

Reduce energy consumption in unused buildings and rooms

Well-planned implementation of home office working for your employees will cut energy consumption if you reduce the operating levels of your heating, ventilation, lighting and IT equipment at the same time.

Action

Reduce the room temperature and switch off all unnecessary equipment that consumes electricity when the building or parts of it are not in use.

Requirement

Your employees work from home offices, and the building (or individual areas and storeys) are standing empty.

What to do

- Plan your home office operation, and define which parts of the building do not need to be used. Your company's technical department will assist you with this.
- Combine vacant areas (see overleaf) and check whether the heat and air distribution can be controlled individually.
- Turn the heating and ventilation down:
 - Reduce the room temperature (12 to 18 °C).
 - Reduce airflows.
- Switch off equipment that consumes electricity and optimise the intake of natural air:
 - Switch the lighting off completely.
 - Disconnect electrical, electronic and IT devices (printers, WLAN routers, WLAN repeaters, vending machines, water dispensers, etc.) from the power supply (no standby mode).
 - Close doors, gates and internal windows in the building.
 - When the sun is shining in directly during daytime in winter, roller shutters and louvres/blinds should be opened. They should close tightly when the sun is not shining.



Costs – effort

- A specialist can implement a reduction programme for heating and ventilation in half a day. For small buildings (if you have a little technical skill), you can implement this setting yourself.
- Lowering the room temperature by one degree Celsius will reduce the energy consumed for heating by 6% to 10%.

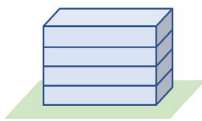
Please note!

- Home office working will cut your costs and save energy. However: you are passing part of your energy consumption on to your employees. It is best to deal with this issue in the expenses regulations. For example, you can compensate “passed-on operating costs” with a monthly flat-rate payment (see the additional information, link: “Home office and expenses in Switzerland”).
- In the fact sheet “Working in your home office”, your employees will find suggestions on how to keep their energy costs down when working from home.

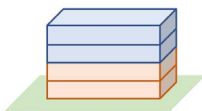
Additional explanations

Variants for reduced operation

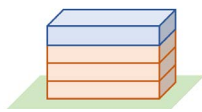
To achieve lower room temperatures in individual parts of a building, you must combine these rooms to create a “cool unit”. Also, the heating system must support individual controls of this sort in the building. This is not always the case, especially in older buildings.



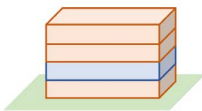
Ideally, you should set the entire building to “economy mode”. This is technically the simplest solution, and it produces the best effect.



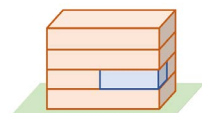
If you continue to use parts of the building, combine the unused areas into one unit.



If only one storey is to be “cold”, the top floor is the best choice in terms of saving energy.



If the top floor has to remain in operation and an intermediate floor is standing empty, the temperature here should only be reduced slightly (to about 18 °C). Reduce the airflows, and consistently switch off the lighting and electrical equipment.



It is technically difficult, if not impossible, to reduce the temperature in one single area of an intermediate floor – and the savings from this are very low. But even in this case, switching off all power consumers is effective.

Define the right room temperature

Temperature reduction is influenced by factors such as building design, the heating system, and the usage and position of the rooms. In office buildings that are not used for lengthy periods, you can reduce the room temperature to between 12 and 14 °C. If you alternate usage of the building – heated from Monday to Thursday but at reduced temperature from Friday to Sunday – a reduction to between 16 and 18 °C should be a practicable solution. In both cases, observe how the building behaves (humidity, condensation) and how long it takes for the rooms to become “warm” again after a reduction.

Ventilation

Ventilation is often forgotten when considering how to reduce energy consumption. But reducing the airflows to meet effective demand actually opens up important potential for savings.

Organisational aspects and communication

Astute organisation of home office operating mode is just as important as the technical measures. Control workplace occupancy so that all the employees on one floor are working from their home offices – or on another level of the building. That allows you to shut the whole floor down completely. Or: launch a regular home office day for the entire workforce on Fridays – so you can already put the whole building into “economy mode” on Thursday evening.

Additional information

- Information sheets on operational optimisation for practical use
 - [Heating 02: Reduce the temperature at night](#)
 - [Ventilation 01: Adapt operating times](#)
 - [Miscellaneous 02: Working in your home office](#)
- [Energy manual for caretakers](#), SwissEnergy, 2022
- [Home office and expenses in Switzerland – an overview](#), Handelskammerjournal (Journal of the Chambers of Commerce) 2021