



CITY OF GOSNELLS CIVIC CENTRE REDEVELOPMENT PROJECT

IMAGE

City of Gosnells Civic Centre
Redevelopment Project
5 Star Green Star - Office Design v2

PROJECT DATA

Owner

City of Gosnells

Location

2120 Albany Highway, Gosnells, WA

Council Size

The City of Gosnells is the fifth largest municipality in metropolitan Perth, covering an area of 127 square kilometres with more than 105,000 residents.

Project area

4,500 square metres of office space with a further 500 square metres of civic space including council chamber, function rooms, meeting rooms and dining area.

PROJECT TEAM

Project team

City of Gosnells project team

Architecture and design

Christou Design

Green Star Accredited Professional

Kellogg Brown Root

Specialist Green Star advice

Aecom

green building council australia



Office Design v2 2010

The project at a glance:

- ▶ 5 Star Green Star – Office Design v2
- ▶ Sustainability 'premium' of just \$750,000, or 3 per cent, on a \$26 million project
- ▶ Predicted payback period of five years for the Green Star investment
- ▶ Water use reduced by 35 per cent compared to similar sized buildings
- ▶ Energy use reduced by over 315,000kWh each year, equivalent to taking 43 cars off the road.

The City of Gosnells has achieved a 5 Star Green Star – Office Design v2 rating for the retrofit of its Civic Centre. In doing so the City has demonstrated its commitment to sustainability and shown that even buildings constructed during the 1970s can be given an environmental and economic overhaul.

Paul McAllister, Project Manager, City of Gosnells, explains: “Initially we thought the age of the building would make a sustainable retrofit unviable, however for an additional cost of 3 percent, a sustainable makeover was the only responsible option.”

The council expects a five year payback period on the extra outlay of \$750,000 demonstrating that building green is a smart financial decision. As McAllister points out: “We have a commitment to fiscal responsibility for our rate payers. That’s why we decided to build green.”

The sustainable transformation means the Civic Centre is now future-proofed to withstand tighter environmental legislation, the rising cost of utilities and the introduction of a price on carbon. Its energy and water saving features will reduce bills, while the improved indoor environment quality is helping the City improve productivity as well as attract and retain staff who want to work in a healthy and sustainable workplace.

The City of Gosnells’ Civic Centre demonstrates that smart, sustainable design is not the preserve of large, expensive developments. The council’s 5 Star Green Star rating is positive proof that low-technology design principles and a modest budget can produce a leading-edge green building.

WHAT CITY OF GOSNELLS ACHIEVED:

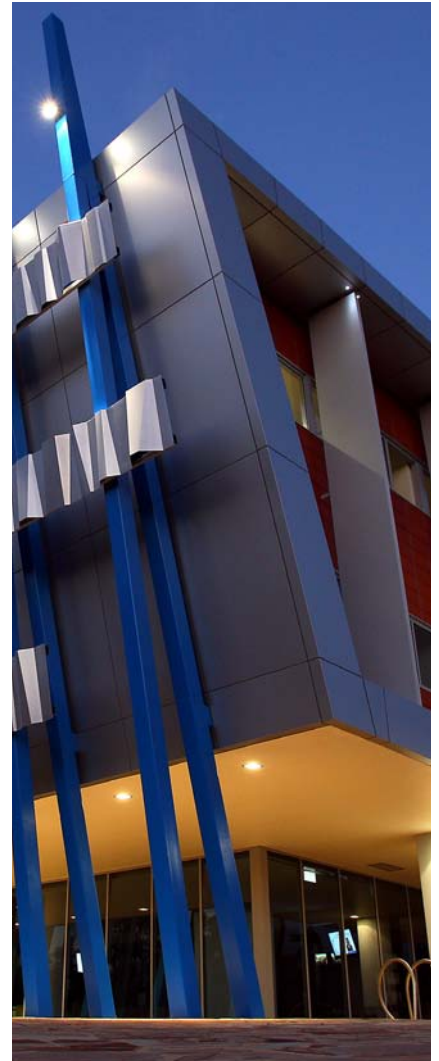
MANAGEMENT

During the retrofit of the Civic Centre, a comprehensive building users’ guide was created to help the occupants understand how to interact with the building, and to help the building managers identify and fix problems quickly. This will ensure that the City of Gosnells’ building maintains the highest possible level of performance.

ENERGY

The council has installed a thermal energy storage tank in the building which will store ‘cool’ energy in the form of ice. It is charged overnight to avoid peak energy tariffs (thereby saving the City money), with the cool energy then released during the day, reducing the City’s reliance on traditional air conditioning. Overall the building is expected to reduce energy usage by 315,878 kWh each year – equivalent to taking 43 cars off the road for an entire year.

The Civic Centre also uses solar energy to heat water for domestic use within the building, a measure which has reduced gas usage by 55 percent alone.



INDOOR ENVIRONMENT QUALITY

The OECD's Environmentally Sustainable Buildings report argues that health problems from indoor air pollution are now one of the most acute problems related to building activities. CSIRO modelling based on US research into the effects of indoor environment quality on health and productivity has found that potential annual savings in Australia could be as much as AUD\$21 billion each year.

The City of Gosnells was determined to provide a healthier, happier and more productive working environment for employees – and that meant reducing internal noise levels and maintaining a comfortable temperature for employees.

The Civic Centre also minimises staff exposure to volatile organic compounds (VOCs), which are linked to Sick Building Syndrome, by specifying low-VOC paints and carpets. This will provide a healthier workplace and support the City of Gosnells' goal of becoming the local government employer of choice in Western Australia.

WATER

Water-efficient fittings and fixtures, as well as a rainwater tank used to flush toilets, have been installed to reduce water use. These measures will cut the City's water use by 35 per cent each year saving 840,000 litres of water, equivalent to the water in nearly 17 average size backyard swimming pools, from being flushed down the drain each year.

EMISSIONS

Stormwater is collected and filtered on site before it enters the Canning River. This will improve the health of the river by reducing runoff contamination and will help reduce the need for extra in-ground stormwater infrastructure in the future.

