Prototypes of the new FedEx Express delivery truck have arrived and are now being tested. These diesel-electric hybrids could radically reduce the environmental costs of moving goods around America.

The new hybrids, which use regenerative brakes to recapture energy normally lost when braking, are ideally suited for the stop-and-go delivery business, analysts say.

Interest in the new low-polluting trucks is already building. “There’s quite a bit of excitement about this project among motor carriers and established suppliers,” notes Bill Gouse of the American Trucking Associations.

A truck rental company, a public utility and even the U.S. Army are closely monitoring tests of the hybrids in San Antonio, TX. “This is where the rubber meets the road,” says Elizabeth Sturcken, project manager at our Alliance for Environmental Innovation, which started the project with FedEx.

Two years ago, Environmental Defense teamed up with FedEx Express, the world’s largest express transportation company, to develop a truck that will improve fuel economy by 50% while cutting smog-forming pollutants by 90%. We invited manufacturers to submit designs that meet our emissions standards without compromising performance or the bottom line.

Of the 20 suppliers that responded, four were offered the chance to build prototypes. And two of those, BAE SYSTEMS Controls and Eaton Corporation, delivered. Over the next month, experts at the independent Southwest Research Institute will study how well the prototypes perform against a baseline FedEx Express delivery vehicle.

“Preliminary tests suggest that we’re well on our way to meeting the project’s design objectives,” says Jim Steffen, chief engineer for vehicles at FedEx Express.

By January, our team expects to choose one or both designs for further improvements, with production vehicles to be on the road by 2004. Each year, more than 200,000 delivery trucks of this type are sold in the U.S. Imagine how much cleaner America’s air would be if all of them were hybrids.
This election day, 37 gubernatorial races are up for grabs and at least 20 winners will be governors for the first time. This is an opportunity.

With Washington standing still on the environment, states can and should take major strides forward. For example, California Governor Davis signed groundbreaking legislation to cut greenhouse gas emissions from new cars. Other states can follow suit.

There’s room for innovation in other areas, too. North Carolina Governor Easley signed “clean smokestacks” legislation to cut power-plant emissions roughly 75%. And New York Governor Pataki required construction equipment at the World Trade Center site retrofitted to reduce air pollution dramatically.

Meanwhile, several Midwestern states have passed laws encouraging agricultural interests to help reduce global warming.

As the magnitude of environmental problems becomes clearer to their constituents, governors should recognize that such bold initiatives make good politics.

We will work with state leaders of both parties. Some say the states, now in budget crisis, can ill afford such innovations. But many crucial environmental reforms do not require government spending. They require leadership.

-Fred Krupp

Our scientist Michelle Duval, with colleagues, helped forge a network of marine reserves.

A new way to save threatened seas
RESERVES OFFER A PROTECTIVE CORRIDOR FOR FISH

This summer, a devastating collapse of fish stocks off California and New England led to widespread fishing closures. For fishery managers, this was a clear warning: New methods had to be tried, or more collapses and despair in the fishing industry would follow.

In the Southeast, we were already positioned to help restore imperiled fisheries, thanks to gifts to the Campaign for Environmental Defense.

For reasons unknown, huge schools of grouper congregate year after year in the same deep waters off North Carolina, where they are easy prey for fishermen. As a result, the slow-growing groupers are dangerously overfished. To help them recover, we and our allies proposed a network of strategically placed marine reserves, off-limits to fishing, where sea life could replenish itself.

The South Atlantic Fishery Management Council previously had tried to establish reserves but failed to convince fishermen. This time, the managers asked for our help. Initially, fishing communities were not well-disposed. At one hearing, our scientist Dr. Michelle Duval found herself an isolated environmentalist testifying in a crowd of 100 fishermen. But we persisted. Duval participated in workshops in affected communities, while we persuaded the fishery council that isolated reserves wouldn’t save the fish.

As we produced the needed science, the attitude changed. “You can’t win support if no one knows how threatened some of these fish are,” says Duval. Our scientist Dr. Douglas Rader then chaired a key panel that designed the first reserves.

The result was initial approval of a network of eight reserves along the southeastern U.S. coast that, when complete, will cover 800 square miles. The network will form a vital corridor for giant groupers and other wondrous species whose larvae are transported from Caribbean spawning grounds up the Atlantic coast. The protective network is the first of its kind in the United States.

