000.

Young, chairman of the Placencia Fishing Cooperative, teamed up with Environmental Defense to oppose the development in court. The effort is part of our Caribbean Fishing Leader Project, where we partner with community fishing patriarchs to protect habitat. From Belize to the Bahamas, Florida, Mexico

and Puerto Rico, fishing leaders have emerged from obscurity and joined forces across national borders to change policies and protect marine treasures including fisheries, atolls and corals.

"Fishermen are alarmed by the Caribbean's degradation—and by government inaction," says Young. During his 42 years on the water, Young has seen fish stocks plummet: "I used to think spiny lobster would never finish.

But now you run all over the place and you still won't catch a lobster. We have to face reality." With his allies, he has taken matters into his hands, helping create marine reserves at Laughing Bird Caye National Park and Silk Cayes and monitoring compliance by fishermen.

The fishing leaders' thorough knowledge of the undersea world has



James Berendse

The rufus-necked woodrail is one of the rare species protected by our alliance with community fishing leaders.

been invaluable as we've analyzed Cuban fishery management, built a global database of snapper and grouper spawning sites and identified a new species of shallow reef snapper.

Governments find it hard to brush off these local legends. "We don't rely on anyone," says Young. "And you can't buy our influence."

Showdown at Texas Petroleum Club saves 2 million acres



Heinz Plenge/Peter Arnold

When Shell began operations in the Peruvian Amazon in the 1980s, nearly half of the Nahua people died from introduced diseases. We're working to prevent more such tragedies.

When the Peruvian government decided to auction off new oil and gas leases that would leave 70% of its Amazon basin open to drilling, Environmental Defense helped local leaders take their

case for protecting key lands directly to the bidders. Our joint effort has saved more than two million acres.

"Nothing like this had ever happened before," says our Peru expert Aaron Goldzimer. With our allies, Goldzimer brought five Peruvian indigenous, human rights and environmental leaders to Houston, where thousands of oil business players had gathered to make deals.

At the aptly named Petroleum Club, where Peru's state-owned petroleum com-

pany was making its pitch, we showed that all of the leases included protected or indigenous lands. When the indigenous leaders, dressed in full tribal regalia, were refused the microphone, they spoke out

anyway: "The indigenous peoples of the Peruvian Amazon are against any further petroleum exploitation on our lands until existing problems are resolved."

The unprecedented intervention had an instant impact. Peru's Minister of Energy and Mines met with indigenous leaders the next business day, and the government agreed to exclude four key areas from oil and gas activity. The move will save huge tracts of forest, including 1.7 million acres of the Sierra del Divisor, which biologists describe as having "the highest conservation priority imaginable."

Still, much of the Peruvian Amazon remains on the auction block. We're working with our partners to change that. "The people of Peru—and especially the people who live in these areas—deserve more of a say in the fate of their tremendous natural inheritance," says Goldzimer.

Global warming: Our coast-to-coast action

Environmental Defense is building momentum for national climate action by working with powerful constituencies, such as farmers and business leaders, and by promoting state and regional programs to serve as national models. At least 300 bills that address climate change have been filed in 40 states, and more than 400 mayors have committed their cities to reduce emissions.

Our goal is to reduce greenhouse gas emissions 80% by the year 2050—the amount that scientists say is needed to minimize the risk of irreversible consequences. To achieve this, Congress must pass a cap-and-trade bill that sets a nationwide cap on emissions, coupled with a flexible, market-based trading system to reduce these emissions at lowest cost. Smart policies, American ingenuity and technologies available today can make the United States a leader in addressing global warming.

