

# Walking Our Talk

*The Union of Concerned Scientists Sustainability Report  
for Fiscal Year 2015–2016*



**Union of  
Concerned Scientists**



## Message from the Executive Director

# Sustainability at the Union of Concerned Scientists

I'm pleased to present the Union of Concerned Scientists' sustainability report, which covers our fiscal years 2015 and 2016 (October 2014–September 2016). This report marks our 14th year of measuring and reporting our carbon emissions, and our second report under our new two-year time frame. The two-year time frame allows our all-volunteer Sustainability Task Force to focus on its project-driven work and take a big-picture view of its efforts to reduce our organization's emissions and expand sustainable practices across our offices. These efforts are detailed in the pages that follow.

Our internal sustainability work is a reflection of the work we do to promote a healthier environment on the regional, national, and international levels, and a testament to our staff's embodiment of this work. Oftentimes, our efforts at these levels help improve our practices within our own organization. During this reporting period, UCS continued our work to expand the role of clean energy in meeting energy demand across the nation; worked to strengthen fuel efficiency standards for passenger and heavy-duty vehicles; and witnessed our long-standing international work on climate change come to fruition with the signing of the Paris Agreement, in which nearly 200 countries committed to working together to avoid the most damaging impacts of global warming. At home, we completed the installation of our new rooftop solar array in our Cambridge, Massachusetts, headquarters; continued our robust composting, recycling, and electronic waste recycling programs; and supported low-carbon commuting efforts across the organization.

In the years that follow, we look forward to building on these achievements and seeing the effects of our continued progress, both in our office—and yours—and around the country. Visit [www.ucsusa.org](http://www.ucsusa.org) for the latest news and updates on our work, and learn more about our sustainability efforts at [www.ucsusa.org/sustainability](http://www.ucsusa.org/sustainability).

Kathleen Rest  
*Executive Director*



The Union of Concerned Scientists (UCS) puts rigorous, independent science to work to solve our planet’s most pressing problems. Joining with people across the country, we combine technical analysis and effective advocacy to create innovative, practical solutions for a healthy, safe, and sustainable future.

In fiscal years 2015 and 2016 (FY15 and FY16),<sup>1</sup> UCS staff took their expertise to Paris, France, to help secure international agreement on addressing global warming; to cities and towns along the eastern seacoast to help protect and prepare coastal communities for sea level rise; and to the US Midwest to help build a cleaner, more resilient electricity grid. We also uncovered the coordinated climate disinformation campaigns of the world’s largest carbon emitters; engaged with policymakers, industry, labor, and others on economic development in communities affected

by our transition away from coal; and communicated our work to thousands of scientists at the American Association for the Advancement of Science’s annual meeting.

Our work in climate, energy, agriculture, and transportation has helped reduce heat-trapping emissions and environmental impacts at the international, national, and state levels. UCS also seeks to reduce emissions, limit waste, and promote sustainability from its internal operations and in our day-to-day activities with efforts guided by the UCS Sustainability Task Force (STF). The STF is an all-volunteer group of analysts, advocates, and administrative staff, representing every department and program at UCS. The STF not only helps bring a sustainability focus to UCS’s operational decisionmaking, but also monitors and measures office-related carbon emissions for our sustainability reports. The four main sources of carbon emissions measured by the STF are paper



Ashley Siefert Nunes/UCS

UCS staff Peter Frumhoff (second from left) and Kenneth Kimmelf (second from right) join climate scientists in a panel discussion at the 2015 United Nations climate negotiations in Paris, France. Our science and policy expertise helped secure international agreement on strong emissions reduction targets.

<sup>1</sup> UCS’s fiscal year runs from October 1 through September 30.

use, energy use, business travel, and employee commuting. This report goes into detail about these emissions, and our efforts to reduce them.

