

# TIPS FOR ENERGY SAVINGS WITH LITTLE INVESTMENTS

Many improvements to energy efficiency can be brought at no or very little costs simply by implementing good energy practices into daily operational activities. Active engagement of the staff is critical to improve energy efficiency and make energy savings. Therefore, it is important to raise staff's awareness about these aspects to ensure that they will be applied.

This chapter provides a non-exhaustive list of tips which will help hospitality businesses generating energy savings at low or no costs. While some advice may apply only to hotels, other apply to both hotels and restaurants. To facilitate implementation, this list is divided by the types of area that one can find in a hospitality establishment.

## 1. General tips for hospitality establishments

- Exterior lightening should be turned off during daylight hours.
- Make use of natural sunlight: artificial lights can be turned off when ambient light level is sufficient.
- Keep lighting systems clean.
- Label switches to avoid having them turned on un-necessarily.
- Use low-energy lighting, in particular recent T5 tubes, compact fluorescent tubes or LED maps.
- For replacement of electrical equipment, use products with EU ecolabel or the top energy label classes whenever possible.
- All equipment not used should be turned-off. Be aware that some equipment might actually be on stand-by and can be fully turned-off.
- Doors and windows should be kept shut when the heating/cooling system is on.
- External doors and windows should close properly or be serviced. Close doors to un-heated or un-cooled areas.
- Thermostats should be set at a reasonable temperature for the season. In particular do not set them too low in summer (e.g. 22-24°C) when air conditioning system is on.
- Do not heat/cool low traffic areas, hallways or unoccupied rooms.
- Do not operate the heating and cooling systems simultaneously.
- In summertime, a free cooling system can be obtained from natural ventilation when the outside temperature is lower than inside temperature.
- Air-conditioning should be turned-off in banquet hall, function rooms or restaurants as soon as they are closed.
- Back of house temperature can be set at a lower level than front-house temperatures.
- Regularly monitor energy consumption of your equipment. Consider installing electricity meters to monitor energy use more precisely.
- Adjust air-ventilation to avoid over-ventilation (which increase energy consumption) and under-ventilation (which negatively affects health and comfort).





## 2. Guest rooms in hotels

- Room thermostats should be set to correct levels to avoid the need to open doors/windows.
- In unoccupied rooms, lights should be switched-off.
- In unoccupied rooms, windows and curtains should be closed.
- Cleaning and housekeeping staff should take advantage of natural daylight (with curtains open) when cleaning/servicing the room, if ambient light level is appropriate.
- When leaving the room, cleaning and housekeeping can further help reducing energy consumption by routinely checking the key energy related aspects of guest rooms. See specific separate box for a list of items to be checked.
- During unoccupied periods, the fan coil may operate with time intervals of fifteen minutes to preserve the balance between energy savings and the prevention of moisture.

### Special focus on routine checks by cleaning and housekeeping staff in guest rooms:

- Doors and windows should be closed.
- TV should be off and not only on stand-by.
- Lights must be switched-off.
- Temperature/fan speed/thermostat settings shall be appropriate for the room.
- Curtains of windows exposed to sunlight should be closed in summertime.
- All power in the room should be off when guests have checked-out.



## 3. Kitchen

- Kitchen appliances should be turned-off when not in use.
- Cooking appliances should be regularly cleaned, serviced and maintained.
- Run dishwashers only when fully loaded.
- Refrigerators should be located away from high temperature areas. Good ventilation and lower ambient temperature reduce refrigerators' energy consumption.
- Fridges, freezers and mini-bars should be defrosted regularly. Inform maintenance of any fridge doors that do not close properly.
- Fridge doors should be kept closed as much as possible.

- Fully load a cooling chamber before starting filling-in another one. This will avoid unnecessary energy consumption.
- For an optimal functioning of cellar cooling equipment, ensure that cellar doors are closed and that there is no heat producing equipment in the cooled cellar.
- Cooking pans and pots should be adequate to the size of the fire.
- When cooking, if recipe allows, cover pans and pots to avoid heat losses.
- If recipe allows, turn-off stove to finish cooking with residual heat.
- Do not store hot food in cooling chambers.
- Fully list (and label) the content of your cooling chamber. This will avoid opening it (and therefore save energy for cooling) to check what is inside and will help you controlling better expiry dates of products, therefore avoiding food waste as well.
- For replacement of old refrigerators/freezers, choose if possible A++ units (for information, the energy labelling in the EU will evolve and A++ or A+++ will be replaced by A grades only. Double check that the energy label corresponds to the most energy efficient system).
- For electric chafing dish heaters, check their operation times and think about installing a programmable clock to their plug. This will avoid energy consumption outside of serving periods.

#### 4. Reception/front office

- Entrance door should be closed to avoid air infiltration / loss of heat.
- Shut down computers completely at the end of the day (no stand-by).
- For computers, set screensavers, so that screen turns off after 5 or 10 minutes.
- Old equipment tend to consume more. At the end of their lifespan, change them to new and more energy efficient ones.
- Provide information to guests on the hospitality business energy policy and how they can contribute to make the service more sustainable.



#### 5. Laundry

- Washing machines and dryers should be operated with full loads (to minimise number of operations).
- Water temperature/amount should correspond to manufacturer's instructions.
- When possible, wash at lower temperature and air-dry linen.
- When the laundry is not in use, lights and ventilation/air conditioning should be turned-off.
- Ensure regular maintenance of laundry machines. Check and clean regularly dryers filters.







## 6. Swimming pool / Spas

- Use a pool cover to reduce evaporation in summer and heat loss in winter. When not in use, installing a thermal cover allows to make further savings.
- Use large water jets on a timer to make them run at regular intervals instead of continuously.
- Hours of operation of water slides should be controlled, in order not to run all day.
- Proper functioning of heaters can be made through regular checks of the water temperature

## 7. General maintenance of HAVC, steam pipes, boilers and calorifiers



- For proper functioning of the HAVC equipment, have a regularly updated manual with operating methods and instructions.
- Regular maintenance and servicing of heating and air-conditioning equipment is fundamental. Particular attention should be paid to the following:
  - Proper activation of control valves.
  - Clean monthly filters of ventilation and air-conditioning in guests room and public areas.
  - Clean annually fan coil units, air handling units and cooling units.
  - Clear and check cooled air ductings. Seal leaks.
- Regular maintenance and servicing of steam pipes (e.g steam ovens, dryers, washing machines, etc.) helps them maintaining efficiency.
- Check and service your boiler regularly and beware of leakage of fuel or smoke or CO emissions. Regularly check their pipes insulations.
- Do not over heat hot water: 55°C-60°C is ideal to kill legionella bacteria and avoid un-necessary energy consumption.
- Check calorifiers regularly.