

**TIP OF
THE MONTH**

**HEATING AND
LIGHTING –
ADDITIONAL
TIPS**

General guidelines

LIGHTING

- **Let the sunshine in**, open the curtains during daytime.
- **Use a desk lamp instead of an overhead light** if you are working alone in your office room.
- Use LED lights for your office's daylight, motion or occupancy sensors.
- Look for the **EU Ecolabel** or **ENERGY STAR** label.
- ... and **let the maintenance manager know** about all these possibilities and your needs related to lighting.

HEATING

- Don't place furniture near the **radiators** and don't cover them with boxes or drapes.
- **Turn down the heating for the evenings, weekends and holidays.** Consider installing a programmable thermostat or thermostatic radiator valves.
- Make sure you know how to set the **thermostatic radiator valves** correctly.
- **Spaces** that employees just **pass through** can be kept at a **lower temperature** than permanently occupied rooms.

LIGHTING – ONCE MORE

The second energy saving tip (Electricity use, Lighting) already contains the general principles related to saving on lighting. Let's see them now in more detail, and hear about some new ones.

- **Let the sunshine in!** The scarcer it gets, the more valuable it becomes, so open the curtains during daytime. Besides providing natural light it might give you some warmth too. One more reason to prefer natural light: daylit environments increase productivity and comfort, and provide the mental and visual stimulation necessary to regulate our biological clock properly.
- If you need to use artificial light, **make sure you choose the right colour temperature**. Colour temperature has a spectrum from warm white through neutral white to harsh blue-white, and highly affects well-being. This information is usually written on the packaging of the bulb, given in K (degree Kelvin). Warm white is around 3000 K. Also, there are some “full spectrum” or “daylight spectrum” fluorescent lights that have a close to natural colour temperature.
- **Use a desk lamp instead of an overhead light** if you are working alone in your office room – and the overall illumination of the room is satisfactory –, not only because it is more energy efficient, but also because you have different lighting needs for looking at the screen of your computer and reading documents. Too much light at the wrong place or too little light at the right place can both harm the eyes. With desk lamp you can direct the light exactly where you need it the most.
- If you want dimming in your room, use **dimnable LED lights**. They come handy if you want to manually adjust the amount of artificial light to your needs or when you want to use daylight sensors. Either way, you work towards saving energy. Never use a non-dimmable lamp in a dimmable circuit as it may cause damage to the lamp or the circuit!
- **Look for the EU Ecolabel or ENERGY STAR label** on the package of the bulbs too. This label ensures that the bulb you choose is certified to save energy.
- **Let the maintenance manager know** about all these possibilities and your needs related to lighting!



HEATING – ONCE MORE

The first energy saving tip already provided some general guidelines on heating. Here comes an extra set of tips on the topic on what else you can do:

1. **Do not place furniture near the radiators or cover them with boxes or drapes**, as they might block much of the heat. If you have a forced air heating system in your building, **don't cover the vents or heating registers**.
2. **Turn down the heating for the evenings, weekends and holidays**. Turning it down by 2-3 °C can save you a considerable amount of energy, while posing little risk of comfort or moisture problems. If you have automatic temperature control in the building, then the so-called **setback or programmable thermostat** is the most convenient and at the same time most efficient way to decrease temperature in the office when it's empty. You can save as much as 10% a year on your office's heating bills only by turning your thermostat down by 10-15% for 8 hours each day.
3. **If you have thermostatic radiator valves, make sure you know how to set them correctly**. They sense the air temperature around them and turn the flow of hot water to the radiator on or off depending on if the air temperature is above or below the set point. So interestingly, they do not work like a tap, there is no proportional control to the flow of hot water.



What the 1 to 5 or 6 settings relate to is the air temperature at which the radiator will be turned off. A 1 to 5 thermostatic radiator valve at setting 5 makes the radiator turn off when the adjacent air temperature is roughly 25°C, and at setting 1 it will turn the radiator off at around 15°C. Thermostatic radiator valves can be retrofitted and are relatively cheap to install. Make sure to leave the space around the valve clear for it to be able to measure temperature properly.

4. **Spaces** such as corridors, elevator halls, storage spaces etc. **which the employees just pass through can be kept at a lower temperature** than permanently occupied rooms. It is recommended that heating is switched off in rooms which are never used. You can also consider turning off the heating in the washrooms. However, for hygienic reasons it is necessary to keep all rooms well ventilated, even those which are unoccupied.

TOP TIPS FOR CHAMPIONS

- **Make sure that there is no disturbing reflection, glare or shadow in your field of vision.** It is best to place your screen perpendicular to the window and put your desk lamp between the window and your work station.
- It is more energy efficient to **individually set the temperature in each room**, but even within the same room colleagues might have different temperature needs and levels of comfort. There are many possible solutions to this problem; if you like warmer temperatures, sit as near to the radiator as possible, you can also put a carpet under your table or an extra (woollen) blanket on your chair, or even have an “office cardigan/ pair of slippers” etc. These practices of course also come handy if you cannot control the heat in your office at all and you find it too cold.



YOU CAN ALSO....

In a room filled with warm (such as yellow, orange) **colours we literally feel warmer.** Even if you are not allowed to paint the walls of the office, you can put up posters with warm colours or have some pieces of yellow, orange, red furniture or objects around.

DID YOU KNOW?

- Can we freely turn the lights on and off without decreasing their life span? Do they consume more energy to switch back on than what we can save by switching it off for a few minutes? Let's see: CFLs (compact fluorescent lamps) do require a small amount of extra electricity to light-up, but it only equals to a **few seconds** of normal light operation. As regards **LED and halogen lights** the higher inrush current is even less significant, so they **can be freely switched on and off, and can be well used in occupancy or motion sensors, too.**

Frequent switching on and off decreases the bulb's lifespan only in the case of fluorescent lights, so LED and halogen (as well as incandescent) bulbs remain unaffected. Rule-of-thumb for CFLs: **if you will be out of a room for more than 15 minutes, turn them off.**

- While trying to save on heating **make sure that both male and female colleagues are at comfort.** Temperatures in office buildings are often based on a decades-old standard that considers the metabolic rate of men. However, **women generally have a lower metabolic rate** than men because of their body composition so they prefer warmer rooms and need less air conditioning.

FURTHER READING

[When to turn off your lights?](#)

[Best practices for office lighting design](#)

SOURCES

<http://energy.gov>, <http://www.thisismoney.co.uk>, <http://www.integral-led.com>

PICTURES

<https://rightsinfo.org>, <https://www.encyclopedia.com>

