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What they're saying about Environmental Defense:

"Environmental Defense is probably the best nongovernmental organization to find the intersection between profit and planet."

 Bob Langert, McDonald's senior director of social responsibility

Will Congress heed the public's call to act in 2007?

When the 110th Congress convenes, one of the fresh faces on Capitol Hill will be Jerry McNerney. A wind energy entrepreneur, he soundly defeated Representative Richard Pombo (R-CA), the powerful chairman of the House Resources Committee.

Pombo was unrelenting in his efforts to dismantle the Endangered Species Act and other treasured environmental legislation. His attempts to roll back this legacy of conservation finally caught up to him.

The environment emerged as a factor in the midterm elections. At least 20 pro-environment challengers unseated anti-environment incumbents. And California Governor Arnold Schwarzenegger won crucial voter support by signing the country's toughest carbon emissions reduction law.

"In the new political landscape, the environment will move up on the agenda,"

says Environmental Defense president Fred Krupp, "but getting good policies adopted will still require a lot of work."

No issue is more important than global warming. Barbara Boxer (D-CA) replaces James Inhofe (R-OK) as chair of the Senate Environment and Public Works Committee. Inhofe, who calls global warming a "hoax," routinely blocked climate legislation. Boxer, on the other hand, says passing a mandatory cap on greenhouse gas emissions is one of her chief goals. Senator John McCain (R-AZ) also says he will "absolutely" push for a Senate floor vote this session.

In the House, where global warming has barely been mentioned, Speaker Nancy Pelosi (D-CA) has committed to make climate change legislation a "critical part" of her agenda. "The window has opened on the Hill for meaningful

Please see Cover Story, p. 2

The task ahead: Legislative priorities for 2007



Global warming. This could be a make-or-break year for winning a nationwide cap on greenhouse gas emissions. Passage of a strong market-based bill is our top priority.

Farm policy. In the Farm Bill, we aim to slash harmful subsidies and shift dollars to conservation, helping more farmers and the environment.

Oceans protection. Congress reauthorized Magnuson-Stevens legislation incorporating our tools to make fisheries more sustainable. We will work to establish a fund to help fishing communities manage the transition.

wid Cailors/Corbis

Memo to Congress: Seize the opportunity on global warming



Northern Siberia: Scientists discover that methane, a potent greenhouse gas, is bubbling out of "thaw lakes" of melting permafrost. The study estimates methane

releases increased 58% from 1974 to 2000. This feedback loop, with warming causing more warming, may trigger unthinkable consequences.

Washington, DC: Midterm elections usher 60 new faces into Congress.

These seemingly unrelated events present a warning and an opportunity. After the elections, leaders of major environmental groups gathered to plan a unified strategy. We agreed that global warming must be the environmental priority for the new Congress. The litmus test is whether legislation caps and cuts global warming pollution.

There's a real risk that bills will feature the words "global warming" but fail to require adequate reductions. Some in Washington have proposed reducing only the "intensity" or "rate of

There's a risk of lip service to global warming.

growth" of emissions, which means emissions could keep rising.

Passing a weak law would provide cover for politicians and forestall more meaningful action. The law must couple a strict cap with a market to stimulate cost-effective reductions.

Such a market has emerged in Europe, kick-starting the development of technologies that reduce emissions. There will be similar profit-making opportunities for Americans, whether farmers practicing no-till agriculture, entrepreneurs installing solar panels or utilities finding cleaner ways to generate electricity.

Opportunity, as much as fear, should inspire action. More than half of Americans in a Zogby poll said concern about global warming made a difference in how they voted. Americans are looking for leadership on this issue.

Will the new Congress deliver? I believe a strong climate law is achievable this year. It largely depends on whether Speaker Nancy Pelosi and Majority Leader Harry Reid make it a priority. There's no time to lose.

Fred Krups

New faces, new agenda on Capitol Hill

Continued from p. 1

steps on climate," says our legislative director Elizabeth Thompson. "We'll be pushing as hard and fast as we can."

Many companies would prefer national climate legislation to the current proliferation of state actions. "From Shell's point of view, the debate is over," says John Hofmeister, president of Shell Oil. "When 98% of scientists agree, who is Shell to say, 'Let's debate the science'? We cannot deal with 50 different policies. We need a national approach to greenhouse gases."

