

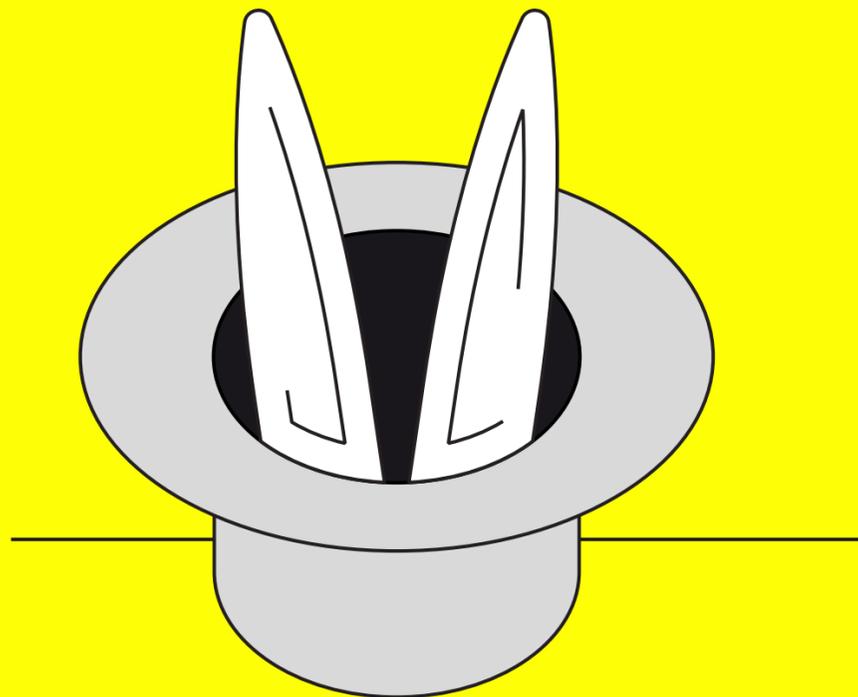
Lighting in the Office

Read our guidelines and
improve your workplace.