The STF also oversees initiatives to help further sustainable practices within the office and within staff’s personal lives. For example, the STF organizes our annual Low-Carbon Commuting Month each May to encourage zero- and low-carbon transportation options, coordinates CSA (community-supported agriculture) programs so local farms can deliver produce directly to our offices, and serves as a regular resource for UCS staff on various sustainability issues including residential renewable energy options and enjoying a low-carbon holiday season.

Our efforts reach far beyond our Sustainability Task Force. Each new staff member receives a sustainability orientation, and our sustainability report is presented to our entire staff, giving everyone the opportunity for input to help refine and extend our sustainability goals. We hope this report is useful not only for our staff, but also for organizations of similar size looking to identify sustainability opportunities for their own operations.

## FY15–FY16 Emissions Overview

Our total emissions for FY15 and FY16 were 744 and 693 metric tons of CO<sub>2</sub>e.<sup>2</sup> These values are 7.5 and 14 percent lower, respectively, than in FY14 (Table 1). During the same time, the organization grew in both number of staff and annual budget. While these numbers are only snapshots in time, and depend on a range of factors (many of which are outside of our control), they represent an encouraging sign that our sustainability efforts are working.

## Emissions from Paper Use

### THREE-YEAR PERSPECTIVE

UCS measures emissions from paper use in three areas: fundraising mailings, publications and member communications, and office paper.

Paper use continues to be our largest source of carbon emissions across the four areas that we track and report. Compared with FY14, overall CO<sub>2</sub>e emissions from paper use decreased about 7 percent in FY15 (see Table 2) but rebounded somewhat in FY16, ending up 2 percent below FY14 levels.

TABLE 1. UCS Organizational Overview, FY13–FY16

	FY13	FY14	FY15	FY16
<b>Staff Size (full-time equivalent)</b>	142	154	166	186
<b>Donors</b>	93,000	95,500	97,500	100,500
<b>Operating Budget (millions)</b>	\$23.8	\$25.8	\$29.6	\$32.3
	Metric Tons CO <sub>2</sub> e			
<b>Paper Use</b>	322	324	300	318
<b>Energy Use</b>	55	68	62	46
<b>Business Travel</b>	243	271	295	224
<b>Commuting</b>	104	141	87	105
<b>Total Emissions</b>	724	804	744	693
<b>Per-Employee Emissions</b>	5.1	5.2	4.5	3.7

*UCS total emission for FY15 and FY16 are 7.5 and 14 percent lower, respectively, than in FY14 despite growth in our staff capacity, membership, and budget. These declines depend on a variety of factors but represent an encouraging sign that our sustainability efforts are working.*

Notes: Energy figures reflect net emissions after the purchase of renewable electricity credits; see p. 6 for details. These net emissions are used for calculating total UCS emissions and per-employee emissions.

UCS calculates paper emissions data using the Environmental Paper Network’s (EPN’s) Paper Calculator, an online tool originally developed by the Environmental Defense Fund and now managed by the EPN to help organizations make greener paper purchases and more accurately report their paper footprints.

Fundraising—our primary source of paper-related emissions—is the lifeblood of organizations such as UCS. Effectively communicating with our members is also critical to our organization’s overall effectiveness, and our publications are an important way to communicate our activity and the impact UCS has on the issues important to our members. Our growing membership, however, puts pressure on paper use for publications and member communications; we mailed to approximately 5 percent more people in FY16 compared with FY14.

### ADDRESSING EMISSIONS FROM PUBLICATIONS

UCS is taking various steps to reduce our paper-related emissions. We continue to increase our use of 100 percent post-consumer recycled, Forest Stewardship Council–certified paper, and set all printers by default to double-sided printing.

<sup>2</sup> All emissions in this report are measured in metric tons of carbon dioxide equivalent (CO<sub>2</sub>e), which takes into account the impact of all heat-trapping emissions (not just CO<sub>2</sub>) by expressing each in terms of the amount of CO<sub>2</sub> that would create the same amount of warming.



