Environmental Defense Fund

PROGRESSING TOWARDS A GREENER EUROPE

ENVIRONMENTAL DEFENSE FUND EUROPE

2022 REVIEW

PROGRESSING TOWARDS A GREENER EUROPE

Environmental Defense Fund Europe: 2022 Review

Russia's invasion of Ukraine at the start of 2022 triggered an historic turning point in Europe's energy transition. While first and foremost a human tragedy, this war also triggered an epochal moment when, in the minds of the majority, energy security became fully aligned with the imperative to tackle climate change. Environmental Defense Fund Europe brought real-world science and pragmatic solutions to this moment to support lasting changes for a healthier and more stable Europe.

The year started with fresh hope, as pandemic era lockdowns were lifted, allowing friends and families to reunite. However, with conflict suddenly flaring on Europe's eastern borders, attention switched to the soaring cost of living and doing business.

European Union institutions responded with agility and unity to the war in Ukraine. Politicians doubled down on many aspects of the EU Green Deal, which had been launched in 2019 with the goal of making Europe the first climate neutral continent via a mix of renewable energy, energy savings and electrification. It was quickly retooled to curb Russian gas revenue and gain energy independence. The EU's financing mechanisms were also quickly reprioritised, becoming the multi-billion euros Green Deal Industrial Plan.

The era of globalisation became bogged down amid economic sanctions on Moscow and the realisation that energy supplies, and many emerging technologies, could be used as economic weapons. In Washington, policymakers applied the lessons of the European predicament to their already-strained relations with Beijing and concluded that something must be done to loosen China's dominance over critical technologies for future energy transition. The Inflation Reduction Act of 2022 was born, and with it came a new sense of global – and transatlantic – rivalry over clean energy technologies.

Of course, the history of Europe's energy transition is not yet written until the steel is in the ground. In the debating chambers of Brussels, Paris, Berlin and other capitals, Chapter One has certainly played out in favour of "turbo-charging" climate action. But there remains a strong counter lobby, arguing that Europe is not yet ready to move beyond fossil gas, or that we cannot afford to move away from intensive agriculture.

This meant EDF Europe also had to pivot in response to these rapidly shifting tides of geopolitics. Our methane campaign continues to focus on the imperative to quickly reduce methane emissions to meet the Paris Agreement goals, but now also points at the energy security benefits of reducing wasteful leakage from production sites and distribution networks. As industry lobbyists drove a mythical narrative of using hydrogen to clean up the heating network, our team countered with facts and realism. We also made breakthroughs on policies to support renewably produced fuels for shipping and aviation. And in the agriculture space, we started to build collaborations in search of win-win solutions to help cut emissions in line with a just transition.

We're incredibly proud of what we achieved in 2022. Read on, and we hope you'll be equally impressed.

Pete Harrison

Executive Vice President, Regions,
and Acting Executive Director,
Environmental Defense Fund Europe

REDUCING METHANE EMISSIONS

The spotlight on methane, and its impact as a fast-acting greenhouse gas, continues to grow. Since the joint announcement of the Global Methane Pledge by the EU and the U.S. in 2021, more than 150 countries — responsible for half of global emissions and two thirds of the global economy — have endorsed the pledge to reduce global methane emissions at least 30 percent from 2020 levels by 2030.

EDF Europe has been working with partners to help shape proposed methane regulations that are being considered by the European Parliament and the Council of the EU. We are working in close collaboration with partners, the European Commission, the European Parliament and EU member states to put forward pragmatic, science-based solutions that will meet Europe's energy needs while reducing methane emissions. Moreover, as the world's largest importer of fossil fuels, decisions made in Europe will have repercussions well beyond our borders.

2022 Achievements:

- We engaged the Brussels' missions of the EU Council of Ministers as it began negotiations on the proposed EU methane regulation to counter lobbying from the oil and gas industry.
- Through direct advocacy and high-level events, such as EU Sustainable Energy Week, we have engaged with many of the EU's 705 parliamentarians, providing clear science-based guidance.
- EDF Europe co-hosted the official opening of a methane-focused exhibition in the European Parliament during Methane Week in September, alongside Member of the European Parliament Jutta Paulus.
- Our advocacy in national capitals has also rapidly advanced — with activities now ongoing in Poland, Spain, France, Italy, Germany and the Netherlands — and supported by media coverage in leading national outlets, including *El Pais*, *Le Monde* and *Die Zeit*.
- Through our strategic collaboration with Climate Action Network Europe (CAN), we have also expanded our advocacy reach to Bulgaria, Hungary and the Czech Republic.

