POOL BLANKETS

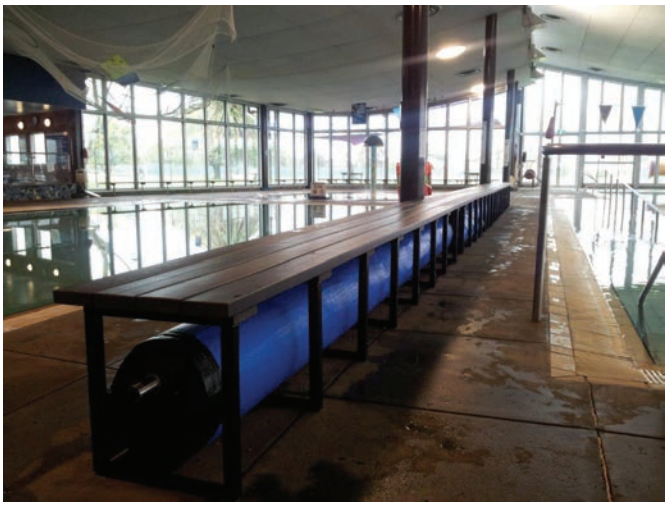
Swimming pools are a large user of both **energy** and water

Pool blankets reduce water loss from swimming pools by **reducing evaporation**, leading to reduced **water consumption** as the pool needs to be "topped up" less often

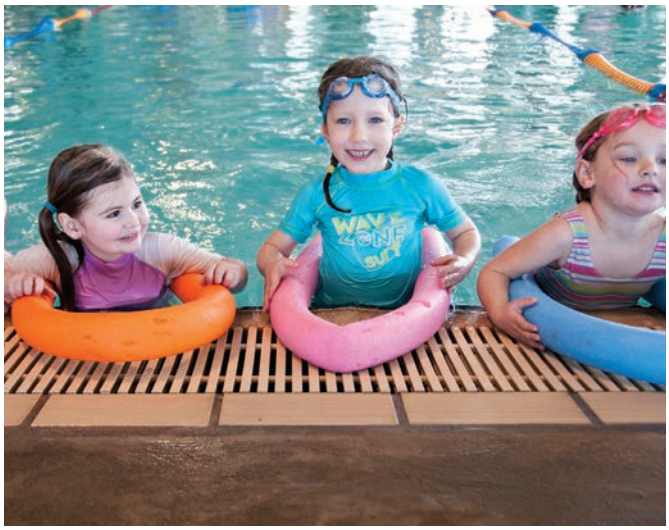
Pool blankets **reduce heat** loss by providing a "thermal barrier" that stops heat leaking out of the pool and into the air, leading to **reduced energy** consumption and greenhouse gas **emissions**

TECH SPECS

A pool blanket acts like a thermal barrier that slows the transfer of energy, the same way as insulation and double glazing work, and improve the energy efficiency of swimming pools.
The rate at which the blanket slows heat transfer can be measured with an 'R' value, the same as insulation for the ceiling and walls of a house. In comparison to house insulation, the R values for pool blankets are typically significantly lower, meaning they are highly



effective at reducing heat transfer.
Because of this low R value, a pool blanket plays a very important role in trapping heat in the swimming pool. If a pool isn't heated then this results in the temperature of the pool remaining considerably warmer than without a blanket, especially in Melbourne!
Interestingly, if the pool is heated, the bulk of energy savings actually come from the pool cover reducing the evaporation of water. This is because the lost warm water from the pool needs to be replaced with new water that is typically colder than the pool water and needs to be heated up.
Either way, a pool blanket can dramatically reduce the energy and water consumption of both heated and non-heated pools.



THINGS TO BE AWARE OF:

There are several logistical issues that need to be addressed when considering thermal pool blankets.

• The design of how the pool covers easily deploy and retract on a daily basis is very important. Accordingly, a permanent solution custom designed to suit the facility is preferable to a temporary or portable solution.

• Developing a clear and simple operating

procedure in conjunction with the staff who will be operating the blankets, as well as training and supporting staff to use the blankets when the pool isn't being used is critical to the success of the project. Making this process easy and safe for staff is the key to maximising the energy and water savings, without the staff on board, pool blankets will be underutilised and not deliver the expected energy and water savings.

