

Walking Our Talk

*The Union of Concerned Scientists Sustainability Report
for Fiscal Years 2017–2018*



**[Union of
Concerned Scientists**



Message from the Executive Director

Sustainability at the Union of Concerned Scientists

I am pleased to present the Union of Concerned Scientists' sustainability report, which covers our fiscal years 2017 and 2018 (October 2016 – September 2018). This report marks our 16th year of measuring and reporting our carbon emissions, and our third report under our new two-year time frame that allows our all-volunteer Sustainability Task Force to take a big-picture view of its efforts to expand low-carbon practices across our offices. These efforts are detailed in the pages that follow.

Our internal sustainability work reflects the work we do to promote a healthier environment on the regional, national, and international levels, and is a testament to our staff's embodiment of this work. During this reporting period, UCS worked first and foremost to defend the important role of science in protecting public health and the environment. We worked to expand the role of clean energy in meeting US energy demand and accelerate the adoption of electric vehicles, while holding fossil fuel companies accountable for their decades-long campaign to deceive the public about global warming and their contribution to this crisis. We also continued our long-standing international work on climate change mitigation and adaptation to avoid the most damaging impacts of global warming.

In our own offices we continue to seek out ways to reduce the carbon footprint of our operations. We continued our composting, recycling, and electronic waste recycling programs, while also supporting efforts to reduce our business travel, be more energy-efficient, and minimize commuting-related emissions. While this report looks back on our fiscal years 2017 and 2018—and so much has changed since then—it is a valuable reflection on where we have been and where we need to go in our efforts to be more sustainable.

In the years that follow, we look forward to building on our achievements, learning from our missteps, and seeing the effects of our continued progress, both in our office—and yours—and around the country. Learn more about our efforts at www.ucsusa.org/sustainability.

A handwritten signature in black ink that reads "Kathleen Rest". The signature is written in a cursive, flowing style.

Kathleen Rest
Executive Director

Introduction

The Union of Concerned Scientists 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 2017 and 2018 (FY17 and FY18),¹ UCS experts continued working to secure international agreements to address global warming. Closer to home, we worked to protect coastal communities against, and prepare them for, climate change impacts. In the nation’s heartland, we continued our efforts to build more resilient and healthy food systems and a cleaner, more modern electricity grid. We also continued to expose the coordinated climate disinformation campaigns of the world’s largest carbon emitters and engaged with policymakers, industry, labor, and others on economic development and clean energy opportunities in communities across the country. Perhaps most importantly, we expanded our efforts to defend the important role of science in informing policymakers, and we 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 in its internal operations and 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 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 promote sustainable practices within the office and within employees’ personal lives. For example, the STF organizes our Low-Carbon Commuting Month each May to encourage zero- and low-carbon transportation options, organizes brown-bag events for staff to learn about sustainable food options, and serves as a regu-

lar resource for UCS staff on various sustainability issues including residential renewable energy options and enjoying a low-carbon holiday season.

The STF works to ensure that all staff stay informed on these and other efforts. Each new staff member receives a sustainability orientation, and our sustainability report is presented to our entire staff, giving all the opportunity to understand, refine, and expand our sustainability goals. We hope this report is useful not only for our staff, but also for other organizations looking to identify opportunities in the realm of sustainability.

FY17 – FY18 Emissions Overview

Our total emissions for FY17 and FY18 were 1,580 and 1,636 metric tons of CO₂e,² respectively. A comparison of our emissions across the four-year period from FY15 through FY18 is shown in Table 1. There were two critical updates to our data collection and methodology since our last report that have im-

TABLE 1. UCS Organizational Overview, FY15 – FY18

	FY15	FY16	FY17	FY18
Staff Size (full-time equivalent)	166	186	194	239
Donors	97,500	100,500	124,000	130,000
Operating Budget (millions \$)	\$29.6	\$32.3	\$40.2	\$39.8
	Metric Tons CO ₂ e			
Paper Use	500	537	572	592
Energy Use	62	46	84	73
Business Travel	1,073	815	805	838
Commuting	87	105	119	133
Total Emissions	1,722	1,503	1,580	1,636
Per-Employee Emissions	10.4	8.1	8.1	6.8

While overall emissions remained relatively consistent across FY17 and FY18, our per-employee emissions dropped 16 percent. This is an encouraging trend that we will look to build on in coming years.

