Google's CO2 Emissions: Some Puff, Lies & Good Old Fashion Hype

January 14 2009, by Mary Anne Simpson

Google kettle. Image (c) PhysOrg.com

(PhysOrg.com) -- A January 11, 2009 article in the London Times (on-line version) entitled, *Revealed: The Environmental Impact of Google Searches* quoted Harvard Physicist, Alex Wissner-Gross that "two Google searches generate the same carbon dioxide as boiling a kettle for a cup of tea." As one might expect, the Google Team went into overdrive to correct the perception that Googlers are energy hogs.

As it turns out, the study of the environmental impact of web searches

authored by Wissner-Gross soon to be published is not about Google, except in a very general way. It would appear, the London Times was trying to sell newspapers and Google always generates interest on the Web. According to Wissner-Gross in an exclusive interview with Technology News, the tea kettle analogy, "They (London Times) did that, I have no idea where they got those statistics".

Harvard Physicist Alex Wissner-Gross manages a web site CO2stats.com whose aim it is to educate Web site owners about reducing energy consumption and offers a seal of approval logo for compliant sites. Wissner-Gross did say, "a Google search has a definite environmental impact" and "Google operates huge data centers around the world that consume a great deal of power." Additionally, Wissner-Gross stated, "Our work has nothing to do with Google. Our focus was exclusively on the Web overall, and we found that it takes on average about 20 milligrams of CO_2 per second to visit a Web site."

As one might expect, there was an immediate rebuttal from Google posted by Urs Holzle, Senior Vice President, Operations. First, Google disputes that a typical Google search produces 7g of CO_2, instead Google asserts that a typical search produces 0.2g green house gases. Secondly, Holzle points out that Google has made great strides to reduce the energy used in its data centers and plans to do more. In 2008, the philanthropic arm of Google invested $45 million in breakthrough clean energy technologies. Google co-founded the Climate Savers Computing Initiative, a group with the goal of reducing energy consumption by computers 50-percent by 2010 thereby reducing global CO_2 emissions by 54 million tons per year. There's more from Google's perspective, if you are interested see: [googleblog.blogspot.com/2009/0 … g-google-search.html](googleblog.blogspot.com/2009/0) .

In other rippling effect news from the blogosphere about the London Times Google CO_2 story other cracks may have occurred. Apparently,

the Times reporters did interview a Google engineer whose job it is to review and analyze Google's data centers, but it failed to include any of the information supplied to them in the published article, according to Google spokesperson, Jamie Yood. Comments about the story, include "What about the Google private wide-body jet and questions the lack of transparency of Google's server infrastructure." Other comments include, the 'greenwashing' of Google's energy consumption by its public display of cute electric cars and more.

In conclusion, the Times story opened up a discussion on the high energy demands of all Web data centers. Going Green is not a logo, TV commercial or press release. A little transparency would go a long way to dispel rumors and perhaps allow cooler heads to prevail in reporting the news.

© 2009 PhysOrg.com