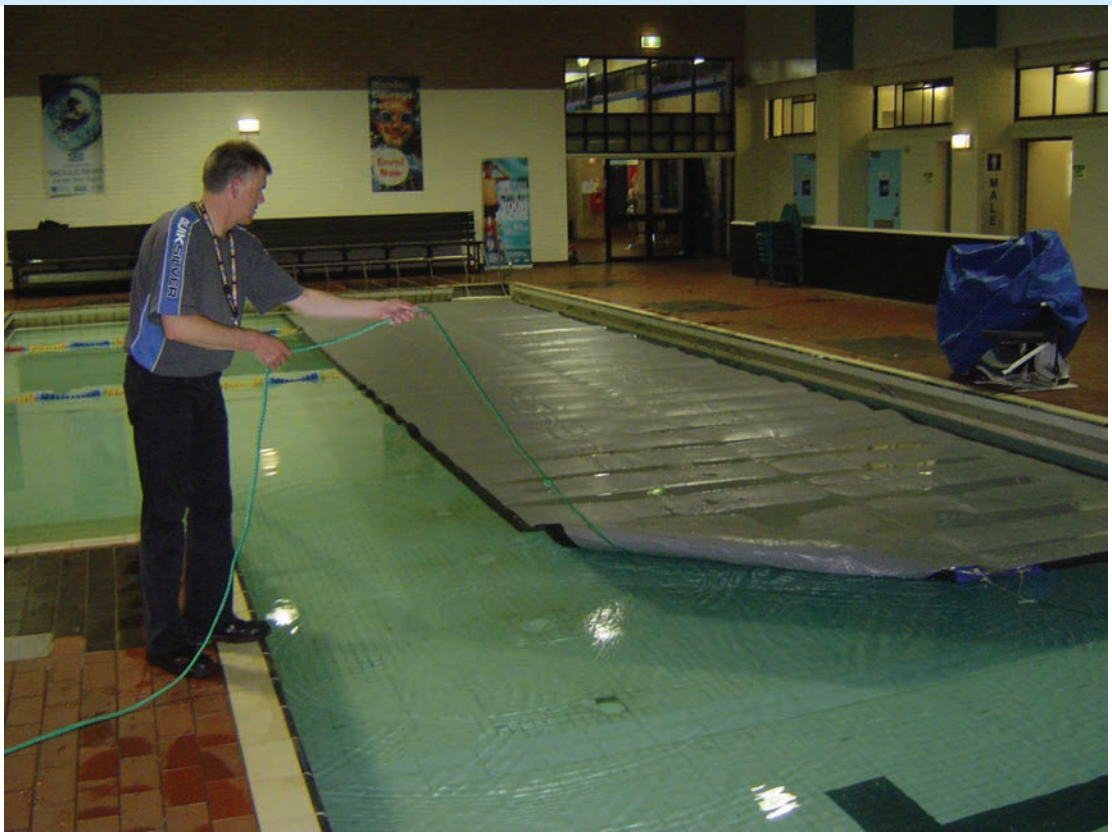
BENEFITS

Evaporation, conduction, convection and radiation are responsible for up to 90% of the heat loss from swimming pools. A well designed and properly installed pool blanket can reduce evaporation to nearly zero, and can greatly reduce heat loss. This helps reduce Council's running costs and greenhouse gas emissions.

IN ACTION AT THE COBURG LEISURE CENTRE

Thermal pool blankets have been installed on both the 'Lap Pool' and the 'Learner's Pool' at Coburg Leisure Centre. The blankets are housed under a bench made of marine grade stainless steel framing and decking made of recycled plastic and wood by-product that also acts as a useful seat for pool patrons.
An automatic pool blanket winch system has been installed to pull the blankets on and off the pool, and helps make using the blankets safer and easier for handling by staff.
Council expects the blankets to reduce energy consumption by 729 GJ and $5,000 in costs per year, with an annual greenhouse gas reduction of 41 tonnes. The expected reduction in water consumption through reduced evaporation is estimated to be up to 100 kilolitres per year.

IN ACTION AT FAWKNER LEISURE CENTRE



POOL MANAGER

Australian Government

COMMUNITY ENERGY EFFICIENCY program

Moreland City Council

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