Another priority for Environmental

Defense is reform of U.S. farm policy. With more than 70% of the land in the lower 48 states managed by farmers and ranchers, the Farm Bill represents the most powerful economic tool for conservation. Yet three out of four farmers who offer to improve conservation on their land are denied federal help.

"Our goal is to double conservation funding in 2007," says our farm specialist Scott Faber. Although Congress faces strong pressure to protect the \$20 billion in harmful subsidies that go to the

> biggest commodity producers, this year's legislation could be different: The new chairmen of the Senate and House agriculture committees, Tom Harkin (D-IA) and Colin Peterson (D-MN), have strong conservation

records, and districts that have been underrepresented on those committees especially from the Northeast, California and Florida—will have a greater voice.

"We see tremendous opportunities ahead," says Thompson. "Many of the battles in recent years have been rearguard efforts to protect core principles. Now, with so many new faces in Congress, we can set out to make real progress."





Out: Foe of endangered species Richard Pombo. In: Champion of climate action Barbara Boxer.

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MAILBAG

In the final weeks of 2006, Environmental Defense members from 49 states contributed to our Global Warming Challenge Fund, providing a dollar-for-dollar match to encourage new members' first-time gifts. The result: In just a few weeks, we raised more than \$100,000 for our global warming work and recruited nearly 1,000 new members.

We also asked our members to share messages of inspiration. Here are some of them:

It was 67 degrees on December 1 in Boston, MA. Obviously we need to change our ways. Now.

Todd Bartel, Weston, MA



Great to be part of such a significant movement! Hold the Democrats no less accountable than the Republicans! Paul Chesen, Potomac, MD

Thank you, Environmental Defense! You have made it possible to speak truth to power.

Peggy Hutchinson, Lapeer, MI

We live at a crucial time in history. Our actions in the next years will define the future.

Jennifer Kendler, Chicago, IL

We who are scientists must make the politicians aware that global warming must be dealt with now.

Stephen Goldberg, New York, NY

See all the messages at our online Wall of Appreciation: environmentaldefense.org/go/comments.

WE WANT TO HEAR FROM YOU! See addresses at left.

Car counseling: A green car guide for all

"A much more refreshing and realistic approach than you usually get from environmental types." That's how the Chicago Tribune described the new green vehicle ratings that Environmental Defense launched this fall with Yahoo! (See the Green Center at autos.yahoo.com.)

inspire Americans to buy cleaner cars. Yahoo!, a leading Internet portal, is visited by more than 100 million people each month, many of whom use the Yahoo! Autos section.

It's part of our effort to

Rather than rating just a few cars, like hybrids, our Green Rating shows the environmental friendliness of any vehicle, even radical sports cars like the Lotus Elise. "We wanted to help people make a greener choice no matter what class of vehicle they're buying," said our senior fellow Dr. John DeCicco, an automotive engineer.

Say you want a mid-sized SUV, but can't spring for the Toyota Highlander hybrid. You might like to know that the Nissan Murano's Green Rating of 60 edges out both the regular Highlander and the Honda Pilot.

The Green Rating's 1 to 100 scale reflects the total environmental impact of manufacturing and operating a vehicle, everything from its steel to the pollutants



To reach the widest possible audience, we teamed up with Yahoo! and rated the environmental impact of every car.

that come out of its tailpipe. "This is the most rigorous and environmentally sound calculation you can do," said DeCicco.

He should know. A decade ago, DeCicco created the first U.S. green car rating, the Green Book, still published by the American Council for an Energy-Efficient Economy. The Yahoo! guide represents a streamlined approach for mainstream car buyers.

Yahoo! instantly saw the value. "According to a Yahoo! survey, one out of every two people is interested in learning more about alternative fuel vehicles, which signals clear consumer demand for a product like the Green Center," said Jennifer Dulski, general manager of Yahoo! Autos.

"Many car buyers care about the environment," added DeCicco. "We've made it easier for them to act on that concern when car shopping."



Millions of Americans can now factor the environment into their car-buying decisions.

Regional update

Echoes of an ancient forest



A red-cockaded woodpecker at home.

Longleaf pine trees once dominated forests from Virginia to Texas. Shaped by regular wildfires—to which the trees are resistant—longleaf stands delighted early explorers, who described "a vast forest of the most stately pine trees that can be imagined, planted by nature at a moderate distance ... enameled with a variety of flowering shrubs."

