



EDF IMPACT 2023

GLOBAL REACH LOCAL IMPACT



WHAT'S INSIDE

- 3 **Thank you** Your global reach. Your local impact
- 4 **Methane** The fastest way to slow climate change now
- 8 **Transportation** Cleaner cars, better health, safer climate
- 10 **Nature and climate** Finding solutions in nature
- 12 **Air pollution** Local clean air, globally
- 14 **Food** Abundant food in a warming world
- 16 **Resilience** New land for a vanishing coast
- 17 **More 2023 milestones**

A fully interactive version of this report is available online at impact2023.edf.org

Front cover: *The Marañón River backed by the Amazon rainforest in northeastern Peru.*

Inside cover: *Field in China.*

THANK YOU

YOUR GLOBAL REACH, YOUR LOCAL IMPACT

The consequences of climate change are being felt worldwide. That's why EDF is ramping up game-changing solutions at a global scale.

And, because big ideas are only as good as their real-world impacts, we also partner with people on the ground — fishers facing dwindling catches, farmers struggling through floods and drought, families breathing polluted air.

This year, your generosity once again powered our efforts to stabilize the climate, support people's health and strengthen the ability of people and nature to thrive.

You strengthened our global influence

Our experts shared the stage with world leaders and delivered data-driven solutions at COP28, the biggest climate conference of the year, and at ADIPEC, the world's largest energy conference, in Abu Dhabi. We also participated in the first Africa Climate Summit in Nairobi, Kenya, where the discussions focused on opportunities for climate solutions across the continent.

You expanded our regional impact

Your unwavering support is driving down climate pollution in the four regions responsible for about half of the world's current emissions: China, Europe, India and the United States.

In China, we continued to advise the government on its national carbon market, the largest in the world. In Europe, we are paving the way for new regulations on methane pollution from the oil and gas industry.

In India, EDF experts worked with farmers, researchers and companies — including with the world's largest milk producer — to improve farmers' incomes, increase yields and reduce emissions from agriculture and livestock.

And in the U.S., we are working to ensure that the climate and clean-energy investments made in the Bipartisan Infrastructure Law and the Inflation

Reduction Act are well-spent to help cut America's climate pollution in half from 2005 levels by 2030.

You advanced our community work

We're proud to say that the Frontline Resource Institute, which EDF helps support, has completed its first grant cycle, distributing more than \$1 million to 13 groups taking action for environmental justice. And this year we launched the Climate Vulnerability Index, which pinpoints the challenges that U.S. communities face due to climate change and shows where resources are most urgently needed.

For your role in enabling this vital work and more, we thank you.



Amanda Leland | Executive Director

Fred Krupp | President

Mark Heising | Chair, Board of Trustees

METHANE

THE FASTEST WAY TO SLOW CLIMATE CHANGE NOW



The planet is getting hotter, fast. The past eight years have been the warmest on record, and 2023 will likely be the hottest ever. Fortunately, there's an emergency brake we can pull to slow down the alarming rate of global warming. By cutting methane pollution now, we will make a difference within the next decade.

Methane is a potent, short-lived climate pollutant that is accelerating how quickly the planet heats up. It has more than 80 times the warming power of carbon dioxide in the first 20 years after its release. The methane pollution

released next year will warm the planet as much over the next decade as all the carbon emissions from burning fossil fuels. Agriculture and fossil fuels are two major sources of this pollution — methane is the main ingredient of natural gas.

This year, EDF reached several major milestones in our all-out effort to galvanize methane reductions. We've advanced strong government policies, new technologies and powerful partnerships around the world, laying the foundations for a climate breakthrough.

METHANE REDUCTION POLICIES WITH TEETH

The oil and gas industry is the largest industrial source of methane pollution. New regulations will cut pollution and protect communities.



In the United States alone, some 18 million people live less than a mile from an oil and gas site. Navajo Nation members are twice as likely to live within half a mile of such facilities. Wendy Atcitty of Naeva, a Native American civic action group, advocated alongside EDF for **strong new U.S. Environmental Protection Agency** rules to limit oil and gas methane pollution. “It’s unbelievable to see in my lifetime the impact of climate change on Navajo lands,” says Atcitty, noting a warmer, drier environment with harder winds. The new rules will apply to millions of sites nationwide. They are informed by years of EDF advocacy and research and are projected to cut 36 million tons of methane by 2035, as well 10 million tons of health-harming air pollution.

