

WorkZone, Perth WA



WorkZone, a pair of office buildings in Perth, show why sustainability is not a ‘set and forget’ strategy. Knight Frank has exceeded the commitment to 5 star NABERS Energy ratings at both buildings, thanks to an “obsession” with energy efficiency and an ambitious optimisation program.



The WorkZone sustainability story, several years in the making, was led by skilled experts always looking to do better.

In 2021, WorkZone East became Western Australia’s first carbon neutral commercial building. Following this, in March 2022, WorkZone West achieved the same carbon neutral status – the first 6 star NABERS Energy building to do so without the help of green power or onsite renewable energy.

But the story of these two buildings starts with a pledge on paper. A 5 star NABERS Energy Commitment Agreement, signed in 2011, outlined the development team’s promise to design two buildings to meet the highest of energy efficiency standards.

When Knight Frank took over the management of the WorkZone duo, the base buildings had good bones. But there was room for improvement.

As Knight Frank’s Chris Whincop says: “The buildings were energy efficient in design, but times and technology had evolved and we could see, from our energy monitoring and the way the NABERS Energy ratings tracked, that neither building was achieving its full environmental design performance. We also believed it was possible for the buildings to exceed that design performance.”

Chris, as Knight Frank’s Head of Asset Management Services for Western Australia, had previously overseen an ambitious program of works on another Perth landmark building, One William Street. This pointed to the possibilities at WorkZone.

FAST FACTS

5 Star Energy

Both buildings – WorkZone East and WorkZone West – were completed in 2013, with NABERS Commitment Agreements to achieve NABERS Energy ratings

↑ Proximity

WorkZone comprises of two seven-storey buildings across 27,962 sqm of net lettable area located on the edge of Perth’s CBD at 202 Pier Street

A-Grade spaces

WorkZone West, owned by Elanor Investors Group, is 15,601 sqm of A-Grade space, while WorkZone East, owned by RF CorVal, offers 12,361 sqm of A-grade space

- Knight Frank has managed WorkZone East since 2016 and took over management of WorkZone West in 2018 after the property changed hands
- The carbon neutral status of both buildings has been certified by NABERS using the Australian Government’s Climate Active Carbon Neutral Standard for Buildings



“We are incredibly passionate about saving energy and our team is continually looking for ways to go above and beyond to improve building performance.”

— Chris Whincop, Head of Asset Management Services, Western Australia, Knight Frank

“At One William Street, NABERS improvement works implemented between 2014 and 2016 led to a reduction in base build energy in the order of 66%, or 2,150,000kW annually. These results clearly demonstrated to us what might be possible at WorkZone.”

Transformational tweaks

Knight Frank collaborated with building owner RF CorVal and engineering experts at Cundall to develop a five-year sustainability roadmap for WorkZone East. The roadmap’s destination? Carbon neutrality.

With the help of an AI-powered data analytics platform, the team could scrutinise the building’s operation on a minute scale to identify small efficiencies that added up to big savings, explains Janitha Kaushal, Knight Frank’s Senior Facilities Manager.

During the fine-tuning process, everything from chiller set points to optimum start times were analysed and recalibrated, Janitha notes.

The basement car park’s inefficient T8 fluorescent lighting system was replaced with efficient LEDs, with timers and motion-sensors, leading to large savings. A controls strategy for air-conditioning further reduced consumption. An in-depth examination of the greywater recovery system was undertaken. This was found to be expensive and energy inefficient, as well as using large quantities of chemicals, and so was decommissioned.

“With a range of measures – from altering lighting schedules to introducing a controls strategy for air conditioning – WorkZone West uses around three times less electricity than the average Perth office building.”

— Janitha Kaushal, Senior Facilities Manager, Knight Frank

Electrical vehicle charging points were installed in the 83-space basement car park, and the heavy-duty gas boilers in the end-of-trip facilities were upgraded with an energy efficient heat-pump system.

Taken together, these interventions elevated the NABERS Energy rating from 4.5 to 5.5 stars, driving down energy consumption by 22% over four years.

Fine-tuning the energy efficiency operations at Workzone East was followed by optimisation works at WorkZone West.

At WorkZone West, lighting schedules were adjusted, sensor lighting systems installed and a control strategy for air conditioning implemented. Lighting was upgraded from inefficient T8s to LEDs.

The result? Energy consumption has fallen by 28% and WorkZone West has maintained its 6 star NABERS Energy rating for two years in a row without using green power.

“The asset management teams at RF CorVal and Elanor Investors Group have been thrilled by what we’ve achieved at WorkZone. The results have resonated with tenants and investors.”

— Chris Whincop, Head of Asset Management Services, Western Australia, Knight Frank

The journey continues for both buildings with rooftop solar projects approved by both owners and soon to be installed. This will mean WorkZone East will no longer require offsets to achieve carbon neutrality – another market first that sends a new signal to Perth’s property industry.

Chris says the “wheels are starting to turn faster and faster” as more businesses, investors and tenants set carbon neutral and net zero targets. “A big push is coming from the real estate investment trusts, who consistently tell us that their investors want them to do more in ESG.”

