

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

Item	CO ₂ e	Total Impact	Notes
1 kWh electricity	220 g from Canadian grid	In 2011, GHG emissions in Canada totaled 702 megatonnes CO ₂ e (latest stats from Environment Canada)	Carbon cost depends on fuels used to produce hydro. Canada's mix is cleaner than that in the US or UK, but varies by province. For example: The 2011 stats from Environment Canada list GHG emissions in BC at 59 megatonnes (Mt) CO ₂ e; in Nfld, only 2 Mt; and in Alberta, a whopping 246 Mt. No change is predicted for 2020 in BC or Nfld, but in Alberta, that number is expect to RISE to 295 Mt.
1 kWh of heat	Solar water heating panel: 50 g Newer gas furnace: 244 g Older gas furnace: 400 g Electric grid: 660 g**	see above	(**Based on US grid electricity.) Solar panels aren't carbon-neutral because their production has a footprint. Location, design and maintenance affect operational impact. More than ½ the energy in fuels used to produce hydro is lost in the power station or transmission grid.
1 Litre of gasoline	3.15 kg		Burning fuel accounts for 74% of its footprint; the rest comes from refining and transporting the fuel, but isn't factored in. The carbon footprint of driving is underestimated. The potential of biofuels is reduced by carbon emissions produced in growing fuel crops – not to mention the waste of agricultural land that could grow food.
Burning the world's fossil fuel reserves	2.5 trillion tons	Equals 50 years of current global emissions	By conservative estimates, we could keep burning fuels at current rates for another 5 decades, with disastrous results. The antidote: leave it in the ground, and expand clean energy sources.
Spending money, <u>per dollar</u>	Rainforest preservation: <u>saves</u> 220 kg Solar panels: <u>saves</u> 2 kg On hydro: costs 4 kg		Economic activity = emissions. Invest in renewables, but remember that the best way to reduce your hydro footprint is to consume less. Companies that buy carbon credits to offset over- consumption are just greenwashing.

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