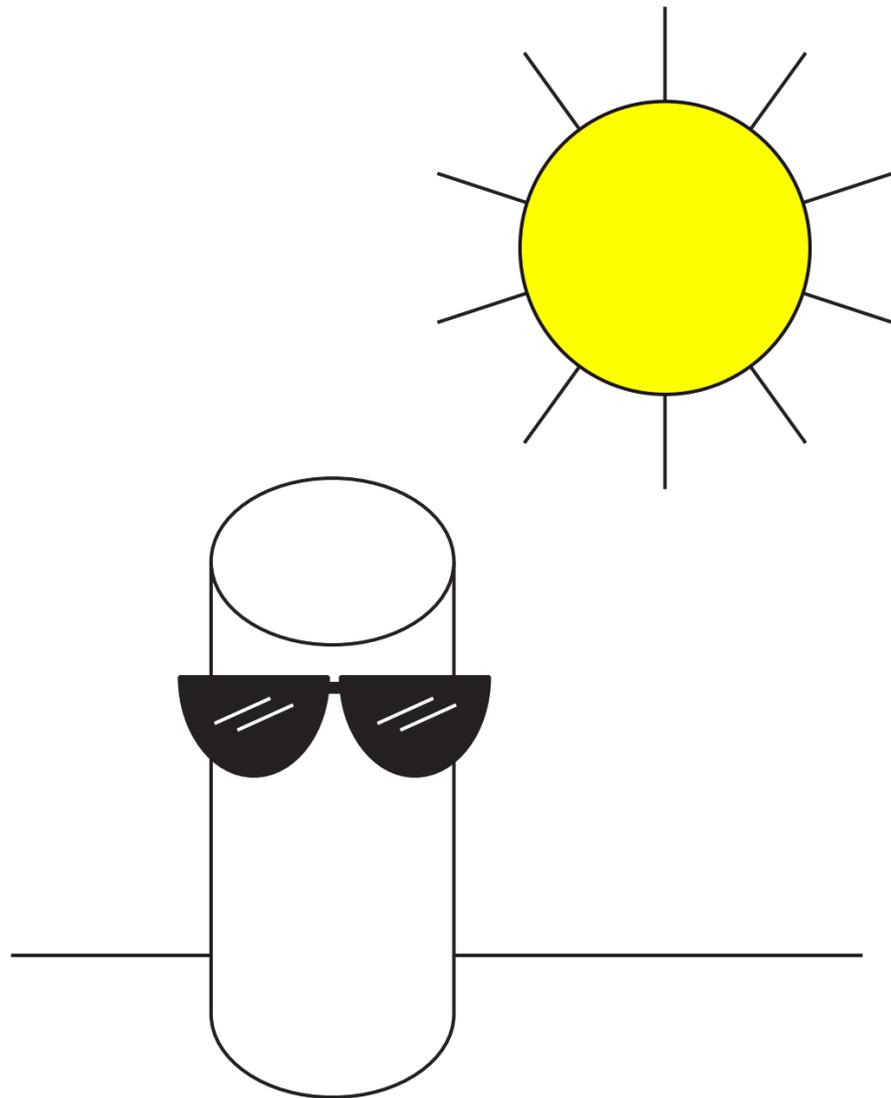
A few insights

- Natural and artificial lights are essential for our work and well-being.
- If you want to save on energy, you should consider using energy-efficient light bulbs, electronic light ballasts and electronic light ballasts with the option of light regulation.
- By following the latest guidelines, you can save up to 75% on your energy bills, as well as promote sustainability.



Good lighting

How important is it?

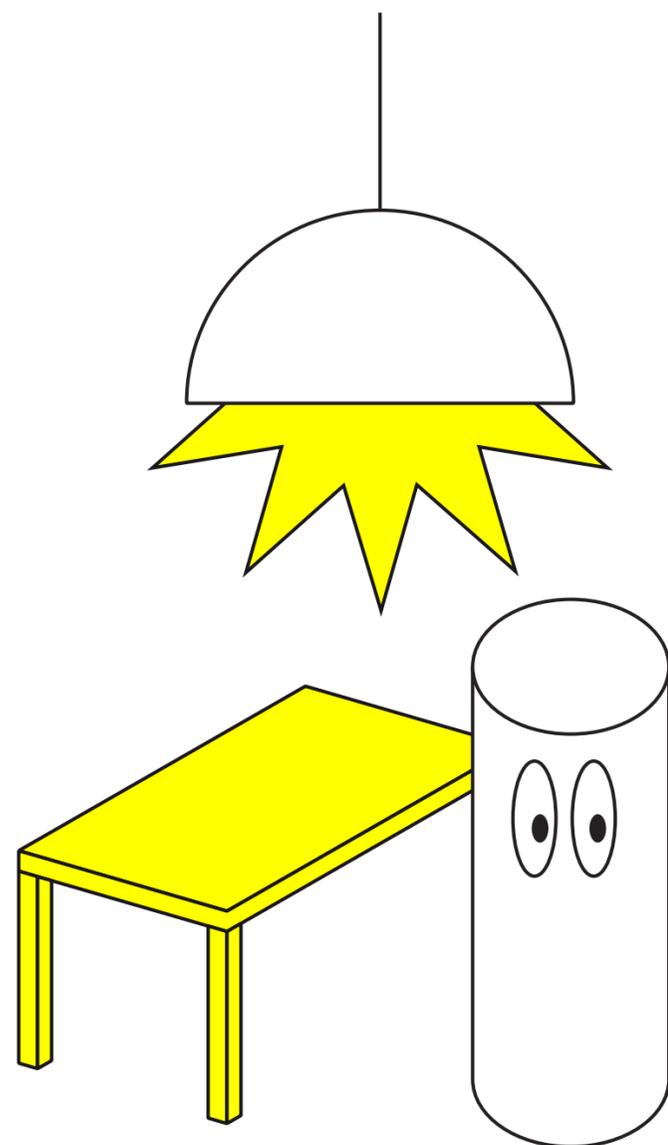


Did you know that over 85% of the information we receive from the environment comes through our eyes?

Good lighting in the office is, therefore, a prerequisite for efficient work. During the summer, natural light is all around us. Winters can be trickier, though. The shortage of light quickly shows on the mood, motivation and health of your employees. Headaches, fatigue and lower productivity are not uncommon when the lighting is bad. Many office spaces have not yet been upgraded according to the latest guidelines and are not well lit.

Today, we would like to share with you a few lighting hacks that can help create pleasant working conditions and increase your company's productivity, as well as cut your energy bills.

Lighting in the office



In an office, the desks are usually perpendicular to the windows. The flow of natural light dictates the position of the workstations and the direction of gaze. To avoid glare, we need to position the lights parallel to the windows and parallel to the viewing direction.