RAPPORT WITH FISHERMEN

“Environmental Defense found a rapport with the council and fishing groups,” says Dr. Louis Daniel, a North Carolina fishery representative. “They provided the right science in a reasonable way. Some groups want everything at once. Environmental Defense advocated a step-by-step process that protects the resource without tying fishermen to the dock. I applaud the way
they handled a difficult negotiation.”

Such cooperative victories can pave the way for ocean reserves off California and Florida.

The Campaign for Environmental Defense is enabling us to take on complex, wide-ranging challenges such as the depletion of the seas. One of the campaign’s leadership donors, Environmental Defense trustee Lewis Ranieri, says he was driven to contribute because, “Our undersea resources are every bit as endangered as some of our terrestrial resources. But if we give them a chance, they are renewable.” A recreational fisherman who conceived a love of the ocean as a child in the inner city, Ranieri found himself drawn to our mission: “Our generation is creating undersea national parks, just as Teddy Roosevelt created national parks,” he says. “It’s eminently doable and eminently sensible.”

So far, leadership gifts to the campaign have helped us raise $162 million in program support toward the campaign goal of $200 million.

For more information about The Campaign for Environmental Defense, please call Paula Hayes, Director of Development, at 212-505-2100.

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**U.S.-Mexico effort helps endangered turtles come home to Texas**

Lumbering through the surf toward Padre Island, desperate to lay her eggs, the female Kemp’s ridley turtle doesn’t care that she’s in Texas. But as she clambered ashore and releases her clutch of eggs, the turtle represents a remarkable bi-national achievement.

The 100-pound turtle is one of a record 37 endangered Kemp’s ridleys nesting in Texas this year. Until a few years ago, these endangered turtles were very rare. Nearly wiped out by poaching and fishing, their only known nesting site was a single stretch of beach at Rancho Nuevo, Mexico.

As part of a joint U.S.-Mexico program, scientists protected the remaining nests at Rancho Nuevo from poachers and natural predators. Next, they began collecting eggs for transport to Texas. To change the turtles’ imprinting—a little-understood phenomenon that guides them thousands of miles to nest at the beaches on which they hatched—scientists netted the eggs as they were laid and immediately packed them in sand from Texas beaches. When they hatched, the silver-dollar-sized babies were shepherded across these same beaches before being recaptured for an additional year of protection.

This year, five mother turtles from the program returned to Padre Island, protected by regulations Environmental Defense helped draft to keep shrimp boats at bay during the egg-laying season.

“We’re expecting more mama turtles,” says our fisheries biologist Pamela Baker. “This proves that cross-border cooperation works.”

**A MAJOR EXPANSION OF CROSS-BORDER WORK**

This success has inspired Environmental Defense to substantially expand cross-border initiatives. We recently hired five key staff from the Texas Center for Policy Studies to enhance our ability to work with grassroots groups and political leaders in Mexico and the United States. Among our goals are to rebuild habitat for the endangered ocelot, help resolve water disputes along the border, reduce cross-border air pollution and reform Mexico’s fisheries.

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**Free at last**

The bald eagle has enjoyed a dramatic recovery, due in large part to the ban on DDT won by our founders. For Environmental Defense, the eagle’s resurgence is a fitting way to commemorate 35 years of work.

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Colin Rowan
Parks bloom in Los Angeles

In 1995, in the dense urban core of Los Angeles, a beautiful garden spontaneously grew. But it was no fairy tale. Neighborhood activists laboriously turned a trash-filled vacant lot on Francis Avenue into a thriving oasis of vegetables and flowers. Now the lot’s absentee owner is planning to sell his property at a price they can’t afford. Score another one for the giant, right?

Not necessarily. Environmental Defense has spearheaded a fast-growing movement to create an urban land trust. This nonprofit land trust would bring together L.A. city government, private philanthropy and members of the Verde Coalition, a diverse group of 13 local organizations, to foster neighborhood open spaces like the garden at Francis Avenue.

Walking to the Park, a new report from our Los Angeles Environmental Justice project, envisions a city where every resident can enjoy the simple pleasure of neighborhood open space. The report, immediately endorsed by Mayor Jim Hahn and key city council members, suggests ways local communities can acquire and maintain such spaces.

