Green Gown Awards Australasia

2030 Climate Action

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2020 Case Study

RMIT

Eliminating Emissions in Education

RMIT has a long history of commitment and action in addressing sustainability and greenhouse gas emissions across operations, learning and teaching and research. RMIT's first commitment to sustainability was in 1995 with the signing of the Talloires Declaration. This was followed by the achievement of the ATN emissions reduction target of 25% by 2020, four years ahead of schedule, predominantly due to the $128M of energy efficiency work delivered under the Sustainable Urban Precincts Program completed in 2017.

In May 2018, Council approved RMIT University's Carbon Management Plan which set an ambitious direction to transform the way the University thinks about energy in the future and to become Carbon Neutral by 2030. RMIT committed to expanding the roll-out of on-site solar generation, continuing improvement of on-site energy efficiency and supporting renewable energy purchasing. In 2019, RMIT University reported a 48% reduction in emissions from the 2007 baseline.

The comprehensive Carbon Management Plan was developed by bringing together a reference group of academics and specialists from across the University – including sustainability, business, legal, facilities management, capital works, information technology and others. The Plan outlines the scope and sources of the University's emissions and charts a pathway to reach carbon neutrality. With a strong emphasis on following the carbon management hierarchy and preferencing avoidance and reduction before offsetting, it provides RMIT with a strongly defensible pathway to carbon neutrality. In working towards achieving carbon neutrality RMIT has completed a number of world-leading initiatives, including:

- **Sustainable Urban Precincts Program (2017)** RMIT delivered a $128M investment into energy efficiency through two large energy performance contracts, this was broken into over 60 separable packages of work delivered by Siemens and Honeywell. Over 3 years the program delivered 4.4MW of on-site generation, 11 high-efficiency boilers, 12 high-efficiency chillers, over 40,000 LED light fittings, BMS and HVAC system upgrades. The entire program of work has led to RMIT realising a 30,000-tonne reduction in emissions annually.

- **Solar Photovoltaic Rollout (2018)** RMIT rolled out over 600kW of solar PV across University rooftops within a constrained inner-city Melbourne. Sites were selected through a rolling program of living laboratory projects where RMIT Masters students assessed the solar resources across the portfolio and selected the best available sites – which

can be difficult with a number of high-rise apartment towers around Melbourne. The student work was the basis of the submission to the capital development program the following year and ultimately formed the tender documentation. A total of 19 solar systems were installed with remote monitoring and an estimated financial payback of 4.5 years.

- **Melbourne Renewable Energy Project 1 (2018)** RMIT was a key partner in the first-ever group renewable energy power purchase agreement in Australia, signing a 10-year renewable energy supply contract with Pacific Hydro. The contract supported the construction of the 39-turbine, 80MW Crowlands Wind Farm in western Victoria, bringing more renewable energy into the national grid. The project also provided a blueprint for future power purchase agreements in Australia, with the publication of a guide to buying off-site renewable energy. The agreements provide RMIT with carbon neutral electricity and a 8,000-tonne emissions reduction.

- **Melbourne Renewable Energy Project 2 (2020)** Following the outstanding success of MREP1, RMIT took bold leadership to establish a second group of corporate and University partners through a power purchase agreement process. Ultimately the group contracted over 1 terrawatt hour (TWh) of renewable energy over 10 years from the Yaloak South Wind Farm in Western Victoria. As the lead customer RMIT guided the partners through the procurement and market testing processes, sharing lessons from previous experience, contracting and coordinating all external advisory services through to the successful contract execution. The renewable energy supply agreement provides RMIT with more carbon neutral electricity and provides a 16,000-tonne emissions reduction. Group members included: RMIT University, Mondelez, ISPT Super, CBUS Property, Deakin University, Fulton Hogan and Citywide North Melbourne Asphalt.

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Environmental & Social Benefits

Working towards carbon neutral by 2030, the environmental benefits are best showcased as emissions savings:

Initiative	Emissions Savings (tCO2-e)
Sustainable Urban Precincts Program	30,000
Solar Photovoltaic Rollout	1,000
Melbourne Renewable Energy Project 1	8,000
Melbourne Renewable Energy Project 2	16,000
Total	**55,000**

The above initiatives put RMIT well on track to achieving the goal of becoming carbon neutral by 2030.

Leadership & Engagement

The carbon neutral initiatives demonstrate that real progress can be made to emissions on-site and that a journey to carbon neutral can be done in a financially responsible manner. Demonstrating that RMIT is serious about making real sustainability progress, not only within the boundaries of the campus, but in the communities in which we operate. The following initiatives are uniquely distinctive:

- The onsite emission reductions (before offsets) that RMIT University have undertaken are by far the largest of any University in Australia.
- The energy performance contracts were the largest contracts of their kind in the southern hemisphere.
- The approach to partnerships around group power purchase agreements has scaled up impacts of purchasing decisions, allowing wind farms to be build and further driving demand for renewable energy in Australia.

Wider Societal Impact

Undertaking large group power purchase agreements have allowed RMIT University to scale up the impacts of purchasing decisions. Through Melbourne Renewable Energy Project 1 & 2, the groups have collectively purchased a combined 2 terrawatt hours (TWh) of renewable energy over 10 years, specifically driving the construction of a wind farm in western Victorian and increasing the overall demand for renewable energy in the national market. These impacts benefit Australia by decreasing the reliance on fossil fuels in the National Electricity Market as well as providing best practice examples and support to others.

Top 3 Learnings

The importance of an overarching goal such as Carbon Neutral by 2030, to capture the attention of the University executive, wider staff and students

Focus on continuous improvement through design standards revisions, ensuring the University is going over and above on energy efficiency

Showcase initiatives and learnings to others so they can undertake similar work, compounding the impact of the initial work