



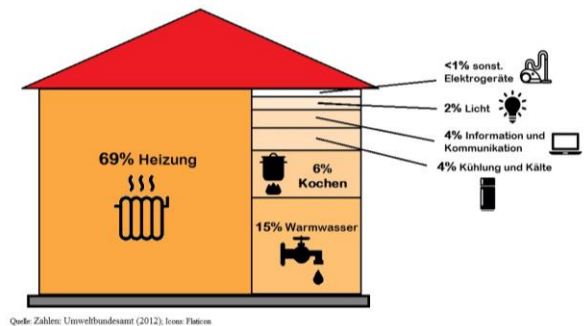
Save energy in your flat

1. Problem/background information:

Due to the geopolitical situation and the resulting problems in the energy market all households in Germany are being asked to save energy. This does not only concern natural gas but also fuel oil and electricity, due to the fact that the production of electricity from renewable sources is still very limited. For you personally, heating and electricity could add a very high bill to your rental payments. Thus, we hope that our guide will help you to use less energy in your home and save you money.

2. Energy use in a house

The bulk energy use in a house is for heating and hot water generation. Therefore, this is the area where you can save the most. Below we have collated useful tips.



3. Heating

1) Roomtemperature living room/office 19-20°C, children's room 20°-22°C.



If you dress adequately (jumper, long trousers, house shoes) then 19-20°C are sufficient even for rooms in which you don't move much. Invest in a thermometer to check the room temperatures. Try to keep the rooms that you use regularly at an even temperature and avoid to get let them and their walls cool, because (rapid) reheating such cold rooms will waste a lot of energy.

If you have a thermostat leave it on position 2-3 and avoid the warm/hot positions 4-5. In case you want to reduce the temperature in rooms that you don't use (e.g. overnight or if you are not at home, decrease the temperature by 1-2°C. You can programme your central room thermostat to regulate this automatically. In case you would like some help with your temperature settings, please call our office or directly speak to our friendly building supervisors.



2) Bedroom temperature 17°C:

A lower temperature improves sleep, set the thermostat in this room to „moon“ or 1.

3) Kitchen temperature 18°C:

Waste heat from appliances and from cooking will warm up your kitchen, you may be able to avoid additional heating via the radiator. If it is very cold in winter, try a low setting of the thermostat (1-2).

4) Bathroom 22°C:

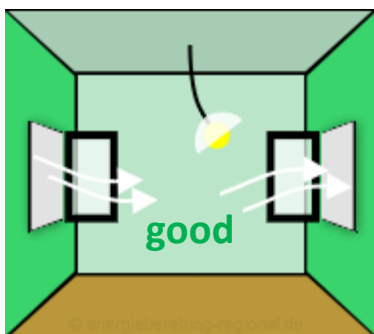
5) Additional ideas:

- Kepp the doors of cooler (or warmer) rooms closed.
- Don't block the heat circulation from the radiators with heavy curtains or furniture.
- Dress warm and use a blanket, fur house shoes and/or heating pads to keep warm.
- Close blinds or curtains at night.
- We acknowledge that each person needs a different temperature to feel comfortable. The guidance given is from the german federal environmental authority. Is is understood that older folks often need it a little warmer.
- **Attention: If you don't heat sufficiently and the walls of your flat get too cold, then fungus might start to grow.** Thus, never lets rooms get below 15°C.

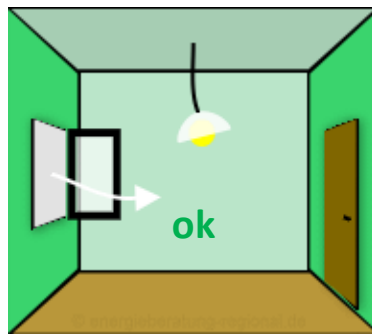
4. Correct ventilation saves heating costs

It is absolutely necessary to air your flat in order to a) reduce the humidity in the rooms and b) to increase the oxygen and get rid of the CO₂ that you generate.

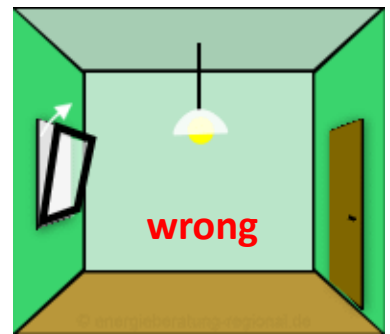
Each person releases 1 liter of water/day through the lungs and sweat. Consequently, in a three person household about 10 liters of water are added to the ambient air each day through breathing, cooking, shower, plants, laundry and drying thus increase room moisture. The ideal humidity in your flat is 55%, but I have often seen apartments with 75% humidity which developed fungus at the walls. The correct ventilation of your flat will help avoid this and also reduce unwanted heat and energy losses.



Cross ventilation:
2-5 min, at least 3x daily
= little heat loss, saves energy



Open window ventilation:
5-10 min, in case you can't generate any crossventilation (e.g. via two rooms or the hallway)



Tilted window :
30-75 min needed for sufficient airing, the walls cool and fungus grows on the cold walls around the window, high energy loss.

5. Save at hotwater generation

- 1) **Shower instead of taking a bath.**
- 2) **Take a short lukewarm shower**, or even a healthy cold shower. If you have an electric continuous flow water heater, try a lower heat setting.
- 3) Use economical waterhead (**Sparduschkopf**) in the shower and an aerator tap (**Perlator**) for the faucets.



6. Save electricity

Usually a one-person household uses 2200 kWh, a four person household 4900 kWh/year. The German federal statistical office stipulates that a one-person household should save 700 kWh/year. As you can appreciate from the chart, there are many places where you could save energy and thus money.



- 1) **Only turn on lights when you really need it and use energy saving bulbs, best LED.**
- 2) **Kitchen: use/buy new fridge and freezer with energy certificate A and do not place them close to warm gadgets like stove or radiator.** Open doors only briefly, add food only in closed containers and at room temperature and don't cool fridge below 8°C (often setting 1). Place freezer in cold room (cellar), don't place warm dishes inside, don't cool freezer below -18°C and defrost regularly. Boil water in water boiler rather than on stove and avoid heating more water than needed. On the stove use the size of pot that fits the heaterplates or size of the gas flame and always use a lid, if you cook on an electric stove use the residual heat after turning stove off. If you bake use convection oven, don't preheat and use residual heat. Buy an energy saving dishwasher (class A), use the energy saving programme at 55°C and only run dishwasher when full.
- 3) **Laundry:** Use 30°C/40°C setting without prewash (occasionally use 60°C to avoid bacterial buildup in washer) and only wash when full. If possible dry clothes outside.
- 4) **Don't leave electrical devices on standby, always turn off completely.** You can waste 100 € /year on standby. Convenient are power strips that can be turned off.
- 5) **PC/laptop/cell phone:** A Laptop consumes less electricity than a PC, tablet or cell phone use even less, thus think ahead which device you need. Don't charge gadgets the whole day or night, and don't keep the cable plugged in all the time, only plug in while charging.
- 6) **TV:** Look at the energy rating and don't buy a huge screen as it uses more electricity. Turn off TV, standby utilizes a lot of energy.
- 7) **Buy 100% Ökostrom** which does not consume primary energy (gas, oil, coal). Nowadays the tariffs are not expensive, compare tariffs from different providers.

