Hospitality







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## Get smart, save energy

Since the term "hospitality" encompasses everything from a cosy corner café or B&B to a multi-room, internationally renowned hotel (see right), electricity consumption levels will vary considerably. However, there are some general ways to cutting back on your usage.

## 5 steps to reducing your energy consumption

- Onmit to continuous improvement involve staff, set goals and track progress
- Analyse your start point performance, develop benchmarks, and track improvements
- Set realistic, measurable goals and target dates to see how you're doing
- Choose the steps you'll take to achieve those goals and involve your employees
- Implement and measure results, communicating all wins, no matter how small

#### What do we mean by hospitality?

When referring to this sector, we're including:

- Hotels
- Resorts
- B&Bs
- Inns
- Motels
- Service apartments
- Other types of accommodation
- Restaurants
- Pubs
- Takeaways
- Delis
- Cafes

If you're a stand-alone sports or fitness centre, please see our Energy Efficiency Guide covering retail, leisure and entertainment.



# How your hospitality business can save energy

The Carbon Trust, a not-for-profit company supporting the UK's move to a low carbon economy, says "heating is the biggest driver of energy usage across this sector (at over 40%)". The Trust also states that "energy used in catering accounts for between 4 and 6% of operating profits. Saving energy can directly increase revenue and profitability without the need to increase sales."



We've used the Carbon Trust's energy saving reports on <u>hospitality</u> and on <u>food preparation</u> and <u>catering</u> as sources of information for the following suggestions.

These tips highlight areas of consumption that, with improved efficiency, could deliver valuable savings; the amount you recoup depends upon your organisation and your investment.

To help with your budgeting and energy efficiency planning, the tips cover (where possible) three options: no-cost, low-cost, and long-term savings.

#### No-cost changes

You can make these simple changes quickly – and it won't cost a thing.



#### Low-cost changes

For a minimal spend you can soon achieve worthwhile savings – and relatively easily too.



#### Long-term savings

Make a more substantial investment now – and you'll see the returns over time.

### Heating



#### No-cost changes

- Don't use ovens to warm up kitchens it's more efficient to change heating settings
- Set hot water to 60°C (high enough to kill bacteria)
- Reduce night temperature to 10°C
- Alter temperature according to area (see below)

Area	°C
Bars/lounges	20–22
Bathrooms	26–27
Bedrooms	19–21
Restaurants	22–24
Corridors	19–21
Kitchens	16–18
Laundries	16–19





#### Low-cost changes

- Use local control systems (e.g. timers/ themostatic radiator valves) to alter ambient temperatures – particularly useful in restaurants/other common areas
- Make sure the location of your thermostat's not affecting accuracy (e.g. it's too near to a source of heat or a draught) and causing temperature changes unnecessarily
- Service your gas boiler once a year and oil boiler twice a year
- Save hot water by having tap controls and efficient showerheads that reduce volume
- Store water at a temperature no higher than 60°C



#### Long-term savings

 Consider creating heating zones (e.g. for unoccupied floors, restaurants, lounges, kitchens, and storage areas)

## Leisure and fitness



#### No-cost changes

- Turn off fitness machines and air-con at night
- Ensure pool backwashes aren't used too often
- To reduce condensation and cost of ventilation, keep water temperature at 28–30°C and air temperature no more than 1°C above it



- Use a pool cover to retain heat/reduce need for ventilation (payback 18–36 months)
- Use a humidistat to automate when ventilation's needed
- Consider solar thermal technology to heat pool water and the building



## Ventilation/air conditioning (VAC)



#### No-cost changes

- Switch off air conditioning overnight in fitness areas
- Use doors/windows for ventilation (ensuring no risk to guests or staff)
- Review the performance of your VAC systems
- When heating and/or air-cooling are on, set temperature to 19–24°C (ensuring no risk to guests or staff)
- For a safe working environment, consider smoke capture, control of external emissions, heat recovery, fire protection, and grease extraction/disposal
- Turn off kitchen fans when no one is cooking
- Keep VAC filters clean



- Choose new parts / systems with the highest energy efficiency rating
- Consider fitting variable speed drives to equipment (see Carbon Trust website)
- Consider investing in air-to-water recovery devices to minimise wasted heat



### Lighting



#### No-cost changes

- Lighting controls/efficient bulbs may reduce costs by up to 50%
- Proper maintenance, including cleaning, can prevent light levels falling by up to 30% in 2-3 years



#### Long-term savings

 Consider installing key-card/reception switches to enable remote control of lighting, heating and ventilation when the room is unoccupied



#### Low-cost changes

- Occupancy sensors (e.g. in rest rooms) save 30-50% on lighting costs, and daylight sensors turn off artificial lighting when there's enough daylight
- Light emitting diode (LED) lighting lasts longer than lamps defined as standard incandescent, tungsten halogen, tubular or compact fluorescent, high pressure sodium or metal halide
- See the Energy Saving Trust report: The right light – selecting low energy lighting



### Building fabric (walls/floors/ceilings)



#### No-cost changes

- In autumn, check building for damp, plus faulty gutters or downpipes
- Retain heat keep windows/doors closed and close curtains/blinds at end of day



- Insulate walls, roof spaces, cavity walls and pipes
- Consider sealing unused windows or improve glazing to reduce draughts
- To reduce heat loss, install two sets of doors (one closes when other opens) in lobby area/ entrance, or automate doors



### Catering



#### No-cost changes

- Only turn on equipment if it's needed not at the beginning of a shift 'just in case'.
- Switch off equipment and extractor fans after use
- Regularly clean extractor fans and VAC systems to improve efficiency
- Match pot/pan size to the heating ring or oven to avoid wasting energy
- Don't overfill saucepans and kettles and use lids where possible
- Minimise hot storage of cooked food
- Reheat small amounts of food in microwaves rather than on the hob
- Have a maintenance plan (clean, look for damage/ corrosion, and check accuracy of elements/thermostats)



- Save up to 5% by having automated controls (e.g. a sensor that turns off after a period of having no pan on the hob)
- If investing in new equipment, consider energy costs over its lifetime not just the upfront cost
- The following can be more efficient than conventional gas or electric hobs:
  - induction hobs that transfer the heat to food immediately
  - combi-steam/convection (some use waste heat to preheat water and save more energy)
  - microwave ovens (use minimal energy when not in use and need no preheating)
  - griddles rather than grills because they lose less heat and require less extraction save more energy)



### Refrigeration



#### No-cost changes

- Keep fridge and freezer doors closed whenever possible. If ice is building up, too many air changes are occurring – indicating that the doors are open for too long
- Have a maintenance plan (check for scaling, damaged vent fins, clear drip pipes)
- Defrost at least every 2 months and/or check manufacturer's advice on appliances
- Use correct temperatures: 1°C too low ramps up energy use by 2–4%



#### Low-cost changes

- Buy 7-day timers to automatically switch off equipment when premises are closed
- Install special blinds or curtains for open refrigeration units to prevent cold air loss



## Dishwashing equipment



#### No-cost changes

- Stack items correctly to maximise loads – and only run when full
- Use the economy setting
- Avoid washing up with running hot water



#### Low-cost changes

- Use automatic water treatment or water softeners to avoid the build-up of scale
- Save water with automatic timers for taps/flow restrictors



- If your needs vary, opt for two smaller machines to improve efficiency
- Install heat recovery condenser devices in large machines to reduce consumption



### What's next?

If you've any questions, call us on 01234 567890 or email <a href="mailto:smart@drax.com">smart@drax.com</a>

energy.drax.com/smart