An oil and gas well near Bill Suan’s farmhouse in West Virginia leaked oily, briny fluid for decades. It’s one of at least 125,000 – and likely many more – **abandoned wells across the United States** that can leak harmful chemicals into the air, soil and water, and climate-warming methane into the atmosphere. Leaking wells on Suan’s farm were among more than 5,000 orphan wells in two dozen U.S. states that were sealed and remediated in 2023 thanks to federal funding in the Bipartisan Infrastructure Law, which EDF helped secure and guide. Our work with state policymakers to prevent future orphan wells also resulted in new rules in California and Louisiana.



The European Union, the world’s largest natural gas importer, has reached a provisional agreement on its **first methane regulations**, which will slash methane pollution from both the EU fossil fuel industry and from imported fuels. EDF’s public campaign and direct engagement with policymakers across the EU played a major role in creating these pioneering rules. By covering imports, as EDF has long advocated, the new legislation is expected to cut 2-6 times as much methane as domestic provisions alone.

MAKING THE INVISIBLE MEASURABLE

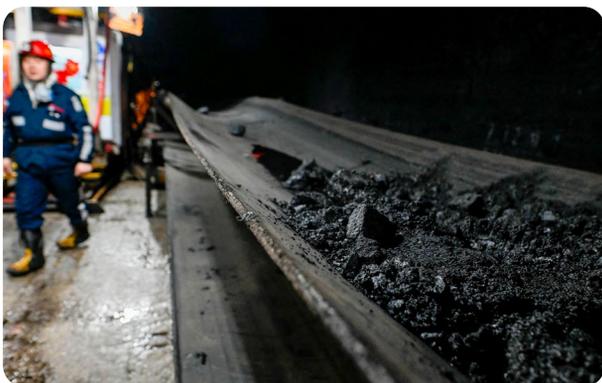
Methane pollution is rarely monitored, let alone properly reported. Groundbreaking technologies to locate and measure it will provide actionable information to slash emissions and enforce regulations.



EDF subsidiary **MethaneSAT** has completed construction of the world's most advanced methane-measuring satellite, scheduled to launch in 2024. MethaneSAT will provide a full account of the quantity and rate of methane pollution from oil and gas operations around the world. It has unique capabilities to see both high-emitting sources and widespread, low-level emissions that constitute a major share of methane pollution. It can see the total emissions in an oil or gas field. MethaneSAT scientists will make data rapidly available at no cost to governments, companies, investors and the public, leaving polluters with nowhere to hide. MethaneSAT will be a key contributor to a growing stream of data that will help cut emissions and measure progress.

MethaneAIR, **the world's only dedicated methane-measuring jet**, flew over major U.S oil and gas regions to gather emissions data in advance of MethaneSAT's launch. Developed by MethaneSAT, EDF, Harvard University and the Smithsonian Astrophysical Observatory, MethaneAIR, using technology similar to MethaneSAT, will build the first comprehensive baseline methane measurements

for these regions, so reductions can be tracked. MethaneAIR is revealing methane pollution from hundreds of thousands of small sources that have been invisible until now.



China is among the top methane-emitting countries, along with the United States, India, Russia and Brazil. EDF partnered with key ministries and provincial governments to help **China develop its first national methane action plan**. This blueprint reflects many of EDF's recommendations, including the use of satellites to monitor methane emissions. It sets a framework for methane use and monitoring from coal mines, the largest source of methane emissions in China, as well as other sectors, and lays a foundation for higher ambition going forward.

GAME-CHANGING PARTNERSHIPS TO CUT METHANE

EDF teams up with major players on the frontlines of methane action to deliver solutions that work.



Day and evening, millions of small farmers in India bring milk from their cows to a collection center like this one in Mujkuva, Gujarat, run by **India's national dairy cooperative**. EDF is working with the cooperative — the world's largest milk producer — to improve small farmers' bottom lines and the health of their cattle, while also reducing methane emissions from livestock. This work includes scaling up the installation of biogas systems on farms that turn methane-emitting manure into free, clean-burning fuel. We're also working to improve farmers' access to locally-grown, nutritious cattle feed that will improve milk yields, reduce costs and cut methane from cow digestion.