Notes: Donors are UCS supporters who have given financially to the organization over the past 24 months. Email activists and other supporters are not included in this total. Energy figures reflect net emissions after the purchase of renewable electricity credits; see p. 5 for details. These net emissions are used for calculating total UCS emissions and per-employee emissions.

¹ The UCS fiscal year runs from October 1 through September 30.

² All emissions in this report are measured in metric tons of carbon dioxide equivalent (CO₂e), which takes into account the impact of all heat-trapping emissions (not just CO₂) by expressing each in terms of the amount of CO₂ that would create the same amount of warming.

proved our understanding of UCS's carbon impact and highlighted the organization's need to double down on our carbon-reduction efforts. With regard to our paper emissions, updated carbon emissions calculations that account for a broader range of carbon impacts throughout the paper life cycle result in a significant increase over what was reported in our FY15 – FY16 report. In the case of our business travel, an update to how we collect these data captures a far greater proportion of our overall business travel compared with previous years. As a result of these new calculations, our FY17 – FY18 emissions numbers are significantly higher than those reported in our FY15 – FY16 report; we have reanalyzed those older numbers using the new calculations to present an apples-to-apples comparison of emissions in this report.

While UCS has struggled to meaningfully reduce overall emissions in recent years, we can look to FY17 and FY18 for some promising trends. Perhaps most important is the 16 percent reduction in per-employee emissions from FY17 to FY18. 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 trend that we will look to build on in coming years.

Emissions from Paper Use

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

With our updated data collection and emissions estimate methodology in place, paper use now represents our second-largest source of carbon emissions across the four areas that we track and report. Across the four years from FY15 through

FY18, emissions from paper use increased each year. The highest increase occurred from FY15 to FY16 when emissions increased nearly 7.5 percent. The smallest year-over-year increase occurred between FY17 and FY18 when emissions increased 3.4 percent (Table 2).

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. Version 4 of this calculator, launched in July 2018, includes a more sophisticated methodology and updated data sources.

Our primary sources of paper-related emissions are also the lifeblood of UCS: fundraising, communicating with members, and sharing our analyses with the public and policymakers.

Several important factors in the updated version increase the estimated carbon impact of paper use. These include the addition of forest carbon storage loss from logged forests and short-lived climate pollutants such as black carbon, organic carbon, nitrogen oxides, and sulfur dioxide. The updated version also adjusts the timeframe for global warming potential (i.e., how much and how long a gas can trap heat in Earth's atmosphere) used in estimating equivalent metric tons of carbon dioxide, which also increased the overall estimated impact. In sum, EPN's updated version provides a more accurate estimate of the overall impact of our paper use and highlights the need for UCS to continue seeking ways to reduce our organization's impact in this regard.

Fundraising—our primary source of paper-related emissions—is the lifeblood of organizations such as UCS. Communicating with our members is also critical to our organization's overall effectiveness, and our publications are an important way to communicate our analyses to decisionmakers and the public. Even as we seek out additional ways to reduce paper usage across the organization, paper use for member and analytical materials will continue to comprise a large portion of our overall emissions.

TABLE 2. Paper Use Emissions

	Metric Tons CO ₂ e			
	FY15	FY16	FY17	FY18
Fundraising Mailings	389	392	400	391
Publications and Member Communications	107	140	167	197
Office Paper	5	5	6	5
Total Emissions	500	537	573	592

Reported CO₂e emissions from paper use increased steadily from FY15 through FY18. The 3.4 percent increase from FY17 to FY18 represents the smallest year-over-year increase across this four-year period.