Today only about 3% of the original longleaf forests remain. They are essential for endangered species such as the gopher tortoise and red-cockaded woodpecker, which is the only American woodpecker that drills its nest in live trees. The longleaf can also be sustainably harvested for timber.

Environmental Defense recently helped design a

Landowners will restore 250,000 acres

federal Farm Service Agency program that will provide greater financial incentives for farmers to restore up to 250,000 acres of longleaf pine forest in nine Southern states.

"This program will dramatically boost the restoration of the longleaf ecosystem," says our forestry specialist Will McDow. "Mature longleaf pines are so important for wildlife conservation. They're also great for a landowner's bottom line."



The longleaf pine forest once spread across 92 million acres.



A new effort will help protect Lake Erie from farm chemicals.

Breathing life back into Lake Erie, again

It's been nearly four decades since a tributary of Lake Erie, heavily contaminated with petrochemicals, burst into flames. So powerful was the image of burning water that Congress went on to pass the Clean Water Act.

Lake Erie has rebounded since then, and today is the centerpiece of a \$7 billion recreational industry. But recently, dead zones have returned to the lake, as excess nutrients pour into it from one of the most intensively farmed landscapes in America.

Five years ago, the U.S. Department of Agriculture set up the Lake Erie Conservation Reserve Enhancement Program to improve water quality and restore wildlife habitat. The program, like similar ones around the country, encourages farmers to restore wetlands and natural buffer zones near streams to block runoff. But not enough Ohio farmers were

signing up. So Environmental Defense partnered with federal and state agencies to come up with a more attractive package. "We gave farmers the right tools to improve the landscape," says our consultant Terry Noto.

The revised program offers farmers \$220 million in incentives and more choice in how they practice conservation. Some 2,400 miles of

Farmers will protect 2,400 miles of streams

streams and tributaries will be protected.

"Environmental Defense was instrumental in this project," says Todd Hesterman, a fourth generation farmer in Napoleon, OH. "It will take environmentally sensitive cropland out of production and reward guys for doing so."

China initiative helps farmers—and fights global warming

In rural China, farmers are often forced to migrate to already overcrowded cities to survive. This year, Environmental Defense began four projects in Xinjiang province that will financially benefit hard-pressed farmers while also reducing global warming pollution, providing villagers with sustainable energy and reversing the spread of deserts.

Located in China's far west, Xinjiang is a desert region and one of the country's poorest areas.

Our agreement with Xinjiang's Environment Protection Bureau is the first of its kind. Wheat farmers will forego traditional plowing and use "no-till" methods to increase the storage of carbon in the soils. By not plowing, they'll also cut fuel use and reduce carbon dioxide emissions. Similarly, cotton farmers will adopt drip irrigation methods to reduce energy use and cut down on the release into the environment of nitrous oxide, a potent greenhouse gas, from fertilizer. More than 150,000 acres of farmland will be included in the two programs.

In addition, 30,000 acres of desert will be planted with native shrubs to stop desertification and sandstorms. And more than 25,000 households in Xinjiang villages will transform the way they light their homes and cook their food. Traditionally dependent on coal, they will burn biogas from household

methane digesters that break down biological wastes from animals and fields. The digesters save money and reduce greenhouse gas emissions.

The reductions in heat-trapping gases will be quantified based on a system we developed with Duke University.



Made in China: The world's largest producer of cotton moves toward climate-friendly practices.

The resulting credits will then be sold on the international carbon market with profits going to the farmers.

"The idea is help get the market going and let the people take it from there," says Dr. Zach Willey, our economist who helped design the program.

Standing up to a destructive mine in New Caledonia



Environmental Defense blocked financing that would have destroyed a unique biodiversity hotspot.

With its vivid forests and gleaming lagoons, the South Pacific island territory of New Caledonia (also known as Kanaky) has been identified by scientists as one of the world's top ten "biodiversity hotspots." Ironically, this exotic place is also home to nearly onequarter of the planet's nickel reserves.

