



BUILDING A SUSTAINABLE COMMUNITY

Computers and sustainability

If you use a computer at home, it makes a contribution to your carbon (and ecological) footprint. How can you minimise the impact?

Purchasing - the environmental cost of creating a new PC is quite high. Making your existing one last as long as possible is generally the best policy. But modern PCs can be much more energy efficient and the carbon savings from lower electricity use may quickly offset the impact of materials. Particularly if you can pass the old PC on for re-use or recycling.

If you are buying a new PC, a laptop is more energy efficient than a desktop and uses less material in its manufacture, but it may not be as reliable and long-lasting. A flat screen monitor consumes much less power than the older cathode ray tube screens

Many PCs now are extremely powerful, consuming as much as 600W – such power may be required from time to time, for state of the art gaming or computer-aided-design, but for general home and office use these ultra powerful PCs are probably wasteful. PC manufacturers are keen to present their products as ‘green’ but as usual, some claims are more worthy than others - research their statements carefully. One manufacturer worth considering is Tranquil PC, which makes very low power consumption machines that don't need a ventilation fan. See: www.tranquilpc.co.uk/Tranquil_Green.htm

Recycling - a large number of organisations throughout the UK will take computer equipment and re-furbish it where possible for reuse or alternatively recycling components. Find one from Waste Watch's list at www.wasteonline.org.uk/resources/InformationSheets/ComputerRecyclersRefurbishers.htm

Or use the Donate a PC website at www.itforcharities.co.uk/pcs.htm to find a charity who will take your old PC.

Or give it a new local home through [Woking](#) or [Guildford](#) Freecycle networks.

To dispose of a PC that is really of no further use, take it to one of the 15 [Community Recycling Centres](#) in Surrey or use Woking BC's bulky collection service if you can not physically manage to get the item to the site. Disposal of computers is covered by the new WEEE legislation – see www.weeeman.org

Energy use

Businesses now recognise that running a PC over its typical three-year life costs more in electricity than the purchase price. It's worth understanding how to minimise energy use and therefore running costs, even for a home computer, which may be used much less.

With a typical home computer using the Microsoft Windows or Vista system, there are several features worth exploring to help conserve energy. The most important thing to understand though is that the typical home computer continues to use power from the mains even when ‘turned off’ if it is still plugged in to the wall socket. The biggest saving you can make is to always switch the computer off at the wall after you have turned it off using the mouse / keyboard. If you don't, your computer can be consuming electricity day and night, and the costs quickly escalate.

The next good habit to get into is to switch the computer off between sessions. Only leave it on standby for very short periods. If you go out to the shops, stop for a meal etc, it's wasteful to leave the computer on standby.

Don't worry that your computer will take too long to start-up if you switch it off. Use the **Hibernate** facility to speed up re-starting. Hibernate means you can restart where you left off, with all previously open programs and documents ready for immediate use. If you are using Vista, it's possible that the Hibernate facility has been disabled to conserve disc space. You can re-enable it by following the instructions [here](#).

Follow these tips to reduce your computer's electricity bill by as much as £50 per year.

Tips

1. Set the power options for your computer as follows (Windows):

- Right click on your desktop, select 'properties', then 'screensaver'.
- Set screensaver to 'blank' and 'wait' to 1 minute.
- Then click 'power' and set the following options
 - Turn off monitor after 1 min
 - Turn off hard disks after 10 mins
 - System standby after 5 mins
 - Hibernate after 10 mins
 - Then click the 'hibernate' tag and ensure that hibernate is enabled.

Don't forget to click the final OK.

2. Turn off your screen whenever you leave your desk

3. When you are leaving the computer for more than a few minutes, go into HIBERNATE and then switch off at the wall. *You do not need to close down any applications you are working in.*

- From the Start menu, take the normal 'turn off computer' option
- On the next screen, hold down the 'shift' key and press the yellow standby/hibernate button.
- When the computer has powered down (normally a few seconds), switch off the power on the screen and at the wall on the supply to the computer itself*.

The work you have been doing will be saved in a special place, and will be available when you start up again.

*If it's difficult to get to the wall socket to switch off the power to the PC, maybe it's worth investing in an extension lead with a power switch that you can position in a more accessible place. This could be used to supply power to the computer, its monitor and other devices like a printer and scanner – in this way you can easily switch them all off.

Useful sites

Woking Freecycle <http://groups.yahoo.com/group/WokingFreecycle/>

Guildford Freecycle <http://groups.yahoo.com/group/GuildfordFreecycle/>

Community recycling centres www.surreywaste.info/householders/recycling

Vista hibernate re-enable <http://support.microsoft.com/kb/920730>

Woking LA21 www.windowonwoking.org.uk/sites/la21

This document is also available at:

http://www.windowonwoking.org.uk/sites/localagenda21/computer_energy_saving_tips.pdf