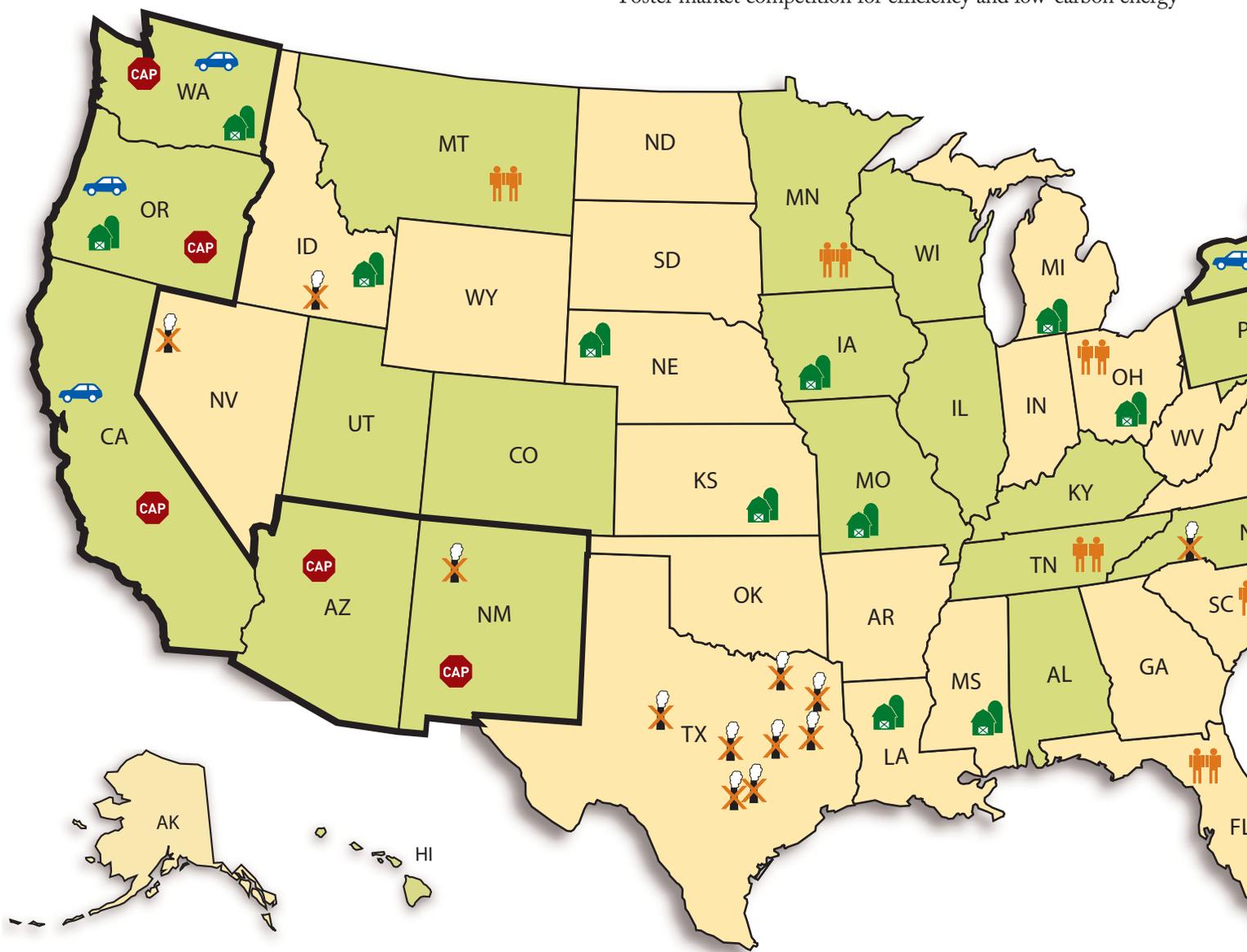
CLIMATE ON THE FRONT BURNER IN DC

Twelve of America's largest corporations joined Environmental Defense and other nonprofits in urging Congress to pass a market-based cap on global warming pollution. More companies are poised to join.

Meanwhile, seven climate bills are in the works in the Senate. We're pressing Senate leaders to knit together the best elements of these bills and pass a national cap during this 110th Congress. After years of inaction, the House has held ten hearings, and Speaker Nancy Pelosi promises action on legislation this year.

Effective legislation will meet our four criteria:

- Set a hard cap that reduces emissions enough to stabilize the climate
- Ensure all forms of global warming pollution are covered
- Establish new standards for environmentally sound biofuels
- Foster market competition for efficiency and low-carbon energy



on campaign

CAP Western governors take on climate

In February, five governors announced a regional initiative to track and reduce greenhouse gas emissions. We will work to leverage the program into national action.

CAP The Northeast: Focusing on power plants

This winter, MA and RI joined a regional initiative aimed at reducing power plant emissions 10% from 2009 levels by 2019, using a cap-and-trade system. We're working with member states to implement the agreement.

