On 6 July 2018, Monash University announced that it had concluded a corporate renewable power purchase agreement (PPA) for both electricity and large-scale generation certificates (LGCs) with Victoria’s Murra Warra Stage I wind farm. With this deal, Monash joins the Telstra-led consortium which includes ANZ, Coca-Cola Amatil and the University of Melbourne. The announcement by Monash is the latest step towards the University’s goals of achieving net zero emissions by 2030 and being powered by 100% renewable energy. This is one of four pillars within Monash University’s sustainability plan. The other pillars being energy efficiency, electrification and addressing residual emissions through offsets. The strategy that directs initiatives to achieve this goal is arguably a model for any tertiary institution and, more broadly, large energy users which also seek to manage carbon risks. Energetics provided technical and commercial advice during the development of the corporate PPA’s business case, as well as during the due diligence stage of the Murra Warra Stage I transaction.

Approach

Monash is recognised leader in sustainable building asset management. In 2009 the University stated its intention that all new buildings would be achieve a 5 star Green Star As Built rating. Over the past 12 months they have installed more than 4000 solar PV panels across the campuses and upgraded 7000 light fittings to super-efficient LEDs. Monash is also piloting advanced design methods (Passive House Standard) and a campus precinct scale microgrid project at their Clayton campus to control electricity usage and support the broader electricity grid during peak times.

The University’s net zero transformation is well underway. Monash have a clear view on future business growth trajectories and the emissions reduction gap that is unlikely to be closed by deep energy efficiency retrofits, on-site solar, switching to all electric precincts and adopting high performance design standards. What they recognised was the role a corporate PPA with an offsite renewable energy project could play; if the business case stacked up.

How the deal developed

Monash approached corporate PPA suppliers with an expression of interest during the first half of 2017. Energetics was engaged to support Monash in selecting a suitable contracting model and to develop a business case. When an opportunity to join the Telstra-led Murra Warra Stage I consortium was presented to Monash they engaged Energetics to provide commercial and technical due diligence on the offer received. Our work included the provision of evidence-based electricity price forecast scenarios, financial modelling to support the evaluation of the offer, as well as an assessment of Monash’s energy market risk exposure under the terms of the agreement.

The duration and therefore potential financial impact of a corporate PPA typically trigger decision making thresholds well
beyond those required for a short term retail electricity contract. The extent of energy markets’ knowledge required by senior executives must not be underestimated. The Monash team, led by Dr Wasiluk, Monash’s Building and Property Sustainable Development Planner, succeeded in engaging a diverse range of senior internal stakeholders. Monash also appointed external legal and accounting advisors to support the deal’s development.

“Energetics helped Monash to confidently navigate the complex world of PPAs. They were responsive to our dynamic journey and changing needs, supporting our every step with their technical knowledge and energy market expertise.”

  
  Dr. Kendra Wasiluk, Sustainable Development Planner, Monash University

Outcome

Monash was able to lock in market leading pricing, at levels well below the current wholesale market prices for both electricity and LGCs. The voluntary surrender of LGCs will reduce the University’s indirect obligation under the Renewable Energy Target\(^2\) and forms a key component of Monash’s net zero ambition. In addition to the potential cost savings over the life of the agreement, the University has gained a long-term buffer against future electricity and LGC price volatility, supporting a secondary objective of greater budget certainty.

Finally, the corporate PPA supports the construction of what will be Australia’s largest wind farm. Scheduled for completion in 2019, Murra Warra has a capacity of around 226 megawatts during its first stage. Combined, stage one and two will have up to 116 turbines with a capacity of about 429 megawatts\(^3\) This project offers a boost to Australia’s overall generation capacity, contributing to lower prices in the long term during a period of unprecedented transformation of electricity markets.

References

2 The retailer passes its obligation onto energy users in the form of a LREC charge
3 http://www.murrawarra-windfarm.com/the-project/project-summary/