To face the *stark* reality of a warming planet ...

Map visualizations of average temperature change over each succeeding decade from 1856 to 2016.

Reprinted with permission from the author, Dr. Ed Hawkins, University of Reading. Data supplied by the UK Met Office.
... we must have the resolve to confront it

EDF 2020 GOAL:
Stop rising global greenhouse gas emissions and begin to bring them down by 2020

EDF STRATEGY:
Put focus on and resources into tackling the largest problems to deliver the greatest reductions in the shortest period of time
2016 Progress Highlights

- EDF built an extraordinary coalition of prominent businesses, power companies, trade associations, states and cities, health experts, faith groups, members of Congress and massive grassroots support to defend the legal and technical foundation of the Clean Power Plan before the U.S. Court of Appeals for D.C. Circuit on September 27, 2016.

- While the case moves through the courts, EDF is advising more than 20 states and numerous power companies that are already working to comply with the Clean Power Plan and investing in cleaner energy.

- This year the U.S. Supreme Court ruled in support of clean, low-cost energy. EDF played a key role in the case, rallying support and working with allies to file briefs supporting the Federal Energy Regulatory Commission’s authority to ensure electric rates are just and reasonable.

- As a result of EDF and other allies, New York State put in place a new, modernized business model for utilities. Utility earnings will be tied to greenhouse gas reductions in addition to performance. Electric utilities will be required to offer time-variant pricing, which rewards customers for efficient energy use.

- An EDF report, Well Within Reach, showed that the state can meet the Clean Power Plan’s new carbon pollution standards by relying on its robust clean energy resources, debunking doomsday scenarios painted by Texas officials.

- After months of negotiations with EDF and others, Illinois utility ComEd became the first in the country to agree to measure the greenhouse gas emission reductions associated with its clean energy and smart grid investments. EDF and its allies also released a report showing new legislation to repair the state’s renewable energy and energy efficiency standards could create 32,000 new jobs and save consumers up to $1.6 billion on their electric bills.

- EDF’s Investor Confidence Project won the prestigious 2016 “Finance for Resilience” award from Bloomberg New Energy Finance. The award recognized the project’s great potential to boost global investment in energy efficiency.

- EDF and partners launched the “Power the Tower” initiative to turn Fresno, California’s Tower District into a hub of clean energy innovation. Fresno will serve as a model for linking community development with clean energy and more distributed energy resources in lower-income communities.
Key 2020 Objectives:

- Half of All Carbon Emissions are Capped at 2015 Levels
- Improve Energy Efficiency by 25% over 2015 Levels
- Derive 35% of Energy from Renewable, Nuclear and Natural Gas, up from 15% in 2013

2016 Progress Highlights

- As China grapples with the sheer scale of the launch of its 2017 national carbon trading program, EDF is rapidly expanding our training and advising capacity.

- EDF organized an emissions trading summit, to educate key stakeholders on the core components: data collection, monitoring, reporting, verification and capacity building.

- In Hubei, EDF was asked to help set up a national emissions trading center to offer support to non-pilot regions and industries through both on-site and e-learning platforms.

- EDF has now trained a total of more than 2,000 industry and government stakeholders in carbon trading at our carbon market simulation centers.

- With the China Quality Certification Center, EDF has developed Monitoring Reporting Verification manuals for 11 major industrial sectors.

- Working with our Chinese government partners, EDF is building a Green Supply Chain pilot center to improve energy efficiency of the manufacturing industry.

- EDF is providing help and support for a first-of-its-kind integrated benchmark system to measure a factory’s environmental, energy and carbon performance.

- Working with the China Energy Modeling Forum to help move its economy away from fossil fuel energy sources more quickly, initial projections, while not final, show China’s emissions are likely to peak before 2020—a decade ahead of schedule.

- EDF is sharing U.S. expertise and research findings with China on how methane gas can be reduced across all segments of the natural gas supply chain.
**Key 2020 Objectives:**
- Achieve Zero Net Deforestation in Brazil and Amazon by 2020
- In Brazil, Obtain 50% of Beef and 50% of Soy from Zero Deforestation Zone
- Help Brazil Obtain International Carbon Credits for its Forest Protection and Restoration Efforts

**2016 Progress Highlights**

NOTE: While Brazil’s political and economic crises continue after the impeachment of Dilma Rousseff, several ministers in the new government are actively interested in improving federal policy on incentives to halt deforestation, and major civil society and business networks are focusing renewed attention to this issue. EDF and partners have had very positive discussions with Agriculture Minister Blairo Maggi, and see promising signs in other ministries as well. Meanwhile, we continue to work with Amazon state governments to enable more effective participation in climate policy.