Cleaning up King Coal

The 150 old-fashioned coal plants on the drawing boards nationwide threaten to undo climate gains already achieved. We're working to promote energy efficiency, renewable energy and new coal technologies that reduce emissions.

Our campaign against energy giant TXU's rush to build old-style plants was so successful that when two firms bid to buy the company, they made their offer contingent on our approval of their plan to slash greenhouse gas emissions. This resulted in the

cancellation of eight coal plants in Texas.

We helped bring about a CA law requiring all power plants that provide dedicated electricity to the state (even out-of-state plants) to meet strict limits on greenhouse gas emissions. This helped lead to the cancellation of coal plants in ID and NV. Our efforts along with strong local opposition also led a coal plant in NM to be cancelled.

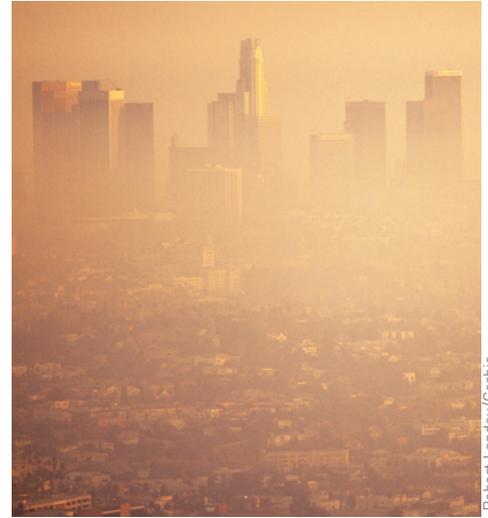
NC energy regulators refused to permit a new coal unit after we argued that efficiency and renewable energy could meet demand more cheaply.

CAP California enacts first statewide climate cap

California has emerged as a test case for successful climate regulations. Environmental Defense cosponsored the measure to reduce the state's emissions to 1990 levels by 2020, and now we are helping put the system in place, advising state agencies on opportunities for early action, cap-and-trade design, reporting and other regulatory issues that will ensure the law's success.

Farmers harvest carbon

With more than half the U.S. covered by farms, ranches and privately owned forests, landowners can play an important role in reducing heat-trapping gases—and gain new sources of income. In ID and other states, we're helping landowners



Robert Landau/Corbis

reduce emissions and measure and sell the carbon they store in crops, trees and soil. We're helping dairy farmers do the same with captured methane.

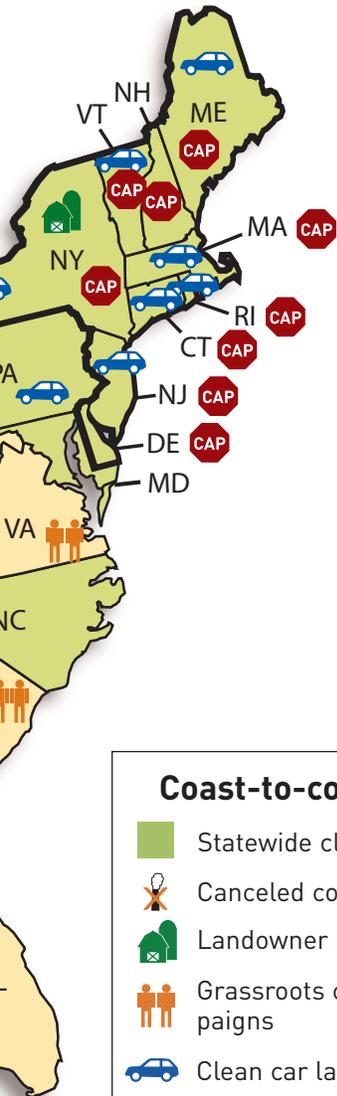
A commitment on cars

Supported by Environmental Defense, 11 states have adopted programs cutting global warming pollution from vehicles. And now, in a remarkable step forward, the Alliance for Automobile Manufacturers—the main industry trade group—has urged national action on global warming. A few weeks earlier, the top automakers and the United Autoworkers went on record before Congress in support of a national cap. This astounded some lawmakers, including climate skeptic Rep. Joe Barton (R-TX), who asked the industry CEOs to repeat themselves.

