

## Are e-books greener than print?

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For a time, concerned about food miles, I only drank wine from Europe. Then a couple of years ago at a party for Green Profile, I got to talking about this with Duncan Clark, who co-founded the environment-focused imprint with Rough Guides founder Mark Ellingham. Clark told me that New Zealand wines are produced in a "clean and green" fashion and are often sent to the UK in container ships and bottled over here, thus perhaps giving them less of a carbon footprint than, say, wine from France that is bottled over there and shipped to the UK.

Eco-conscious consumers face these sorts of dilemmas every day, the sort of electric handdryer versus paper towel debates (on that one, Al Gore recommends neither but waving your hands around in the air). But with the Amazon Kindle now available in the UK and the e-book market certain to rise, a vexing question UK consumers will certainly be asking themselves is this: are e-books greener than print?

As often with these green debates, the answer is less than certain. A few recent reports from the US fall heavily on the "e is greener" side. In August, a study by the San Francisco-based Cleantech Group, a company which supports the development of clean and environmentally sustainable technologies, suggested that, on average, the carbon an Amazon Kindle emits in the life of the device is offset in its first year.

Emma Ritch, author of *The Environmental Impact of Amazon's Kindle*, wrote that after that first year, each additional year's use would "result in net carbon savings, equivalent to an average of 168kg of CO<sub>2</sub> per year"—the amount of emissions produced in the manufacture and distribution of 22.5 printed books.

The Cleantech Group forecasts that e-readers purchased in the US between 2009 and 2012 could prevent the production of 5.3bn kg of carbon dioxide in 2012, or 9.9bn kg during the four-year time period.

### Other implications

But that study failed to explore a few of the issues. One is what difference is made to the carbon footprint of print books if publishers exclusively use Forest Stewardship Council or recycled paper. Another area it skims over is the long-term landfill implications of devices that are certainly not biodegradable and may contain toxic materials. And that leaves aside the social and environmental implications of "resource extraction", or the obtaining of raw materials—which more often than not come from developing countries. There is also the implication that the user will continue to use his or her Kindle for years. Given the increasing pace of technological improvements, in a year's time the Kindle being sold now may look as ancient and as quaint as those briefcase-sized mobile phones from the 1980s. Will the people who buy them now, the bulk of whom are gadget obsessed early adopters, continue to plod along with their old devices when newer, sexier versions come on the market?

Lastly, it should be emphasised that e-book devices, hooked up either wirelessly or through a PC to the internet, do use a not inconsiderable amount of energy. The Cleantech report does acknowledge this—and certainly a number of studies have shown that the dedicated e-reader is greener than reading books directly online from a computer—but it does not make any assumptions, good or otherwise, about where the electricity comes from.

This can be crucial, according to a study done earlier this year by researchers at Stockholm's Royal Institute of Technology's KTH Centre for Sustainable Communications. Looking into reading newspapers online or in print, the study found that print and online newspapers could be comparable in their emissions, depending on the source of power used for the computers, how far trees have to travel to the paper plants, how far paper has to travel from plant to printer and a variety of other factors.

The "e" versus "p" debate trundles on. One thing is for certain, if readers are truly looking for the greenest option, they should not buy a Kindle or print books; they should borrow them from their local library. But perhaps that is another debate.

*Source:* [www.thebookseller.com](http://www.thebookseller.com)