Agriculture and livestock are responsible for about 40% of human-caused methane emissions globally. This year, EDF partnered with Danone — **a global dairy company that works directly with more than 58,000 farmers** in 20 countries — to become the first food and agriculture business to make a methane-specific climate pledge. Danone committed to reduce emissions from its fresh milk supply by 30% by 2030. EDF is helping Danone achieve this goal through improved science, data

and reporting, and innovative financing strategies to fund more climate-friendly dairy practices. “The dairy industry can be a leader in reducing methane while continuing to be a vital source of food and jobs around the world,” said Henri Bruxelles, chief sustainability officer for Danone. “We're proud to be partnering with EDF to make this vision a reality.”



In 2023, more than 20 new companies joined the **Oil & Gas Methane Partnership**, an international initiative led by the United Nations Environment Programme and supported by EDF and the European Commission. The partnership, through which companies pledge to report their methane emissions and set reduction targets, now includes over 115 companies across more than 60 countries and represents 35% of the world's oil and gas production. Due to EDF's direct engagement, Petrobras of Brazil and PetroEcuador, both major national oil companies, were among the companies that joined this year.

CLEANER CARS, BETTER HEALTH, SAFER CLIMATE

In the United States, transportation is the largest source of planet-warming pollution. It's also a major source of air pollution linked to asthma, heart disease and cancer. That's why EDF is working to ensure that by 2035, 100% of new cars, trucks and buses sold in the U.S. emit zero

pollution. Your support over the past year has helped us engage automakers, autoworkers and policymakers in a clean car revolution, dramatically accelerating a transition to cleaner vehicles, while generating good jobs, more choices for consumers and healthier, safer communities.



Following EDF's research and outreach, the U.S. Environmental Protection Agency approved **California's clean truck standards**, which will increase sales of zero-emission freight trucks and buses by 45-75% through 2035, depending on vehicle type. Seven other states have already moved to adopt the rule, covering nearly a quarter of the U.S. market. While they make up just 5% of wheels on the road, these big, diesel vehicles — such as this semi-truck driving past family homes in Newark, New Jersey — cause a quarter of the greenhouse gas emissions and nearly half of the deaths linked to air pollution from transportation.

Tailpipe pollution is especially dangerous for children, like 12-year-old Oscar Hauptman (*right*), whose lungs are still developing.

Oscar, who already suffers from asthma, lives near Detroit, where hospitalization rates for asthma are four times higher than in the rest of the state. But safer air is on the way. Thanks in part to the advocacy of clean air champions like Oscar's mom, Elizabeth Hauptman, an organizer for EDF affiliate Moms Clean Air Force, the U.S. Environmental Protection Agency proposed **new tailpipe pollution standards**. These standards could shift two-thirds of all new car sales, nearly half of new commercial vehicle sales, and up to a third of new 18-wheeler sales to zero-emissions vehicles in the next decade. EDF helped build the case for these standards through groundbreaking reports highlighting the feasibility and enormous benefits of this transition, and extensive outreach to policymakers, major manufacturers and truck fleet operators.



TRANSPORTATION



A 2023 EDF analysis found that **15 million people in 10 U.S. states live within a half-mile of a warehouse** and that the associated truck pollution disproportionately affects Black, Latino, Asian and Native American communities. When this 1-million-square-foot warehouse opened in the very same spot that was once home to a dirty coal-fired power plant, residents of Chicago's Little Village

neighborhood, a primarily Latino community, quickly realized that the city had traded one polluter for another. EDF is advocating alongside the Little Village Environmental Justice Organization, Warehouse Workers for Justice and the Respiratory Health Association for Illinois to enact policies that follow California's clean truck standards and would facilitate Illinois' transition to zero-emission vehicles.



In the last eight years, auto manufacturers have announced over \$165 billion in new investment in U.S. electric vehicle and battery manufacturing facilities. EDF's advocacy helped pass the Bipartisan Infrastructure Law in 2021 and the Inflation Reduction Act in 2022, further turbocharging the U.S. market. More than half of the \$165 billion investment has happened since the passage of the Inflation Reduction Act. Manufacturers have also announced more than **179,000 new, direct U.S. EV-related jobs** — including as many as 2,300 at this GM plant in Michigan — in the same time frame. Almost half the new jobs were announced in the last year. By 2026, the U.S. is expected to be able to produce 4.7 million new electric vehicles every year.

