



'Energy Efficiency solutions'

A quick overview of how to reduce the energy consumption of your hotel



Excellence in Energy for the Tourism Industry – Accommodation sector: SME hotels (EETI)
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WHY CARE ABOUT ENERGY?

As a citizen:

➔ Energy use (fossil fuels for direct use or to produce electricity) is the main source of greenhouse gases responsible of climate change

As a hotel manager:

- ➔ To become less vulnerable to energy prices fluctuations
- ➔ To reduce your costs
- ➔ To improve the sustainability and overall value of your company



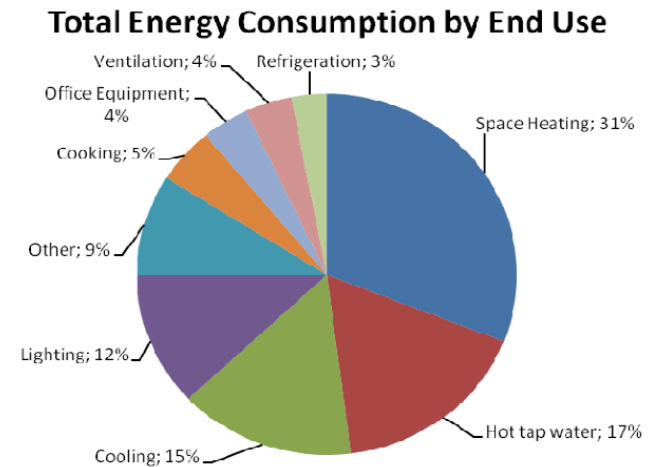


ENERGY USES IN BUILDINGS

What uses energy in your hotel?

- ➔ Space heating
- ➔ Space cooling
- ➔ Domestic hot water production
- ➔ Lighting
- ➔ Ventilation
- ➔ All electrical appliances: computers, TVs, fridges, etc...

The share of each energy use varies from one hotel to the next, but heating and cooling usually represent about 2/3 of total energy use.



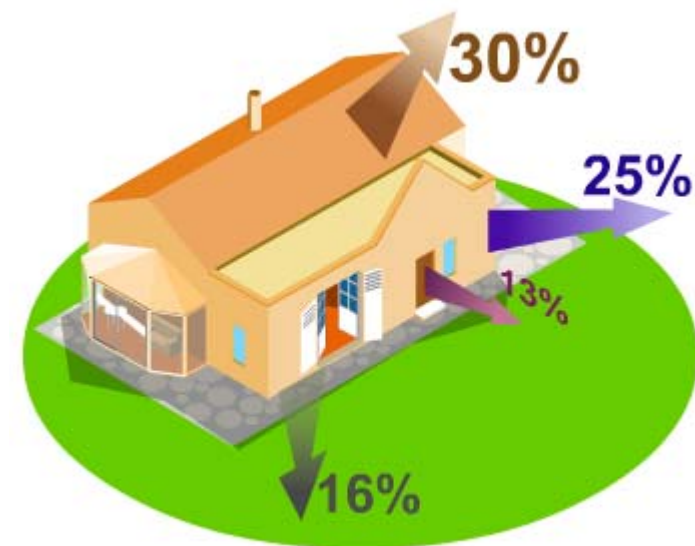


HEATING & COOLING (1) – HEAT LOSSES

Why do heating and cooling require so much energy?

- ➡ The heat produced by the heating system (or cold produced by A/C system) “leaks” from the building and is lost
- ➡ In theory, a perfectly insulated building would use no energy for heating

Reducing energy consumption requires to reduce those heat losses!



(Source : groupe Saint-Gobain)



HEATING & COOLING (2) – REDUCING HEAT LOSSES

Several solutions exist to help you reduce heat losses:

- ➔ Insulation of your walls and roof
- ➔ Installing efficient windows (double or triple glazing)
- ➔ Reducing air exchanges with the exterior (from air-proofing to installing automatic entrance doors)



But you can also adopt very simple gestures, like never turning off the heating system when windows are open!



HEATING & COOLING (3) – TEMPERATURE CONTROL

Another important way of saving energy is to adapt your heating & cooling systems to the exact needs:

- ➡ Obtain just the temperature you want with thermostats
- ➡ Adapt the temperatures of the different areas: unoccupied rooms, meeting rooms and corridors usually don't need to be too warm/cool
- ➡ Don't overheat or overcool: usually 19°C in winter and 26°C in summer are the most comfortable temperatures

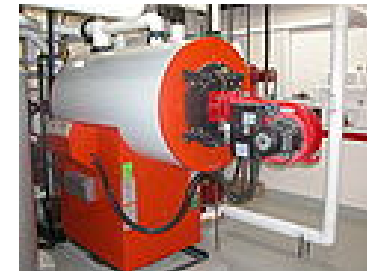




HEATING – EFFICIENT SYSTEMS

Once you have reduced your heating needs, make sure your heating system is efficient:

- ➔ Have your boiler serviced every year
- ➔ If your boiler is old, you can install a new one: recent boilers such as condensing boilers have a much higher efficiency – you can save up to 40% energy
- ➔ Adopt low temperature radiators or floor heating to improve the efficiency of your system





COOLING – PASSIVE MEASURES

There are smart solutions to reduce or even remove the need of active air-conditioning systems:

- ➡ Protect your hotel from the summer sun with sun-shading devices
- ➡ If you have an outside area, plant trees and vegetation to cool the air around the hotel
- ➡ Let the cool night air in by opening windows or increasing ventilation





HOT WATER – REDUCING ENERGY USE

The energy use for production of domestic hot water can be reduced:

- ➡ Insulating the pipes and boiler reduces the heat losses through the system
- ➡ Decreasing the temperature level of hot water also reduces heat losses
- ➡ Don't waste hot water: make sure your staff and guests are aware of the issue





LIGHTING – REDUCING ENERGY USE

There are several solutions to reduce electricity consumption of lighting:

- ➔ Install energy-saving bulbs (FCL, LED depending on use)
- ➔ Control the lights so that they are only on when useful: occupancy sensors, timers, daylight sensors allow to turn off lights when they are not needed
- ➔ Communicate to your staff about the issue so that they adopt the simplest gesture: turning off the lights!

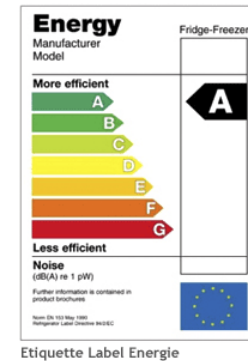




APPLIANCES – EFFICIENT SOLUTIONS

All electrical appliances added up consume a high amount of electricity:

- ➔ Choose energy-efficient models (check the label)
- ➔ Avoid sleep modes: they consume a lot of energy
- ➔ Make sure appliances are only on when useful! An effective solution to automatically turn off appliances in the rooms are key-card systems





CONCLUSION (1)

Improving the energy performance of a hotel requires to take into account a large number of aspects:

- ➡ There is no one-size-fits-all solution: your hotel is unique
- ➡ Don't hesitate to be helped by a professional to identify the most relevant solutions

But it does not always imply complex and costly operations:

- ➡ A large number of simple gestures and low-cost measures can help you save a great deal





CONCLUSION (2)

How to get started:

- ➡ Know your current performance... using the Hotel Energy Solutions toolkit
- ➡ Obtain information on possible solutions... with the Hotel Energy Solutions toolkit
- ➡ Contact professionals to obtain advice





HOTEL
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