

Nothing 'virtual' about climate impact of emails, tweets

March 18 2016, by Marlowe Hood



A parallel realm of carbon-polluting activity, ranging from email exchanges to social network chatter to streaming movies on smartphones, has slipped largely unnoticed under the climate change radar

Even as people the world over symbolically dim lights to fight global warming this Saturday, many will join email and social network campaigns that invisibly contribute to climate change.

The 10th edition of Earth Day, organized by the WWF and backed by other NGOs to raise awareness about the threat of climate change, will see landmark monuments—from the Eiffel Tower to the Empire State building to Taipei 101 in Taiwan—go dark at 8:30 p.m. local time.

Individuals are also encouraged to participate and adjust lifestyles to trim their carbon footprints, thus incrementally reducing the [greenhouse gas emissions](#) that drive [global warming](#).

Biking or car-pooling to work, eating less meat, turning down the thermostat a notch in winter, becoming an 'eco-responsible' consumer—these are some of the many ways folks can make a small difference, especially in rich countries with higher per-capita CO₂ emissions.

At the same time, however, a parallel realm of carbon-polluting activity—ranging from email exchanges to social network chatter to streaming movies on smartphones—has slipped largely unnoticed under the climate change radar.

In isolation, these discrete units of our virtual existence seem weightless and without cost.



A WWF activist dressed as a panda bear stands next to an illuminated globe in front of the darkened Brandenburger Gate in Berlin during the global climate change awareness campaign "Earth Hour" in 2015

A short email, for example, is estimated to add about four grammes (0.14 ounces) of CO₂-equivalent (CO₂e) into the atmosphere.

By comparison, humanity emits some 40 billions tonnes of CO₂ every year.

But as the digital era deepens, the accumulated volume of virtual messages has become a significant part of humanity's carbon footprint.

"Electricity consumption related to the growth of digital technologies is exploding," notes Alain Anglade of the French Environment and Energy Management Agency.

In France it already accounts for more than 10 percent of total electricity

use, he said, a percentage that holds for many developed countries.

To see the big picture, it helps to break it down.

Sending five dozen of those four-gramme emails in a day from your smartphone or laptop, for example, is the equivalent of driving an average-size car a kilometre (0.6 miles).

The culprits are greenhouse gases produced in running the computer, server and routers, but also include those emitted when the equipment was manufactured.

Citation: Nothing 'virtual' about climate impact of emails, tweets (2016, March 18) retrieved 26 June 2024 from <https://phys.org/news/2016-03-virtual-climate-impact-emails-tweets.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.