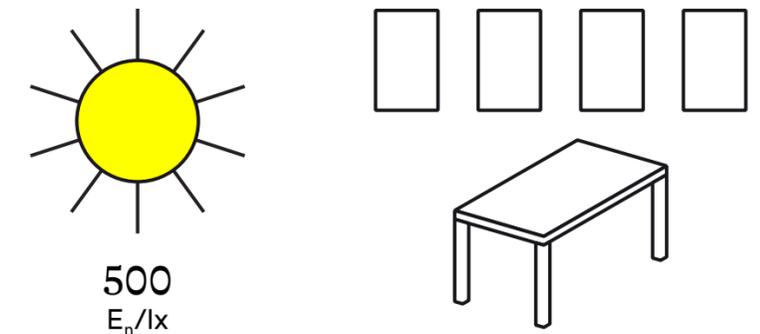
What we need to consider with lighting in office space:

- The position of lights should be adjusted according to the window layout.
- When planning the lighting of workplaces, we first look at the lighting requirements of the largest room. Based on that, we arrange the lighting in other, smaller areas.
- It's usually best to create a combination of direct and indirect light and utilise different types of lights (table lamps, ceiling lights, floor lamps) with different types of colour temperature.

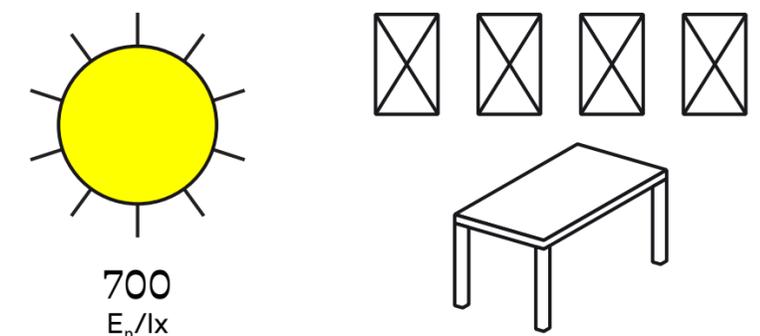
The lights should not be placed directly above the desks and workers' heads. With two or more sets of lights, the first set should be placed 0,7 metres from the wall, while the second should be 3 metres from the first set (depending on the depth of the room).

For optimal comfort, the intensity of light hitting a horizontal surface should be between 300 and 500 lux. The most common problems we notice in offices are that workplaces are too dark or too bright.