FINDING SOLUTIONS IN NATURE

Nature plays a crucial role in solving the climate crisis by storing carbon in soils, trees and the deep ocean. Protecting forests offers the single largest natural climate solution. But our science shows that risks to forests are growing, in part due to climate change itself. EDF is laser-focused

on accelerating investments in forest protection worldwide. For other natural systems, such as oceans and mangrove forests, your support is driving first-of-its-kind research to better understand and quantify the true carbon storage potential of these vital ecosystems.



At the EDF-sponsored 2023 Indigenous Women's Forum in the Republic of Congo, experts gathered to discuss the role of carbon markets in protecting tropical forests. Indigenous peoples are critical partners in the creation of markets that genuinely protect forests, deliver real, long-term carbon reductions and support forest communities. The LEAF Coalition (Lowering Emissions by Accelerating Forest Finance), which represents **the largest-ever public-private investment in tropical forests**, continues to grow in size and scope. EDF helped launch LEAF in 2021. This year, our support enabled 10 jurisdictions, including Costa Rica, Ecuador, Ghana, Vietnam, Kenya, Nepal and four states in Brazil, to accelerate their readiness to sell hundreds of millions of dollars' worth of high-integrity forest carbon credits to preserve over 2.5 million hectares from expected deforestation. The first purchase agreements are expected by mid-2024.

EDF is helping make the voluntary carbon market — through which companies buy carbon credits from projects designed to store carbon or reduce emissions — a more credible place. Earlier this year, EDF, alongside seven other environmental nonprofits and Indigenous peoples' organizations, released the latest version of the **Tropical Forest Credit Integrity Guide**. The guide offers comprehensive guidance to help companies purchase carbon credits that will reliably reduce emissions and directly support the Indigenous groups that steward the world's tropical forests. In addition, our Carbon Credit Quality Initiative's free, open-access scoring tool helps companies understand the quality of different types of carbon credits, including those based on renewable energy, clean cookstoves and more. The latest version includes scores for several kinds of forest credits and covers 80% of the voluntary carbon market.



NATURE AND CLIMATE

Aboard the research vessel BAP Carrasco off South America's Pacific coast, EDF scientists and partners from Chile, Ecuador and Peru **collected sediment cores and DNA samples of mesopelagic animals**, the small and abundant creatures that live at depths of 650 to 3,300 feet. Ocean sediments provide a rich picture of the abundance and distribution patterns of marine animals in the past, and DNA can illustrate what's in the water today. Scientists increasingly believe that these understudied animals play a vital role in the ocean carbon cycle, storing carbon from the consumption of smaller organisms and releasing it as waste that sinks to the seabed, where, if not disturbed, it stays for millennia. EDF is using this research to identify the best way to protect mesopelagic species.



A square mile of mangrove forest can sequester carbon 10 times faster than the same area of mature tropical forests. But mangrove forests can also emit greenhouse gases when disturbed or degraded. In Ecuador, EDF works with crab gatherers such as Mauricio Cruz and local conservationists as they reconnect tidal channels, **enabling mangroves to**

return to deforested areas. Data from new, low-cost greenhouse gas sensors are informing standards to guide mangrove preservation and restoration, and giving researchers the ability to identify which sites play a larger role in mitigating climate change. “The mangrove is life,” says Cruz. “It protects the species on which we and our families survive.”

LOCAL CLEAN AIR, GLOBALLY

The World Health Organization estimates that, across the globe, nearly 7 million people die prematurely from air pollution every year. With your steadfast support, EDF works with

partners on five continents to find practical solutions that help people breathe cleaner air and live healthier lives — while also fighting the effects of climate change.



Mercury is a highly potent neurotoxin that can have devastating impacts on the brain and nervous system, especially for babies and young children like Mercedes McKinley's two-year-old daughter, Jade. That's why McKinley, an organizer for EcoMadres, an outreach program of EDF affiliate Moms Clean Air Force, worked tirelessly alongside EDF to campaign for better protections in the United States.

