Effective and attractive lighting is essential for customer comfort and satisfaction as well as for the health and safety of staff and visitors. Use of energy efficient lighting and controls can enhance all aspects of operations and provide an opportunity for savings.

Switch it off!
The easiest way to save energy and money is to promote a ‘switch off’ policy on lighting. For example through appropriate messages and labels on switches for guests and staff. Make it clear which switch is for what to help people select only the lights needed.

Automatic Lighting controls
In some instances putting automatic lighting controls in place is more effective than manual switches.

There are 3 main types of light controller:

**Passive Infra Red (PIR) or motion sensor** which switches on lights when movement is detected and switches them off following a set period of non-detection. This kind of occupancy or presence sensor can achieve savings of up to 30% on lighting costs and is particularly useful in public toilets, cellars, store rooms, offices and back of house areas, function rooms and banqueting suites.

**Light level Sensors** or ‘photocells’ measure the light level and adjust it accordingly. They are used to dim or switch off artificial lighting if there is sufficient natural daylight. Since daylight hours vary throughout the year, sensors can help provide more control and can achieve substantial savings. They are particularly useful for external lighting on signage, drive ways and car parking areas. Light sensors can also be combined with time switches or presence sensors for more precise control.

**Timer** – a timer switch can be used to manually switch a light on and automatically off after a set time. A time clock can also be used to specify when a light comes on and goes off. If only using a timer, remember to adjust the times according to the season.

Light controllers can be used in combination to offer a more precise and sophisticated control. For example on external lights you could have a light level sensor combined with a presence detector to stop lights being on all night.

**Hint for Hotels:** a range of controls exist to switch energy consuming services down or off when a guest vacates a room. Some systems can be controlled from the front desk and others are based on key-card access. These systems can achieve significant savings and can pay back installation costs within 1-3 years.

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**Top tip:**
Sometimes giving someone the permission to switch off a light is more encouraging than giving an order. E.g. try placing a label in a bathroom or public toilet, saying: “Please feel free to switch off this light!”
Lighting controls - Switch it off

Energy series

What to look out for when specifying lighting controls

The area that a sensor controller can ‘see’ varies in angle and distance depending on the type selected, so care is needed to ensure you select the appropriate controller.

These sensors might initially require adjusting to the right level and trial and error may be necessary, so make sure it is easily accessible!

Fitting lighting controls does not necessarily require any changes to wiring. A good opportunity to install more extensive lighting controls might be during a wider refurbishment.

Financial Help - Lighting controls are included within the Enhanced Capital Allowance (ECA) Scheme. This is a government program to encourage businesses to invest in energy saving equipment and provides businesses with enhanced tax relief for investments in equipment that meets published energy-saving criteria.

Top tip:

Have more than one switch to control different light circuits to ensure only those needed are switched on instead of all of them at once. This is especially effective in a larger space like a lobby, corridor or conference room.

For more information on implementing lighting controls see the Carbon Trust guide (pdf) www.carbontrust.com/resources/guides/energy-efficiency/lighting

For further advice contact Resource Efficient Scotland www.resourceefficientscotland.com or call 0808 808 2268.

Content contributed by the Carbon Trust and Resource Efficient Scotland

More lighting tips

Letting natural light into a room during the day is the best way to limit the need for lights. Avoid using blinds, even those that are tilted open limit incoming daylight.

Keeping open blinds and curtains away from the window pane also means more daylight comes in, so placing tracks higher and well clear of the window is a good idea.

Top tip:

Many businesses keep lights on to look ‘open for business’. However, when visitors look in they see the far wall, so rather than having all the lights on, it is more important to have the back wall illuminated.