BRINGING NEW SCIENCE TO THE HYDROGEN DEBATE IN EUROPE

Investors are spending hundreds of billions of dollars to develop “clean” or “green” hydrogen as an alternative fuel, because it emits no carbon dioxide when burned or used in a fuel cell. The EU alone is projected to produce 10 million tonnes of green hydrogen and import another 10 million tonnes by 2030.

However, research from EDF shows that transitioning to hydrogen would not be a panacea; it could either help or hurt the climate depending on how it is produced, managed and used. Hydrogen, because it is a very small molecule, has the potential to leak into the atmosphere where it acts as an indirect greenhouse gas by increasing the amounts of other greenhouse gases. The likelihood of hydrogen leaking into the atmosphere, and the impact of these emissions, must be taken into consideration when making decisions about where and how best to deploy hydrogen.

EDF Europe is providing scientific and technical support to help policy makers and stakeholders understand how to avoid dangerous pitfalls and reap hydrogen’s potential climate benefits. These decisions will shape the energy system for decades to come.

2022 Achievements:

- EDF Europe briefed numerous European Commission staff members in departments for Energy, Climate and Research about the benefits and risks of hydrogen use.
- We submitted responses to key Commission consultations on hydrogen legislation and contributed to a report on hydrogen leakage by the official platform the EU Joint Undertaking on Hydrogen.
- Guided by EDF science and our advocacy efforts, the EU’s research and innovation funding programme *Horizon Europe* introduced a budget line for research on the climate impacts of hydrogen leakage.
- We presented our analysis of risks and opportunities from hydrogen at events with Chatham House, Reuters and the TED Dilemmas.
- We successfully applied for a position in the European Clean Hydrogen Alliance, which will help put our science at the heart of the debate with EU policy makers and the private sector.
- We briefed 20+ organisations from civil society and business on hydrogen leakage.
- For the first time, the International Energy Agency’s annual “Global Hydrogen Review” included a section on avoiding hydrogen leakage that references research by EDF.

REDUCING POLLUTION FROM TRANSPORTATION

Transportation represents almost a quarter of Europe's greenhouse gas emissions and is the main cause of air pollution in cities. The transportation sector has not seen the same gradual decline in emissions as other sectors — emissions only started to decrease in 2007 and remain higher than in 1990. Emissions dropped during the Covid lockdowns, but preliminary data from 2021 shows a rebound in transport emissions of 7.7% since this time. With measures currently planned, domestic transport emissions may not drop below 1990 levels until 2029. Within this sector, road transport is by far the biggest emitter, accounting for 77% of all greenhouse gas emissions from transport in 2020.

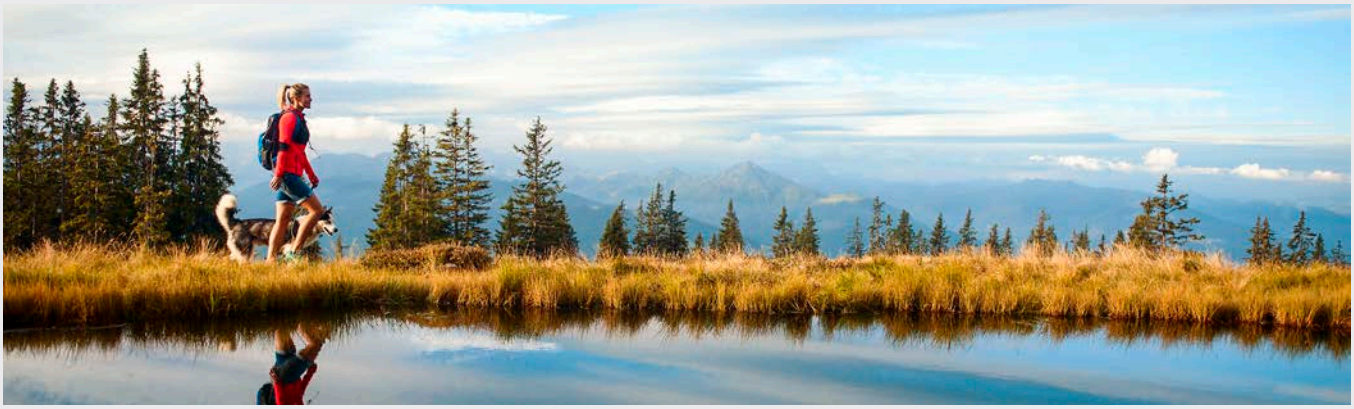
In 2022 EDF Europe's focus has been on influencing the European Commission's proposal for extending the EU's Emissions Trading System to maritime transport and the legislation proposed for sustainable maritime and aviation fuels. Additionally, we have started a small project to build on a successful urban freight pilot, called SURF, which took place in 2021.

