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# Energy Saving Tips



## TIP OF THE WEEK

HEATING 1.

### Heating – general guidelines, maintenance

- Make sure that the HVAC system in your building is **regularly cleaned and serviced**.
- Clean the radiators or heating registers (and vents) from time to time.
- Continuously **monitor indoor temperature and humidity values**.
- Turn down the heating. The **ideal temperature** in offices is **19-21°C** in winter.
- Inspect your windows and doors and identify possible **air leaks**.
- Keep the **doors closed** during the heating season.
- For **ventilation** open the windows wide but only for a short period of time (max. 5-10 mins).
- In winter keep your **curtains** open during the day, especially on the south side of the building, but close them for the night.

**PLEASE PUT A RELEVANT LOCAL  
PICTURE TO THE FRONT PAGE**





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## Heating – general guidelines, maintenance

Just as office buildings themselves can be manifold, the type of heating installed, the means and extent of insulation in them also show great variance. However, one thing is for sure: **heating, ventilation and air conditioning (HVAC) are responsible for the most significant share of total building energy consumption**, generally around **40–60 %** in offices. *Feel free to modify this figure if you have a more precise national value for it.* So saving on heating is one of your best shots to cut back on overall energy consumption, don't miss it!

Here are some ideas how you can do it:

1. **Make sure that the HVAC system in your building is regularly cleaned and serviced.**

In case you have a furnace, replace or clean its filters as recommended, during winter check the filters every month. Dirty filters restrict airflow and so increase energy requirement!

2. **Clean the radiators or heating registers** and vents from time to time too. If the radiator has a cover, remove it and clean inside as well. Dust (especially burnt organic dust) gives off unpleasant smell and might also trigger allergic reactions. Besides, excessive dust makes your heating system less efficient.
3. **Eliminate trapped air from hot-water radiators.** – Does your radiator keep making a gurgling noise? Or maybe it has a cool top with a hot bottom? These are signs that your radiator has some air pockets inside which prevent it from functioning properly. As a result it doesn't only leave you cold but is also a waste of energy, so it's time to bleed the radiator.
4. **Continuously monitor indoors temperature and humidity values.** – Use thermometers and hygrometers around the building, possibly in each floor and rooms facing all the four directions. Don't forget about the corridors, the kitchens and washrooms either!

Even if you have an automated HVAC system it's worth to check the temperature and humidity every now and then.



5. **Turn down the heating.** – The ideal temperature in offices is **19-21°C** in winter. *Please check your national regulations/recommendations on it and modify accordingly.* Decreasing the temperature by 1°C can mean as much as 5-10 % savings in heating energy consumption.
6. **Inspect your windows and doors and identify possible air leaks.** One way of doing this is to see if you can rattle them, for doors you can also check if you see light around the frame. Also look for gaps around cables and pipes entering the room.
7. **Keep the doors closed during the heating season.**





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8. **Regular ventilation** is necessary to remove stale indoor air. However, during the heating season one should be more careful not to let out the heat. Therefore **open the windows wide but only for a short period of time** (max. 5-10 mins). Avoid leaving the window ajar for hours.
9. Despite the cold temperatures outside the sun's rays can still bring some warmth into your office. Moreover, it's for free, so take advantage of it! **Keep your curtains open during the day**, especially on the south side of the building. **Close the curtains for the night** in every room to reduce the impact of cold drafts.

## Top tips for champions

**Have more plants around you!** They don't only cheer you up but also increase humidity in the room, and with higher levels of humidity cold doesn't feel so cold on those chilly days. Therefore it is advised to keep indoor humidity between 40% and 60% during winter months.

Place **heat resistant radiator reflectors** between exterior walls and your radiators.

Put a **draught stopper** in your office window.

## You can also...

Remember **green roofs and green walls** that were mentioned in our 10<sup>th</sup> Energy Saving Tips **+link if it's available online** on office environment. They don't only keep heat away in the summertime but can help to reduce heat loss from buildings during the winter when root activity of plants, air layers and other components of the soil system create heat and provide an insulation membrane on top of the building.

## Further reading and ideas:

<http://energy.gov/energysaver/tips-heating-and-cooling>

<https://www.nh.gov/oep/energy/saving-energy/conservation/heating-cooling-tips.htm>

Level 3 of the Green Clicks Tool. **add link**

## Sources:

Antal, O., Vadovics E. (2005) Zöld iroda kézikönyv. [Green Office Handbook]. KÖVET-INEM Hungária, HU

<http://energy.gov/energysaver/home-heating-systems>

[http://eartheasy.com/live\\_cheapheat.htm](http://eartheasy.com/live_cheapheat.htm)

<http://www.energysavingtrust.org.uk/home-energy-efficiency/heating-and-hot-water>



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