

Melbourne Renewable Energy Project

University of Melbourne
November 29, 2023

Net Zero on Campus Community Case Study

The [Net Zero on Campus](#) initiative, a collaborative effort between SDSN, the Climateworks Centre, and Monash University, aims to facilitate the sharing of lessons and resources to accelerate the decarbonization of university campuses around the world. The initiative consists of a “how-to” guide and accompanying online toolkit that will enable universities to accelerate the planning and implementation of net zero strategies, and act as living laboratories for testing solutions.



What is the case study trying to accomplish?

Facilitated by the City of Melbourne, the Melbourne Renewable Energy Project (MREP) consortium supported the construction of a 39-turbine, 80 MW capacity wind farm in north-west Victoria, which became operational in January 2019. The University of Melbourne engaged in a competitively priced long-term power purchasing agreement (PPA) through the program, whereby it purchases 6 GW of electricity each year.

The MREP marks the first time in Australia that a group of local governments, cultural institutions, universities and corporations have collectively purchased renewable energy from a newly built facility. Note that multiple universities were partners to the MREP (including RMIT Australia and Deakin

University Information

City: Melbourne

Country: Australia

Region: Oceania

Number of Staff: Large (between 6,000 - 10,000 staff)

Number of Students: Large (between 6,000 - 30,000 students)

Type of Institute: Public

Case Study Overview

Category: Energy

Initiative: Source renewable energy

Type of Net Zero Solution: Financial investment

Funding Source: Public-private partnership

Emissions Scope: Scope 2

Impact on Net Zero: Very large positive impact (the wind farm is expected to save over 96,000 tonnes of greenhouse gas emissions per year from entering the atmosphere)

Timeframe: Long (between 2 and 5 years)

Stakeholders: Sustainability officer, energy market advisor, procurement agents, probity advisors, legal advisors, technical advisors

Transformational Potential: Very significant

University). However, the power purchasing agreement was facilitated by the local government, the City of Melbourne.

Under this project, members have committed to purchase 88 GWh of electricity per year from the Crowlands Wind Farm under a long-term PPA, which is equal to reduction of 96,800 tonnes per year of greenhouse emissions. In a volatile electricity market, long-term renewable energy contracts present opportunities to avoid risk and reduce costs. Plus, they present an opportunity to deliver additional benefits to the broader community. The Crowlands Wind Farm will create more than 140 jobs during construction and eight ongoing operation and maintenance jobs. Renewable energy purchasing is a cost effective way to deliver on corporate commitments to reduce greenhouse gas emissions, be carbon neutral, or buy more clean energy.

The MREP contract demonstrates innovation by enabling customers to hedge their electricity costs over a 10-year period, while creating additional renewable energy in the National Electricity Market. The deal delivers a competitive product compared to regular electricity purchasing, along with some budget certainty for the customers. Since the success of MREP, the City of Melbourne is actively facilitating other organizations to follow in its footsteps. While many other very large energy users have signed a PPA since MREP was announced, there is still a need for someone to bring mid- to large-sized organizations together. To build on the success of MREP, the City of Melbourne is now facilitating a second PPA to aggregate those mid-sized energy users that benefit most from this kind of partnership. Together, MREP 1 and 2 have reduced the equivalent of five per cent of the city's emissions.

What were the key success factors in implementing the case study?

The City of Melbourne worked collaboratively with 14 partners from a wide range of sectors, from banks to universities, alongside local governments and state government bodies. To set the project up for success, we needed to agree on a way to work together and a clear decision-making framework in the early stages. We developed a participant agreement to provide clarity on issues such as governance and structure of the group and decision making processes.

As the MREP model was innovative and hadn't been tested in the Australian market previously, the City of Melbourne had to work closely with proponents during tendering, evaluation and negotiation phases to ensure that the solution was fit for purpose for both customer and supplier.

What were the challenges or barriers you had to overcome in implementing your initiative?

The Renewable Energy Procurement Guide produced by the City of Melbourne outlines case studies and tips drawn from their experience establishing the Melbourne Renewable Energy Project, and from other similar projects. Much of the advice is on ensuring you are set up for success with the right partners, advisors, and consultants to help manage the process.

What did you learn from the process and what are your recommendations to others?

The process of PPA agreement can become complex especially where partners are involved, so engage a strong project manager. Bear in mind that because you may not be following a traditional procurement approach, the manager does not necessarily need to be a procurement specialist, but must be able to work with a team across a range of skills and knowledge to tailor solutions to meet the project’s needs. Also, maintaining a smaller group of two to four partners would mitigate this risk to some extent. A greater degree of senior engagement among all participants may also have mitigated this risk. This could also have been addressed by securing stronger commitments about participating in a tender from the outset and committing to the outcome, provided certain criteria were met.

What resources did you use to implement this initiative?

Resource	Why is this resource helpful?
Renewable Energy Procurement Guide	<p>This guide is all about how to procure electricity through large scale purchasing models. The guide will help you: (1) understand the opportunities, (2) understand what you need to know and how to get started (3), make the business case, (4) plan the procurement process. Throughout the document, you'll find case studies and tips drawn from our experience establishing the Melbourne Renewable Energy Project, and from other similar projects. The guide is written from the perspective of Australia's east coast 'National Electricity Market'. Electricity markets operate differently in various parts of the world. Many of the observations and lessons may be applicable in other markets, but some of the specifics may differ. If you are located outside Australia, you may need to undertake your own local research.</p>

Get Involved with Net Zero on Campus

Contribute to the Online Toolkit

- [Submit](#) your own case studies and decarbonization resources to be featured;
- Share your questions and/or feedback with us at info@unsdsn.org.

Join Our Community

- Join our global community of practice and Net Zero on Campus LinkedIn Group;
- Join global networks of academic institutions working on decarbonization: [SDSN](#), [Second Nature](#), and [EAUC](#). See our resource directory for more networks;
- Join the [Race to Zero for Universities and Colleges](#) campaign and make a net zero commitment;
- Empower your students and engage them in your campus decarbonization efforts: join [SDSN Youth](#) and see our guide for more information.

Learn More

- Explore [SDSN's free, open educational resources](#) from the world's leading sustainable development experts to use in your classrooms: MOOCs, educational videos and lectures, and global community of practice.

[Net Zero on Campus](#) is a collaboration between [SDSN](#), [the Climateworks Centre](#), and [Monash University](#), in partnership with [Second Nature](#) and the [EAUC](#) (Secretariat of the Race to Zero for Universities and Colleges).