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Developing an Energy Efficient Office

Having a genuinely energy efficient office is about more than turning unnecessary lights off. It's about being clear where and how and why you are using energy and planning to reduce those uses.

The first step is to be clear as clear as possible about how much energy you use. This may be difficult if you are sharing a building or an office or are paying a standard charge. If you are paying the bills then go through the last two years and work out how much you've spent on gas and electricity. This gives you a 'base-line' and a good target would be to reduce energy use by 20% in your first year. With good planning and staff support you may find this surprisingly easy. A larger building will benefit from an energy audit – your local Energy Advice centre should be able to guide you to help on this. Your local council is also likely to have some form of energy saving or climate change programme and may be able to offer help or advice.

If you have one main power line coming in to a fuse box for your office you could consider buying a device such as 'The Owl' – a box that measures how much electricity you are using at any time and will tell you much that is costing you (and your level of greenhouse gas emissions) – the display can be put up anywhere in the office. This costs about £50, but users say that by encouraging energy saving it can pay for itself rapidly (see www.theowl.com).

Second point is to look at where that energy is going – mostly heating, lighting and electrical equipment. 'Smart plugs' - a simpler version of 'The Owl' - plug into any power socket and let you plug equipment in on top and then measure how much power your computer, copier, kettle etc. is using. These are available in many electrical stores.

The practical actions build on the basic-energy saving work – see the **First Steps**, <http://eaclink.info/?GCGVT>, page.

Heating

Heating is likely to be your main energy cost. You should already have checked your thermostats and cut the worst draughts. Now plan to make the office well-insulated. Windows are a main heat loss – the long-term solution may be double glazing or new frames. Shorter-term options include light-weight plastic sheets as secondary glazing (check hardware stores) and blinds or curtains for winter evenings. See the **Ideas for saving energy**, <http://eaclink.info/?EDAWM>, sheet for ideas on insulation and energy saving around radiators.

Equipment

Turning it off when it's not being used is a good start. Longer –term planning is about ensuring that any future purchase of equipment takes energy use into account. Ask before you buy – items such as fridges are now energy-rated, but you may need to inquire about computers etc. New energy-efficient equipment is being developed rapidly so check material from manufacturers. Plasma screens for TVs and displays tend to use much more energy than LCDs so be aware of this is buying any bigger items. The Ethical Consumer magazine can also advise on wider purchasing issues (www.ethicalconsumer.org).

Lighting

The 'first steps' are about using natural light and low-energy light-bulbs. Now look at all the lighting systems. Are they delivering light where it is needed? If you are upgrading or improving the office (see [here](#) for more advice), look to improve the lighting system using the best appropriate low-energy technology. There's a new product appearing rapidly as demand rises.

The key to energy efficiency is to plan. Work out what can be done now, soon and later and incorporate these goals into an overall Sustainable Development Action Plan for your office (see <http://eaclink.info/?BUICF> for more information).

A further key action point is to switch your electricity supplier (if you have control here) to one that sells 'green electricity' from renewable sources. See the **Electricity and Gas Supplies** page <http://eaclink.info/?LORFC>.