This year, for the first time in over a decade, the U.S. Environmental Protection Agency moved to **strengthen protections against mercury** and other hazardous pollutants from coal-fired power plants, modernizing its Mercury and Air Toxics Standards. Following further advocacy from EDF and families like McKinley's, the U.S. Environmental Protection Agency also finalized the "good neighbor" plan. The plan will protect millions of people from poorly controlled smokestack pollution from fossil fuel power plants, including coal plants, and other industrial sources, that wafts across state lines.

In India's fight for cleaner air, the city of Indore is making strides. It is one of three pilot cities for the **Clean Air Catalyst**, a **global partnership** supported by the United States Agency for International Development and led by the World Resources Institute and EDF that builds support for solutions to air pollution. This year, the Indore Catalyst team launched three new air quality monitoring stations in Indore — because accurate data is the first step in addressing pollution — and trained 160 traffic police officers, and an all-female team of community health workers, known as ASHAs, on the dangers of air pollution. The ASHAs are now educating 40,000 households on the harmful health effects of air pollution and encouraging healthier habits, like refraining from burning garbage.



AIR POLLUTION



In Mexico, EDF experts are helping food and beverage companies, including Grupo Bimbo — one of the world's largest bakeries — cut emissions by promoting the use of electric vehicles and bicycles for last-mile delivery. In Brazil, we are advising the government on the design of a new national air-quality strategy. These are just two of 10 projects getting underway thanks to a **new partnership with the United Nations Environment Programme** that aims to reduce air pollution in 33 countries across Latin America and the Caribbean. Five hundred million people in the region breathe air that exceeds the World Health Organization's guidelines for pollution. Ultimately, the projects will also serve as models for other cities and countries to replicate.



We can't tackle air pollution until we know where it comes from. In Jinan, China, EDF teamed up with experts from Tsinghua University to roll out a **hyperlocal air-quality monitoring system** that pairs real-time pollution measurements with local wind data to illustrate pollution's path. The system incorporates methods

used in AirTracker, EDF's online tool that runs on trusted scientific models to help users learn more about the sources of air pollution in their community. Ultimately, we plan to expand the system in Jinan to cover the entire city of 9 million people, giving officials valuable information as they inspect polluters and enforce air pollution rules.

ABUNDANT FOOD FOR A WARMING WORLD

As extreme weather grows more frequent and intense, farmers must work harder to stay productive and profitable. Meanwhile, changing ocean temperatures and currents are endangering the fisheries that sustain coastal communities around

the world. To take on these unprecedented challenges, EDF partners with small-scale fishers, farmers and governments, using science, economics and policy to fortify the world's food producers against an uncertain future.



In California's San Joaquin Valley, nearly 900,000 acres of drought-plagued farmland will become unfarmable by 2040. Farmer Sarah Woolf is one of the beneficiaries of EDF-sponsored state legislation that provides \$90 million to **repurpose agricultural land for wildlife habitat**, solar projects, community parks and floodplains. "We may need to retire as much as 30% of the land in our district," says Woolf. "These incentives are going to make that transition less painful." This year, EDF worked with federal lawmakers to introduce legislation that would fund similar programs across the United States, prioritizing projects that provide direct benefits to disadvantaged communities.



Fishers in the port of El Niño, in northern Peru, worry about their ability to feed their families as climate change supercharges the dramatic weather swings associated with episodes of El Niño and La Niña. This year, catches declined as water temperatures in the eastern tropical Pacific reached a record high. EDF is expanding its groundbreaking **early warning system for climate impacts on**

fisheries in the Humboldt Current, the cold ocean current that flows north along the western coast of South America. This year, fisheries managers in Peru and Chile used the system's predictions to issue El Niño alerts, allowing them to modify fishing practices and regulations (including temporarily closing Peru's anchovy fishery to protect its long-term viability) to quickly adapt to changing ocean conditions.

FOOD



ntan and Andi Nurlinda in the village of Kuala Teladas, Indonesia, use the fat of blue swimming crabs – which was previously discarded – to develop products such as crackers and other snacks. In a region where more than one in four children under 5 years suffers from stunted growth, primarily due to chronic malnutrition, these highly nutritious foods cater to local dietary preferences and help fight impaired growth and development. EDF and local partners are helping coastal communities in **tropical nations around the world diversify their food and livelihoods**, and manage fisheries more sustainably to build resilience to the effects of climate change.