ADDRESSING EMISSIONS FROM PUBLICATIONS

UCS is taking various steps to reduce our paper-related emissions. We continue to seek out ways to increase our use of 100 percent post-consumer-recycled, Forest Stewardship Council-certified paper, and vegetable-based inks. In our office we discourage unnecessary printing and set all printers by default to double-sided, grayscale printing. 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 growing membership we continue efforts to cut the amount of paper used for our mailings (based on total weight) due to a reduced-solicitation initiative UCS launched in 2015 and formally adopted in 2016, 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

Energy-related emissions from UCS offices stem from use of two fuels: natural gas for heating; and electricity for lighting, cooling, powering computers, and more. In FY17 and FY18, we

significantly expanded our Cambridge, Massachusetts, and Washington, DC, offices to accommodate a growing staff; the increased space led to higher electricity-related emissions during this timeframe—almost 60 percent more, on average, compared with FY16 (Table 3). This increase outweighed the positive impact of cleaner electricity mixes in the regions where our offices are located. Our natural gas-related emissions also increased, from 46 metric tons of CO₂e in FY16 to 84 metric tons in FY17 before dropping to 73 metric tons in FY18.

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 development of wind, solar, and other renewable energy sources. When purchasing RECs to offset our electricity use, we prioritize Green-e certified RECs³ 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 other three offices (Washington, DC; Oakland, California; and Chicago, Illinois), and in those offices UCS comprises a small part of the 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.

Emissions from Business Travel

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.

Estimated UCS business travel emissions remained relatively consistent in the three-year period from FY16 to FY18, generating 815, 805, and 838 metric tons of CO₂e, respectively (Figure 1, p. 6). The drop in annual emissions compared with

TABLE 3. Energy Use Emissions

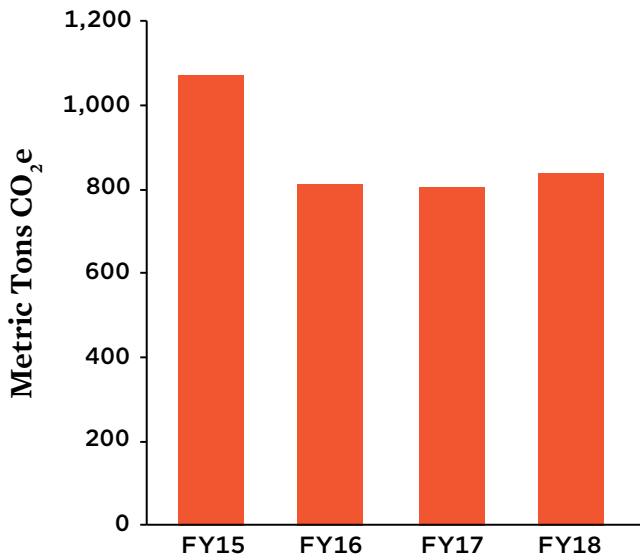
	Metric Tons CO ₂ e			
	FY15	FY16	FY17	FY18
Electricity	177	165	245	254
Natural Gas	62	46	84	73
Energy Subtotal	239	211	329	327
Net Emissions*	62	46	84	73
Per-Employee Emissions*	0.37	0.25	0.43	0.31

From FY16 to FY18, emissions from our energy use increased 57 percent as we purchased or leased additional office space to accommodate our growing staff. As we settle into our new spaces, we will continue our efforts to reduce energy usage across our offices.

* Reflects net emissions after purchase of renewable electricity credits.

³ 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. More information can be found at www.green-e.org.

FIGURE 1. Business Travel Emissions



After an active year of international travel in 2015 to engage in the negotiations surrounding the Paris Climate Agreement, UCS’s business travel emissions dropped and remained relatively stable in the years since, even as our staff and areas of engagement continued to grow. Regardless, business travel represents our largest carbon emissions source, and we remain committed to reducing this impact in coming years.

FY15 reflects a decrease in international travel after the establishment of the Paris Climate Agreement, in which several of our staff were actively engaged; international climate talks have required less travel since then.