Heather Turtle/UCS

A sampling of the reports UCS produced in FY15 and FY16. These reports have been used by policymakers, the media, and concerned citizens around the country to promote science-based solutions to today's pressing problems.

TABLE 2. Paper Use Emissions

	Metric Tons CO <sub>2</sub> e		
	FY14	FY15	FY16
Fundraising Mailings	268	254	256
Publications and Member Communications	53	44	60
Office Paper	3	2	2
<b>Total Emissions</b>	<b>324</b>	<b>300</b>	<b>318</b>

Overall, CO<sub>2</sub>e emissions from paper use decreased about 7 percent in FY15 compared with FY14, but rebounded in FY16 to just a 2 percent decline compared with FY14. Paper use continues to be our largest source of carbon emissions across the four areas that we track and report.

We also continue to use a paperless system for our employee expenses and travel arrangements, and the expansion of organizational intranet continues to help minimize our paper-related office emissions.

We are conscious of the carbon footprint of our fundraising and member communications mailings and continue to work to reduce it. Despite our membership increasing by 5 percent from FY14 to FY16, we were able to cut the amount of paper used for our mailings (based on total weight) by more than 4 percent. This is partly due to a reduced solicitation initiative UCS launched in 2015, in which we informed our members that we would send them fewer pieces of mail. This not only led to lower paper use but also increased satisfaction reported by many of our members and, in some cases, even led to increased gifts. We continue



to explore lower-carbon methods of communicating with our supporters.

## Emissions from Electricity and Natural Gas Use

### THREE-YEAR PERSPECTIVE

Energy-related emissions from UCS offices stem from the use of two fuels: natural gas for heating; and electricity for lighting, cooling, powering computers, and more. From FY14 to FY16, emissions from energy use decreased 32 percent overall (Table 3) and by more than 43 percent on a per-employee basis. Our natural gas–related emissions decreased from 68 metric tons of CO<sub>2</sub>e in FY14 to 46 metric tons in FY16 largely because of milder winters across much of the country, which led to reduced heating demand. For electricity, the drop (from more than 200 metric tons in FY14 to 165 in FY16) was due to not only lower electricity use in our offices, but also cleaner electricity mixes in the regions where our offices are located—a result of policies (which UCS helped to enact) that have shut down the nation’s dirtiest coal plants and replaced them with cleaner energy options.

For the emissions associated with our electricity use, we purchase “green power”—renewable energy credits (RECs)—commensurate with our electricity usage. In addition to offsetting approximately three-quarters of our total energy-related emissions, REC purchases help drive the further

TABLE 3. Energy Use Emissions

	Metric Tons CO <sub>2</sub> e		
	FY14	FY15	FY16
Electricity	203	177	165
Natural Gas	68	62	46
Energy Subtotal	270	239	211
Net Emissions*	68	62	46
Per-Employee Emissions*	0.44	0.37	0.25

*From FY14 to FY16, emissions from our energy use decreased 32 percent overall and by more than 43 percent on a per-employee basis. While milder winters and an overall cleaner electricity mix contribute to this decrease, UCS has continued its efforts to be more energy efficient in all of its offices.*

\* Reflects net emissions after purchase of renewable electricity credits.

development of wind, solar, and other renewable energy sources. When purchasing RECs to offset our electricity use, we prioritize Green-e certified RECs<sup>3</sup> from the geographic regions where our offices are located.

### ADDRESSING EMISSIONS FROM ENERGY USE

Part of the challenge in making continued progress to reduce our office-related emissions is that only one of UCS’s offices (our Cambridge, Massachusetts, headquarters) has dedicated electricity and gas meters. UCS leases building space for its



UCS’s Cambridge headquarters updated its two-decade-old photovoltaic array with a larger, more efficient system that generates six times more clean electricity.

Andrey Eyring/UCS

other three offices (Washington, DC; Oakland, California; and Chicago, Illinois), and in those offices UCS comprises a small part of a building's tenant base. This means that our own energy efficiency investments and efforts are less visible in the data, and increases in energy use by other tenants will affect UCS's data more appreciably.