Nitrous oxide is a powerful greenhouse gas. Inefficient use of nitrogen-based fertilizers contributes directly to climate change and costs farmers money. In January, EDF and partners published new research that measured nitrous oxide emissions from agriculture in India, where we work with more than **40,000 farmers in the states of Maharashtra and Bihar**. The study showed that farmers such as these rice growers in West Champaran, Bihar, can reduce fertilizer use without sacrificing yield or income. Thanks to partnerships with nonprofits like the Syngenta Foundation India, we are now able to calculate and share the economic and environmental benefits of various climate-smart farming practices, helping food growers stay productive even as the climate changes.



One year after launch, **one of America's first farm financing programs that rewards environmental stewardship** saw 83% of farmer participants meeting environmental standards, while maintaining crop yields. The program offers farmers a reduced interest rate on their operating loans if they meet certain benchmarks for fertilizer efficiency and soil conservation practices like planting cover crops. EDF launched the program with Farmers Business Network. It rapidly became the network's fastest-selling financial product ever. "This program highlighted the enormous demand for, and powerful potential of, programs that reward farmers for reducing emissions and protecting their soils," said Steele Lorenz, a senior director at FBN. "We relied on EDF to set the environmental standards for the program and they've been an invaluable partner every step of the way."

NEW LAND FOR A VANISHING COAST



Nearly 40% of the world’s population lives near a coast, where climate change is already causing rising seas and bigger storm surges. EDF’s work helps coastal communities thrive in a warmer, wetter world. In the United States, we helped the state of Louisiana launch its most ambitious project yet to sustain its coastline.

At the magnificent Mississippi River Delta in southern Louisiana, wetlands, marshes, islands and forests rise up from the rich mud deposited by the river. These coastal ecosystems are home to bounteous fish and wildlife. During storms and high seas, they protect communities as far inland as New Orleans by slowing down waves and absorbing water.

But 2,000 square miles of these wetlands — an area bigger than Delaware — have sunk into open water since the 1930s, leaving people increasingly vulnerable to flooding and hurricanes.

This year, Louisiana broke ground on an ambitious project to fight back, by harnessing the power of the river to rebuild wetlands. It’s **one of the largest ecosystem restoration projects** in the world.



Louisiana’s land loss is largely due to a century of efforts to control the Mississippi River. The U.S. Army Corps of Engineers has built thousands of miles of dams, levees and other structures along the river to prevent flooding and ease navigation. These projects have also choked off the supply of sediment to the delta — sediment that raised south Louisiana out of the sea.

“We’ve lost so much,” says Daniel Songy, a local charter boat captain. “Anything we can do to build land, we need to do.”

The project, backed by decades of research and advocacy from EDF and partners, will divert fresh water and sediment from the Mississippi to the dying wetlands of Barataria Bay. When the river runs high, it will once again naturally build new land in the bay (see *map*), reviving habitats, restoring natural flood protection, and fighting back against land loss.

The plan also includes funding to support impacted communities, such as shrimpers and oyster farmers, and wildlife. It is the centerpiece of Louisiana’s efforts to help coastal communities survive and thrive in a changing climate, and a model for further resilience efforts in the state and other coastal regions.

MORE 2023 MILESTONES

CORPORATE CLIMATE ACTION, FASTER



Just eight global industries, including food, construction, fashion and electronics, account for more than half of annual greenhouse gas emissions globally. Nine hundred of the world's 2,000 largest companies have set goals to zero out their climate pollution. But far fewer have followed those promises with concrete action at the speed that is required to pump the brakes on climate change.

Obstacles to action include lack of in-house expertise, changing regulations and confusion about what guidance to follow. That's why, this year, EDF launched the **Net Zero Action Accelerator**, a free, science-backed web hub that helps companies make customizable plans to quickly slash emissions from their operations and supply chains. The tool includes guidance on generating internal engagement, calculating emissions, identifying and tackling industry-specific emissions hotspots, and it provides analyses of regulatory developments, incentives and more. The tool has environmental justice considerations built into most of its recommendations and a section dedicated to specific efforts companies can make to include climate justice in their work.

