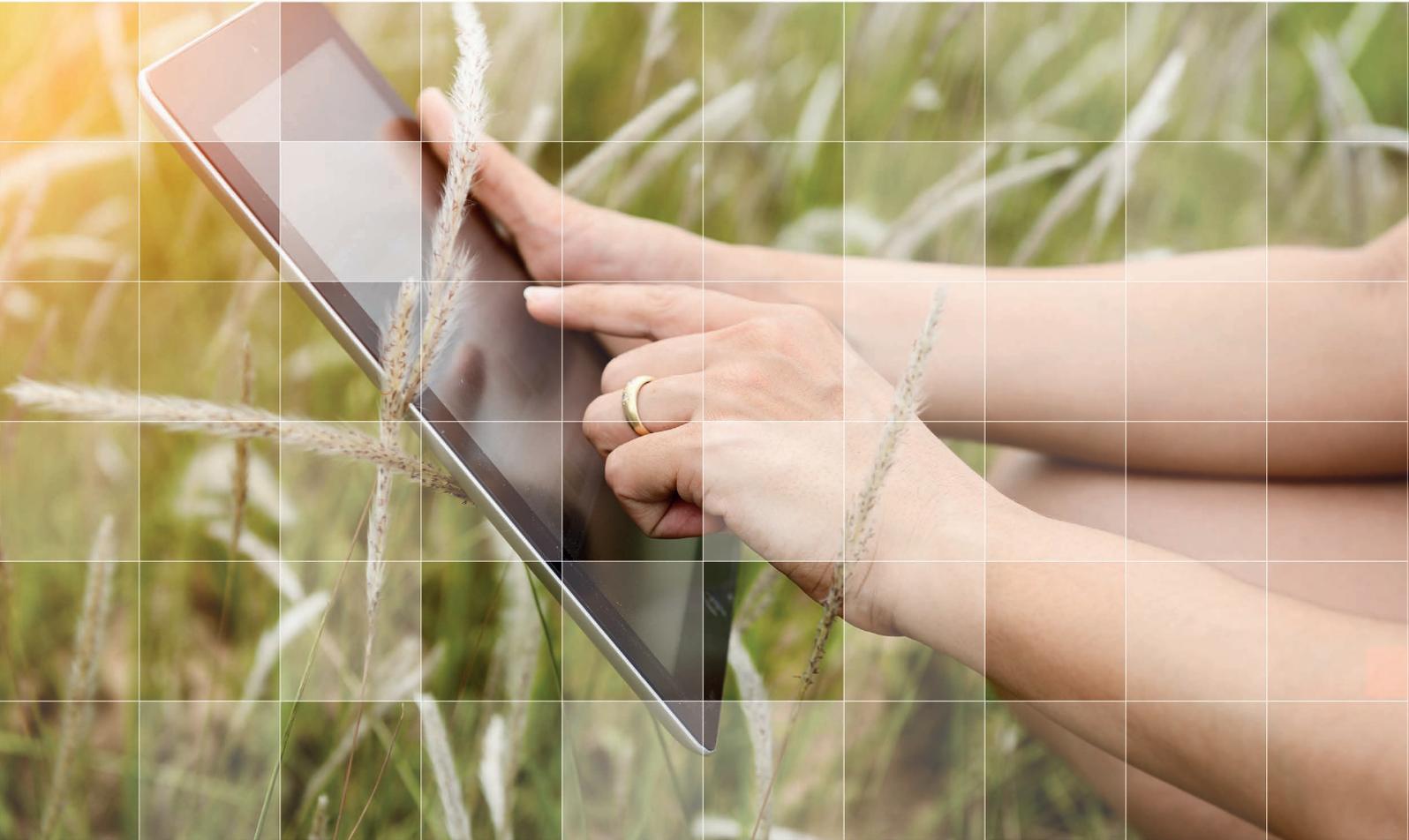


creating a carbon conscious workplace



Summary: Trapped in the Day-to-Day

It is easy for business people to become trapped in the day-to-day commonplaces of work. Attracting business, dealing with customers, supervising the workplace, monitoring finances, all of these and many other considerations are quite enough to fill the working day. As a result, larger and longer-term considerations are pushed to the back of the mind, to be dealt with "when we are not so busy" or "when there is time". The problem of creating a sustainable office is perhaps one of these longer term projects. This should not be the case, as we will discover.

The Problem

All thinking people are now au fait with global warming and the effect that the emission of carbon dioxide has on the phenomenon. Most sensible people want to reduce the size of their carbon footprint. What is true of sensible people is also true of sensible businesses. When one thinks of carbon emission one tends to picture traditional heavy industries belching smoke from stacks. However, the ordinary office is a considerable source not only of emissions but also of the consumption of precious natural assets.

Almost everywhere that one looks in a conventional office, there is an example of precious natural assets being frittered away, not out of malice or even apathy but simply because the office is not a carbon conscious workplace. Consider the computers, switched on all day and left on standby when the workstation is not being used. Computers or laptops which are left on standby use ten times more electricity than those which are turned off when not in use, accounting for 50% of the office's energy consumption¹. In fact, a desktop uses about 2.8 watts when turned off just by being left plugged into the socket².

