



Hospitality



Contents

Get smart, save energy	3
Heating	5
Leisure and fitness	6
Ventilation/air conditioning (VAC)	7
Lighting	8
Building fabric (walls/floors/ceilings)	9
Catering	10
Refrigeration	11
Dishwashing equipment	12
What's next?	13

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 below), 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

1. Commit to continuous improvement - involve staff, set goals and track progress
2. Analyse your start point performance, develop benchmarks, and track improvements
3. Set realistic, measurable goals and target dates to see how you're doing
4. Choose the steps you'll take to achieve those goals and involve your employees
5. 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
- serviced 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 [hospitality](#) and on [food preparation and catering](#) 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



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

Low cost



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 right)

Low-cost changes

- Use local control systems (e.g. timers / thermostatic 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)

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



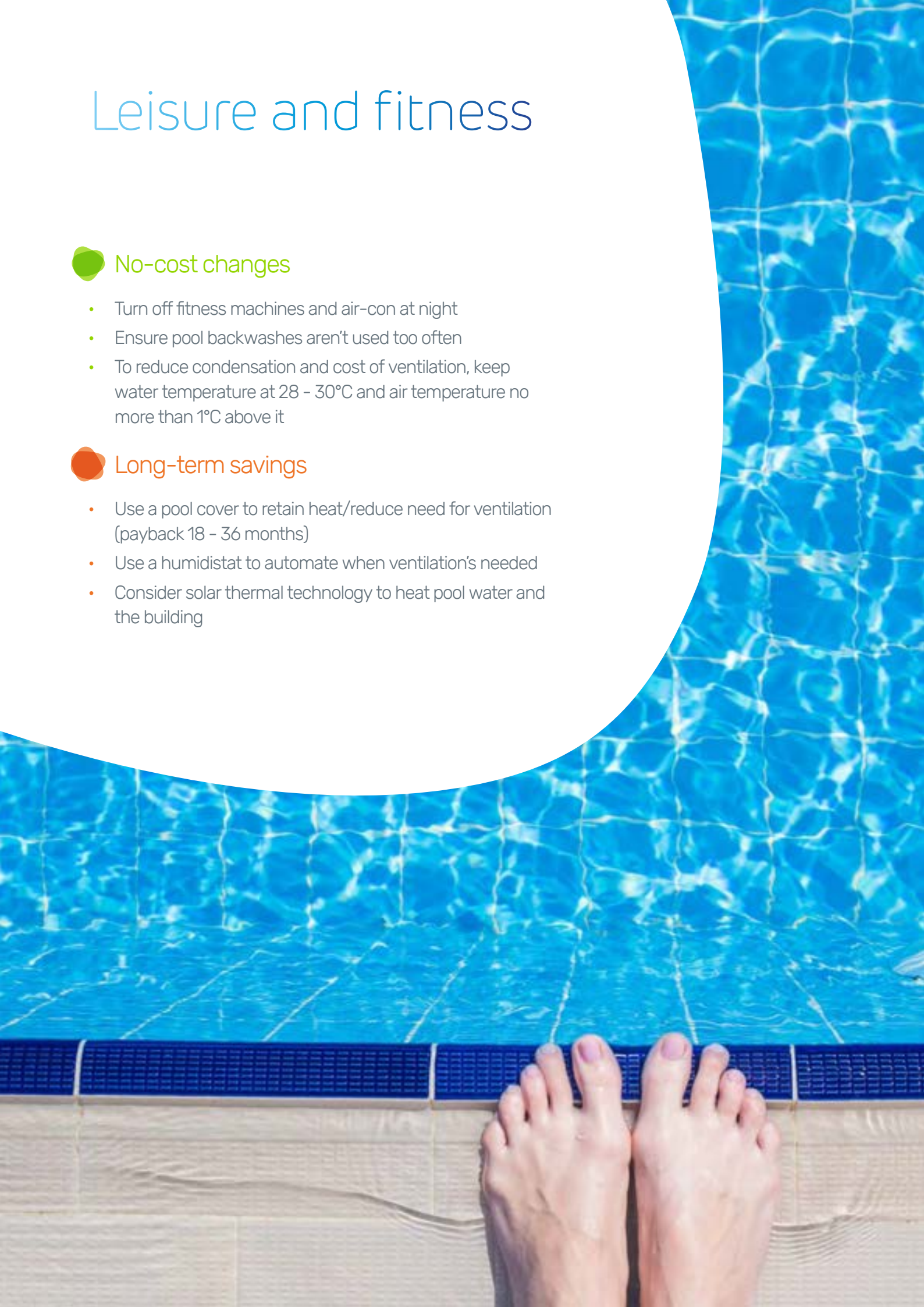
Leisure and fitness