Despite these challenges, UCS is committed to investing in clean energy however possible. In addition to purchasing RECs to account for the electricity use in each of our offices, for the one office we own (Cambridge), we took advantage of a reroofing project—and dramatic drops in the cost of solar power—to upgrade our onsite solar capacity. We replaced a two-decade-old photovoltaic (PV) array with two arrays of larger-capacity, higher-efficiency PV modules that increase our solar output sixfold, despite the space and sun constraints of our urban environment. The new system covers the majority of the electricity of one of the four floors we occupy.

## Emissions from Business Travel

### THREE-YEAR PERSPECTIVE

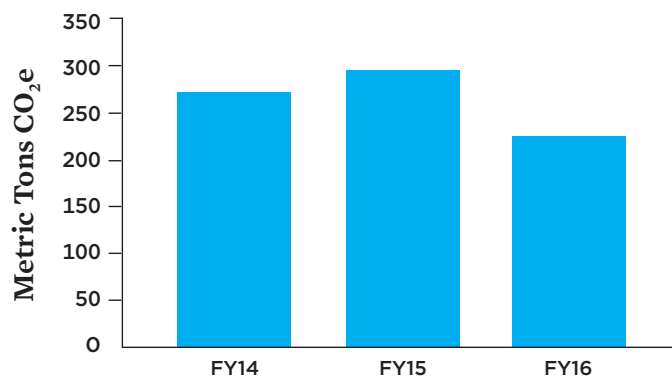
To advance our strategic goals, UCS works with leading academic experts, policymakers, the media, and our supporters in the United States and around the world. Maximizing these opportunities often requires staff to travel by air. In FY16, for example, air travel was responsible for more than 97 percent of the UCS business travel emissions that we tracked.

UCS business travel emissions in FY15 and FY16 generated 295 and 224 metric tons of CO<sub>2</sub>e, respectively, compared with 271 metric tons of CO<sub>2</sub>e in FY14 (Figure 1). The increase in FY15 business travel emissions compared with FY14 emissions can be partly attributed to UCS's growing staff. It also reflects our ongoing engagement in the international climate talks by sending senior staff to personally present analysis and advocate for strong national carbon reduction goals based on rigorous science. After the ratification of the Paris climate agreement in FY15, our international travel declined significantly, resulting in a reduction in our FY16 business travel-related carbon emissions despite continued organizational growth.

### ADDRESSING EMISSIONS FROM AIR TRAVEL

UCS has invested significantly in video conferencing technology in staff offices and conference rooms to reduce the need for, and frequency of, interoffice trips. To minimize emissions

FIGURE 1. Business Travel Emissions



UCS business travel emissions in FY15 and FY16 generated 295 and 224 metric tons of CO<sub>2</sub>e, respectively, compared with 271 metric tons in FY14. The significant decline in FY16 is largely attributable to a decline in international travel after ratification of the Paris climate agreement in FY15. UCS has also invested in video conferencing technology to help reduce business travel emissions even as we continue to grow as an organization.

**After the ratification of the Paris climate agreement in FY15, our international travel declined significantly.**

from flights that are necessary, we require employees to travel coach and encourage direct flights (even if more expensive than one-stop flights), as takeoff and landing account for a significant portion of air travel-related emissions. Traveling staff also try to schedule visits with foundations and supporters located in their destination cities, to avoid the need for multiple trips to the same location (whether by program staff or Development staff).

## Emissions from Employee Commuting

### THREE-YEAR PERSPECTIVE

UCS employee commuting data are obtained through an annual employee survey administered by the STF at the end of each fiscal year. Based on these data, employee commuting

<sup>3</sup> Green-e is the largest voluntary certification program for renewable energy. RECs that receive Green-e certification have met stringent environmental and consumer protection standards developed in conjunction with leading environmental, energy, and policy organizations.

in FY15 and FY16 generated 87 and 105 metric tons of CO<sub>2</sub>e, respectively—both significantly lower than the 141 metric tons of CO<sub>2</sub>e generated by employee commuting in FY14 despite ongoing organizational growth.

