energia
Switched on





ENERGY EFFICIENCY
HOSPITALITY

www.energia.ie





Your chance to reduce your business energy usage by as much as 20%!

20% is a significant figure and reducing your energy bill by this amount could make a real change to your bottom line. By identifying where you can save and implementing the measures to realise those savings, you will be well on the way to achieving optimum energy efficiency in your business. At Energia, our aim is to help businesses use energy efficiency measures to achieve greater success.

Energy Efficiency simply means using less energy to perform the same function. Reducing your energy usage is achievable. Energia is committed to providing you with the right energy solutions for your business. This brochure is designed to help you see where your business can save and if you need any further assistance, our energy efficiency team are always here to help.

Contact us on 1850 36 37 44 or email energy.efficiency@energia.ie

> **“ Energy Efficiency simply means using less energy to perform the same function.”**





> “ Purchase equipment with its running costs in mind.”

Kitchens

Kitchens consume large amounts of energy and can be one of the highest areas of waste. As approximately only 40% of the energy consumed is used in the preparation and storage of food, effective energy management can provide substantial savings.

- Equipment should be switched off or turned down when it is not required. Create a culture where grills, fryers and hobs are switched off immediately after use.
- Maintain and clean the equipment regularly. Seals and gaskets should be checked weekly to ensure the correct fit.
- Gas burners should be checked for a blue flame and efficient burning.
- Never use catering equipment to warm the kitchen. This is the job of the building’s heating system.
- Purchase equipment with its running costs in mind. Always consider the energy used over the lifetime of the product, not just on capital cost.
- Equipment that automatically switches off can save up to 25% on energy costs





Refrigeration

Refrigeration can be a significant energy user in the hospitality industry. Regular maintainance and some simple measures may help reduce energy usage.

- Refrigeration equipment may gradually use more energy and break down if not properly maintained. A simple maintenance schedule may save on energy costs.
- Ensure defrost procedures are followed and door seals on cold rooms, freezers and fridges are checked and replaced if damaged.
- Condensers and evaporator coils should be kept clean and free from dust, and the system should have the correct amount of refrigerant.
- Products such as canned drinks do not need to be in the refrigerator cabinet at all times. Store them in a cool place and put them in chilled cabinets only as required as per the manufacturers guidelines.

“ Condensers and evaporator coils should be kept clean and free from dust.”





> “ Using a pool cover when the pool is not in use can cut energy use by 10-30%.”

Leisure and Fitness Facilities

Leisure facilities can be major energy users. By implementing a few simple energy efficient measures, costs can be kept to a minimum.

- Swimming pool temperatures - maintain water temperatures at the minimum level to meet comfort conditions. Swimming pools are usually heated to 28˚C - 30˚C.
- It is important to ensure that the pool hall air temperature is maintained at 1˚C above the water temperature to limit evaporation from the pool surface. Staff should be trained to use controls effectively.
- Backwashes - swimming pool filters need to be cleaned by backwashing. All of the captured matter must be removed from the filter. In some cases heat from the backwash water can be used to pre-heat new pool water through the heat exchanger.
- Install a pool cover - swimming pools may only be used for a number of hours a day, yet require 24 hour heating and ventilation. Using a pool cover when the pool is not in use can cut energy use by 10-30%.



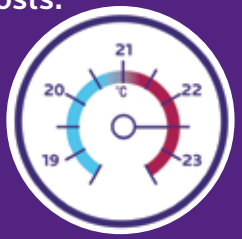
We recommended the following temperatures for specific areas of your business as a guide:	
Area	**Temp. °C**
Bedrooms	19° - 21°
Bathrooms	26° - 27°
Dining Rooms	22° - 24°
Bars	20° - 22°
Corridors	19° - 21°
Laundries	16° - 18°
Kitchens	16° - 18°

Heating

Heating costs may be reduced by **up to 1/3** by simply maintaining appropriate temperatures and using appropriate heating equipment and controls.