Consider the copiers and the printers. The power they use is provided by power stations that almost certainly burn hydrocarbons. Office energy use accounts for 20% of America's energy consumption and 12% of the nation's greenhouse gas emissions. Leaving a photocopier on standby overnight and at weekends instead of switching it off costs your company £42 a year and emits around 183kg of CO₂, whilst switching off a laser printer overnight and at weekends, instead of leaving it on standby, will save your company £21 a year and cut CO₂ emissions by approximately 91kg³.

By taking simple steps such as turning your computers, printers and photocopiers on standby or powersaver mode whilst they are not in use during the day can reduce energy consumption by 75%⁴. It's a shocking fact that businesses are spending up to £1 in every £2 of their electricity bills on powering their business when staff have left for the day⁵ and 46% of business electricity use happens outside of the traditional business hours of 8am-6pm⁶. Office buildings consume 198 billion kilowatt hours of electricity every year⁷, with the Department of Energy (DOE) reporting that lighting comprises 44% of an office's annual electricity use⁷.

Solutions

The first step towards creating a sustainable office should be to create an atmosphere of carbon consciousness among the

employees. The owner or manager of the business should find it easy to enlist the support of his or her staff, especially the more committed and better informed employees. Once all are agreed on the importance of minimising the office's carbon footprint then it will be found that many practical steps can be taken.

The owner or manager might indeed take the opportunity to redesign or completely refurbish the workplace, creating a sustainable office with the assistance of a specialist consultancy company who will be able to factor carbon consciousness into their plan for redesign or refurbishment. Such a company would almost certainly make a range of suggestions.

The "Paper Free Office": A Real Possibility

Their first suggestion would almost certainly be that the company should invest in, and make use of the latest electronic tools to facilitate paper-free transactions for workflow management, information receipt and transmission, account management, the payment of bills and the receipt of payments. All of this can be done electronically as can the storing of information. This has been true for some time, but the culture of "backing up" with paper copies persists and frankly unnecessary paper copies are still bulging away in uncounted thousands of filing cabinets. New advances in technology mean that the long-sought-after goal of a paper free office is achievable by companies who are determined to achieve a sustainable office.

While paper-use is still necessary then a carbon conscious workplace should use it wisely and in moderation. For instance, there is no reason why a business should not print on both sides of a piece of paper. Nor is there any reason for internal documents to be printed up to the standard that is required for a formal communication. The business that is determined to reduce the size of its carbon footprint will also, of course, use recycled paper or paper made from sustainable sources.

This may perhaps be one of the most difficult objectives in a company's drive towards sustainability, since the profligate use of paper is so common in offices. One thinks of the jammed notice boards, the scribbled notes that are later crumpled and abandoned in the waste bins, the spare copies of documents run off "just in case". In certain ways, achieving a carbon conscious workplace is a matter of altering peoples state of mind. As we noted above well motivated staff will be eager to use any facilities that help the business to reduce its carbon footprint. A feature of the redesigned office could be a series of recycling bins placed in strategic locations. Posters or reminders to use less paper could be placed around the workplace to help workers keep paper use to a minimum.

Cut Consumption and Save Money

If we consider that the business has been made suitably aware of the importance of reducing the consumption of paper then we might move on to the equally important matter of power consumption. Here again, a specialist office design consultancy can help with suggestions that will reduce the office's energy needs while maintaining the business's efficiency. Indeed, they will probably improve the business's efficiency.

We noted that the deployment of the latest technology facilitates communication while reducing paper consumption. The specialists will be able to recommend systems and machines that use power most efficiently. In this way, energy consumption will be reduced, and energy bills will follow suit – this is a good example of the practical short-term advantages of creating a sustainable office.

Specialist companies will also be able to recommend machines and systems that have been specifically designed with recycling or re-manufacture in mind. They will also know which energy efficient multi-function printers can be purchased to replace the wasteful copiers and printers presently in use.

A Fresh Start

We have seen various ways in which a carbon conscious workplace can be created. As a final comment let us return to the idea of the “fresh start” that comes with an office designed with energy efficiency and paper reduction in mind. We remarked on the difficulty in modifying long-established practices and habits of mind. Perhaps the best way to shake up these damaging practises is to specifically create a sustainable office and emphasise sustainability as part of the business’s identity. True long term benefits will certainly accrue.

1: slimmeproducten.eu/data/mediablocks/brochure_checkmini.pdf

2: www.greenlivingonline.com/article/how-much-energy-does-your-computer-use

3: www2.warwick.ac.uk/about/environment/energy/whattodo/switch_it_off_-_office.pdf

4: smallbiztrends.com/2012/11/office-technology-energy-use.html

5: www.britishgas.co.uk/blog/articles/businesses-in-the-dark-on-electricity-usage-up-to-1-in-every-2-spent-on-electricity-could-be-wasted

6: www.britishgas.co.uk/blog/articles/businesses-in-the-dark-on-electricity-usage-up-to-1-in-every-2-spent-on-electricity-could-be-wasted

7: homeguides.sfgate.com/conserve-energy-office-78684.html

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