

10 no Cost and low-cost ways to reduce your energy bills and carbon footprint

**4th and 5th October 2022
Development Trusts Association Scotland**

Who we are

- Funded by the Scottish Government
- We provide free, impartial support and access to funding to help small and medium-sized enterprises save energy, carbon and money
- We help businesses identify AND implement energy saving projects
- Local support covering all of Scotland
- Previously known as the Energy Efficiency Business Support Service, and now managed by Energy Saving Trust

What I will be covering today

- 10 no cost and low-costs things you can do to reduce your energy use
- Q&A

OPTIMIZE

CONTROL

UPGRADE

1. Make use of natural (free) light

- Ensure that windows and skylights are clean
- Remove furniture and any obstructions from near windows
- Mount curtains or blinds above or to the side of windows so they do not obstruct light when they are not in use
- Move workers around so that desk based workers are seated next to windows
- Ensure that lighting reflects changing seasons and weathers



2. Don't waste heat

- Optimise your heating controls
- Use our FREE TEMPLATE to record your ideal heating system settings
- Avoid overheating - every degree Celsius (°C) reduction you make can cut up to 8% on your energy bills
- Train staff to operate controls



Recording your building's temperature

Helping you optimise your heating system's switch-off times

A lot of organisations waste energy by heating their premises on site - either in the morning before work starts or in the evening after everyone has left for the day.

Setting correct timer controls on your heating system switch-off times in the morning to provide the right temperature for staff and customers without switching on too much energy.



This template should be used to record external temperature checks and system settings.

- Monitor several areas of the building
- Find out what your heating system is doing
- Record system settings
- Record temperatures
- Alter timings to optimise

Selected area	Desired temperature (°C)
A	
B	
C	

Start time temperature checks							
Date	First day back after weekend/holiday?	External temp	Time of system start	Opening time (when staff arrive)	Temp of area A	Temp of area B	Temp of area C





<https://businessenergyscotland.org/tool/optimize-your-heating-controls>

3. Fix leaking (hot water) taps

- Conduct a site walk round using our free checklist
- Encourage staff to report leaks - and make it clear how they can
- Measure flow rate
- Often, just tightening a washer is enough

Site walk around checklist - water

Date of walk around _____

Area inspected _____

Staff present _____

	Undertaken (✓, X, n/a)	Action required (✓, X, n/a)	Date actioned
General			
Are there any visible pools of water, leaks or drips?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Can you hear any running or dripping water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Toilets			
Is water needlessly discharging into the pan between flushes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Is the water in the cistern at the manufacturer's specified level?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Are previously installed water efficiency devices still in place and working correctly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Urinals			
Is water needlessly discharging into urinals between flushes?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Are automatic urinal controls working correctly?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Taps			
Are any taps dripping or leaking when they are turned off?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Check the running time of push taps. Does this exceed 10 seconds?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Is the flow rate between 4 and 6 litres per minute?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="text"/>
Showers			



<https://businessenergyscotland.org/wp-content/uploads/2022/08/Site-Walk-Around-Checklist-Water-RES.pdf>

<https://businessenergyscotland.org/staff-engagement-toolkit/>

4. Draught proof

- Save money
- Improved conditions for employees
- Easy and cheap to do

***“draught proofing a building
can reduce energy bills by
around 15%”***



5. Hot desk

- Make the best of your space layout
- Hot desking means only the amount of desks needed, are used at one times
- Lights or heating can be turned off in areas which aren't used
- Employees can move to areas where they prefer the light or the heat - stopping the need for higher energy usage



6. Staff Awareness

Resource efficiency at work quiz

Name _____ Date _____

Please put a tick in the box alongside the correct answer for each of the following questions:

1. What is the correct order for how to best deal with waste?

- a) Prevent waste > Re-use items > Recycle waste > Energy recovery > Landfill
- b) Recycle waste > Prevent waste > Re-use items > Landfill > Energy recovery
- c) Prevent waste > Recycle waste > Re-use items > Energy recovery > Landfill
- d) Landfill > Re-use items > Energy recovery > Recycle waste > Prevent waste

2. Why should we prevent waste?

- a) It is bad for the environment
- b) It is required by regulations
- c) Waste prevention can save an organisation money
- d) All of the above

3. Which waste types best describes what must be seen in all businesses as of January 2014?

- a) Used paper towels, milk bottles, packaging, electrical equipment
- b) Paper, card, plastics, metal, glass
- c) Wine bottles, wood, lightbulbs, tyres, vegetable peelings

6. Why should we try to reduce water consumption in Scotland?

- a) It can save organisations a large amount of money for little effort
- b) Water is an extremely scarce resource
- c) It is required by legislation
- d) Our water is needed for export

7. How long is an organisation responsible for the waste it produces?

- a) Until it is collected by the waste contractor
- b) Until it reaches a waste treatment facility
- c) Until it is put outside for collection

- b) Set the thermostat to the required temperature
- c) Leave the heating on all the time even when the area is empty to maintain the temperature
- d) Turn on all equipment in the room as well as the heating system

9. How can someone learn more about reducing waste at work?

- a) Wait and see if management organises a training course
- b) Visit our website www.zerowastescotland.org.uk and use the FREE Savings calculator
- c) Work with a management consultant to deliver a seminar
- d) Read the back of packaging

Would you be interested in becoming a Green Team member?

