Refrigerators & freezers

Is your existing fridge as old as the hills? Is your freezer busy growing its own glacier? Or have you got a 'refrigerasaur' out the back which is used just to keep your drinks cold? The fridge is the mainstay of our homes and is generally considered an essential appliance. Refrigeration can however account for a surprisingly large slice of your electricity bill. You might be surprised at how many households in Alice Springs have three or more fridges and freezers in their home and what it is costing them to keep these appliances running. Here are some handy tips to help you 'close the door' on high refrigeration energy bills.

The true cost of keeping your old fridge

Alice Solar City recently came across a 20 year old fridge in an Alice Springs home, which was used to keep drinks cold. It was kept outside on the south side of the house and was well shaded and ventilated which helped to minimise running costs. However a simple test showed that it was using around 1,060 kWh per annum and cost over $270 a year. Your second fridge could be costing you this much or even more to run.

Reconsider the way you use your second or third fridge

Instead of having a second or third fridge or freezer adding to your energy bills, consider the following:

- Do you really need lots of cold drinks on hand?
- Is there room in your main fridge for your daily needs? A fridge will maintain its temperature better when it is full and be more economical to run.
- Would an esky be suitable for your cold drinks on those occasions when needed?
- Can you turn the second fridge off for most of the time and only plug it in when it is needed?

How much does your fridge cost to run?

The most relevant indicator of the running costs of your fridge or freezer is the kilowatt hour (kWh) value, which can be found on the energy rating label of newer models. The kWh figure displayed is an indicator of how much electricity it will use over one full year of use under normal operating conditions. The more kilowatt hours, the more it will cost to run. For each kWh of electricity you use in Alice Springs, it costs you 25.83 cents (as of 1 Jan 2013). So a fridge that uses 500 kWh in a year will cost you approximately $130 to run for the full year, or about $32 per quarter.

Energy consumption

500

kWh per year

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How to reduce your refrigerator running costs

Cost cutting tips!

- Keep it closed - Each time you open the door, warm air gets in and increases the work the fridge needs to do.
- Don't set the temperature too low - A change of one degree can effect energy consumption by 5%. Use a thermometer to check the temperature. Freezers should operate at -15°C to -18°C while fresh food compartments should be held at around 3°C to 4°C.
- Give it room to breath - Allow enough space for air to flow over the condenser coil at the back of, or under the fridge (follow your fridge manufacturer's recommendations). Restricting ventilation could add 15% or more to the energy bill.
- Lose the fluff - Clean the condenser coil and fan blades (if there are any) on a regular basis to prevent dust/dirt build up, allowing greater efficiency of heat exchange. If you are not sure how to do this contact the manufacturer or your local refrigeration professional.
- Keep it sealed - If your fridge's door seals are not in good condition it will need to work harder, will increase ice build up and will cost you more to run.
- Pick your spot - Placing a fridge or freezer in direct sunlight or next to an oven or other heat source can increase energy consumption substantially.
- Ice buildup in your fridge makes it harder for your fridge or freezer to operate effectively - defrost your unit when the ice is more than 5 mm thick
- Turn it off - when away for a longer period, turn off, empty and clean the refrigerator and leave the door ajar.
- If you're going to throw out your old fridge, ensure that it is professionally de-gassed as part of disposal.

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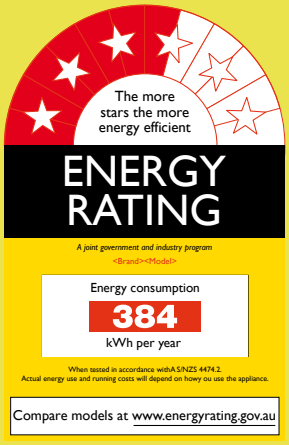
New star-rating system

When shopping for a new energy-efficient refrigerator, it is important to be aware of recent changes in the energy rating system. New standards for energy efficiency were introduced in 2010 and all fridge/freezer models were given new star ratings to reflect these more stringent standards. However, some display models may still carry the old star rating label.

Old labels carry a green bar at the base while new labels carry a white bar which includes the energy rating website address. To find out more about the energy rating system or the star rating of a particular appliance, visit www.energyrating.gov.au



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