Many sports clubs across New Zealand operate at least one glass-fronted commercial fridge, or an old domestic fridge passed down from members’ households, to store non-perishable items such as bottled beer and soft drinks. Most of these fridges are running constantly, an unnecessary consumption of energy considering that the vast majority of clubs don’t operate all day, every day.

WHY INSTALL FRIDGE TIMERS?

It is common for a club’s fridges to be old and oversized, relative to the club’s daily operations. This results in high energy bills, which can be hard to cover for a cash-strapped community club. In addition, most bars are run sporadically and drinks fridges are only being used a few hours or days of the week. Rather than leaving their fridges on constantly clubs should therefore consider running them only during the hours or days on which cold drinks are required.

This is where fridge timers come in: they allow clubs to schedule the operating hours of any fridge holding only non-perishable items according to when it is needed.

HOW DO TIMERS WORK AND DO THEY AFFECT THE TEMPERATURE?

Installing a fridge timer means a club can choose the hours during which the fridge needs to be running and adjust the settings according to their specific needs. Most timers can simply be plugged into the power socket without any need for rewiring.

Most well maintained fridges have the ability to retain cold temperatures for a long time as long as the doors remain closed, as shown by a case study by the Hume Business Efficiency Network of Hume Council in Australia*. A slight increase to an average of 5 degrees was found for fridges turned off overnight. When the power comes back on, the fridge goes back to its desired active temperature within half an hour.

CASE STUDY

Ellerslie AFC had been looking at ways to reduce their carbon footprint through energy conservation. The club aims to be one of the greenest clubs in New Zealand, so LiteClub suggested a fridge timer trial to reduce electricity bills. The club currently has two glass fronted commercial fridges: one with a double door, manufactured in 2012, and one with a single door, manufactured in 2006. The club operates its bar from 3 pm to 12 am midnight on most days except Sunday, when the bar closes at 8.30 pm. Considering these weekly requirements there is an opportunity to switch off both fridges from 12 am to 12 pm every day.

LiteClub installed two power data loggers to capture power consumption data for both fridges prior the installation of timers. Once enough data was collected, two digital timers were installed to schedule the fridges to switch off for 12 hours daily.

We measured an approximate 40 - 50% reduction in power consumption, which annually equates to estimated savings of $777 on electricity bills and a reduction of CO₂ emissions by 385 kg between the two fridges.


Disclaimer: Always consult with a refrigeration service technician and your club’s bar manager before installing a fridge timer on your fridges. LiteClub accepts no responsibility for negative outcomes incurred from following the above advice.