



Managing your utilities to reduce costs and improve your environmental performance

Micro Business Fact Sheet: Managing Your Utilities

Managing your utilities can deliver the following benefits:

- improved resource efficiency;
- reduced costs – helping you stay competitive;
- reduced carbon footprint;
- improved environmental performance;
- enhanced corporate image; and
- greater environmental awareness amongst employees.

This fact sheet is aimed at helping you to manage your utilities. It provides you with top tips on managing your utilities quickly, easily and at low or no cost. Implementing many small changes can be just as effective as one big one, and may cost less to carry out.

How to reduce waste arisings

If Scottish organisations put simple waste reduction measures in place, they could save approximately 1% of their annual turnover. If all organisations in Scotland did this, the total annual savings would be over **£2 billion**. Businesses must overcome the perception that 'going green' is costly – the opposite is true. Those companies that have addressed their environmental performance with even small changes have measured savings in their bottom line .

The waste hierarchy ranks the different ways in which waste can be dealt with in terms of sustainability. The prevention of waste is the highest priority, followed by reuse, recycling, and recovery of other value (e.g. energy), with disposal as the least desirable option.



Zero waste means reducing the unnecessary use of raw materials, reusing products where possible and recovering value from products when they reach the end of their lives through recycling, composting or energy recovery.

The waste hierarchy



✓ Top Tip

Funding is available for a variety of initiatives, such as low interest or interest-free loans for energy projects (<http://www.energysavingtrust.org.uk/scotland/Take-action/Business-funding/Small-business-loans>) and Enhanced Capital Allowances for water and energy projects (www.eca.gov.uk)

Waterwise is an organisation focused on decreasing water consumption in the UK and building the evidence base for large-scale water efficiency (www.waterwise.org.uk)

Here are some quick and easy to implement, low- or no-cost actions for each stage of the waste hierarchy.

Prevent

- E-mail copies of invoices instead of sending hard copies.
- Send e-mails instead of mail-outs and print documents only when necessary.
- Remind others to print only when necessary.
- Use electronic calendars for booking procedures.

Prepare for reuse

- Before any item is disposed of, check if it can be re-used.
- Ink cartridges for printers can often be refilled instead of buying new ones.
- Re-use envelopes wherever possible, especially for sending information internally.
- Donate waste card or paper to your local school or nursery.
- Segregate and shred paper for reuse as packaging infill.

✓ Top Tip

If you produce, prepare and/or sell food, you will need to present this waste for separate collection by 2015* (Zero Waste (Scotland) Regulations). Consider whether you can compost this waste and apply it in your garden. See http://www.sepa.org.uk/waste/waste_regulation/application_forms/exempt_activities/paragraph_12.aspx for more information and guidance on registration requirements.

Recycle

- Aim to purchase items without packaging, and if you cannot avoid packaging, look for materials that can be recycled easily and locally. Refer to the Zero Waste Scotland [Business Recycling Directory](#) for reuse and recycling services in your area.
- Place paper recycling bins in your offices, with one bin between six staff as a guideline. Use paper box lids as additional desk-top collection trays.
- Promote the scheme to staff by displaying posters around the offices and on bins explaining the types of materials that can be recycled.



- Get together with other local organisations to make the collection of recyclable products more economical.

✓ Top Tip

Work in partnership. The majority of microbusinesses have low volumes of waste to dispose of. There is potential for businesses to share waste services and facilities to help save money and achieve better service, particularly in rural areas or industrial estates. Talk to your neighbouring microbusinesses to see if you could take advantage of the economies of scale offered by your waste contractor.

Recover other value

- If possible, try to seek disposal routes that generate fuels, heat and/or power from waste products through processes such as anaerobic digestion, incineration with energy recovery, gasification and pyrolysis. For example, food waste can be used in energy from waste plants.

*Separate food waste collections must be in place for businesses with >49 employees by end 2013 and for small businesses by end 2015.

Disposal

- Preventing waste from being generated at source through careful purchasing and better utilisation of materials is the best way to make dramatic savings in your waste costs and reduce your impact on the environment.

On Course For Zero Waste

On Course For Zero Waste is a FREE online training course for Scottish small to medium enterprises/organisations (SMEs). It has been designed to give you the skills and tools you need to improve the resource efficiency and environmental performance of your organisation – and, of course, save money too.