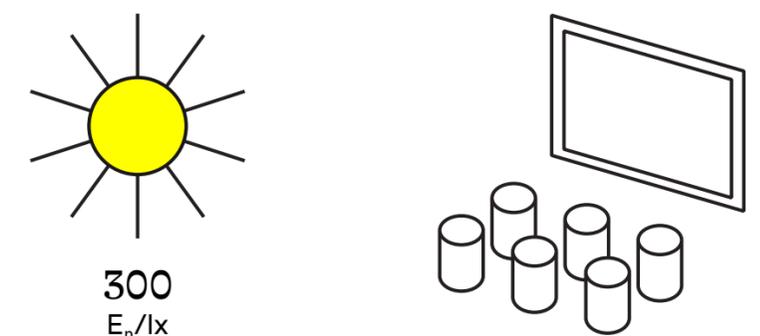
Office with windows



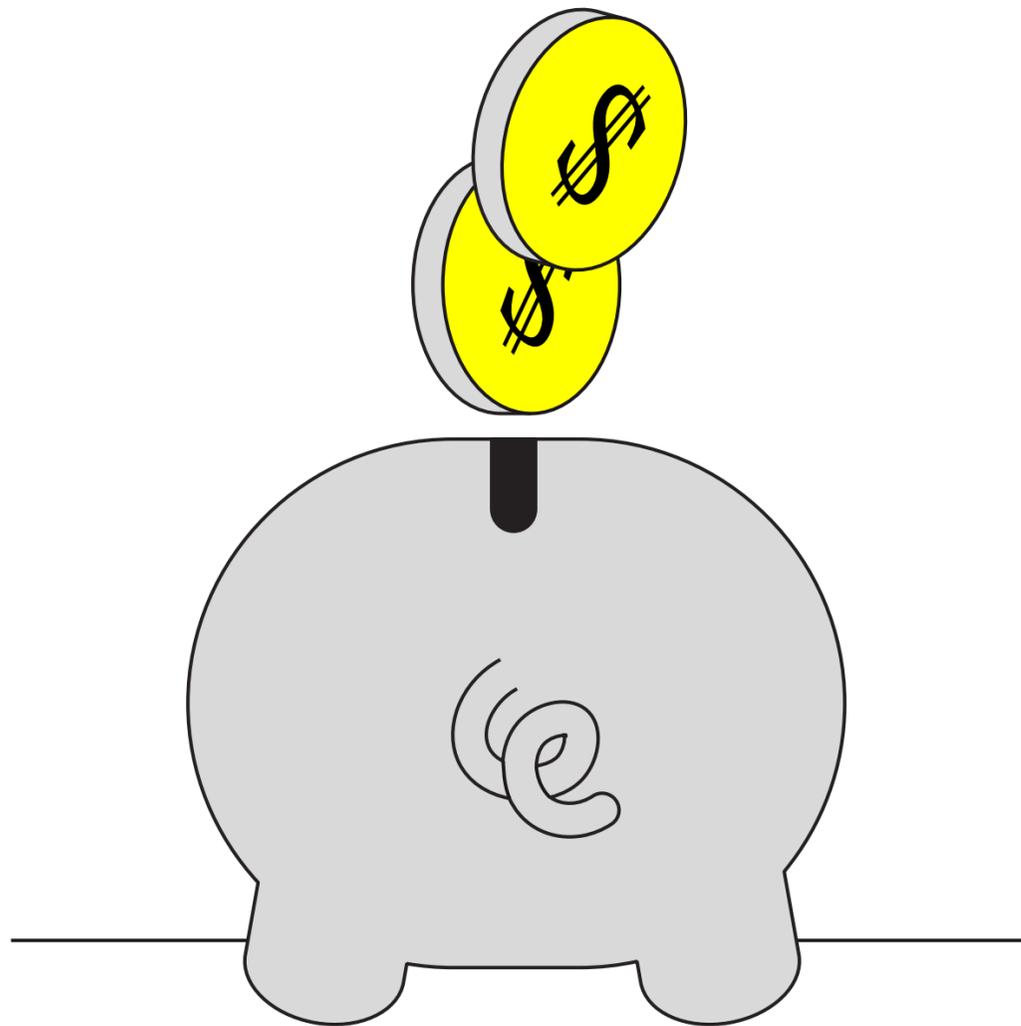
Office without windows



Multipurpose room



Three steps for saving energy



We are all trying our best to be environmentally friendly. Adjusting your company's lighting can be a step in the right direction.

This, however, doesn't mean you should give up the comforts of great illumination! With the help of modern technology, you can be both eco and enlightened (pun intended).

