

ALL IN A DAY'S WORK: Some more carbon costs in typical workplace-related consumption

Item	CO ₂ e	Total Impact	Notes
Leaving lights on	90 kg for a low-energy bulb for 1 year 500 kg for an incandescent bulb (100 W) for 1 year	Can vary by country, depending on the energy mix being used	Many office buildings have lights that are on all the time, and can't be turned off. People who use low-energy bulbs may fool themselves into thinking that it's okay to leave them on longer – which defeats the purpose. And there's no truth to the popular belief that leaving lights on consumes less energy than turning them off and back on.
Using a cell phone	47 kg per year (2 minutes per day) 1250 kg per year (1 hour per day)	125 megatonnes per year, globally (or about 0.25% of global emissions).	The cost of manufacturing a cell phone is estimated at about 16 kg (equal to 1 kg of beef). The average phone is made to last about a decade, but is used for only a couple of years. Texting and land lines are both lower-carbon options.
Using a computer	A low-cost laptop: 200 kg, + 13g per hour A 21.5" iMac: 720 kg, + 69 g per hour An all-frills desktop: 820 kg, + 165 g per hour for an older computer	It takes energy to run one, but most of the impact comes from embodied emissions. It's better to make an older computer last than to keep replacing it with newer, more "efficient" models.	Add 55 g per hour for using servers and networks. This is the fastest-growing part of the computing footprint. A new iMac has the same footprint as a return flight between Vancouver and Winnipeg (before you turn it on). Bulk raw materials are a small part of the issue, as is packaging. Most of the footprint comes from the many complex processes involved in production, from mineral extraction to the manufacture of microchips. Assembly in cheap, carbon-intensive developing nations is also a factor.
The world's data centres	130 megatonnes in 2010; 250-340 megatonnes predicted for 2020	Equals 0.25% of total global emissions. Data centres use about 2/3 as much energy as all the computers and monitors in the world.	The energy load from data centres is set to double in the next few years, so digital information may not end up being lower-carbon than the old, paper-based world – especially as our consumption grows. Printing what you download exacerbates the problem even more.

Source: Mike Berners-Lee, How Bad Are Bananas? The Carbon Footprint of Everything (2011)