- The governor of Mato Grosso has proposed an ambitious and collaborative zero-deforestation and rural development plan that would protect 60% of the state’s territory, a vast area of native forest and savanna almost the size of France.
- Major consumer companies are playing a growing role in the effort to halt deforestation, with Walmart, Nestle, Unilever and more than 400 other companies committed to zero net deforestation in major commodity supply chains by 2020.
- The Soy Moratorium, an agreement signed in 2006 between government, civil society and major soy traders to only purchase zero-deforestation soy in the Amazon, was renewed indefinitely in 2016.
- Brazil’s biggest supermarkets called on their meat packers to provide deforestation-free beef. It sends a strong signal to Brazilian farmers that deforestation is bad for business. Companies that control half of cattle slaughter in the Amazon signed an agreement with civil society and governments to only purchase deforestation-free beef. A recent study showed that purchases by slaughterhouses from recently deforested properties fell from 36% in 2009 to 4% in 2013.
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**Key 2020 Objectives:**

- Reduce Methane Emissions to Less than 1% of Total Natural Gas Produced in the U.S. Supply Chain
- Secure Commitments from the Oil and Gas Companies or the Countries Representing 40% of the Global Methane Market to Monitor and Report Their Emissions

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**2016 Progress Highlights**

- Largely due to EDF groundwork, EPA finalized the first clean air standards for methane emissions and leaks for new and modified sources in the oil and natural gas industries. The Obama administration has committed to taking action on existing sources, and EDF is working to ensure that rigorous source standards move forward quickly.

- EDF has built a groundswell of support from a broad and diverse constituency for the anticipated Bureau of Land Management proposal to address leaks, venting and flaring of natural gas on federal and tribal lands.

- For over a year, EDF worked to build political support for reducing methane emissions in Mexico. In June, Mexican President Enrique Peña Nieto joined the U.S. and Canada in committing to reduce Mexico’s oil and gas methane emissions by 40% to 45% by 2025.

- Thanks in large part to EDF’s extensive methane research, EPA estimates that U.S. oil and gas methane emissions are 34% higher than previously thought—making the oil and gas industry the single largest source of methane pollution in the United States.

- Thanks to U.S. leadership, five European Scandinavian countries committed to develop national plans to “drive down” their methane emissions through regulations and targets.

- Public Service Electric & Gas Company, one of the largest gas utilities in the U.S., announced it will use our methane detection methodology as part of its $905 million infrastructure modernization program.
In addition to the launch of China’s national carbon market in 2017 and the continued work to protect and implement the Clean Power Plan here in the U.S., here are five other major expansion efforts for next year to support our goal to halt the rise of global greenhouse gas emissions:

- **Expand our methane emissions work from North America to global.** The methane issue is so urgent that EDF is beginning its global strategy beyond North America. Because much of the world’s oil and gas production occurs in nations where regulatory oversight is not the norm, EDF will work with multinational energy producers operating in these countries to measure, report and reduce methane emissions.

- **Develop an EDF scope of work plan for India.** As India works to deliver energy to large parts of its population, India’s carbon footprint is growing faster than any other nation in the world. Under the current business-as-usual scenario, India will overtake the U.S. as the world’s second-largest emitter of greenhouse gas emissions in the next 15 years. EDF is initiating a comprehensive scoping project to determine where value can be added to help India continue its path of economic growth to alleviate poverty while accelerating the transition from a fossil-fuel energy infrastructure to a clean, renewable one.

- **Create a coalition of carbon markets.** Emissions trading to cap and cut climate pollution is already working in more than 60 jurisdictions around the world. EDF plans to help form a “coalition of carbon markets,” a set of jurisdictions that would work together to develop common standards to ensure environmental integrity, boost cost-effective emission reduction efforts, and encourage the broad and ambitious climate action that the science demands.

- **Implement a global market for airline emissions.** On October 7, the International Civil Aviation Organization (ICAO) adopted a global market-based measure to cap carbon emissions from international aviation—the first-ever for an entire industry sector. EDF staff, working with a coalition of NGOs, were deeply involved in the talks leading up to the agreement. We’ve got a lot of work ahead over the next two years to help write the detailed international rules to ensure the new market operates with integrity.

- **Work with the new administration to set the climate agenda for the next four years.** The United States must expand its climate action initiatives to fulfill our own commitments to the Paris Agreement. EDF will work to ensure that an ambitious climate action plan is a priority for both the president and Congress. EDF will help develop and disseminate policy ideas that could achieve economy-wide emission reductions in the context of multiple legislative vehicles (tax reform, infrastructure, etc.).