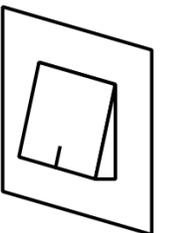
Step one

Using energy-efficient light bulbs



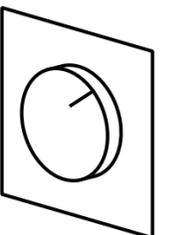
Step two

Using electronic light ballast



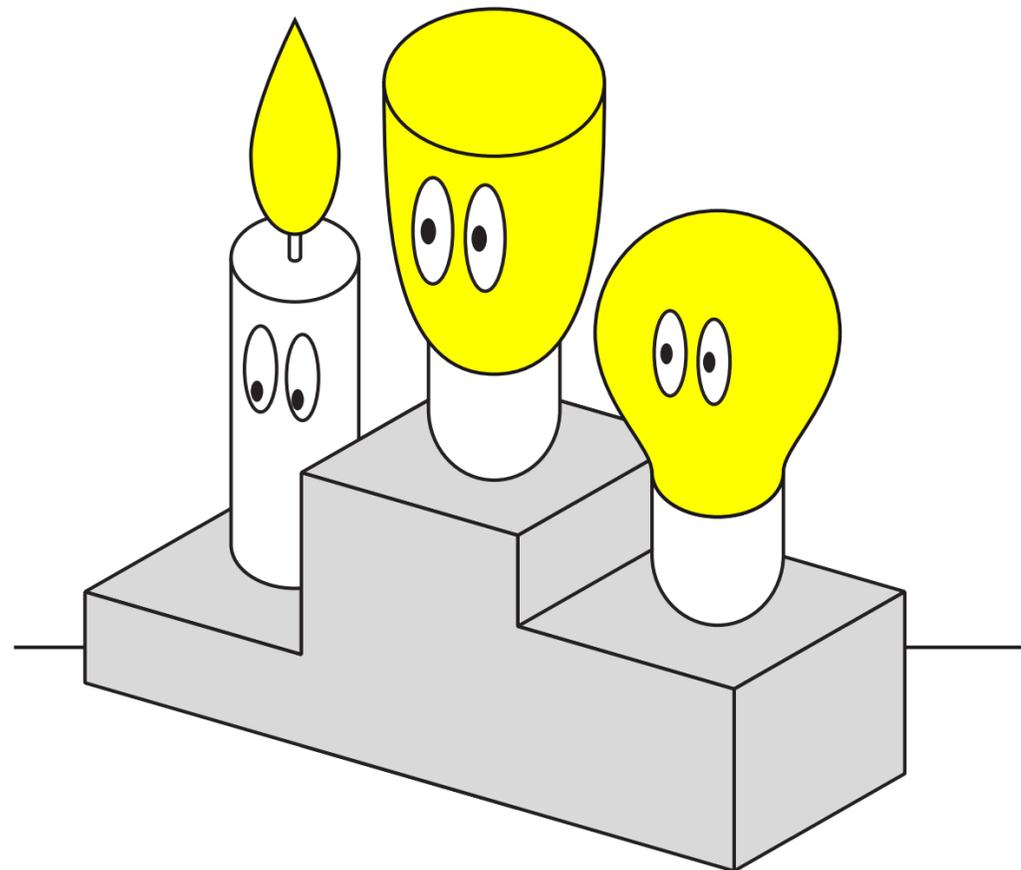
Step Three

Electronic light ballasts with the option of light regulation



Step one

Using energy-efficient light bulbs



Do your employees often complain about their eyes hurting?

In many places, bright white and cool fluorescent tube bulbs are still being used. However, this type of lighting is not appropriate for a modern office and has been associated with eye damage. Your staff's eye problems might very well stem from the wrong choice of lights.

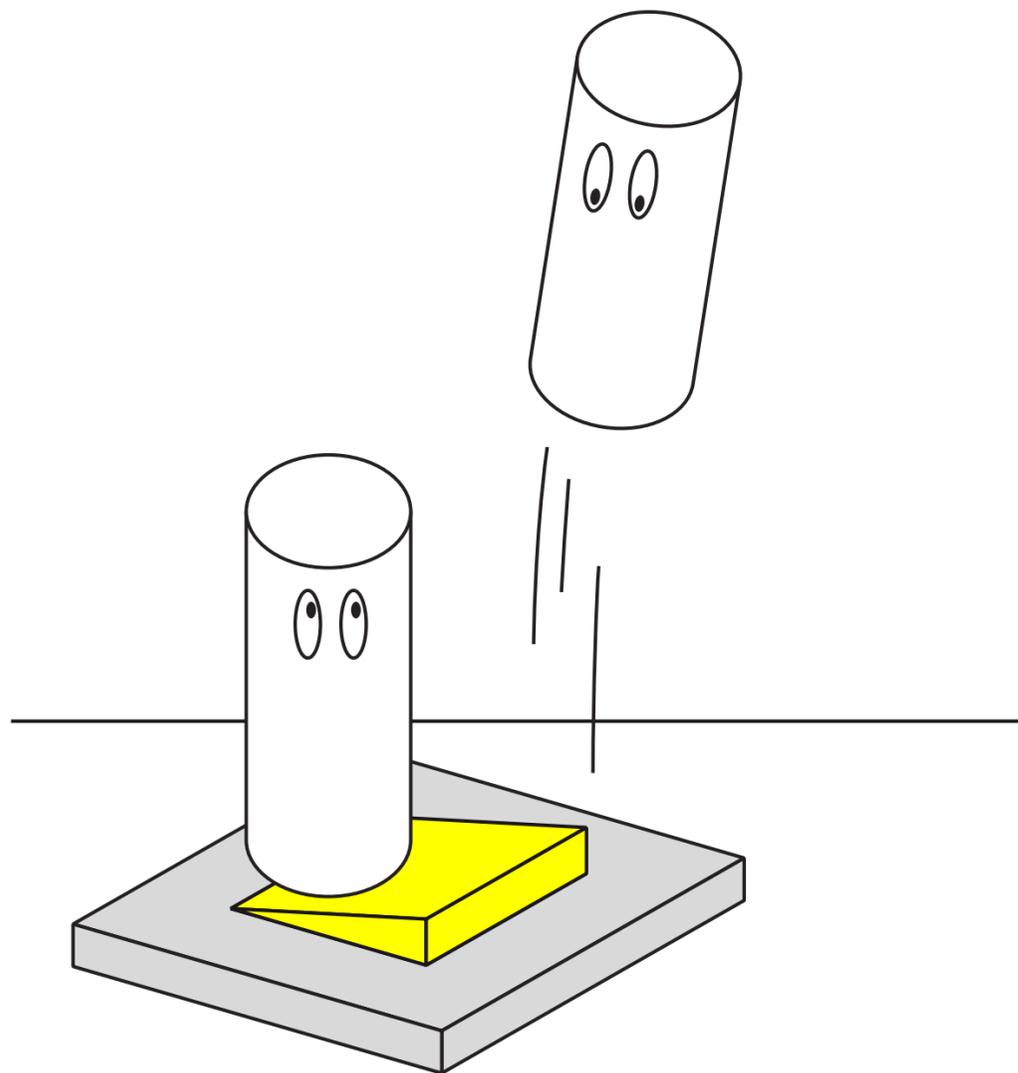
We can significantly improve the situation if we use modern LED lights that reduce glare and are suitable for all workstations. Those lights are also more energy-efficient, saving up to 30% of electricity.

