The Melbourne Renewable Energy Project

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Globally, we are seeing the lack of national and international action kick city governments into action. The City of Melbourne has long recognized the need for cities, corporations and individuals to take action on climate change. The Council's first "Zero Net Emissions" strategy was endorsed in 2003 and led the way globally for ambitious emissions reductions for local governments.

While our strategies, programs and actions have evolved (we now have a Climate Change Mitigation Strategy that aligns our targets with the Paris Climate Agreement, for example), the fundamentals of the early Zero Net Emissions goal and the Council's ambition have not.

Origins of the Melbourne Renewable Energy Project

As a local government in Australia, we have no policy control or ownership of our electricity generation assets or grid. So, we set out to find a new way for the city and other large energy users in Melbourne to take voluntary action to accelerate the decarbonisation of the grid, regardless of the policies of state or federal governments.

This gave rise to the Melbourne Renewable Energy Project (MREP), an Australian first that brought together a group of local governments, cultural institutions, universities and corporations to collectively purchase renewable energy from a newly built facility.

Renewable energy developers face barriers in securing finance in the face of an uncertain regulatory environment. To secure finance to build their projects, renewable energy facility developers usually require a 'bankable' long-term stream of income from an offtaker to underwrite the debt. These contracts are referred to as Power Purchase Agreements, or PPAs.

How the Model Works

The City of Melbourne and its MREP partners, in response, recognized that we could use our purchasing power and credit strength to provide sufficient certainty to enable the construction of a large scale renewable energy project.

We 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.

Launching the Project

MREP members have committed to purchase 88 GWh of electricity per year from the Crowlands Wind Farm under a 10-year power purchase agreement. This commitment has enabled the construction of the 80 MW wind farm at Crowlands, a 3-hour drive from the City of Melbourne. The wind farm is owned and operated by Melbourne-based clean energy company Pacific Hydro. As the wind farm will generate significantly more energy than the purchasing group needs, it will bring additional renewable energy into the market.

The MREP contract demonstrates innovation by enabling customers to hedge their electricity costs over the 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.

Benefits of the Project

The project did achieve more than just new renewable energy and significant reductions in participants' greenhouse emissions. It is also creating around 140 construction jobs, along with eight ongoing operational jobs in the local area. In addition, Pacific Hydro's Community Fund will provide a long term funding stream to the local community and a solar and battery storage system has been donated to the Crowlands Shire Hall.

As of 1 Jan 2019, the Crowlands Wind Farm began supplying energy to power town halls, bank branches, universities and street lights across Melbourne. Council is now powered by 100 percent renewable energy.

We believe in the power of coming together. The MREP approach enables cities, corporations and institutions to take an active role in securing renewable electricity supply and take action on climate change. It provides long-term price certainty, enabling customers to mitigate the risk of increased energy costs in a volatile market. It will also be critical to increasing the speed of the transition to a renewable energy supplied grid and play a key role in achieving zero net emission targets.

MREP has been recognised as a game changing procurement model and the project team has actively encouraged replication of the model to others.

Replicating the Model and Next Steps

With support from the Carbon Neutral Cities Alliance, the team has presented at a range of industry forums and published a guide to renewable energy procurement, drawing on the insights from MREP.

Since the final deal with Crowlands Wind Farm was concluded, a raft of other corporate PPAs have been announced in the Australian market. Large multinationals, universities and other local governments are all recognising the opportunity and stimulating billions of dollars of investment in renewable energy in Australia. The impact of our project is far wider reaching than just securing low cost renewable energy for our Council, it has catalysed sector wide change that is only getting started. Since the success of MREP, the City of Melbourne is actively facilitating other organisations to follow in our 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 organisations 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.