Similar to our paper use, the numbers reflected here are significantly larger than what we reported in previous versions of this report. In previous years, UCS reported only the business travel that was booked through our internal travel agent under the assumption that this methodology captured most of our overall business travel. In 2017 we discovered that, in fact, nearly 75 percent of employee business travel was booked directly through airlines or hotels, or through other online booking websites. This revelation forced us to acknowledge that previous years’ reporting was severely underestimating the carbon impact of our business travel; Figure 1 reflects updated analysis of our FY15 – FY16 travel. While there is still significant work needed to improve how we track, evaluate, and report on our business travel impacts, we feel confident recent adjustments now provide a more accurate assessment of our overall impact.

ADDRESSING EMISSIONS FROM AIR TRAVEL

UCS has invested significantly in video conferencing technology in staff offices and conference rooms to reduce the need

Video conferencing has helped reduce UCS staff travel between offices.

for and frequency of interoffice trips. To minimize emissions 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

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 in FY17 and FY18 generated 119 and 133 metric tons of CO₂e, respectively—both significantly higher than the 105 metric tons of CO₂e generated by employee commuting in FY16, and 52 percent higher than the 87 metric tons CO₂e generated in FY15 (Table 4). This is primarily due to the increase in our staff size as indicated by the fact that our per-employee emissions remained relatively stable over this time.

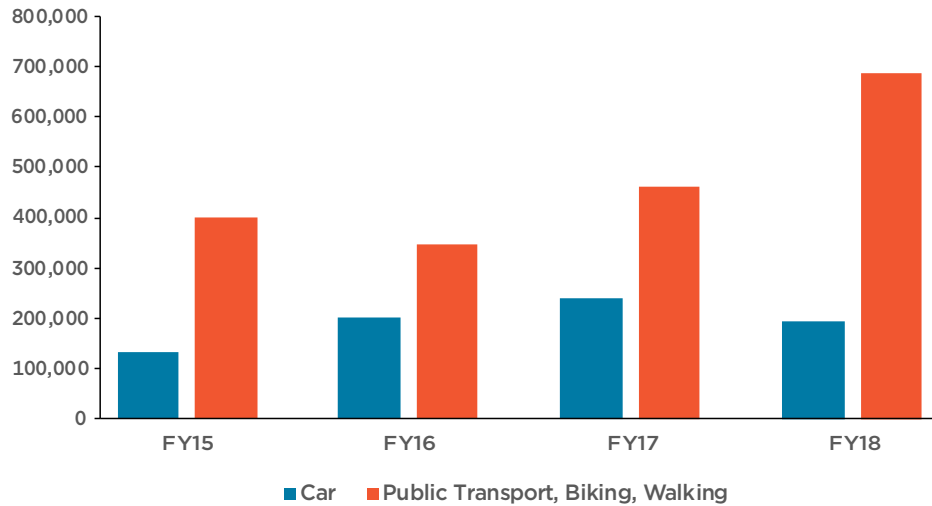
Per-employee emissions from commuting has risen at a much slower pace than overall miles traveled to and from our

TABLE 4. Employee Commuting Emissions

	FY15	FY16	FY17	FY18
Total Miles Traveled	532,000	549,000	700,000	881,500
Total Emissions (metric tons CO₂e)	87	105	119	133
Per-Employee Emissions (metric tons CO₂e)	0.52	0.56	0.61	0.56

Emissions from employee commuting increased significantly in FY17 and FY18 compared with the FY15 – FY16 reporting period, largely due to an increase in staff size. Our per-employee emissions remained relatively stable over this same time period.

FIGURE 2. UCS Commute Miles, by Mode of Transport



Total miles traveled to and from UCS offices increased significantly over the past few years as staff numbers increased. However, because more staff relied on lower-carbon commuting options, our per-employee emissions remained relatively constant from year to year.

offices. This is largely attributed to a decrease in car miles traveled over this period coupled with a large increase in the use of public transportation among our commuting staff (Figure 2). This highlights the variable nature of commutes and the impact that alternative transportation can have on emissions. While car travel accounted for 37 percent of UCS commuter miles in FY16, it accounted for only 22 percent of commuter miles in FY18.

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, 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 pay for parking spaces for staff (to discourage car commuting) and promotes Low-Carbon Commuting Month each May, which largely 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 efforts 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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