Emissions from employee commuting decreased approximately 38 percent from FY14 through FY15, declining more than 43 percent on a per-employee basis. The decrease in emissions in FY15 is largely attributed to a significant decrease in car miles traveled, which highlights the variable nature of commutes and the impact that alternative transportation can have on reducing emissions. While car travel accounted for 38 percent of UCS

TABLE 4. Employee Commuting Emissions

	FY14	FY15	FY16
<b>Total Miles Traveled</b>	649,300	532,000	549,000
<b>Total Emissions (Metric Tons CO<sub>2</sub>e)</b>	141	87	105
<b>Per-employee Emissions (Metric Tons CO<sub>2</sub>e)</b>	0.92	0.52	0.56

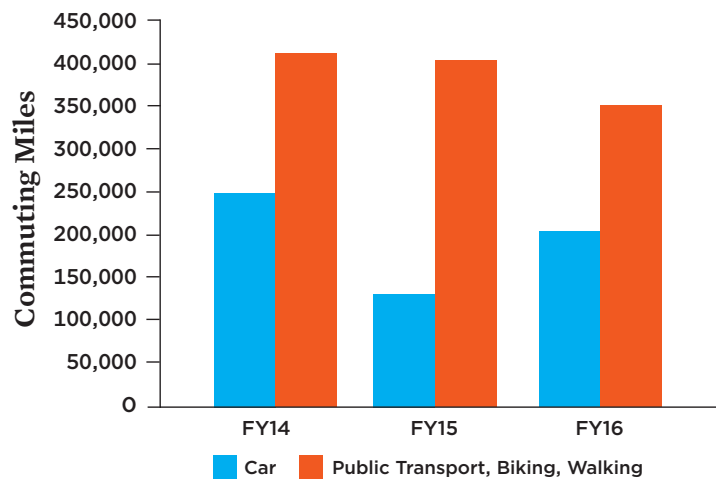
*Emissions from employee commuting decreased significantly in FY15 and FY16 compared with FY14, largely due to a decrease in car miles traveled during UCS staff commutes. The significant decline in both overall and per-employee emissions highlights the impact that alternative transportation can have on reducing emissions.*

commuter miles in FY14, it accounted for only 25 percent of UCS’s commuter miles in FY15. In FY16 commuter emissions increased by nearly 21 percent over FY15, again attributable to an increase in the share of car travel in our daily commutes.

**ADDRESSING EMISSIONS FROM EMPLOYEE COMMUTING**

UCS employees largely “walk the talk” when it comes to commuting and favor low-carbon forms of transportation as much as possible (Figure 2). To further encourage low-carbon commuting,

FIGURE 2. UCS Commute Miles, by Mode of Transport



*The majority of UCS staff use low- or zero-carbon commuting options, and our offices’ proximity to public transit help make this feasible.*

all UCS offices are located close to public transportation, and UCS offers pretax public transportation passes and bike parking in all office locations. Additionally, UCS does not subsidize parking spaces for staff (to discourage car commuting) and promotes “Low-Carbon Commuting Month” each May, which focuses on biking but also encourages shifting to other low-carbon commuting options such as walking and public transportation. Participation is incentivized through prizes, parties, in-office bike maintenance, and presentations to staff on such topics as biking in inclement weather and biking with children.

**ACKNOWLEDGMENTS**

*UCS would like to recognize the effort of the Sustainability Task Force and other UCS staff who collected and analyzed data for this report and participated in the writing process. The Sustainability Task Force is an all-volunteer group of UCS staff representing every department and program. They go above and beyond their normal roles to ensure that UCS emissions reporting is as rigorous and transparent as possible, and help UCS be a leader in discussions surrounding sustainable workplaces*



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