GETTING HYDROGEN RIGHT



Hydrogen has the potential to be a game-changing clean energy solution — but only if it's produced cleanly and used wisely. As governments and industry pour billions of dollars into hydrogen, EDF is leading the charge to **ensure this nascent industry is built correctly right from the start.**

Hydrogen is an indirect greenhouse gas, and EDF research revealed that widespread emissions could undermine the climate benefits of replacing fossil fuels. In 2023, EDF scientists helped test breakthrough technology that can detect and measure hydrogen emissions. We are now working with partners in the United States and elsewhere to begin gathering real-world data.

In the European Union, following advocacy by EDF, the European Parliament called for further investigation into hydrogen leaks. EDF attorneys also urged the U.S. Environmental Protection Agency to protect communities by adopting safeguards that would reduce pollution from hydrogen production plants that use fossil fuels. As the U.S. government implements a hydrogen production tax credit and invests billions in hydrogen facilities, EDF is working to ensure these investments support only the cleanest forms of hydrogen.

MORE 2023 MILESTONES

A WORLD-FIRST EXPEDITION



Warming waters and ocean acidification are putting coral reefs at risk. Cuba's waters are home to four of the world's most climate-resilient reefs, providing ideal conditions in which to study and find ways to preserve coral in the Caribbean and worldwide.

During a **first-of-its-kind scientific circumnavigation of Cuba**, marine biologist Patricia González (*pictured*) examined a coral reef off the coast of Cuba. EDF worked with more than 30 partner organizations to support the two-month expedition on the M/V Oceans for Youth research boat to assess the health of the country's exceptional reefs, along with fish and other marine life that depend on them. Says Fabián Pina, the Cuban marine biologist who initiated the project: "This expedition opens new doors, enormous opportunities that we need to take advantage of if we're going to save this beautiful and essential part of the nation's and the world's natural heritage."

BUILDING TOMORROW'S CLIMATE LEADERS TODAY



When it comes to climate change, no one has more at stake than young people.

EDF is mobilizing youth power

through efforts like Defend Our Future, an advocacy program which this year gave students from across the United States the tools to organize in their communities and lobby for policies that fight for a brighter climate future.

Since 2008, EDF's Climate Corps fellowship program has embedded more than 1,700 ambitious graduate students at over 650 top-tier companies around the world to help both students and corporations become sustainability leaders. In China, the fellowship celebrated its 10th anniversary in 2023. "EDF's Climate Corps was my gateway to corporate sustainability," says alum Mengdi Wang, now a senior environmental specialist at computer maker Lenovo China.

MORE 2023 MILESTONES

ACTION ON LEAD IN WATER PIPES



Over the years, EDF has played a critical role in eliminating lead from our day-to-day lives, most notably by helping to get lead out of gasoline in the United States. But there's more to be done. At today's levels of exposure in the U.S., lead can damage the heart and kidneys. It's especially harmful to children under six – causing behavioral problems and lowering IQ.

Today, we are **supporting the removal of lead from water service lines** across the U.S., through the Get the Lead Out Partnership. The coalition includes the U.S. government, local communities, nonprofits, water utilities, labor unions, and companies – all committed to replacing every remaining lead service line in the U.S. over the next 10 years. This year, EDF experts identified the 10 U.S. cities with the most lead service lines, and raised the alarm on underfunding for states with many lines. We are now working with the U.S. Environmental Protection Agency to develop a more equitable way to allocate funds for lead pipe removal in the future.

RESOURCES ON THE FRONT LINES



The communities hit hardest by climate change and environmental hazards often lack essential resources to fight back. That's where the Frontline Resource Institute comes in. Founded last year with help from EDF, FRI **provides frontline community-based organizations with the resources they need** to counter generations of environmental injustices. In 2023, FRI distributed over \$1 million in

grants to 13 frontline organizations working on issues from pesticide reform to food sovereignty. FRI has also partnered with Writing for Green, an organization that equips frontline leaders with the skills to navigate complex grant application processes and secure much-needed funding for their work. This year, that partnership has supported 18 frontline groups, yielding \$60 million in successful grants.

THANK YOU

Thank you for another impactful year of work to stabilize the climate, support people's health and strengthen the ability of people and nature to thrive.

 [envdefensefund](#)

 [envdefensefund](#)

 [environmental_defense_fund](#)

 [environmental-defense](#)

 [EDF.org](#)

 257 Park Avenue South, New York, NY 10010



**Environmental
Defense
Fund**