A word of caution: Optical radiation of artificial light sources can be damaging to the eyes. Some scientists caution about the dangers of LED lights. LED lights use tiny diodes that emit a spectrum of very bright light, which includes distinct wavelengths of blue light that can cause trauma to the eye retina. Also, bright lights can create unpleasant work conditions. A study conducted by Dr. Georges Zissisa and his colleagues showed that out of 50 LED lights they tested, only 8 complied with the modern energy standards.¹ This should be considered when designing workplaces.

1. Zissis, G., Kitsinelis, S., Arexis-Boisson, L., Martinsons, C., Boulenguez, P., & Carré, S. (2013, September). LEDs and Solid-State Lighting: The Potential Health Issues. In Proc. 7th International Conference on Energy Efficiency in Domestic Appliances and Lighting (EEDAL'13), Coimbra, Portugal (pp. 11-13.)

Step two

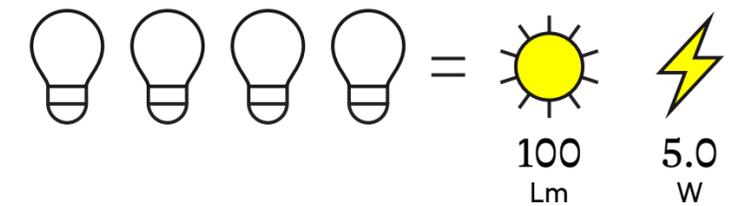
Using electronic light ballast



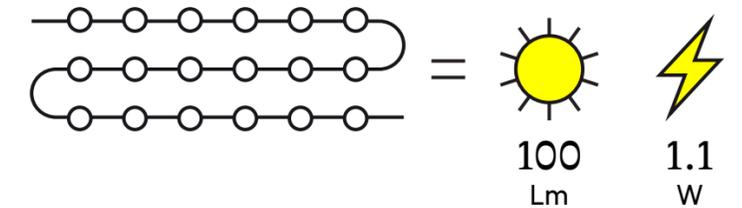
If alongside modern LED lights, we also use electronic light ballasts, we can reduce energy consumption by an additional 20%.

And that's not all! The cooler operation of electronic ballasts reduces air-conditioning costs as well as improves your fire safety. Plus, their lifespan is twice as long as that of the old lights.