In 2001, Canada's Inco company (recently taken over by Brazil's CVRD) started building a \$3 billion nickel-cobalt mine in New Caledonia's Goro region. Without securing permits, the company planned a vast openpit mine that would utilize an unproven acid-leaching technology powered by a coal-fired plant. Amidst eight protected botanical reserves and adjacent to fragile reef systems that

have been proposed as a World Heritage Site, Inco's original plan called for dumping toxic mining wastes directly into a lagoon where indigenous communities fish.

Environmental Defense, working with a coalition of local environmental and indigenous groups, stepped in to

challenge the mine. Our strategy was to "follow the money" and demand environmental protections as a condition of public financing.

"We discovered shocking levels of corruption," says our scientist Dr. Stephanie Fried, who took part in the investigation. "There was a total lack of transparency, a fake public consultation process and altered documents that changed scientific findings."

Our report detailed the abuses and exposed the inadequacy of the company's environmental impact assessment. A trip we helped organize for activists to Paris led to a public finance tax credit contract in 2004 that bound Inco to French and European Union environmental standards, despite the fact that these standards did not yet apply in New Caledonia. The year's successful lawsuits by Kanak leaders have delayed mine operations until at least 2008.

2006 Ten victories

A few of the results made possible by your support

The nation's first statewide cap on greenhouse gas emissions

Faced with the growing threat of heat waves, wildfires and water shortages, California's Republican governor and Democratic legislature agreed in August to a historic

bill to reduce heattrapping gases an estimated 35% by 2020. Environmental Defense proposed the idea, then cosponsored and helped draft the measure. Though outspent ten to one by industry opponents, we built an unprecedented coalition of environ-



mental, religious, health, labor and business groups to support the bill. In down-to-the-wire negotiations, we helped maintain consensus around the measure. Says our attorney Jim Marston: "Ten years from now we'll look at this as a pivotal moment when America finally decided to tackle global warming."

Environmental Defense receives 'Grade A' (the highest rating of any environmental group).

-Wired Magazine

Partnership with Defense Department to help a rare species recover



At the country's largest Army base in Fort Hood, Texas, Environmental Defense created a way for the military to protect an endangered songbird without restricting the ability to train soldiers. Home to the world's largest nesting population of the golden-cheeked warbler, Fort Hood will restore warbler habitat

off base, on private lands critical to the bird's recovery. The Fort can tap the "conservation credits" it earns should onbase habitat be harmed. Now the Pentagon wants to try the approach at other installations, which are home to more endangered species than our national parks.

Eight Northeast states join forces to cut heat-trapping gases

The first multi-state capand-trade program will cut emissions from power plants 10% by 2019. Using a plan conceived and designed by Environmental Defense, the program will create competition among utilities to find the best pollution-reduction meas-



ures, guaranteeing the highest impact for the lowest cost.

A plan to cut pollution in half at America's busiest ports



The Los Angeles and Long Beach ports are Southern California's largest source of air pollution. Guided by our attorney

Jerilyn Lopez Mendoza, vice chair of the L.A. harbor commission, the ports agreed to slash emissions 50% within five years, the most comprehensive port cleanup in U.S. history.

The world's largest marine reserve

Stretching 1,200 miles from Honolulu, the Northwestern Hawaiian Islands are home to Earth's most remote coral reefs and more than 7,000 species, including endangered Hawaiian monk seals. To protect this biological jewel, our staff worked for nearly a decade with Native Hawaiians, fishermen, divers, scientists and local activists. Our president Fred Krupp took the case for the islands' protection directly to President Bush. Soon



after their April 2006 meeting, the President declared the area a national monument, safeguarding more than 84 million acres—an area larger than all of America's national parks combined.

that made a difference

"In terms of the cost-benefit ratio, this regulation ranks up there among the top actions EPA has taken in its history."

—John Millett, U.S. Environmental Protection Agency, on the new diesel rule

New rules dramatically lower diesel pollution nationwide

Diesel exhaust is among the most dangerous and pervasive sources of air pollution, but Americans can breathe a little easier thanks to a new EPA rule that Environmental Defense helped secure and then defend in court. It requires all diesel trucks and buses built in model year 2007 or after to be equipped with modern pollution controls. A second rule cuts by 97% the sulfur allowed in most



diesel fuel nationwide. EPA estimates that the new rules will bring \$70 billion in health benefits annually, more than 17 times their cost.