Environmental Defense is pressing for nationwide emissions limits that include the auto industry.

Grassroots action grows

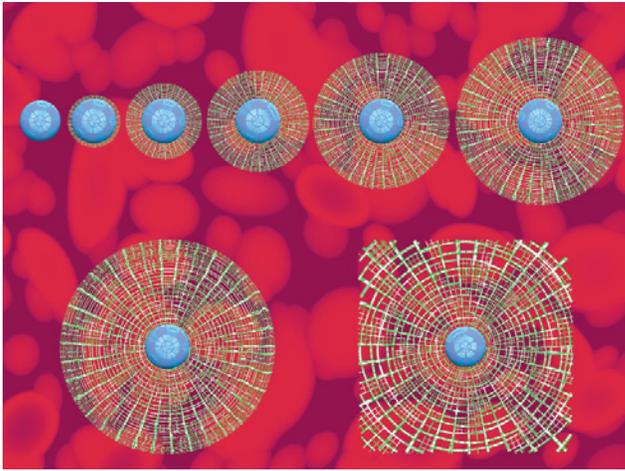
Winning a national cap will require support from every corner of America, so Environmental Defense and its allies are working to build local efforts in key states. In SC, for example, we cosponsored the launch of the bipartisan Mayors for Climate and Energy Leadership. They have called for the state to lead the nation in finding cleaner sources of energy than coal.



Coast-to-coast action

-  Statewide climate plans
-  Canceled coal plants
-  Landowner projects
-  Grassroots climate campaigns
-  Clean car laws
-  Regional cap-and-trade networks

Finally, a framework for responsible nanotechnology



Tim Fonsaca

Not *Star Wars*: An artist's depiction shows nanobots in the bloodstream.

Though still in its infancy, the nanotechnology industry is booming. New materials, 1/1,000th the width of a human hair, are being engineered and endowed with superconductivity, strength and other qualities. Although some nanomaterials may help address environmental issues like pollution and the need for clean energy, there are concerns: New studies have unearthed potentially adverse prop-

erties of certain nanoparticles and raised questions on safety.

Recalling the lessons of DDT, asbestos and CFCs, "miracle" products later found to have severe unintended consequences, Environmental Defense partnered with DuPont in 2005 to address nanotech risks upfront. After 18 months of intensive work, we've produced a comprehensive Framework for Responsible Nanotechnology.

"The framework will help identify and address environmental, health and safety risks of nanomaterials," says Terry Medley, DuPont's global director for corporate regulatory affairs. The 70-page document offers a prescription for responsible production, use and disposal of nanomaterials and requires public disclosure of risk-related information. Though still in draft form, the report (www.nanoriskframe-

work.com) already has been downloaded in more than 40 countries. This spring, our method is being pilot-tested by DuPont on several nanoscale products.

This joint framework is sorely needed. Few requirements exist for pre-market toxicity testing of new products, and EPA remains mired in the development of an "interim" voluntary nanotech program. Meanwhile, over the past year, hundreds of new nanoproducts been marketed and dozens of studies have suggested potential risk. The U.S. government spends just \$10 million yearly on risk research, an amount that DuPont CEO Chad Holiday and Environmental Defense president Fred Krupp have asked to be increased to \$100 million.

"Ultimately," says Dr. John Balbus, our Health program director, "we need a regulatory framework that will minimize potential environmental and health risks to consumers while encouraging the growth of this promising technology. It's a balancing act that will take time and resources, but will pay off in spades down the road."

New rules to clean up 'smokestacks on rails'

I think I can, I think I can. Those words from the beloved children's book *The Little Engine That Could* have a new meaning, thanks to stricter limits on train pollution proposed by EPA. Locomotives of the future may soon chug up the mountain without spewing plumes of black smoke.

With our president Fred Krupp at his side, EPA administrator Stephen Johnson unveiled new standards for diesel trains and ships in March that would reduce particulate pollution and smog-forming emissions from these sources by 90%. "EPA is clearly on the right track," said Krupp.