Old lighting system

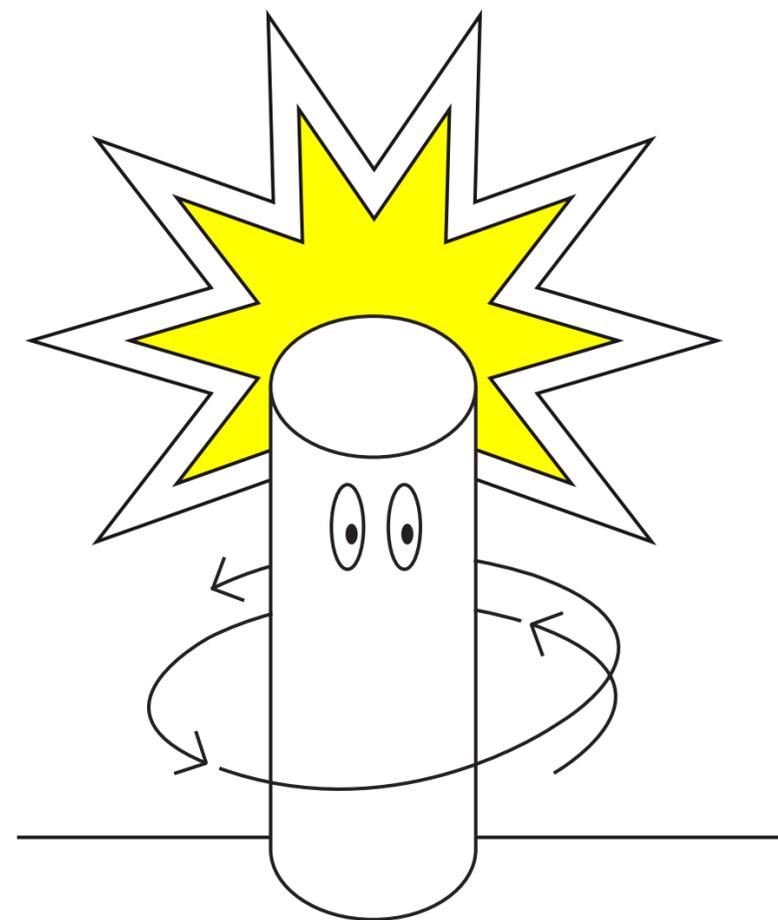


Led light strip



Step three

Using electronic light ballasts with the option of light regulation

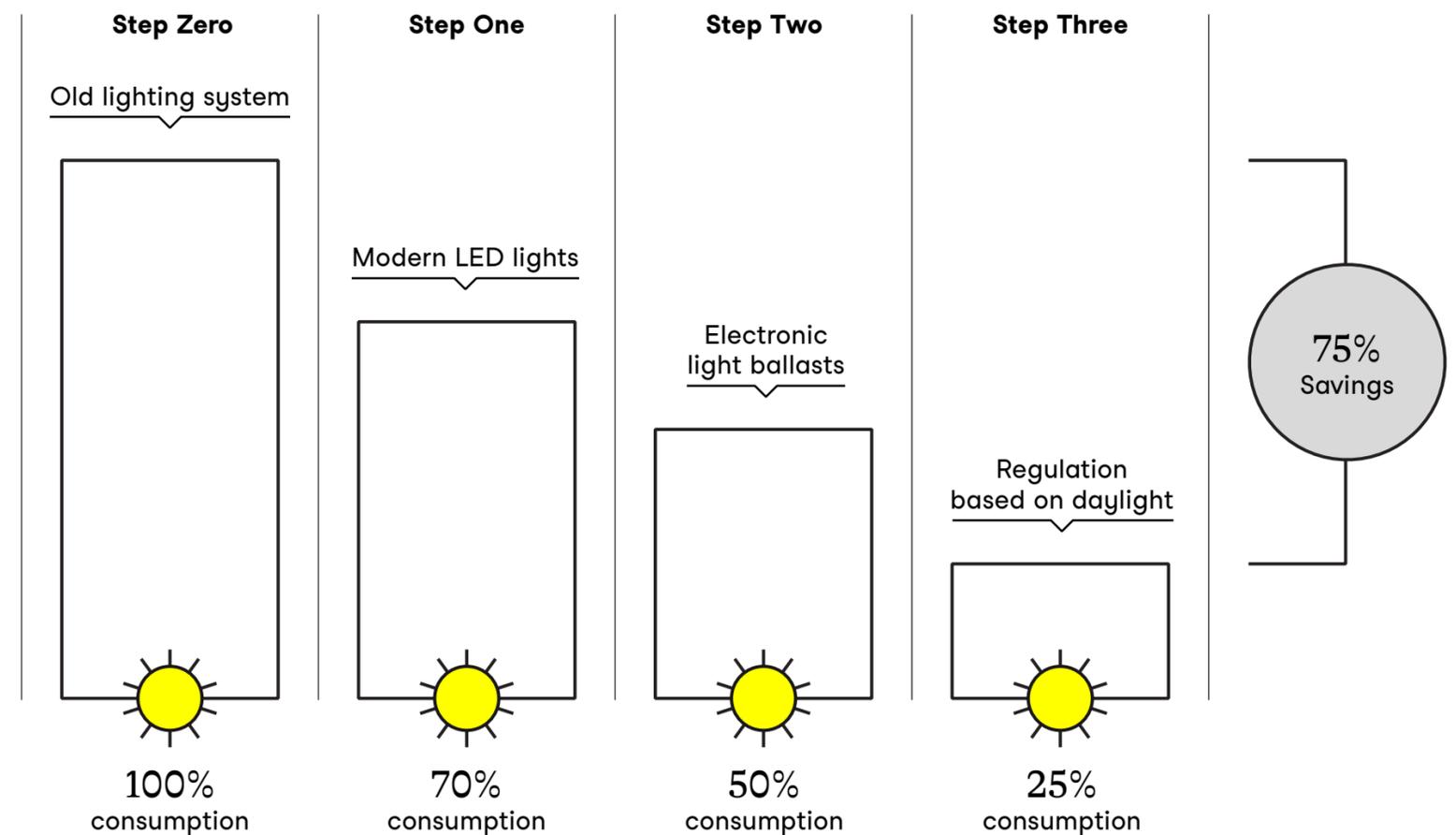


If we use natural daylight and regulate the artificial lights according to the environmental conditions, we can reduce our energy consumption by an additional 25%. A light sensor and a control device, connected with a light ballast with the option of light regulation, ensure that the indoor light adjusts according to the intensity of daylight. The weather conditions (e.g. clouds) and the changing angle of light throughout the day influence the lighting requirements. The technique enables us to