- Reducing the temperature by 1°C may **cut up to 10% off your heating costs.**
- Turn heating off in unoccupied areas.
- Take account of the outside temperature and adjust heating levels accordingly. A multi programmable switch will accommodate varying requirements during the day.
- Location of thermostats is vital to efficiencies in heating systems. Thermostats should not be influenced by sunlight, radiators or draughts. Regular checks will ensure that they are working correctly.
- Thermostatic radiator valves (TRVs) control the heat output from radiators and can contribute to savings.

“ Reducing the temperature by 1°C may cut up to 10% off your heating costs.”







" Appropriate CHP application can reduce energy bills."



Combined Heat and Power

Combined Heat and Power (CHP) can offer an economical method of providing heat and energy which can be more environmentally friendly than conventional methods.

CHP equipment usually burns fossil fuel, such as gas or oil. With CHP, the heat generated producing the energy is recovered on site and used for domestic hot water or heating the swimming pool, thus making the process more efficient.

With year round requirements for electricity and hot water, most hotels are suited for CHP, especially those with a swimming pool. Sites need to be surveyed for suitability.

The aim should be to maximise the use of all the heat and hot water the system can produce. A well designed and appropriate CHP application can reduce energy bills.





Ventilation & Air Conditioning

Preventing unnecessary air loss reduces energy consumption and saves costs. If hot or cool air escapes through doors, windows, the fabric of the building or the ventilation system energy is wasted.

- Ensure ventilation and cooling systems are set correctly and consistent with the occupancy in the building.
- Minimise the cooling requirement by reducing the amount of heat from other sources such as sunlight, equipment, artificial light and vending machines.
- Maintaining systems is essential as energy consumption may increase with dirt collecting in air ducts, fans and components.
- Avoid operating heating and cooling systems at the same time and set a temperature 'dead zone' which is a gap between the temperatures at which the heating/cooling cut in.
- Recover heat from exhaust air by recirculating some of the exhaust air with fresh air. This combination can be controlled using an indoor air quality sensor.

" Avoid operating heating and cooling systems at the same time."





> “ Promote a ‘Switch Off’ policy in your business.”



Lighting

Lighting costs may be **reduced by as much as 50%** with simple energy efficiency measures.

- Install low energy lighting by replacing standard light bulbs with compact fluorescent lamps/LEDs. **This uses up to 75% less energy.**
- Promote a “Switch Off” policy. Lights should be switched off or dimmed in unoccupied areas.
- Clearly label light switches to help employees only select the lights they need.
- Regular lighting maintenance is essential. Keep windows, skylights and light fittings clean and light levels will be maintained.
- Ensure timers are set to match trading hours and occupancy/dimming sensors are clean and operational.
- Install occupancy sensors to ensure lighting only operates when someone is present and achieve **savings of up to 30%.**
- Control lighting with light sensors and optimise natural daylight.





Insulation

Approximately 50% of the heat is lost from buildings through walls, floors and ceilings. Improving this loss will result in lower energy costs.

- Insulate, Insulate, Insulate! Ensure all external walls, roof spaces and hot water pipes are insulated and check the condition of the insulation regularly.
- Maintaining buildings and dealing with issues around gaps and holes quickly will save energy.
- Check regularly for damp as it may cause significant damage to insulation properties.
- Keep the heat in! Ensure windows and doors are closed, close curtains and blinds at the end of the day in winter.
- Improve window glazing. Double glazing is now standard and triple glazing is recommended for north facing walls.

“ Ensure windows and doors are closed, close curtains and blinds.”







“ Hot water at the optimum temperature of 60°C will save energy.”



Water

Maintain hot water at the optimum temperature of 60°C which will save energy.

- Hot water tanks should be insulated with a 75mm or 3 inches thick BS Kitemarked insulating jacket. This measure may save up to 30% on your heating costs.
- Insulating all cold and hot water pipes especially those between the boiler and the hot water cylinder.

Also consider the following water saving devices:

- Tap controls switch taps off after a certain time.
- Spray taps reduce the volume of water used.
- Urinal/Toilet flush controls.







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