Locomotives haul nearly half of the nation's freight—from automobiles and lumber to vegetables and grain—but they also are among the most dangerous sources of air pollution in the United States. Nitrogen oxide emissions are the main cause of smog, and fine particles that



Lester Leikowitz/Corbis

Comin' round the mountain: Cleaner trains.

get deep in people's lungs have been linked to respiratory disease, cancer and premature death.

Last year, our attorney Janea Scott rallied 50 environmental and health groups to sign a letter asking EPA to adopt strict limits for diesel trains and ships. We then released *Smokestacks on Rails*, a report documenting the growing public health threat from locomotives.

The new rules complement those already adopted for diesel trucks, buses, construction equipment and agricultural machinery. Expected to become final by year's end, they will cost roughly \$600 million to implement but will save the

nation \$12 billion a year in health-care costs, according to EPA.

"This is another key piece of the puzzle," says Scott. "We will be there to press EPA to follow through and finalize strong rules, even as locomotive use rises."

Mercury reduction deal is major victory for Colorado health



Chase Jarvis/Corbis

Mercury from power plants ends up in trout streams.

After months of wrangling, Environmental Defense, local governments, state regulators and electric power companies reached a landmark agreement to slash Colorado mercury emissions.

Under the deal, two of the highest-emitting coal power plants must remove

80% of their mercury by 2012. Other plants must meet that benchmark by 2014 and overall emissions must be down 90% by 2018.

The agreement is more stringent than new federal standards and does not allow mercury reductions to be traded or sold. Environmental Defense opposes trading of toxic

substances such as mercury, a powerful neurotoxin that settles in waterways, contaminates fish and has been linked to learning disabilities in children.

“The negotiations were very long and at times very difficult,” reports our attorney Vickie Patton,

who negotiated the deal. “All the parties deserve great credit for hammering through to this great result for the people of Colorado.”

Order a company car, hold the pollution



Lester Leikowitz/Corbis

Corporate road warriors log twice as many miles as the average driver.

The nine million cars and light trucks in corporate fleets across the country drive an average of 25,000 miles each year, emitting significant amounts of pollution. To address this, we launched a program with PHH Arval, a fleet manager serving nearly one-third of all Fortune 500 companies.

Under our PHH GreenFleet program—the first program of its kind in North America—we are helping the company’s clients reduce the greenhouse gas emissions of their fleets with more efficient and better maintained vehicles, driver training and other measures.

Participating clients include Abbott Labs, one of the world’s largest health care companies, and Infinity, an auto insurer. “Our business revolves around helping people lead healthier lives,” said Bob Accarino, Abbott Lab’s director of global environmental affairs. “This includes minimizing our impact on climate change and other environmental issues.”

Investment firms ordered to go paperless

The U.S. Securities and Exchange Commission (SEC) has announced that investment companies in the next two years will be obligated to make all mandatory financial documents available over the Web. After that time, printed materials will only be mailed upon request. Paperless communications to shareholders could save hundreds of millions of dollars annually and deliver huge environmental benefits.



Shutterstock

Four million trees saved: Our technology helped the SEC calculate the environmental benefits of paperless filing.

The SEC quoted benefit statistics from the Environmental Defense paper calculator (*papercalculator.org*), an online tool that has helped companies such as Citicorp and Dell calculate the benefits of better paper management practices. Assuming that around 400 million shareholder accounts receive an average

of 4.5 mailings per year, Internet posting of financial materials could protect approximately four million trees a year, and save enough energy to supply 75,000 homes. It would also eliminate one billion pounds of greenhouse gas emissions—the equivalent of taking 90,000 cars off the road.

Green living

Warm light to help cool the planet

NEW, IMPROVED COMPACT FLUORESCENTS LOOK GOOD, SAVE MONEY



Julie Habel/Corbis

Fight global warming without leaving home.

Thank goodness for small miracles. Watt for watt, new compact fluorescent lights (CFLs) produce about three to four times as much light as old-fashioned incandescents and last six to ten times as long.

If each family replaces just three 60-watt incandescent bulbs with compact fluorescents, the pollution savings would be the equivalent of taking 3.5 million cars off the road. With the growing realization that CFLs can provide illumination at a fraction of the environmental and financial cost of incandescent bulbs, even governments are getting into the act. Australia, for example, announced a nationwide phaseout of incandescents, which have changed little since Thomas Edison patented them in 1879.