2022 Achievements:

- EDF Europe presented research showing that the EU ETS fee for shipping is feasible and a constructive step toward a global measure at the International Maritime Organization (IMO).
- EDF Europe spearheaded a call for a zero-carbon fuel mandate, known as RefuelEU Maritime, and for direct use of renewable power on board ships. We did this in partnership with other NGOs and industry allies including the Global Maritime Forum and the Mærsk Mc-Kinney Møller Center for Zero Carbon Shipping.
- EDF was one of the few NGOs providing thought-leadership on the design of the EU's sustainable aviation fuel mandate, known as RefuelEU Aviation, to ensure that it delivers genuine carbon reductions while minimising impacts on nature and food production.

SHAPING NEW AND EMERGING DEBATES ACROSS EUROPE

EDF Europe is accelerating the transition to climate neutrality by conducting essential new research and working with partners and stakeholders to drive lasting change that supports a cleaner, healthier and more stable world. With this in mind, we are scoping out some new areas where we might make a difference.



Advancing climate-smart agriculture

Agriculture will need to supply 50% more food by midcentury to feed a growing population. A transition to climate-smart food production could meet that demand on existing agricultural lands. And though agriculture is a significant contributor to the climate problem, it can be an essential ally in the fight against catastrophic climate change.

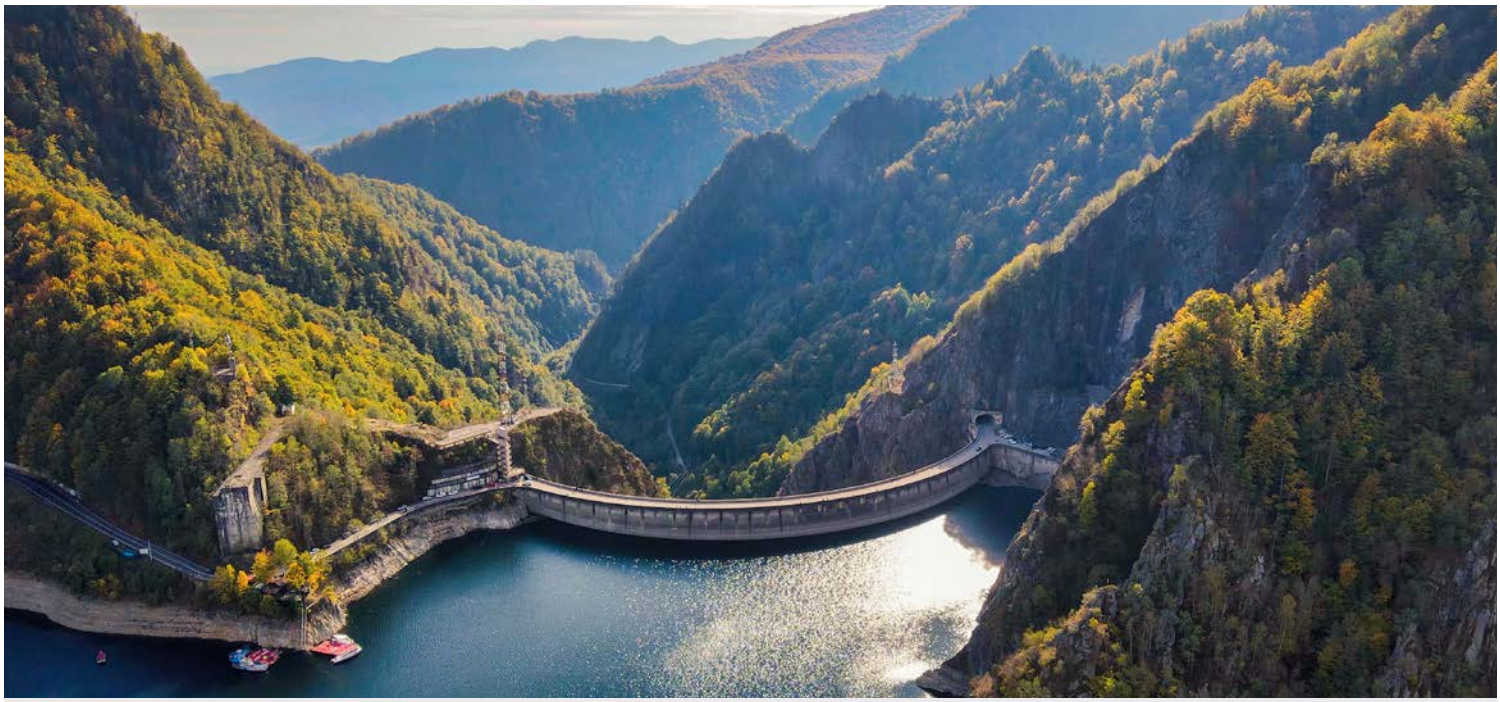
Non-CO2 greenhouse gas emissions from the EU agriculture sector are covered by the Effort Sharing Regulation (ESR), which provides for national annual emissions targets that refer to emissions from all effort sharing sectors. Between 2005 and 2020, agricultural emissions remained stable. Estimates for 2021 indicate that this trend will continue. Based on national projections, only a modest EU-level decline of 2% is expected by 2030 compared with 2005 levels.