maintain a constant level of illumination in the office.

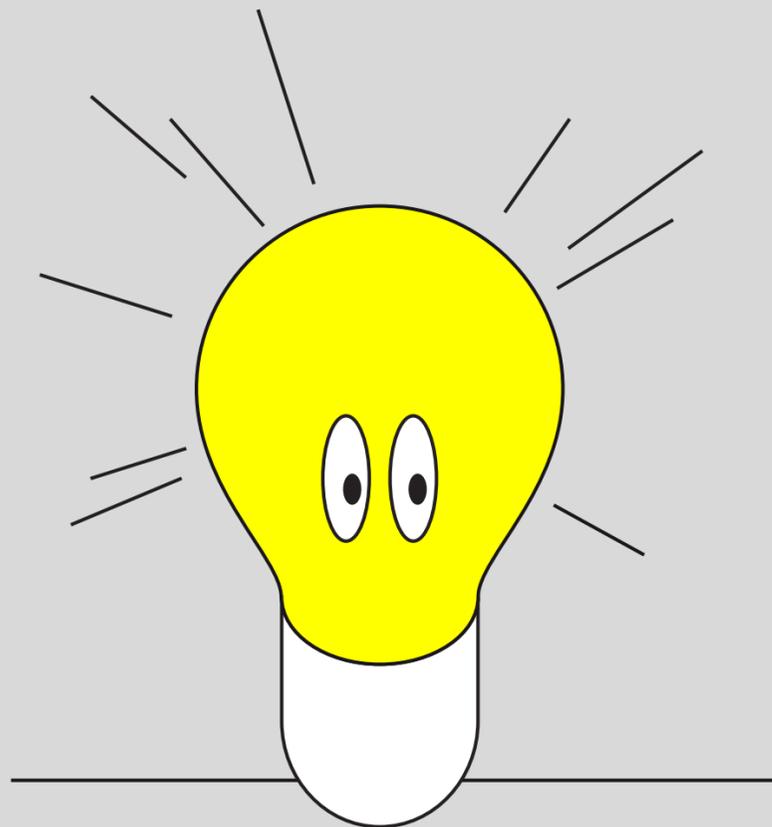
To sum it up: With these simple three steps, you can achieve energy-efficient lighting for your company. For optimal results, all the recommendations should be carried out. Compared to the old lighting, you can achieve up to 75% reduction in energy consumption! An additional benefit is a short amortisation period. And let's not forget about your contribution to the environment!

The benefits of upgrading your lighting



What can you do today?

We will be happy to hear about your needs and discuss possible solutions and savings. Please contact us for more information.





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