Poultry producers curtail antibiotics

An estimated 70% of all antibiotics in the United States are fed to healthy farm animals, undermining the drugs' power to protect people. Environmental Defense persuaded major meat buyers, including McDonald's, to purchase only from poultry suppliers that don't routinely feed medically impor-



tant drugs. In January, four of the nation's top poultry producers said they had ended the harmful practice.

"With a creative approach, Environmental Defense demonstrated how a strong **Endangered Species Act benefits both rare** species and people."

-E. O. Wilson, Research Professor of Entomology, Harvard University

Cleaner coal plant becomes reality

With our partners at Western Resource Advocates, we per-

suaded Xcel Energy in Colorado to commit to build the nation's first coal plant that will capture greenhouse gases and store them underground, dramatically reducing global warming pollution. The project raises the bar for the 150 new coal plants proposed across the nation.



Endangered species find 'Safe Harbor' on four million acres

Most endangered species depend on private land for survival, but landowners once shunned rare plants and animals because of the accompanying federal limits on land use. To resolve the conflict, we pioneered Safe Harbor in 1995. The cooperative program encourages landowners to welcome endangered species without fear of added restrictions. Ten years later, hundreds of landowners



nationwide have signed on to restore habitat for more than 45 rare species, from the northern aplomado falcon to the stunning Schweinitz's sunflower. These successes helped us defend the **Endangered Species** Act, which came under attack in Congress.

New law uses market tool to revive oceans



In December, Congress passed a law that endorses giving fishermen a direct financial stake in conserving. We helped shape the new Magnuson-Stevens Act, which makes the most sweeping changes to fishery rules in a decade. The law for

the first time requires fishery managers to set catch limits for all fisheries. It also authorizes the use of tradable "catch shares" developed by Environmental Defense. With each fisherman owning a share of the catch, there's incentive to conserve: As stocks recover, the value of each share increases.

Triumph of an idea: A new model for fisheries



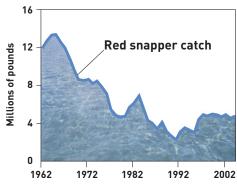
An ancient occupation is adapting to 21st century realities.

It's hard to fathom a world without fish and chips. But according to an exhaustive study published in *Science*, global fisheries—including cod, tuna and salmon—could totally collapse by 2048 if current trends continue. The findings echo earlier studies documenting a 90% decline in some commercially important species due to overfishing.

Fortunately, this does not have to be the future. Environmental Defense is at the forefront of an effort to replace outmoded regulations and improve management of fisheries. This month marks the launch of a market-based catch-share program that we helped develop to revive red snapper, the Gulf of Mexico's most important reef fish.

"I used to believe in open access," says Florida fisherman and seafood business owner David Krebs, "but we've got a disaster on our hands." With Gulf red snapper populations at 3% of historic levels, Krebs teamed up with us to advo-

Empty net syndrome



cate catch shares. "Frankly, this is our only hope for survival," he adds.

The new program allows profitable,

year-round fishing while strictly limiting the total catch, assigning each fisherman a percentage share. It replaces old rules that restricted fishing to certain days without regard to weather, demand or fish prices.

The system will reduce waste and give fishermen a financial stake in conserving. "When stocks recover and the catch limits increase, so does the value of each share," explains our fisheries biologist Pam Baker.

The idea, which has been endorsed by *The New York Times* and *The Wall Street Journal*, is catching on. We now are promoting similar market reforms for the Gulf grouper and shrimp fisheries. In

December, Congress reauthorized the nation's principal fisheries law, the Magnuson-Stevens Act, allowing flexibility to implement catch-share programs nationwide.

In California, we presented a business plan to the Ocean Protection Council for a loan fund to finance pilot projects to reform fisheries. In addition to helping develop catch-share programs, loans could be used to finance innovations such as flash-freezing capacity on boats or custom processing plants on the dock.

"The fund would help fishermen become entrepreneurs, and ultimately result in higher-value seafood," says our marine ecologist Dr. Rod Fujita. "Thriving fisheries depend on a healthy ocean. With a little innovation we can have both."

Kid-friendly seafood

Did you know that chunk-light tuna is lower in mercury than albacore tuna? Or that most fish are not tested for contaminants?