The European climate change advocacy landscape for agriculture is well-developed and benefits from a multitude of actors. In 2021, EDF Europe commissioned a gap assessment from leading French think tank IDDRI, which was delivered in March 2022. Its purpose was to identify the key interventions with the most impact to support a just and sustainable transition of the EU's food system, both at an EU level and in six member states. In November, as a first step, we brought together a unique set of stakeholders — from farmers and NGOs to representatives from industry and the finance sector — to have an open discussion about the barriers and drivers for reducing agricultural methane. We will build on this work as we refine our vision and strategy in 2023.

Driving corporate disclosure and influencing investors

EDF Europe continues to actively engage in shaping the future of the EU's corporate disclosure requirements as a member of the European Financial Reporting Advisory Group (EFRAG). EFRAG is responsible for establishing European disclosure standards that underpin the corporate sustainability reporting directive (CSRD). This also includes standards for the agriculture and farming sector, as well as the oil and gas industry.

The CSRD introduces detailed reporting requirements and ensures that large companies are required to report on sustainability issues such as environmental rights, social rights, human rights and governance factors. These rules will be phased in starting in January 2024 and will apply to large companies, companies listed on regulated markets, listed small to medium-sized enterprises — considering their specific characteristics — and non-European companies with a net turnover of €150 million and at least one subsidiary or branch in the EU.



Reducing energy demand in Eastern Europe

There has been a sense of war-time urgency around the EU's energy transition in Europe during 2022. At the start of the year, the EU imported 90% of its gas, with Russia providing more than 40% of all gas consumed in the EU. Reducing energy demand through efficiency measures is critical for reducing consumer costs, lowering fuel imports and lowering emissions. Each member state has different challenges around energy use and reducing energy demand, and EDF Europe is looking at the most economically challenged states to see how we can make a difference for the most disadvantaged.

We have started scoping work on energy demand reduction in Romania, where we are building an ecosystem of Romanian local partners to help drive transformative solutions. We are also seeking to build on this work in other Eastern and Central European countries, including Bulgaria and Poland.

