

GREEN
STAR
NZ

5 GREEN STAR – OFFICE DESIGN

ADDRESS: 21 Queen Street, Auckland CBD

DEVELOPER: AMP NZ Office Trust

LANDOWNER: AMP NZ Office Trust

DESIGN: Fletcher Construction (Design/Build Contractor)
Peddle Thorp & Aitken (Design Architect)

ENGINEERING: Fletcher Construction (Design/Build Contractor)
Norman Disney Young (Services)
Murray Jacobs Limited (Structural)

SUSTAINABILITY CONSULTANT: Green Star NZ Accredited Professional: Norman Disney & Young

CONSTRUCTION: Fletcher Construction Limited

TOTAL NLA: 14,605m²

AMP NZ Office Trust (ANZO) is New Zealand's largest provider of premium A grade commercial office buildings and is committed to providing office accommodation that balances tenants' needs for a high quality, flexible and efficient space with conservation of resources and environmental sustainability.

In redeveloping 21 Queen Street, ANZO was seeking a well-managed project with a lower environmental impact than a new construction. The project team, through careful strategic procedural planning of the works, ensured that the environmental impact of the redevelopment was minimised through the recycling of almost all construction waste, the retention of the existing structure, and the use of sustainable materials such as natural stone from environmentally-friendly certified quarries. Other features that contribute to the overall environmentally-sustainable design include double glazing, which maximises the use of natural light, and a chilled beam air-conditioning system.



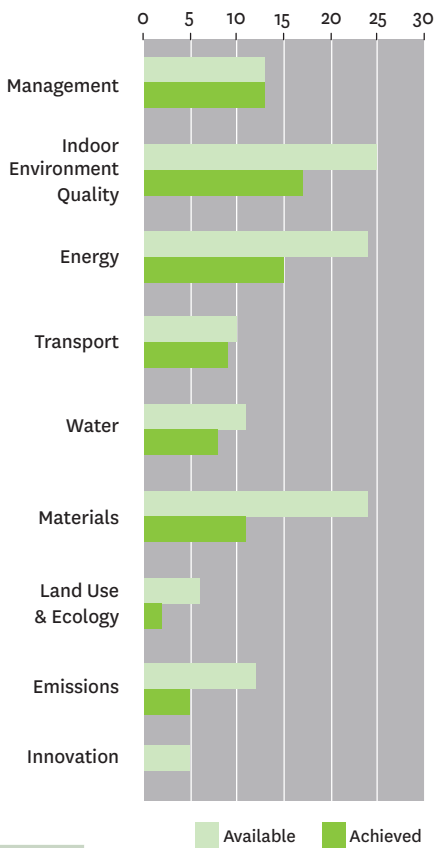


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POINTS ALLOCATION

TOTAL POINTS: 65



21 QUEEN ST, AUCKLAND

MANAGEMENT

- Prepared an Environmental Management Plan in line with New South Wales Environment Management System Guidelines
- Achieved recycling and reuse of more than 80% of construction waste by weight, exceeding the Green Star requirement of 70%

INDOOR ENVIRONMENTAL QUALITY

- Achieved a 150% improvement on New Zealand Building Code requirements for mechanical ventilation
- For 95% of building's NLA ambient noise levels are in accordance with AS/NZS2107:2000
- Full points achieved as a dedicated tenant exhaust riser is provided

ENERGY

- Full points achieved as electrical sub-meters are provided for all building uses greater than 100kVA
- 3 out of a possible 4 points were awarded as lighting power density for 95% of the building's NLA is 2.0W/m2/100lux

TRANSPORT

- Full points were awarded for carpark minimisation, with less than 50% of the maximum local planning allowances were provided
- Two out of a possible three points were awarded for the provision of changing rooms and showers for cyclists and pedestrians, with secure cycle storage for 10% of building staff and visitor cycle parking
- Full points were awarded as the building is in close proximity to public transport

WATER

- Four out of five points were awarded for the use of water-efficient appliances and fittings, as well as the treatment and re-use of grey water for toilet flushing
- Full points were awarded for the metering of all major water uses in the building

MATERIALS

- Full points were awarded for the provision of a dedicated storage area for collection, storage, and separation of recyclable office waste
- Three out of four points were awarded for retaining the existing building structure
- The building maximised use of Environmental Choice certified materials where possible

LAND USE & ECOLOGY

- Full points were awarded for the reuse of the site

EMISSIONS

- Full points were awarded as all HVAC refrigerants have zero ozone depletion potential
- Full points were awarded for avoiding night-time light pollution

The experience of working with the New Zealand Green Building Council and using the Green Star NZ - Office Design Tool V1 in preparation of the design of 21 Queen Street has been thoroughly rewarding for all those involved.

The incorporation of this tool in the design process necessitated a new management structure. Total commitment was required from the entire team from the outset. The resulting design has greatly enhanced the immediate environment and provided tenants with exceptional premises in a landmark building.

