

THIS WEEK

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A clean, green science machine

As the world warms and technology improves, researchers and institutions should look at their carbon footprints and question whether they really need to travel to academic conferences.

Every time the United Nations climate negotiations get under way, media stories appear about the carbon emissions generated as thousands of government officials, environmentalists and scientists fly in from around the world. Similar questions have been raised about major environmental-science conferences, such as the Fall Meeting of the American Geophysical Union (AGU), which last year drew an astounding 24,000 people. But rarely does this discussion move beyond the obvious. It can indeed seem a bit disingenuous that people who are trying to understand and protect the planet will engage in such a high-carbon activity as aviation, but what is to be done?

Researchers at the Tyndall Centre for Climate Change Research in Norwich, UK, have published a thoughtful working paper (see go.nature.com/zdzitd) that lays out a practical methodology to tackle these questions, from the standpoint of both individual academics and institutions. The bottom line is that aviation emissions are rising, and that academics in the industrialized world are responsible for more than their fair share, thanks to the countless conferences, the international nature of science and the need to do fieldwork in far-flung locales. If academics are to fall into step, they must curb their aviation emissions in concert with the rest of the world.

Academics in all disciplines — not just climate experts — should read the paper, not least because it goes beyond posing moral questions and delves into solutions. Simply purchasing carbon offsets will not balance things out, the authors argue, because the market for reliable offsets may be limited and the net effect could be to legitimize unnecessary travel. If scientists want to bolster their credibility on the subject of global warming, the authors say, then they must harness the power of the Internet and reduce the time they spend in the air. Indeed, the authors propose that a greater reliance on online conferencing and social media will not just reduce emissions, it will make science more inclusive. The conferences that do need to take place could be more centrally located for the target audience. And to keep track of it all, the paper provides an accounting system that allows institutions to log “hours in motion” and calculate the resulting emissions.

The arguments the authors put forward are powerful, and there are good reasons to pursue their recommendations. In fact, some quarters have already come to similar conclusions and are taking appropriate action: the AGU’s leaders, for instance, have started to look for ways to hold parallel conferences and online dialogues that will allow more academics, often from developing countries, to engage in its meetings. There is real value in face-to-face interaction, and we must not forget that. But the Tyndall Centre is right to point out that senior researchers probably do not need to fly halfway around the globe simply to present a paper at a conference.

In some ways, the working paper opens the door to questions that are even harder to answer. Do scientists have a responsibility to stop eating meat, given what we know about the greenhouse-gas intensity of beef production and to a lesser extent that of pork and chicken?

Should we expect them to park their cars and take the bus or train instead? The fact is that these are personal choices that academics, like everybody else, must grapple with.

Nor does the buck stop with individuals. Institutions, academic or otherwise, have a large influence on the daily lives that their employees lead. It might seem extreme for universities to force vegetarian fare on their students (although many institutions now have a meat-free day), but bosses could go a long way towards reducing traffic jams and carbon emissions by encouraging their employees to telecommute. And in the long run, does it make sense for an institution or company to purchase cheap real estate in the suburbs and then force its employees to bear the cost of commuting?

There are plenty of solutions to be had at many levels, and all options may need to be exercised to stave off the worst impacts of global warming. But lots of seemingly small actions can have an effect: last week, the International Energy Agency reported that global carbon emissions stalled in 2014, even as the global economy grew by 3%, apparently thanks in part to efforts by China and industrialized nations to boost energy efficiency and adopt renewable sources.

Irrespective of what academics do, it seems likely that steaks, cars and planes will not only persist but will increase in number as the population booms and becomes more affluent. Ultimately, the world must identify better ways to raise beef and move people around. And scientists have a key role in making that happen, even if it means hopping on a flight to the next United Nations climate summit. ■

“Lots of seemingly small actions can have an effect.”

Hollow humour

The public’s distorted attitude towards mental-health conditions hampers their treatment.

What is so funny about obsessive-compulsive disorder (OCD)? Paul Cefalu, a professor of English at Lafayette College in Easton, Pennsylvania, asked that question in a 2009 article that analysed why OCD is so frequently, and unfairly, represented in the media with “humor and levity” (P. Cefalu *PMLA* <http://doi.org/c2mtt4>; 2009). Unlike other mental-health disorders, such as depression and schizophrenia, those who suffer from obsessions and compulsions, Cefalu wrote, “can always be counted on to make us laugh”.

The laughs are thinner on the ground in *This Room*, an autobiographical one-woman play about OCD, written and performed by Laura Jane Dean. In a review on page 289, Emily Holmes calls it