By benefiting from your new skills and expertise, your organisation will:

- understand how much waste it produces;
- identify how waste costs are affecting profits;
- identify simple ways to start reducing waste and save money;
- be able to measure the waste and cost savings made; and
- be able to bring about change.

Sources of further information: waste

- On Course For Zero Waste, **Modules 1 – 4** will allow you to map out and quantify your waste arisings and develop an action plan to reduce your waste.
- **Green Office Guide.** Zero Waste Scotland
- **Working with your waste contractor.** Zero Waste Scotland
- Find out what can be recycled locally using the Business Recycling Directory www.zerowastescotland.org.uk/content/business-recycling-directory

How to reduce water consumption



The demand for water in Scotland has reached unprecedented levels. The trend towards lower average rainfall in some areas could lead to water shortages. In future, organisations are likely to face tighter restrictions on water use and further increases in charges for metered water, yet most businesses are still not aware of how much they are using.

Water is an increasingly expensive resource with mains, sewerage and trade effluent charges all rising. Reducing your water consumption is one of the easiest and most inexpensive ways of achieving cost savings. Many companies can achieve a 20-50% decrease in the amount of water used through implementing water minimisation measures.

Here are some top tips for reducing water consumption in your business.

- **Take regular meter readings.** Water use will vary depending on the type of facility and the services provided on site. Establish a routine of taking weekly meter readings and recording the data in a spreadsheet. Take a reading last thing at night and again first thing in the morning. This will show you how much water is being used outside of normal working hours and can highlight leaks, faulty overflows or other water losses. Premises that do not have a water meter, but have a high rateable value - which can affect standard charges, may benefit from having a meter installed. Contact your water supplier for more information and advice.

Flow restrictors are low-cost solutions that can reduce water use by up to 70%

- **Install water-saving devices.** The majority of water used in most businesses and offices is due to toilet flushing, so install water saving devices in toilet cisterns. These can save up to 3 litres each time the toilet is flushed. They can be obtained and installed at low or no cost, with almost immediate payback, e.g. 'hippos' may be obtained free of charge from your local water supplier. If water pressure is high, the use of tap aerators and flow restrictors are low-cost solutions that can reduce water use by up to 70%. A flow rate of between 5 and 6 litres/minute is usually adequate for hand washing.
- **Encourage staff and customers to turn off taps.** A dripping hot water tap wastes energy, and in one week loses enough water to fill half a bath. So, fix leaking taps and make sure they are fully turned off. If you are planning a refurbishment or a refit of your premises, this is the perfect time to install automatic shutoff (percussion) taps or electronic taps with infrared hand sensors.



- Since 1 April 2008, Scottish organisations have had the opportunity to choose their water and wastewater supplier following the introduction of the Water Services etc. (Scotland) Act 2005. Each service supplier has a unique offering and it is recommended that your organisation chooses the supplier that best suits your needs. Visit www.scotlandontap.gov.uk for more information.

Sources of further information: water

- **Green Office Guide.** Zero Waste Scotland
- **Implementing a Water Minimisation Programme.** Zero Waste Scotland

How to reduce energy consumption



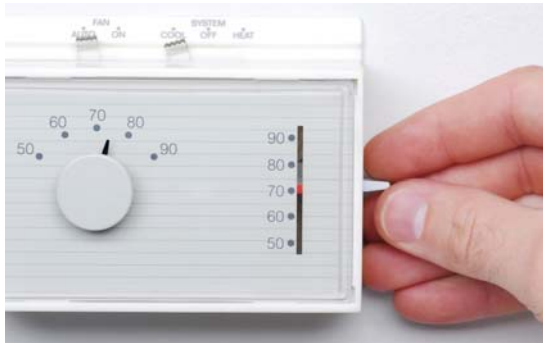
There are a number of low- or no-cost actions that you can implement quickly and easily. These actions also have a short payback period.

- Always turn off the lights when you leave a room.
- Replace spent light bulbs with compact fluorescents.
- Take regular meter readings and compare with the readings on the bill, which may be estimates, this can highlight any discrepancies and overcharges (estimated readings are indicated by an 'E' after the meter reading on the bill and actual readings have an 'A').