The land trust would focus on the city’s poorest areas. Such districts, the report finds, have less than one-twentieth the amount of recommended park space per person. Find our report at www.environmentaldefense.org/more.

Conservation tax axed

North Carolina has an ambitious plan to set aside one million acres for conservation over the next decade. Yet, in practice, many landowners who protected their land under conservation easements were penalized. Instead of getting a tax break, they got a tax hit: three years of back taxes plus future tax bills based on market value—in other words, the highest tax rate.

“In some North Carolina counties, landowners choosing to conserve woodlands were receiving tax bills up to 10 times higher than landowners who designate forests for timber production,” says our attorney Dan Whittle. “This served as a real disincentive to protect valuable forests.”

To correct the problem, Whittle helped draft and pass a bill in the North Carolina legislature that removes negative tax consequences for landowners who choose to protect woodlands for wildlife. The new law also sets up a commission to study other land valuation and forestry management issues in the state. Gov. Michael Easley signed the bill into law in October.

Says Whittle: “This win-win provision is an important first step in updating North Carolina’s forest management policies to reward conservation.” In a state that’s number three in the nation in terms of total forest loss, behind Georgia and California, that is welcome news.
In a major victory for the environment, NY Governor George Pataki announced a plan to protect New Yorkers from highly-polluting machinery at the construction site of the World Trade Center, now one of the nation’s largest building projects. Environmental Defense helped craft the plan through months of work by our Living Cities team in cooperation with state and city officials.

Non-road vehicles such as construction equipment emit more fine particles than all the nation’s cars, trucks and power plants combined. These pollutants are linked to asthma, cancer and other serious health problems.

“These measures will help protect the health of thousands of New Yorkers, including more than 4,000 children who play or attend school within blocks of the site,” says our New York regional director Andy Darrell.

Environmental Defense issued a briefing paper in January outlining cost-effective steps to improve long-term air quality in lower Manhattan. The governor’s plan includes our recommendations to use ultra-low-sulfur diesel fuel and the latest retrofit technologies to cut emissions.

We will use this landmark agreement as a model for cleaning up other large and dirty construction projects ranging from airport expansions to sports arenas. Target cities include Atlanta, Baltimore, Los Angeles and Washington, DC. “Every major city in the country suffers from these diesel ‘super-polluters,’ ” says our staff attorney Janea Scott. “These low-cost measures can be used everywhere.”

Such measures will build momentum for a federal plan mandating low-polluting fuel and better technologies for large off-road diesels. We are redoubling our efforts with EPA to press for rigorous national emission standards for these engines.

EPA recently issued a similar national rule for on-road diesel engines, lowering pollution from trucks and buses beginning in 2007. We pressed for adoption of the rule and then helped defend it in court.

We helped win pollution controls at ground zero.

Fuel cells may be the future, but cars can be cleaner today

When the first Jeep Grand Cherokee rolled off the assembly line in 1992, it ushered in a new era of heavily polluting vehicles. Wendy Abrams purchased her hybrid gasoline-electric Toyota Prius to help bring that era to an end. “I worried about the legacy America’s dirty transportation habits would leave for my twins,” she says.

Concerns about air pollution, global warming and oil dependence have led to a growing market in cleaner vehicles. Policymakers are starting to mandate them, with California recently passing the first law limiting automotive carbon dioxide emissions.

In response, automakers are rolling out futuristic prototypes like General Motors’ Hy-Wire, which is powered by a skateboard-sized fuel cell. Yet automakers are resisting simple changes that can make cars cleaner today.

“Nuts-and-bolts refinements could make today’s vehicles twice as efficient without sacrificing safety or increasing costs,” says our engineer John DeCicco.

Consumer demand and the right policies, not technology alone, will transform the auto industry. Environmental Defense is working to put those policies in place by urging lawmakers in several states to replicate California’s standards.

Our Ad Council public service announcements on green driving have reached millions of consumers, and more than 100,000 Americans have signed our pledge to let the Big Three know they want to buy cleaner cars.

“It’s time for the auto industry to produce cleaner vehicles now, not in some far-off future,” says DeCicco.