If you were disappointed by first-generation energy-saving bulbs years ago, it's time to take another look. Today's compact fluorescents come in a wide range of sizes and shapes to fit most needs; some are dimmable or work in three-way lamps. Stores like Home Depot and Wal-Mart carry a wide selection, and many supermarkets and hard-

ware stores stock common models.

With so many options to choose from, it's no surprise that consumer confusion reigns. Environmental Defense has created an online guide to make finding the best choices easy. Check it out at

www.environmentaldefense.org/go/cflguide. Meanwhile, here are

some general tips to help you with your shopping:

- Make sure any compact fluorescent you buy has EPA's Energy Star rating. These use at least two-thirds less electricity than a standard incandescent.
- Check your bulbs' color temperature. Between 2,700 and 3,000 degrees Kelvin matches typical incandescent light: the lower the temperature, the warmer the light. Higher numbers mean cooler light more like sunlight (4,000 degrees Kelvin is the equivalent of a "cool white" incandescent bulb).
- If your CFLs need to fit into shades or recessed cans, check sizes before purchasing. Consider buying one bulb for a household need and seeing how it works for you. Keep your receipt in case you need to exchange it.

Here's just a sampling of high-quality compact fluorescents for many common applications. All are Energy Star-rated, with prices ranging from \$3 to \$16.

Living and dining rooms



For fixtures that take a globe light, the **Feit 11w G25 Globe** offers "warm white" light equivalent to 40 watts.

The **14-watt MaxLite G30 Globe Lamp** gives a similar but brighter light, equivalent to 60 watts.



Porch



For outdoor lights, make sure to choose a bulb that fits your fixture and is rated for outdoor use.

The **TCP indoor/outdoor R-30 floodlight** works in recessed can fixtures. It uses 14 watts to yield the equivalent of 65 watts.

The rounded **Phillips Marathon 18-watt indoor/outdoor** bulb can be used outside in many weather-protected fixtures.



Hallway



The **14-watt Commercial Electric Ultra Mini Spiral** offers warm white light of medium brightness, equivalent to 60 watts for an incandescent bulb.

The **15-watt Harmony Lightwiz Mini Spiral** has similar light quality and is also equivalent to a 60-watt incandescent bulb.



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

Study or bedroom (reading lamps)



The Nvision Suave Blanco is a medium-sized spiral that gives off bright, warm white light. The bulb uses

only 23 watts to provide brightness equivalent to a 100-watt incandescent bulb.

The TCP ESB Spiral

offers slightly less bright, warm white light that is equivalent to 75 watts for an incandescent bulb. Both of these can be used in standard lamps, except where shades clamp to the bulb.



Kitchen



The **MaxLite 23-watt PAR38 flood** lamp gives warm white light equivalent to a 100-watt incandescent flood.

The **26-watt Satco Energy-Saving spiral** bulb gives similar light quality, also equivalent to a 100-watt incandescent.



Light bulbs are not one-size-fits-all, so read the reviews and find the ones that will work for you. Then help your friends and neighbors see the light! You'll be making a difference for the planet.

By Jim Motavalli

Imagine a legacy as spectacular as this

From national parks and wildlife refuges to unspoiled vistas, much of what we treasure today is the result of the passion and investment of prior generations.



Shutterstock

You, too, can leave a legacy that will preserve land, water and wildlife for the future. Bequests to Environmental Defense made as part of your personal estate planning are a powerful way to make certain that your values endure.

To learn more, contact Anne Doyle at Environmental Defense, 257 Park Avenue South, New York, NY 10010; 877-677-7397; ospreds@environmentaldefense.org



The ticking clock...

Warming makes civil war more likely

If left unchecked, global warming could decimate ecosystems and wipe out species and coastlines. But how will it affect people?

The answer is disturbing. In its recent report, the UN Intergovernmental Panel on Climate Change found that the most disadvantaged countries could be the hardest hit, and pointed to Africa as one of the regions expected to suffer most. The reason cited? Drought.

A peer-reviewed paper in the *Journal of Political Economy* found a strong link between droughts in sub-Saharan Africa and civil wars in the region. Global warming will make droughts even more severe. The study found that a shortage of rain inevitably caused economic decline, and this led to a 50% increase in the likelihood of civil war. Of 43 countries studied, nearly 70% experienced civil war in the 1980s and 1990s.

