

NEWS & INSIGHTS

8 Willis St office redevelopment



Following on from achieving the Capital's first NZGBC 6 Green Star: Office Build v3 Rating – placing the building in the 'world leadership' category. Our 8 Willis office redevelopment (12 level 13,300m² NLA) in Wellington has well exceeded our original energy performance targeting of 5 stars and achieved a 5.5 Star rating placing between market leading performance and aspirational to compete with Argosy 82 Wyndham Street 6 Star NABERSNZ Base Build rating in Auckland. This NABERSNZ 5.5 Star rating implies the building is operating 64%

below the average building for carbon emissions from energy consumption.

This outcome is a testament to the innovative mechanical design of Chris Rowe (from COR Associates) that utilise simultaneous heating cooling with reverse cycle chillers that provide free heating or cooling depending on their operating mode. When the mechanical system is paired with the high performance thermal façade that focused on air tightness, the energy efficiency of the building sets a market leading benchmark for the commercial building sector going forward.

When asked what it takes to make a building a market leading example - Argosy's Head of Sustainability, Saatyesh Bhana - noted that "the environmental performance of the development is a testament to the maxim: 'the whole is greater than the sum of the part'. As the outcomes were only possible by the collaborative inputs of the base build design team, contractor along the tenant's project team, who in conjunction with Argosy applied organisational learnings from prior sustainable projects and stretched out further to implement a number of innovations and new strategies for decarbonisation, seismic resilience, sustainability and wellness." Saatyesh added that for a "project to be a market exemplar, it requires the stakeholders to debate norms and look at alternate ways of achieving the most efficient high quality outcomes."

Decarbonisation and emission reduction moves included the following elements:

Embodied carbon; implementation of a market changing and award-winning approach to seismic bracing of the existing concrete frame with the use of seismic dampers that allowed the building to achieve a 130%NBS rating. The reuse of the 'old' 8 Willis concrete structure saved 1,904 tonnes of CO₂; which equated to a 49% saving compared to building a brand new building of the same type and size.

Operational decarbonisation and emission reduction initiatives included the likes of:

- Decarbonisation through the removal of gas appliances (with futureproof electrical provision for change of use and or commercial grade electric kitchen equipment).
- Air to air heat recovery fresh air system with CO₂ control
- Heating cooling with reverse cycle chillers
- Chilled beams & ec fancoils
- Data analytics with AI audit system
- 18kW solar array installation,
- thermodynamic solar domestic hot water heating,
- intelligent LED lighting with daylight and occupancy control,
- high performance thermally broken façade,

- a 20,000 litre rainwater harvesting system, and
 - high WELS rated fixtures and fittings.
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