



Royal Melbourne Institute of Technology (RMIT)

Sustainable Urban Precincts Program
City Campus

SIEMENS



87,000 students around the world



Ranked in the top **1%** of global universities¹






6% of Melbourne's CBD is covered by RMIT's city campus



The Sustainable Urban Precincts Program: The Sustainable Urban Precincts Program (SUPP) represented a \$128M commitment by RMIT to reduce energy and water use, significantly lowering greenhouse gas emissions associated with campus operations.

¹ 2017 QS World University Rankings.

A perfect place in numbers

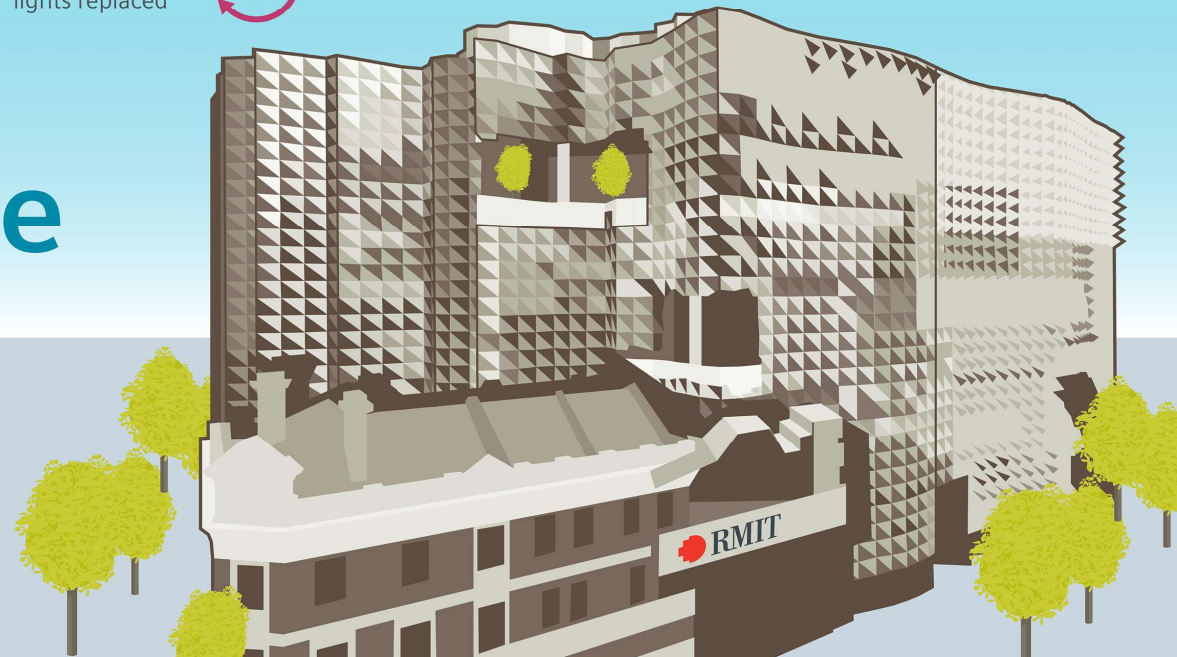
37,000 kL of water saved per year  **Now 50%**
~~39%~~ annual reduction in electricity usage  **Now 17,280**
~~16,500~~ tons of CO₂ saved per year 

17,000 connected data points  **12,000** lights replaced 

Note -The updated data is the average over the first 3 years.

1 sustainable university campus*

* Figures refer to minimum guaranteed savings and works carried out as part of the Siemens Energy Performance Contract on the RMIT University Melbourne City campus.



Project Scope



- High Voltage Ring Main
- Co-generation system
- Cloud-based monitoring platform



- Capital infrastructure program > precinct model
- Chiller and boiler upgrades
- Chilled and hot water network extension



- Campus-wide Building Management System
- Optimized operations of air handling units, pumps, and cooling towers



- Rationalise lighting stock
- Upgrade to smarter & more efficient lighting



- Intelligent water management system
- Upgrade to high efficiency fittings
- Rain and fire services water harvesting

Perfect places in practice

RMIT University City Campus

“A once in a generation project that has provided RMIT with the means to effect a step change in energy use with a fundamental shift in momentum towards sustainability ”



Our guarantee

28%
CO₂ and greenhouse gas reduction ✓

30%
Annual water savings ✓

Most pressing issues

Reducing electricity, natural gas and water use across the various buildings in the city campus

Replacement of ageing assets with holistic precinct design approach

Greater control of the facilities thermal conditioning

Solution from Siemens

Energy Performance Contracting (EPC) with guaranteed savings and Return On Investment

- Greater control of space conditioning
- Interactive dashboards for greater visitor experience

- Modernization of control systems and selected mechanical assets
- Establishment of site-owned HV infrastructure and cogen plant to create a Distributed Energy System (DES) solution
- Comfortable place to learn

People

Dedicated on-site energy and operations manager

Technology

- Desigo™ automation system with smart control strategies
- DES solution incorporating HV ring main and cogeneration plant.
- Lighting redesign, chiller plant replacement, water conservation measures

Services

Digital services through Navigator – the cloud-based energy and sustainability platform

Q&A

Decarbonisation

Digitalisation

Sustainable Asset Renewal

Energy Resilience

Panel

Michael Snow

Senior Manager Infrastructure
RMIT

Umer Mohammed

Head of Energy Performance Services
Siemens

Josh McIntyre

National Sales Energy Performance Services
Siemens