Start spreadin’ the news: Cleaner air for New York
Rx for health

To follow up on the suggestions in the story, contact these resources:

Alliance for Prudent Use of Antibiotics researches and promotes more appropriate use of antibiotics around the world. www.apua.org; 617-636-0966; 75 Kneeland Street, Boston, MA 02111.

An Environmental Defense report, When Wonder Drugs Don’t Work, is available online, where you can also join our campaign to stop Bayer from selling its Cipro-like antibiotic Baytril to factory farms. www.environmentaldefense.org/more.

The Green Adviser web site offers green tools for living, including tips for a healthier diet, from more than a dozen environmental and public health groups, including Environmental Defense. www.greenadviser.org.

Keep Antibiotics Working is a coalition of health, consumer, environmental and other groups opposed to antibiotic overuse. To find a state-by-state guide to restaurants and suppliers of antibiotic-free meat or to support pending legislation to limit agricultural use of antibiotics, visit www.keepantibioticsworking.com; 202-387-3228.

Safe Tables Our Priority (STOP) is a resource center for parents of children affected by food-borne illnesses. www.stop-usa.org; 802-863-0555 (general calls); 800-350-STOP (victims and victims’ families); P.O. Box 4352, Burlington, VT 05406.

Pass the turkey please, but hold the antibiotics.

On the safe side

HOW TO KEEP ANTIBIOTICS WORKING FOR YOUR FAMILY

Any parent who has stayed up all night with a sick child knows food poisoning is no joke. Bacteria cause five million cases of food-borne illness and hospitalize more than 36,000 people annually, according to the Centers for Disease Control. And food-borne illness is only a small part of the problem. Bacteria can also cause ailments ranging from ear infections to meningitis and pneumonia.

Doctors often prescribe antibiotics to treat bacterial infections, but the very popularity of these drugs is beginning to compromise their effectiveness and foster new strains of antibiotic-resistant bacteria. Particularly galling to health advocates is the overuse of antibiotics. Some 70% of all U.S. antibiotics are fed to healthy farm animals to promote rapid growth and compensate for unsanitary, overcrowded conditions.

What can you do to protect your family? Here are some tips:

• **Practice prevention.** The Association for Professionals in Infection Control and Epidemiology urges people to wash their hands frequently, especially before preparing food or eating. Other suggestions include using separate cutting boards when preparing meat and produce, and cooking meat to at least 140 degrees to kill all bacteria. Immunizations should also be kept up-to-date.

• **Buy antibiotic-free.** A growing number of supermarkets and restaurants now carry meat raised without routine use of antibiotics (see a state-by-state list on the “Keep Antibiotics Working” web site, at left). Look for meat labeled as “certified organic” or “no antibiotics.” Caution: The USDA’s “all-natural” designation may be misleading, since it includes meats raised with growth hormones and antibiotics.

• **Use the right medicine.** Too often, people treat viral infections with antibiotics, which have no effect on viruses. The American Academy of Pediatrics has published guidelines that help physicians make a correct
diagnosis. Patients should avoid pressuring their doctor to prescribe antibiotics unless they're appropriate.

- **Follow the prescription.** If you do use an antibiotic, don’t stop taking it as soon as you feel better, because cutting short treatment can promote the growth of antibiotic-resistant bacteria. Never mix antibiotics or share pills with someone else.

- **Stick to sensible soaps.** Many soaps and other products now include “antimicrobials” or “antibacterials”—compounds that aren’t traditional antibiotics but can kill bacteria. For most households, such products aren’t a good idea. Using them regularly will prompt bacteria to become immune to them. Proper hand-washing with regular soap will remove 99.9% of bacteria.

- **Have a safe Thanksgiving.** If you plan to eat turkey, keep it refrigerated until it goes in the oven. Use a meat thermometer to make sure your bird is thoroughly cooked. Certified organic turkeys are safely antibiotic-free.

When used judiciously, antibiotics are indeed “wonder drugs.” But ensuring they remain effective is crucial for all of us. As Dr. John Balbus at Environmental Defense points out, “If the antibiotics become ineffective, there’s no place left to turn.”