- Have light fittings cleaned regularly.
- Make better use of natural lighting by moving desks and work areas closer to windows (remember to avoid glare by installing blinds).
- Don't leave appliances on standby and remember not to leave laptops and mobile phones on charge unnecessarily.

- Turn your thermostat down. Reducing your room temperature by 1°C could cut your heating bills by up to 10% and typically saves around £60 per year. If you have a programmer, set your heating and hot water to come on only when required rather than all the time. Common areas such as hallways and receptions should be between 19°C and 21°C.



- If you have conference areas or whole floors that are used only occasionally, turn off the heating and lighting to these parts of the building between use.
- Boil only as much water as you need (but remember to cover the elements if you are using an electric kettle).
- Is your water too hot? Your cylinder thermostat should be set at 60°C/140°F.

✓ Top Tip

Use energy-saving light bulbs. They last up to 10 times longer than ordinary bulbs, and using one can save you around £55 over the lifetime of the bulb. This saving could be around £120 over its lifetime if you are replacing a high wattage incandescent bulb, or one used for more than a few hours a day.

Sources of further information: energy

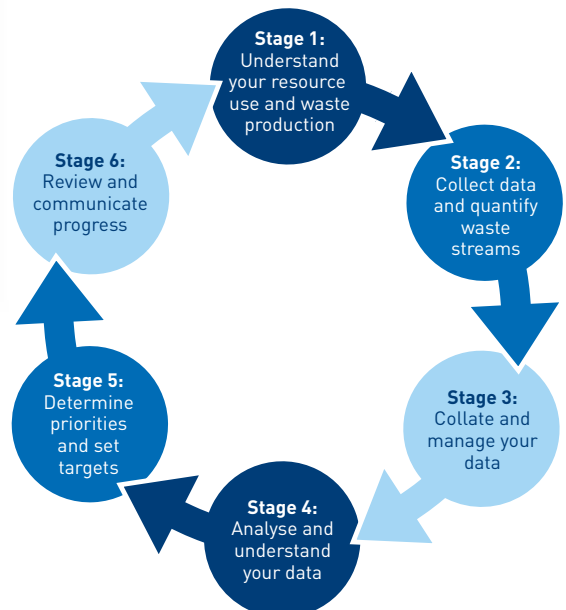
For independent and impartial advice about how to save energy and money, visit the Energy Saving Trust website at <http://www.energysavingtrust.org.uk/>

Measuring and monitoring



“If you don’t measure it, you can’t manage it.”

Measuring and monitoring resource use should be one of the first steps an organisation takes in improving its environmental performance; without a good understanding of use, you will be unable to manage resources in an efficient manner. To identify opportunities for making environmental improvements it is recommended that you conduct a review of current practice. The basic process is shown in the diagram below. However, it is recommended that you obtain more detailed information, particularly the guide **Measuring to Manage Resources and Wastes: An introduction**, to gain a complete understanding of the benefits and process of measuring and monitoring.



✓ Top Tip

For good data, consistency is vital – particularly for measurement units and monitoring periods. For example, gas usage figures could be collected daily, weekly or monthly using either cubic metres or cubic feet.

For a full set of templates to help you to measure and monitor your use of utilities, please refer to EMS Building Blocks at http://www.zerowastescotland.org.uk/sites/files/wrap/EN979_EMS%20Building%20Blocks.pdf

Sources of further information: measuring and monitoring

- **On Course For Zero Waste, Module 2: Measuring and Monitoring.** This module helps you to understand how much waste you produce and how to read your utility bills
- **Measuring to Manage Resources and Wastes: An introduction.** Zero Waste Scotland
- **Green Office Guide.** Zero Waste Scotland
- **EMS Building Blocks.** Zero Waste Scotland

Further information

If you have a specific query or require more information on an area covered in this fact sheet, please visit www.zerowastescotland.org.uk or contact the free Helpline on **0808 100 2040**.

On Course for Zero Waste

Zero Waste Scotland offers a free online training course for Scottish small and medium-sized enterprises/organisations (SMEs) – On Course for Zero Waste. This training has been designed to give individuals the skills and tools they need to improve the resource efficiency and environmental performance of their organisation – and, of course, save money too. For more information visit <http://smetraining.zerowastescotland.org.uk/>



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