

New site energy plant

A major redevelopment and sustainability milestone

St John of God Subiaco Hospital's new, state-of-the-art site energy plant is now fully commissioned and supplying reliable backup power to existing hospital facilities.

It will soon also support the new six-storey clinical building under construction as part of Stage Three of the redevelopment and provide capacity for future campus expansion.

Importantly, the plant is significantly improving energy efficiency and reducing the hospital's carbon footprint. These improvements are contributing to the clinical building being on track to achieve a 5 Star Green Star Buildings rating, setting a new benchmark for sustainable health care infrastructure and aligning with St John of God Health Care's commitment to sustainability.

At a glance

Built for the future

- 2,200m² of new plant space across two levels housing critical infrastructure
- Designed to provide cooling and backup power generation to the existing hospital and the new clinical building
- Capacity to support future campus expansion

Reliable power

- Two backup generators capable of supplying enough electricity to power around 1,000 homes
- Provision for a future third backup generator
- 40,000 litre underground fuel tank for extended emergency power capability – about the volume of a large backyard swimming pool
- Fully automated electrical load control system maintains reliable power to critical clinical services during outages or generator use

Sustainable infrastructure

- Three high-capacity chillers, each capable of cooling the equivalent of around 1,250 homes
- Provision for a fourth chiller and a rooftop cooling tower
- 400 metres of new chilled-water pipework connecting key hospital buildings
- Campus chilled-water network circulates around 185,000 litres of chilled water – about the volume of four large backyard swimming pools
- Two new oxygen storage vessels ensure a reliable supply of medical oxygen:
 - 15,000 litre primary vessel
 - 3,000 litre secondary vessel

Supporting caregivers

- 211 new caregiver parking bays across two underground levels (6,200m²) and an external parking area

A more sustainable build

Construction produced around 80% less carbon emissions than a standard build. This was a reduction of around 17,000 tonnes, equivalent to taking approximately 4,000 cars off the road for a year.