Parents seeking a healthy diet for their children now have some help, thanks to a new collaboration of chefs, pediatricians and experts called KidSafe Seafood. Launched by SeaWeb and Disney, with help from us, the initiative includes kid-friendly recipes and information on



what parents need to know about omega-3 fatty acids, mercury, PCBs and more.

"As a pediatrician, I find that many parents are confused about which fish are best for kids," says Dr. James Sears. The campaign web site,

KidSafeSeafood.com, is a great tool to find out about the nutritional benefits of seafood while limiting contaminants that are particularly harmful to children's growing bodies.

"This initiative underscores the connection between human health and the environment by highlighting seafood that is caught or farmed in an environmentally preferable manner and is low in contaminants," says our scientist Dr. Becky Goldburg.

Through a rigorous assessment process that analyzed the 65 most commonly eaten seafoods, the program has identified the best choices for children.

Among the healthiest choices: wild Alaskan salmon, tilapia and U.S. farmed shrimp.

Decision time: The Supreme Court and global warming



We want to ensure that the nation's highest court doesn't turn a blind eye to climate change.

Environment Defense is a key player in what has been described as, "one of the most important environmental cases ever." The issue: Should the federal government regulate greenhouse gas emissions from vehicles?

Fed up with federal inaction, we joined with allies and 12 states to sue the U.S. Environmental Protection Agency for failing to do its job under the Clean

Air Act. The case, Massachusetts et al. v. EPA, made its way to the Supreme Court, marking the first time the high court has addressed global warming.

During oral arguments, the Court appeared deeply divided. "On the merits, the majority of the justices seemed inclined to decide that, yes, indeed, greenhouse gases are air pollutants that can be regulated under the Clean Air Act," says our attorney Vickie Patton.

The ruling, expected by June, will have immediate con-

sequences on a parallel case on emissions from power plants. It also could determine whether California can proceed with its first-in-the-nation law restricting vehicle emissions of greenhouse gases, set to take effect in 2009.

Whatever the outcome, both sides agree that Congress faces increased pressure to act on global warming. Says Patton: "This case underscores the need

for national leadership in addressing global warming."

Saving a pristine Caribbean coastline



Leatherbacks, the world's largest turtles, need open beaches to nest.

One of the last stretches of undeveloped coastline in Puerto Rico got a reprieve from mega-resort development when the U.S. territory's House of Representatives passed a bill last fall to designate a 3,200-acre nature reserve on the island's eastern shore. Environmental Defense members helped secure passage by sending 11,000 letters to lawmakers.

Our scientists worked with local groups on strategies for protecting the area's extraordinary resources, which include a bioluminescent lagoon and a key nesting site for the endangered leatherback sea turtle. "This victory would not have been possible without concerted efforts by a coalition of groups, including Environmental Defense," says Luis Jorge Rivera-Herrera of Puerto Rico's Coalition for the Northeast Ecological Corridor.

But the struggle isn't over. Developers could still build two resorts and four golf courses unless Puerto Rico's senate and governor approve the House bill. The bill would preserve the area's resources while promoting ecotourism, bringing revenue to local communities.

Urge Puerto Rico's senate and governor to support House Bill 2105 and protect the island's ecological wealth at environmental defense.org/action.

Fast action in California closes a window to pollute

Quick work by Environmental Defense staff and allies blocked an attempt by Southern California cities to dodge a landmark global warming law that took effect January 1. The state law requires out-of-state power suppliers to meet California's stringent new standards for greenhouse gas pollution. The law followed our report, California's Coal Shadow, which revealed the huge amounts of pollution caused by power purchases from dirty coal-fired plants in the Rockies.

Anaheim, Burbank, Glendale, Pasadena and Riverside, which buy up to two-thirds of their power from the Intermountain Power Agency, had been rushing to extend contracts to 2044, locking in three more decades of major pollution. U.S. Senator Dianne Feinstein and State Senator Don Perata, the archi-



Glendale is one of the cities that rejected dirty energy.

tect of the state law, worked with us to persuade the cities to find cleaner sources of energy. The decision may accelerate development of wind and desert solar. At the urging of Governor Schwarzenegger, the Lake Tahoe town of Truckee also rejected a long-term contract with a polluting Utah coal plant.