DARFUR—A CASE IN POINT: A draft study by Environmental Defense finds a cautionary tale already playing out in Darfur. The Arabs in the north and the Africans in the south always have competed for water, but until the 1980s, these disputes were resolved by tribal councils.

Then the government replaced the tribal councils and, simultaneously, Darfur was hit by a severe drought. Since that time, 200,000 Darfurians have been murdered and over



Amr Nbaal/AP Images

A world without water: What will their future be?

three million driven from their homes. While major sociopolitical forces clearly are implicated in this deadly conflict, one of its seeds is climate stress.

Join the conversation at Climate411.org

For more on the human costs of global warming—and to add your own comments and questions—visit our new blog at climate411.org. Here our chief scientist Dr. Bill Chameides and other Environmental Defense experts discuss the science, policy and social implications of climate change.

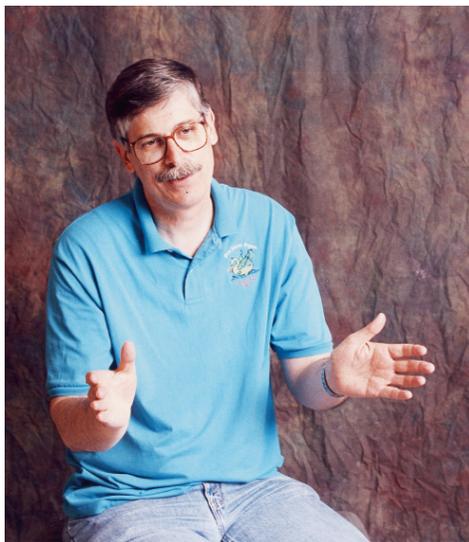
A stunning comeback for our national symbol

A generation ago, the bald eagle nearly vanished from America's skies. A fierce predator with a seven-foot wingspan, the eagle had no defense against DDT, the pesticide Rachel Carson warned about in *Silent Spring*. Used on crops and for mosquito control, DDT was causing the eggshells of birds of prey to weaken and crack.

Four scientists set out to rid the country of DDT, and in 1967 they and others founded the organization that is now Environmental Defense. The DDT ban they won in 1972 started the eagle on the road to recovery.

Today, America's bird has reoccupied its range across the lower 48 states, with more than 9,000 pairs of bald eagles nesting last year, compared to 417 pairs in 1963.

This year, four decades after the founding of Environmental Defense, the U.S. Fish and Wildlife Service has proposed removing the bald eagle from the endangered species list. A final decision will be made by June 29.



T. Charles Erickson

Endangered species advocate Michael Bean

"The bald eagle's recovery is a huge victory," said our president Fred Krupp.

Banning DDT was essential for the bald eagle's survival. The Endangered Species Act helped speed its recovery.

Under the Act, four national wildlife refuges were created, allowing the eagle to safely nest and overwinter; eagles were reintroduced to areas where they had vanished; and

The eagle's recovery shows the Endangered Species Act works

penalties for harming the bird were increased. Other species once headed for extinction have made spectacular comebacks thanks to the Act. In recent years, however, some in Congress have launched assaults on the Act, saying it doesn't work.

Our wildlife director Michael Bean points out that the majority of plants and animals on the endangered list cannot recover unless their habitat is managed. "Since most of those species rely on private lands for survival, we're helping landowners welcome endangered species on their property through a variety of incentives," said Bean.

Today, with species disappearing at a rate at least 100 times greater than before the modern era, the sight



Bald eagle pairs in the continental United States 1963–2006

of bald eagles in our skies offers living proof that with powerful laws and sufficient funding, endangered wildlife can recover.

"We have long worked to achieve the recovery of the bald eagle, as proof of the effectiveness of the Endangered Species Act," said Bean. "The eagle will continue to be protected by the Bald and Golden Eagle Protection Act, as well as many state laws. We will work to ensure that our national bird receives appropriate protection under those laws."

What they're saying about Environmental Defense

On the role we played in brokering environmental conditions for the buyout of TXU, the Texas utility.

"Every college activist should study this story, because it is the future."

—Thomas Friedman
The New York Times,
March 16, 2007