

100 per cent renewable energy to fuel the Ivanhoe Aquatic Centre

We are seeking:

1. A \$4.8 million Federal Government investment for electrification of the Ivanhoe Aquatic Centre to enable the facility to run on 100% renewable energy.



Ivanhoe Aquatic Centre is destined to become one of the first aquatic facilities in Melbourne to be retrofitted to achieve net zero emissions and run on 100 per cent renewable energy through an all-electric, 5 Star Green Star accredited facility.

The centre relies on two gas boilers to maintain a constant temperature of its pool water and pool hall. They consume about 8,000,000 MJ/yr and cost in excess of \$100,000 to operate.

This CO₂ emissions from this is the same as a car driving 2.5 million kilometres, which is driving 170 times around Australia's Highway 1 or 195 semi-trailers making a round trip from Melbourne to Sydney.

Electrifying the site will remove all emissions from onsite operations, and the electric replacement heat pumps will be three to five times more energy efficient than the boilers.

Overview

10 years ago, natural gas produced six times less CO₂ emissions than Victorian grid electricity, and was therefore considered a far cleaner source of energy.

However, grid electricity has become 30% cleaner since then, and with the options of offsetting electricity consumption through solar system generation or green power schemes, it can produce zero net emission. Natural gas on the other hand still produces the same amount of CO₂ emissions, making it a far worse power source for the future.

Banyule's electricity comes from renewable sources through the VECO program, and therefore doesn't emit any emissions at all. In order to achieve our net zero emission target by 2028, it is imperative that all gas consuming equipment be upgraded to efficient electrical equipment.

Centre upgrade

Banyule City Council has committed to upgrading the Ivanhoe Aquatic and Fitness Centre in 2024/2025.

The \$28 million upgrade of the centre will provide a key recreational facility for the residents of the City of Banyule.

In 2012 a master plan was developed to address the ageing infrastructure which was insufficient in size and programmable areas.

The first stage of the proposed redevelopment was completed in 2015 which addressed the most significant demands at that time – increasing the size and layout of the gymnasium, group fitness spaces, changerooms, toilets and reception areas.

Stage two will focus on expanding the aquatics area with an upgrade of the existing 25m pool and additional program pool for learn to swim, aqua classes and warm water therapy activities.

A new Spa and sauna and new change facilities will also accompany these aquatics additions.

The refurbishment also includes significant plant upgrades and repairs to existing aquatic spaces and is the ideal time to upgrade the plant to install green initiatives, in line with Council's commitment to having net zero greenhouse gas emissions.

It is anticipated that the project will cost around \$33M. Council is advocating to the State and Federal Government to partner with them to deliver the project.

Environmental benefits

Our aquatic centres produce the highest amount of carbon emissions of all Council activities, accounting for 52 per cent of all emissions produced.

If electrification of the Ivanhoe Aquatic Centre does not take place, Council will not meet its target of being carbon neutral by 2028.

A concept plan for Stage 2 has been developed and includes full electrification of the centre.

Once implemented, stage 2 will deliver on Council's commitment to net zero through an all-electric, 5 Star Green Star accredited facility outcome.

As one of Council's major projects to be delivered, this project will contribute short and long term sustainable procurement outcomes through its commitment to environmental sustainable principles and local job creation.

The key project objective is to provide a zero net emission facility that meets identified community need and contemporary aquatic design standards.

Council's commitment to carbon neutrality

Banyule Council is committed to achieving carbon neutrality by 2028.

Carbon neutrality means that the net greenhouse gas emissions arising from Council operations will be zero.

This will be achieved by transitioning away from fossil fuel reliant technology (such as gas, diesel and petrol) to renewables forms of energy, reducing energy consumption and improving energy efficiency.

Council recognises that human activities such as burning fossil fuels (coal, gas, petrol and diesel) and clearing vegetation are causing global climate change.

We acknowledge that while the earth's climate has gradually changed throughout history, scientists have agreed that the substantial and very rapid changes we've seen over the past hundred years or so are caused by human activities.

Unless we take significant action now, we are on track for a rise in temperature of between 4-6°C in this short period.