In depth

The search for a cure ENERGY EFFICIENCY IS THE BEST MEDICINE FOR A FEVERED WORLD

That if someone told you that **V** within a decade they could supply 20% of America's energy at less than half the price of coal—with no new smokestacks, oil imports or nuclear waste-and deliver deep cuts in air pollution?

That seeming pipe dream is the very real promise of energy efficiency, the essential first step toward a clean energy economy. Put simply, efficiency means using less energy to get the same, or better, quality of life.

Though the benefits of efficiency for climate, energy security and healthhaven't been discussed much in Washington lately, the technologies for getting more work out of energy are proven. California now uses half as much energy per person as Texas, saving families and businesses money. While it costs 8 to 12 cents to generate and deliver a kilowatthour from new coal or nuclear plants, freeing up that same amount of energy through efficiency costs just 3 cents.

Efficiency provides power without global warming pollu-

tion. In fact, it represents the biggest chunk of greenhouse gas reductions available in America. In the electricity sector alone, using California-style programs nationwide would reduce carbon dioxide emissions 20% by 2020, providing one U.S. "wedge" to help stabilize the

> global climate (see box). Some of the biggest opportunities lie in the Midwest, which could reduce growth in energy demand by twothirds over the next 15 years, eliminating the need for dozens of new coal-fired plants.

You would not know such opportunities existed, however, if you listened only to TXU, the biggest utility in Texas. Warning of an energy emergency, TXU is leading a rush by Texas companies to build 19



Making better use of the energy we have would eliminate the need for scores of new power plants.

coal-fired plants to generate 13,000 megawatts of power. That's ten times what Texas would need if it simply expanded its efficiency programs.

Texas spends only one-eighth as much as California on efficiency; if it upped that investment to just 2% of electricity sales, it would nearly erase the need for new plants and spare the planet most of the 110 million tons of carbon dioxide they would emit each year (enough to

Climate's 'Mr. Fixit'

The crucial role of energy efficiency in solving global warming was made clear in a 2004 Science article by our newest trustee, Princeton professor Dr. Stephen Pacala. While others awaited technologies not yet invented, Pacala and colleague Dr. Robert Socolow proved it possible to stabilize greenhouse gas emissions now with what



might be called "silver buckshot"—a portfolio of existing technologies such as solar and wind energy, along with reduced deforestation and increased energy efficiency. To compare options, Pacala and Socolow created a common unit, a "stabilization wedge," representing 25 billion tons of greenhouse gases avoided over the next 50 years.

For Pacala, a researcher on the ecology of vegetation, it was the beginning of his fulfilling what he calls "the social contract: that a scientist must repay society for the luxury of following one's curiosity." He has joined our board, he says, because, "If you took Environmental Defense out of the picture and ran the tape again, you would see it has made a critical difference in the world."

California uses half as much energy per person as Texas

swamp the gains from California's landmark new global warming bill).

Because the climate stakes are so high, and because TXU dismissed our recommendations for cleaner technology, Environmental Defense is leading a campaign to block the plants. We're mounting legal challenges to TXU's fasttrack permits and highlighting the financial liabilities of ignoring global warming pollution.

We're also helping to lead a nationwide effort to advance efficiency. As part of an efficiency leadership group created by the U.S. Department of Energy and EPA and chaired by Duke Energy CEO Jim Rogers,

Environmental Defense has helped 50 utilities and regulators draft a national action plan, winning commitments in 33 states to cut electricity demand up to 25% by 2020. That will save Americans \$20 billion a year, create half a million jobs and render unnecessary dozens of proposed plants. Participants include public utility commissions and major corporations such as Dow Chemical,

Entergy and Exelon.

A REVOLUTION IN RETAIL

In a flagship effort, Environmental Defense is opening an office in Bentonville, AR, where we aim to help the nation's largest private purchaser of electricity, Wal-Mart, cut its in-store energy use by 20 to 30%. The company's two experimental stores, in Texas and

Colorado, already have cut energy use nearly in half.