- a) No
- b) Yes
- c) Maybe

TOTAL /9



<https://businessenergyscotland.org/guides/resource-efficiency-work/>

7. Run a 'Switch Off' campaign

- Step 1: Launch your campaign.
- Step 2: Label your lighting.
- Step 3: Use visual material to get your message across.
- Step 4: Communicate your campaign to staff.



<https://businessenergyscotland.org/staff-engagement-toolkit/>

8. Label your lights

- Switches should be clearly labelled to enable staff to switch off lights in unoccupied areas
- A lighting map will help staff understand the layout more easily
- Use our free labelling templates to encourage your staff to turn off lights when not needed

Light labelling templates

Helping you encourage your staff to turn off lights when not needed

It's the end of the day, you're at home and go to turn off the lights. But instead of a simple click, you find a number of light switches on the wall. Which one is for your area, and which one is for the rest of your colleagues into the night?

If you're like most people, you probably take the risk of making the wrong choice. You head straight out of the door, leave the lights on and leave it to the last person to turn them all off.

This is a common occurrence in business buildings - a big waste of energy. However, there is a simple solution - just label your light switches.



- If you can come up with a short description for each light switch, use template 1. It can be edited to suit your own office layout.
- If you can't come up with a short description for each light switch, then, beside each light switch, use a number to show what area each number refers to.

Template 1

Reception	Hot desks	Storeroom	Breakout area
Meeting room 1	Meeting room 2	Meeting room 3	Boardroom
Ladies	Gents	Accessible toilet	Toilet/WC
Procurement	Finance	HR	IT
Admin	Sales	Marketing	Customer Service
Pod 1	Pod 2	Pod 3	Pod 4
Desks 1 - 4	Desks 5 - 9	Desks 13 - 17	Desks 18 - 22
Description	Description	Description	Description
Description	Description	Description	Description
Description	Description	Description	Description
Description	Description	Description	Description
Description	Description	Description	Description
Description	Description	Description	Description
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Description	Description	Description	Description

<https://businessenergyscotland.org/guides/switch-off-campaign>

9. Energy saving tips for fridges

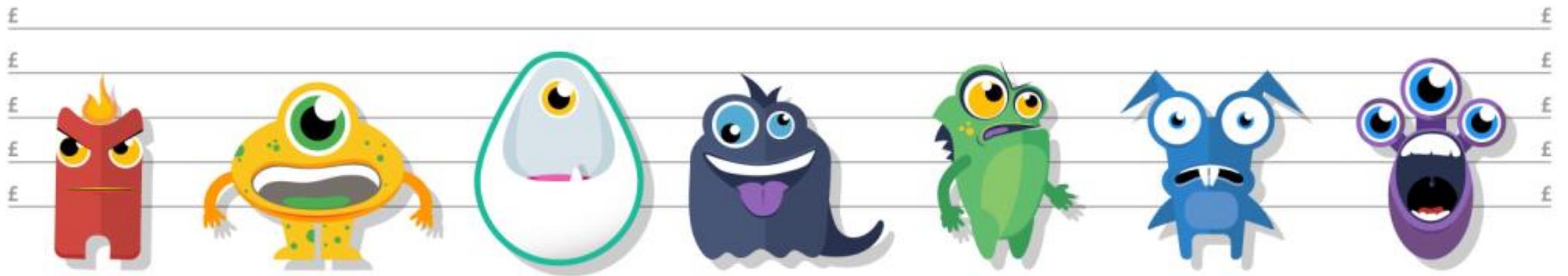
- Make sure your fridge is set at the correct temperature
- Shut the fridge door
- Use a thermometer
- Don't put hot food in the fridge
- Store food in the right area



www.lovefoodhatewaste.com/article/chill-fridge-out

10. Monitor and Measure

- Free Guide for monitoring
- Profit Monsters – why you should measure and monitor



<https://businessenergyscotland.org/are-these-seven-secret-profit-monsters-lurking-your-business>
<https://businessenergyscotland.org/guides/measure-energy-use/>

Green Champion CPD Training 03/11/2022 10.00-12.30

<https://businessenergyscotland.org/event/green-champion/>



Event

Train to become a CPD-certified Green Champion

Join this free training webinar to become a CPD-certified Green Champion

Date: **03/11/2022**

Time: **10:00 am - 12:30 pm**

Location: **Online**