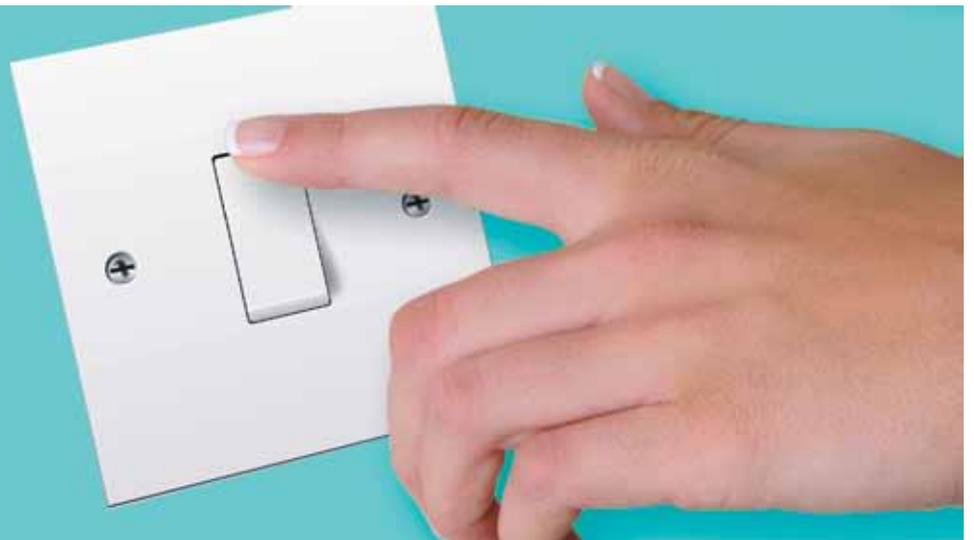


Quick guide to energy saving



Growth that doesn't cost the earth

Reducing energy consumption is a quick and easy way to cut costs. The biggest savings can be made in **refrigeration; lighting; heating; ventilation and air-conditioning.**



Refrigeration

GREAT IDEA

SPAR Dalrymple retrofitted glass doors to its open refrigerators. This reduced annual running costs by between 20% and 25%. The company has placed stickers on the refrigerators to let customers know how much energy has been saved.

Timer switches. Consider installing timers on cabinets containing drinks and non-perishable foods. Switching off appliances at night and over the weekend can reduce running costs by 25%.

Maintenance. Energy consumption and costs can be reduced through regular maintenance. When replacing equipment, look for energy efficient models.

Transparent strip curtains. These are inexpensive to install and will prevent cold air escaping from, and warm air entering, the chilling cabinets thereby reducing energy consumption and providing cost savings.

Doors. These are a more aesthetically pleasing alternative to strip curtains and provide energy savings through cabinet efficiencies and a reduction in cool air in the aisles. However, if retrofitting doors to equipment, it is recommended that you assess potential savings and payback period before doing so as increased efficiency

and savings realised can vary depending on the cabinet models. Installing doors may also require additional ambient lighting, so consider using energy efficient LED lighting.

Insulation. Equipment covers or pull covers/blinds used at night are ideal for open display fridges and ice-cream freezers. They are a low-cost energy saving option and are easy to install. Remember to check the seals on your fridges, freezers and cold rooms. Ensure that the cold room door is kept closed when not in use.

Lighting. Ensure that lights in refrigeration cabinets are switched off when not in use to reduce energy consumption. This has the added benefit of reducing the energy consumed by the refrigeration equipment to remove the heat produced by the lights when they are on.

Stock. Ensure that fridges are not overstocked as this will require more energy to maintain temperatures.

GREAT IDEA

Timers fitted on soft drinks refrigerators at Mo's Convenience Store, Blantyre, switch the equipment off between 10pm and 6am daily, saving energy and money.

TOP TIP

To maintain the efficiency of refrigerators, use a vacuum cleaner on a regular basis to clean the coils at the back of the appliance.

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Lighting

Maintenance. It is important to keep windows, skylights and light fittings clean. Without regular maintenance, light levels can fall by up to 30% in 2 to 3 years. Establishing a basic lighting maintenance schedule can reduce lighting costs by up to 15%.

Occupancy sensors. These are ideal for storerooms and toilets and can reduce lighting costs by up to 30%. Ensure the sensors are kept clean for optimum performance.

Where possible make the most of natural daylight, keep windows clean and free from obstruction.

Install energy efficient lamps. Consider replacing conventional lamps with compact fluorescent lamps (CFL) and LED alternatives that use up to 80% less energy. These lights also generate less heat which means less energy is required by air-conditioning and refrigeration equipment to maintain optimum temperatures. Upgrade fluorescent strip lighting by replacing T8 tubes with T5's or old T12's with T8's (T12's are the fattest tubes and T5's are the thinnest and most efficient). Replacing a light unit fitted with four 20w T12 tubes, with one which uses three 14w T5 tubes is likely to give better lighting quality and reduce energy consumption by 50%.



Heating, ventilation and air conditioning

Electricity is the most expensive and carbon-intensive heating fuel available, so consider replacing electric heaters with more efficient models. Often, the capital cost is far outweighed by the savings realised. If possible, carry out a cost-savings analysis of switching to gas, you may be surprised at the savings you can achieve.

Maintenance. Maintain boilers and pipework regularly and ensure that they are well insulated to prevent heat escaping. Ensure that ventilation and air-conditioning systems are kept clean and regularly maintained to keep running costs low and reduce the risk of breakdown.

Turn down thermostats. Reducing heating temperatures by just 1°C can cut fuel consumption by 8%.

Fit timers. Fit timers to fans and pumps to ensure they are in use only when needed and review the settings regularly. It is often possible to shut down heating and air conditioning an hour before closing time without any noticeable difference to staff or customers.

Draught-proofing doors. Fitting brush or hingestyle draught excluders to outside doors will save money and energy. During a store refit, consider installing automatic doors to prevent heat escaping.

Insulation. Ensure that your building is well insulated. Pay particular attention to the roof where 25% of heat can escape if no insulation is in place.

Equipment. When replacing fryers, look for energy efficient models which use less heat and oil. Replace CRT security televisions with more efficient LED screens.

Enhanced Capital Allowances (ECAs) enable businesses to buy energy efficient equipment using a 100% rate of tax allowance in the year of purchase. Businesses can claim this allowance on the investment value of energy efficient equipment if it is on the Energy Technology List. The procedure for claiming an ECA is the same as that for any capital allowance. For further information please visit the ECA website.



Mo's Convenience Store, Blantyre, a premises of 116 square metres, realised savings of £150 per month by changing from electric to gas heating and installing gas-powered heaters over the doors.



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