Earth Hour dilemma: When the 'like' button harms the planet

March 29 2012, by Richard Ingham

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But here's the irony.

With every email, every tweet, every appeal watched on YouTube or "liked" on Facebook, environmentalists are stoking the very problem they want to resolve.

Each time we network, we emit carbon dioxide (CO2) through the fossil fuels which are burned to power our computers and the servers and

databanks that store or relay our message.

That poses a small dilemma for the Australian-led campaign for Saturday's switchoff.

In 130 countries around the world, people are being urged to turn off the lights for one hour at 8.30 pm local time as a show of concern about climate change.

In emails alone, the typical officeworker is responsible for 13.6 tonnes of CO2 or its equivalent per year, a French government agency for energy efficiency, ADEME, calculated last year.

That figure is based on a French company of 100 people who work 220 days a year and each receive 58 mails a day and send 33 per day, with an average mail size of one megabyte.

By comparison, 13.6 tonnes is more than twice the annual CO2 emissions per capita in France and almost two-thirds of the average annual emissions per capita in the US.

The more people you cc and the bigger the mail, the greater the carbon emissions, ADEME said.

"Just a 10-percent reduction in the number of mails that are sent which include the boss and one of his colleagues leads to a gain of one tonne, the equivalent of a round-trip flight from Paris to New York," it said.

Facebook and Twitter say they are striving to keep their carbon footprint as small as possible.

Facebook, which claims 800 million users worldwide, is building a massive data centre -- its third globally and first in Europe -- in the

Swedish town of Luleaa, near the [Arctic Circle](#).

The local chill helps cool servers, rather than using air conditioning to do so, and the town gets clean energy from hydro.

Greenpeace had mustered a 700,000-signature demand for a "greener" [Facebook](#) under its so-called Unfriend Coal campaign.

At a talk last year that he posted on the Internet, Raffi Krikorian, a director for infrastructure at Twitter, said the company contributed around 0.02 grammes of CO_2 to the atmosphere with each 140-character [tweet](#).

"But at 50 million tweets, that's one metric tonne of CO_2 a day," he observed. "We can do better. We are making our stuff a lot more efficient, and that will get (our carbon emissions) a lot further down."

Just how climate-damaging is the Internet?

By comparison with other sectors, not very -- and it can be argued that the Internet saves carbon which would otherwise be emitted in snail mail, phone calls or travel to face-to-face meetings.

A 2007 estimate by Gartner Inc., an international consulting firm, found the information and communications technology industry was sharply increasing its CO_2 emissions in absolute terms but still accounted for only around two percent of the global total.

This is less than a sixth of emissions from either transport, industry or agriculture.

Andy Ridley, Earth Hour's executive director, said his organisation invested in offsets -- projects that mitigate [carbon emissions](#) -- to

compensate for its own fossil-fuel pollution.

It was also using an intranet social platform called Yammer to cut down on internal emails.

"It has revolutionised how we communicate and very significantly cut the amount of electronic traffic," Ridley told AFP.

"Overall, we think that our ability to build a campaign digitally, and to engage with people across the planet in a way that minimises travel, is one of the great advantages of technology."

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