By Jim Motavalli

Environmental Defense in the news

**From The Economist, July 6, 2002**

“The greatest green success story of the past decade is probably America's innovative scheme to cut emissions of sulfur dioxide (SO₂). Dan Dudek of Environmental Defense, a most unusual green group, and his market-minded colleagues persuaded the elder George Bush to agree to an amendment to the sacred Clean Air Act that would introduce an emissions-trading system to achieve sharp cuts in SO₂.

“At the time, this was hugely controversial: America's power industry insisted the cuts were prohibitively costly, while nearly every other green group decried the measure as a sham. In the event, Environmental Defense has been vindicated. America's scheme has surpassed its initial objectives, and at far lower cost than expected. So great is the interest worldwide in trading that Environmental Defense is now advising groups ranging from hard-nosed oilmen at BP to bureaucrats in China and Russia.”

**IN BRIEF**

**ARMY CORPS REFORM MARCHES ON**

“Damming and dredging a river is like clear-cutting a forest,” says our water resources specialist Scott Faber. “It destroys habitat that wildlife needs to survive.” Over the last century, the Army Corps of Engineers has turned 29 of America's most majestic rivers into straight and narrow barge canals, devastating fish and wildlife in the process.

After we helped reveal that the Corps was manipulating data to justify unwarranted projects, the Army's Inspector General and the National Academy of Sciences confirmed our conclusions.

This fall, Senator Tim Johnson (D-SD) introduced a bill incorporating our recommendations to reform the Corps. Some Senators who crave pork are blocking these efforts, but growing support indicates the Corps' days of unfettered spending are numbered.

**SHARK TROUBLE**

Nearly three decades after *Jaws* transfixed beachgoers, author Peter Benchley has written a sequel. The new non-fiction book *Shark Trouble* (Random House) dispels some of the myths about the ocean’s top predator. “It’s the sharks who are in trouble, not us,” writes Benchley, a member of our national council. “For every human killed by a shark, ten million sharks are killed by humans, mostly for their fins,” an Asian delicacy. These days, when he’s not exploring the ocean’s depths, Benchley is promoting marine reserves for our Oceans program.
Each year for the past 21 years, the annual moratorium on offshore drilling in sensitive marine areas has come up for renewal. This summer we worked with Congress to make the protection even stronger. The entire east and west coasts, parts of Florida and Alaska’s fishery-rich Bristol Bay are safe from new offshore oil and gas leasing for one more year.

Historically, support for the moratorium originates with local elected officials and percolates up through government. Our marine advocate Richard Charter, with two decades of experience in protecting coastlines, helped move the initiative from local government to adoption by Congress.

The campaign then shifted to preventing the development of existing leases. Congress is finalizing a bill we helped craft to prevent exploitation of active but undeveloped leases off central California’s spectacular Point Conception. Says Charter: “We had a major victory on the House floor. We’re now hoping for a positive outcome in the House-Senate conference committee.”

In Brazil’s remote western Amazon, peasants are heading back to the future. Some 3,000 families have left the cities and returned to the jungle to make a living, without cutting down the rainforest, in a special “extractive reserve.”

A decade ago, Environmental Defense helped establish the 3,900-square-mile reserve, named after assassinated environmental leader Chico Mendes, in the isolated state of Acre. Logging is restricted there, and residents are encouraged to manage the resources sustainably.

“Traditional communities develop management plans and practice long-term stewardship in exchange for land rights,” says our anthropologist Dr. Stephan Schwartzman, who conducted the first research on extractive reserves.

In the past decade, forest dwellers have returned to Acre to cultivate rubber and Brazil nuts, two mainstays of the local economy before major deforestation began in the 1970s. Others have formed cooperatives to capitalize on the growing market for environmentally friendly products such as andiroba, a natural oil from the jungle used as a mosquito repellent.

In September, Brazilian President Cardoso said he would designate an additional 34,000 square miles of rainforest as extractive reserves.

The Brazilian rainforest is disappearing at a rate of 6,000 square miles a year, an area the size of Connecticut, as landowners set the jungle ablaze to clear the way for cattle pasture and soybeans.

Extractive reserves and indigenous lands are the final line of defense in the jungle. “If you examine satellite images of all the fires burning in the Amazon, you can see the outline of the indigenous areas,” says Schwartzman. “Where Indian lands start, the fires stop.”