Fawkner Library was opened in 1968 and has had several upgrades since 2003. The Library is part of the Fawkner Civic and Community Hub and which also includes the Leisure Centre, Senior Citizens Centre, Neighbourhood House and Maternal & Child Health Centre.

The centre is well utilised by the local community and popular with families from a diverse range of cultures and backgrounds with almost 65,000 visits recorded from 2012-2013.

Energy efficiency upgrades have improved the comfort levels of patrons (particularly during summer and winter), delivered improved lighting levels, and reduced Council’s running costs and greenhouse gas emissions.

In April 2013 the old gas fired heating and cooling plant was replaced with a 55kW reverse cycle electric AIR CONDITIONING system.

The new system is highly efficient, with a full economy cycle and direct digital control system. This upgrade is part of the Fawkner Precinct COGENERATION project which will see electricity generated next door at the Leisure Centre eventually supplying the Library as well.

The combined savings from these upgrades are estimated to be 45 tonnes of greenhouse gas emissions (CO2e) or $7,500 in energy costs, which is a saving of over 50%. Billing data showed a drop in electricity consumption from 3,300 kWh in May 2011 to...
1,600 kWh in May 2012. This was before the heating and cooling system upgrade.

The library is now more comfortable for occupants with better lighting levels – all while using less energy to operate.

**LESSONS LEARNT**

The old cooling system was well installed and designed and still ran well considering its age. Even so, improvements in equipment efficiency over the last decade had rendered it obsolete.

The Library was first built in the late 1960s and had no insulation in the ceiling or walls. This is typical for most buildings predating the introduction of insulation into the Building Code of Australia in the early 1990s. So if your building is older than 1991, it’s likely that there is no insulation at all, and energy savings will be very attractive!