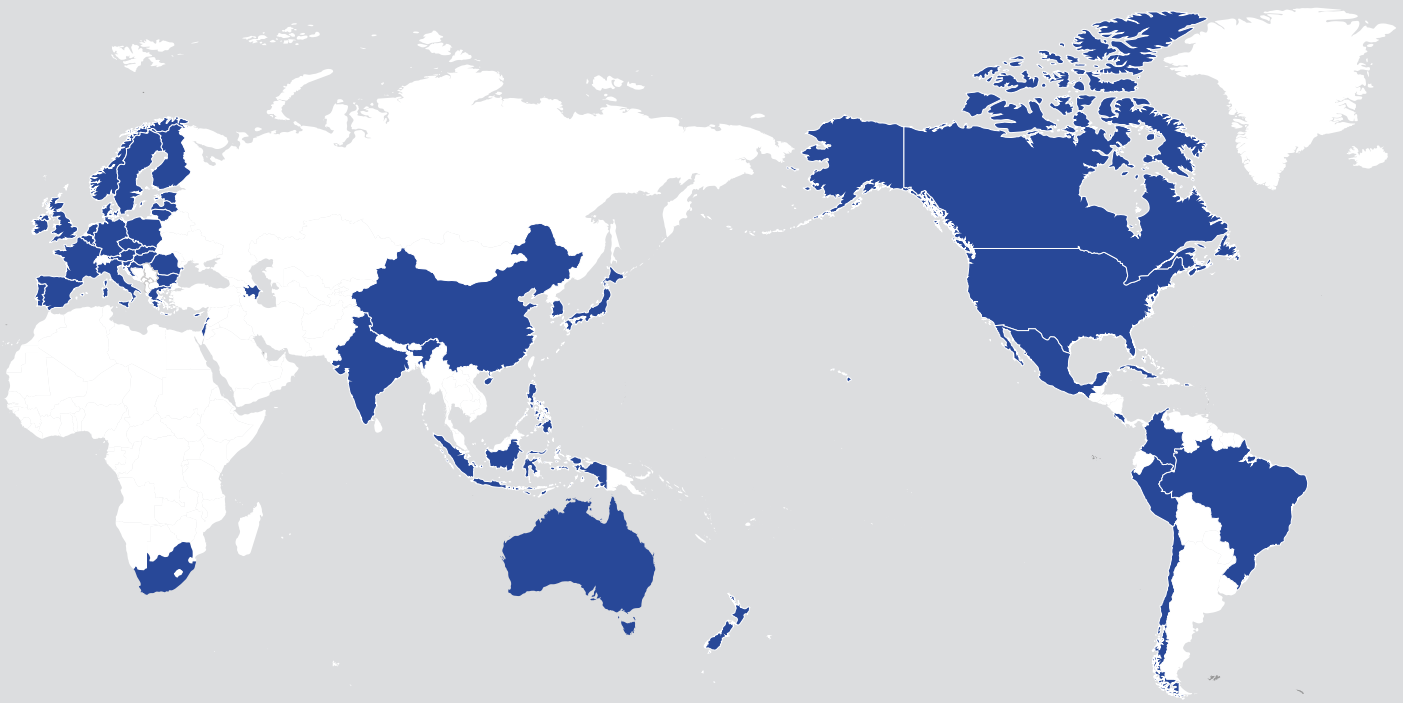
Linking the circular economy to EDF's global Net Zero work.

We cannot achieve climate neutrality if we do not use resources more efficiently. The transition to a more circular economy is a policy priority in the EU, which published two major legislative packages in 2022, including developing mandatory sustainability standards for all goods except medicines and food. We have commissioned a literature review to quantify the contribution of circular initiatives toward meeting climate goals, as well as assessing the financial risks and opportunities.

OUTLOOK FOR 2023

The imperative to rapidly transform Europe's energy system has never been more apparent and, while transforming food systems remains as challenging as ever, we do not intend to relent. EDF Europe has invested in staff capacity in 2022, and we are now a truly pan-European team of experts from multiple European countries. Soon, we will also be opening a new office in Brussels, the heart of EU decision-making.

We look forward to engaging deeply in the policy debate in 2023 and advancing the frontier of knowledge to create lasting changes that support a cleaner, healthier and more stable world.



EDF'S GLOBAL PRESENCE

We have strategic initiatives and partnerships in more than 30 countries.

Environmental Defense Fund is sharply focused on addressing the climate crisis and achieving our vision of a vital Earth for everyone. With more than 1,000 employees, we work with a wide array of partners and allies worldwide to spark innovative solutions to stabilise the climate, strengthen the ability of people and nature to thrive, and support people's health. Our staff are located in 30 countries and we most specifically focus on four geographies — Europe, India, China and the United States — which, together, produce about half of the world's climate pollution.

Environmental Defense Fund

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Please read more about our work at **edfeurope.org**