

PROJECT COMPLETE

SOLAR HOT WATER SYSTEM DELIVERS IMMEDIATE GAS SAVINGS



Located in Perth's southern suburbs, LeisureFit Booragoon (formerly Melville Aquatic Fitness Centre) hosts a range of facilities, including a 50-metre, eight-lane indoor heated pool and a 25-metre leisure pool with beach access.

The lap pool is heated to 27°C year round by a gas heating system. Looking to reduce costs and meet sustainability targets, the City of Melville decided to install a solar hot water system.

A number of companies tendered for the project, with Supreme Heating WA being selected by the tender panel to carry out the project. With plenty of experience in installing solar hot water systems in Western Australia, Supreme Heating WA certainly had the qualifications to get the job done.

The Melville project required 160 panels with 30 tubes per panel, says Craig Doncon, managing director of Supreme Heating WA. He says this makes it the second-largest solar hot water system in the Southern Hemisphere, second only to a 240-panel system installed at the South West Sports Centre in Bunbury - also installed by Supreme Heating WA.

The system heats approximately 2.5 million litres of water each day. Each panel produces 2.17 kW of energy per hour. Extrapolated out over an average 8 h day, this equates to just over 2700 kW of free solar energy per day.

The system is fully automatic, described by Doncon as being like a 'set and forget' system in that it is set to a particular temperature;

when it reaches this temperature, it shuts down and cycles as required to maintain the water heat.

The entire project at Melville took 10 weeks to complete - and the client is already seeing significant reductions in gas use. City of Melville Project Manager Brett Stokes says the council is already seeing a reduction in gas volume of up to 45%. Although this saving will fluctuate with the temperatures, Stokes says the system has certainly achieved the council's target of reducing its gas expenditure.

"Solar hot water systems are a lot more cost effective than geothermal," said Doncon.

"With geothermal, you're looking at a million - maybe two million - dollars. A geothermal system has a potential 10- to 20-year return on investment.

"In comparison, a half-million-dollar solar hot water system will save \$60,000 to \$70,000 per year - a four- to five-year return on investment at current gas prices.

"So if gas prices increase - which we know they're going to do - then the payback period will be faster. Obviously geothermal has its place, but it's a different concept. From a dollars and cents perspective, solar is the clear winner."

Supreme Heating
www.supremeheating.com.au