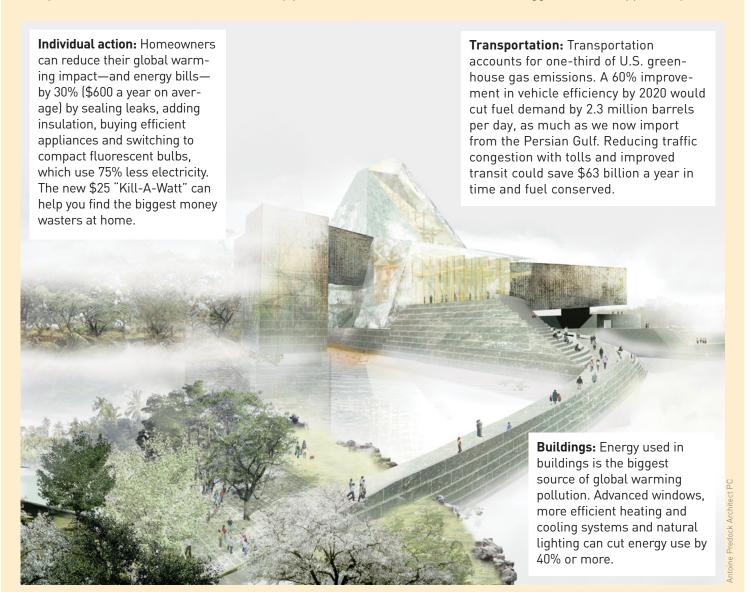
Other companies are sure to follow, because the potential savings are immense. Just changing to more efficient bulbs in ceiling fan displays already has saved Wal-Mart \$6 million. Putting doors and motion sensitive lights on refrigerated display cases and turning off idling trucks will save millions more.

A glimpse into the future

Environmental Defense has promoted energy efficiency since the 1970s, when we persuaded California to shelve plans for ten new coal and nuclear plants in favor of efficiency investments that launched the state on its trailblazing path.

Still, most of the country lags behind, due largely to misplaced economic incentives. Where utility profits are linked to sales, for instance, the company wins by increasing demand. Some states are now correcting those skewed incentives: by "decoupling" profits from electricity sales, using smart meters and variable pricing to switch consumers off peak hours, and upgrading building codes and appliance standards to reduce energy waste.

Here are the three biggest areas of opportunity:



South Texas landowners to welcome a rare feline

Por 20 years, wildlife biologist Linda Laack studied ocelots in South Texas. Using remote cameras, she identified individual cats by their distinctive, finger-print-like spot patterns and tracked them with radio collars. She learned the cat was hovering on the brink. "I often felt I was documenting the ocelot's decline, rather than helping reverse it," she said.

Hidden amid ever-shrinking patches of thick, tangled thornscrub, the last of America's ocelots struggle to survive. But with a landmark Safe Harbor agreement, private landowners will now aid in the endangered cat's recovery—and Laack is working to recruit them.

Under the 30-year agreement, signed last fall by Environmental Defense and the U.S. Fish and Wildlife Service, local property owners will allow previously altered land to return to its wild, thorny state. "The primary objective of a Safe Harbor agreement is to encourage private landowners to voluntarily create and restore habitat where none previously existed or where development threatens the ocelot's livelihood," said Dr. Benjamin N. Tuggle, the Service's regional director. Safe Harbor was pioneered by Environ-



Will the ocelot survive? It depends on us.

mental Defense in 1995 and now protects critical habitat on four million acres nationwide.

Only about 50 to 100 of the "painted leopards" remain, most of them living around the Laguna Atascosa National Wildlife Refuge. "This agreement will create a mosaic

of new habitat," says our wildlife analyst Karen Chapman. "By the end of 2007 we hope to restore 1,000 acres." The cats are wide-ranging, mostly solitary creatures: 500 acres will provide enough space for one male, two females and their kittens.

Ocelots once ranged from Arkansas into Mexico, but their numbers plummeted as they were heavily hunted for their exotic pelts and their habitat was converted to ranchlands and subdivisions. Collisions on the roads that bisect their remaining range still claim many of the animals.

Under our agreement, property owners commit to rejuvenate thornscrub habitat for the secretive felines for at least 20 years. In return, they will receive financial and technical support to replant native vegetation and for other land management.

Laack's involvement with Safe Harbor has taken her beyond field science. She is now deploying her contacts in the region to spread the word among conservation-minded landowners. "I find this active management



Beset from all sides, ocelots have found refuge in rugged thorn scrub.

much more rewarding than the research," she says. "The future of ocelots in Texas depends on their ability to expand their range onto private lands. Fortunately, we have found a way for landowners to set out the welcome mat for them."

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