

**Print versus electronic media**

Print versus electronic media. The environment is an issue within print and even for those companies completely dedicated to being green, it can often be hard to find the right path through the trees.

It is impossible to weigh any one technology, or any one paper, up against a competitive product simply because there are so many variables to consider when you are looking at the ‘print and the environment’ issue.

So, as a general overview, how does print stack up environmentally?

If you are looking at graphic arts you have to consider the whole supply chain, from forest floor to finished product delivered to the customer – and again the variables here are so enormous that to make any sense of it is impossible.

However, it is fair to say that as an industry, the graphic arts sector (and that includes print and paper) is very green. It is a manufacturing process, and that will always have an environmental impact, but print has cleaned up its act. There is certainly more accreditation – independently audited by credible third parties – to high, internationally recognised environmental standards such as ISO 14001. There is more certification, with a larger number of print companies working to FSC and PEFC standards (see labels fact sheet). More and more print companies are also going carbon neutral, and offsetting any carbon impacts that the manufacturing process has.

In print, technologies are continuing to make machines more eco friendly, to cut chemicals and harmful emissions from the process.

Print companies themselves have adopted greener working practices and are going above and beyond – solar panels to generate power, planting wild gardens to give nature a chance, supporting local environmental charities, recycling, reusing, and renewing.

It is worth noting that Defra’s records show that the combined pulp, paper and print industries globally only account for 1% of greenhouse gas emissions – one of the lowest scores of all industries. In fact, it is the second lowest sector responsible for CO2 emissions in manufacturing. The printed, paper based product is recyclable and sustainable and the reduction of its impacts on landfill are lessening year on year.

The woodland area in the United Kingdom in 2016 was 3.16 million hectares: 1.35 million hectares (43%) are independently certified as sustainably managed.

Six thousand hectares of new woodland were created in the UK in 2015-16.

If it is a given that it is nigh on impossible to weigh one technology against another, what about print versus other forms of communication such as electronic media?

The cloud: a pretty, natural, fluffy occurrence – somewhere up there – with Microsoft and Apple and their techy friends sitting atop, strumming their harps and adjusting their halos. Well not quite!

The cloud is as far away from ‘natural’ as you can get. It is not fluffy. It is hard and made from plastic – in fact lots of plastic. It is a truly massive amount of servers churning 24 hours a day, seven days a week, 364 (or 365 in a leap year) days a year, consuming vast amount of power. And, these server banks are growing constantly as we devour more and more computer time. Interestingly, according to a McKinsey & Company report, only 6 to 12 % of the energy consumed at these farms is taken from computer computations ­– the rest is there just to keep the servers running.

According to Greenpeace: ‘These cloud data centres, many of which can be seen from space, consume a tremendous amount of electricity; some consume the equivalent of nearly 180,000 homes’.

There is also the problem of the plastics, chemicals and more used in the servers themselves (and think servers with a capital ‘S’ – these are giant banks of technology). These do not biodegrade, so not only use wasteful resources, but at end of life go straight to landfill (the world’s biggest wand fastest growing waste stream – more so than even domestic waste).

And, it is not just the computers, but the cooling systems, temperature adjustment systems, extraction systems and more.

But, did you know that the volume of e-waste is growing dramatically – and this is something that industry doesn’t shout quite so loudly about! There has been a global jump of 33% of e-waste in just five years (to 2017) and it now stands at around 65.4 million tonnes of volume per year). Also, did you know that the emissions created from spam e-mails wastes more than 33 billion kilowatt hours per years – that is the equivalent to 3.1 million cars. Not convinced, well reading a printed newspaper rather than looking at news online produces around 20% less CO2!

In today’s world, we need electronic media to be able to do business. We need it to have communication with people all over the world.