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

Long-term savings

- 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



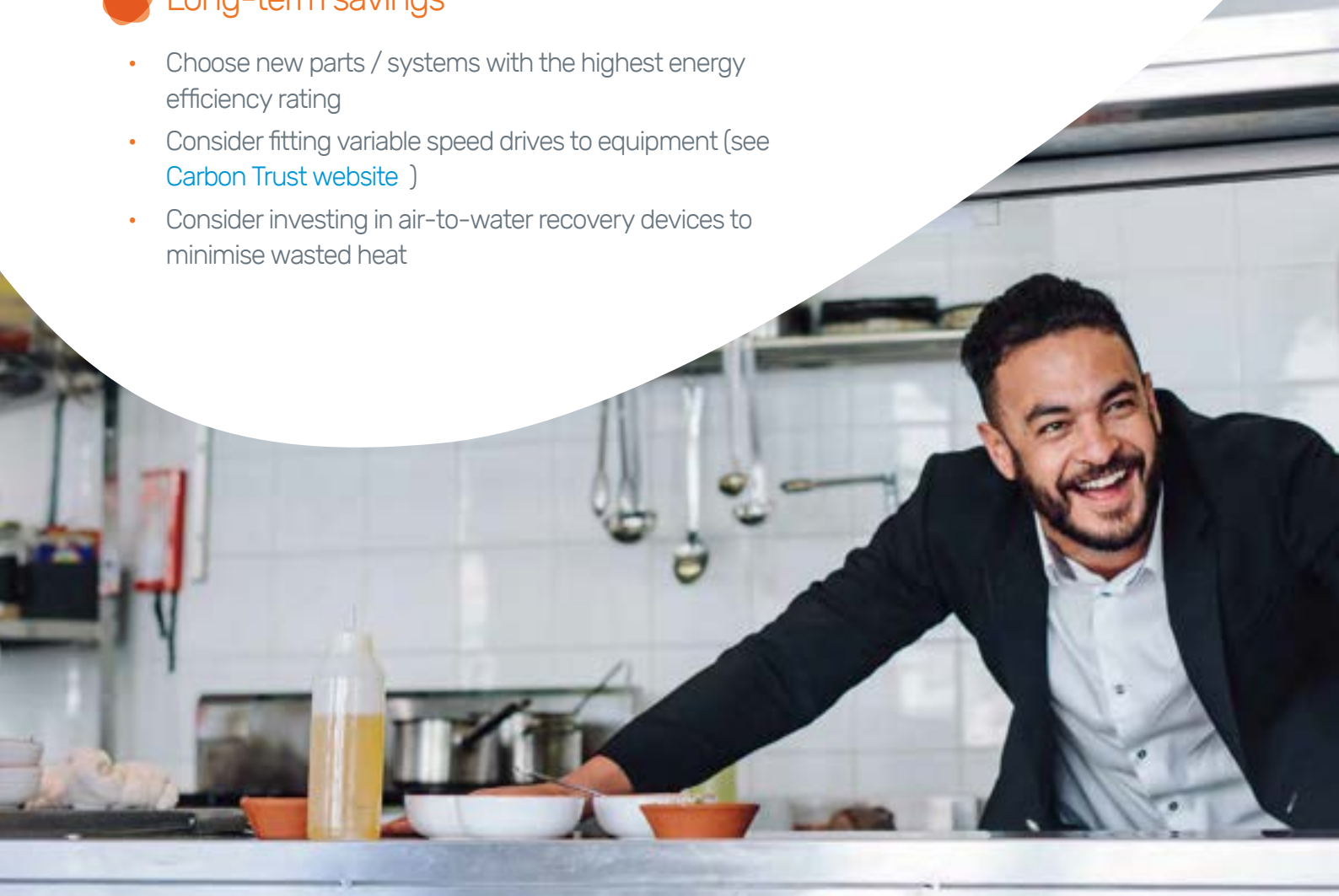
Ventilation/air conditioning (VAC)

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
- 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

Long-term savings

- 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

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
- Use compact fluorescent lamps (CFLs) instead of conventional bulbs - they last 8x longer and use 80% less electricity
- 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](#)"

Long-term savings

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

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

Long-term savings

- 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)

Long-term savings

- 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 ovens (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





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

Long-term savings

- 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?

For further information email us at
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The cheapest unit of energy is the one
you don't consume
www.digitalenergyrevolution.co.uk