



THE PETER DOHERTY INSTITUTE

The Peter Doherty Institute for Infection & Immunity is a 5 Star Green Star building and alongside other “green” buildings on the University of Melbourne campuses, it demonstrates the University’s commitment to sustainable design principles.

Greening Melbourne, one building at a time

As a leader in environmental performance in Australian higher education, the University of Melbourne aims to be carbon neutral by 2030 and develop and use our campuses for a sustainable future.

How we develop and use our buildings is critical in determining if we achieve this goal.

The design and operation of our facilities, and the space we use, directly affects our ability to minimise the amount of natural resources we consume, the greenhouse gases we emit, and our overall carbon footprint.

With this in mind, we have committed to minimum rating target of 5 Star Green Star for all new buildings, and 4 Star Green Star for all major building upgrades under the Green Building Council of Australia.

The Facts – The Peter Doherty Institute

- Architect: Grimshaw Billard Leece,
- Project Manager: DCWC, Services
- Builder: Brookfield Multiplex Constructions
- Approximate floor space is 25,000m².
- Access to state-of-the-art Biomedical research Facilities.
- Provides appropriate containment and support facilities for a variety of Public Health, Research and training laboratories
- A 200-seat Lecture theatre

Building for the future - The Peter Doherty Institute for Infection & Immunity

The Peter Doherty Institute for Infection & Immunity (The Doherty) is a world class biomedical facility specialising in human infectious diseases and immunity. The Doherty brings together the leading Victorian organisations in this field into one institute to study infectious disease.

Located on the corner of Elizabeth and Grattan Street this 14 storey building is a purpose built biotechnology facility, supporting teaching and research activities.

The Doherty incorporates a suite of ‘green’ initiatives a number of which are a first for Australia.

Some of the unique design features of the building include:

Energy

- The building is partially powered by a co-generation unit that uses natural gas to produce reduced gas-emission electricity and lower CO₂ emissions for this facility saving a total per year of 2,474,970 kg of CO₂
- 100% of the domestic hot water for the building is produced as a by-product of the co-generation plant, by using this waste heat.
- Lighting control with motion sensors that detect occupant presence to ensure lights are not left on unnecessarily.
- Utilisation of night purge and heat recovery systems, and economy cycles also reduces energy usage.

Façade

- The façade of the building is designed to minimise the intensity of the sun by the use of an 'Okalux' double glazing system, which contains fixed timber battens between the two panes of glass. This provides a high level of solar protection to the internal building during summer but allowing sunlight to penetrate well into the building during winter. The Doherty is the first building in Australia to utilise this glazing system..

Water

- A portion of greywater generated in the building is treated by a passive subsurface vertical flow greywater Bio Filtration system.
- The system utilises 900 plants and sand filters giving the building a 'green' roof garden which is viewable from the board room. Following filtration the water is returned to a 30,000L holding tank to use for toilet flushing. The system combined in this way is considered a first in Australia.
- A Rainwater tank in the basement that can hold 100,000 litres is used to supplement the gray water system for toilet flushing.
- Low Flow taps and fixtures are used throughout the building.

Transport

- Secure bicycle facilities on the ground floor including showers, change rooms and lockers.
- Excellent access to public transport.

