

City of Melbourne

**Submission to the Review of the
Renewable Energy Target (RET)**

May 2014

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Introduction

The City of Melbourne welcomes the opportunity to provide a submission to the Review of the Renewable Energy Target (RET).

The City of Melbourne is home to 100,000 residents and 16,000 businesses, employing 428,000 people. These include the headquarters and offices of many of the nation's largest financial, industrial, media, scientific, mining and legal institutions. The City's Gross Local Product was \$72B in 2012, contributing five per cent of the nation's economy.

The City of Melbourne has a commitment to support the expansion of renewable energy supply to meet a greater proportion of the electricity needs of the municipality. The City of Melbourne has a target to obtain 25 per cent of the municipality's electricity from renewable sources by 2018¹. The City is also working with a major distributor on the future of the grid, including the integration of renewable energy.

The expansion of renewable energy in Melbourne is delivering multiple benefits. The renewable energy industry employs increasing numbers of workers with flow on economic benefits. The spread of roof top solar has reduced pressure on the grid in Melbourne and has helped reduce the need for grid upgrades and the associated costs which are borne by all energy users.

Security of supply in the electricity grid during peak demand periods can be improved by alleviating network dependence at times when distributed generation opportunities are high. Specifically, peak demand in commercial buildings coincides with periods of high solar output (i.e. daylight hours in summer months). Promoting uptake of rooftop solar in these contexts, particularly on low-rise large roof commercial and industrial sites, would deliver broader network benefits by alleviating overall network demand.

Wholesale energy prices are being reduced on average due to increased competition in the energy market from more electricity generators, resulting in better prices for consumers. Renewable energy is also reducing the emissions intensity of doing business in the city and ensuring that Melbourne's economy remains an attractive location to conduct business in the future.

The Renewable Energy Target is playing a central role in delivering these benefits to Melbourne's residential and business community. The Small-scale Renewable Energy Scheme (SRES) mechanism is specifically driving the majority of increased solar energy uptake within the municipality, while the Large-scale Renewable Energy Target (LRET) mechanism is increasing the overall supply of renewable energy into the grid.

In this context, the City of Melbourne is pleased to provide a submission to the Review of the Renewable Energy Target.

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¹ Zero Net Emissions Update 2014, City of Melbourne,
http://www.melbourne.vic.gov.au/Sustainability/CouncilActions/Documents/zero_net_emissions_update_2014.pdf

Economic, environmental and social impacts of the RET on the City of Melbourne

The RET has increased the contribution of renewable energy to Melbourne's electricity supply. This outcome is aligned with the City Of Melbourne's strategic objectives. The RET has facilitated the uptake of renewables by our residents and businesses who have invested in solar on their own homes and buildings. The RET has also contributed to the expansion of large scale renewables in Victoria. It has therefore enabled job creation in both the small and large scale sectors of the industry and has the potential to continue to do so.

The City of Melbourne is concerned that the modelling assumptions being used in the RET review have focussed on the costs arising as a result of the RET without taking into account cost benefits, and broader economic benefits. The City of Melbourne recommends that the review take into consideration the benefits arising from the RET, such as:

- Competition benefits from diversification of electricity supply
- effect on wholesale electricity pricing, including peak electricity prices
- reduction in network demand and generation demand in peak periods
- consumer resilience resulting from distributed generation
- investment and job creation; and
- broader benefits to the Australian economy as a whole considered.

Impacts on electricity prices

The RET has resulted in reduced wholesale electricity prices, particularly at peak periods, by introducing greater competition into the energy supply market and providing a diversified supply of electricity with lower generation costs. Lower wholesale costs are providing an ongoing benefit to energy users in the City of Melbourne, especially to manufacturers as will be discussed below.

The supply of higher rates of renewable energy into the grid was seen as critical to reducing energy costs during the 2014 summer heatwaves in Melbourne which are traditionally the most expensive generating periods. The supply of renewable sources reduced the need for high cost generators to be dispatched during the heatwave and subsequently lowered the cost of electricity produced. Research undertaken by SKM using AEMO data established that "wholesale prices were at least 40% lower" during the heatwave due to the contribution of wind energy alone to the grid.² Rooftop solar also made a significant contribution to energy security by reducing peak demand 4.6 per cent across Victoria and South Australia.³

Wholesale power prices as a result were lower than that recorded during less extreme heatwaves in previous years.

² <http://blog.powershop.com.au/wp-content/uploads/2014/02/2014-02-SKM-MMA-Heatwave-Report-final.pdf>

³ <http://reneweconomy.com.au/2014/solar-pv-clipped-peak-demand-by-4-6pct-during-heatwave-52250>

Renewable energy plays an important role as an effective hedge against increasing energy costs, including gas and coal price increases that can directly impact on the cost of electricity to consumers in Victoria.

Through our consultation process on the development of our Zero Net Emissions Strategy – Update 2014, which includes a clear strategy for decarbonising our electricity supply, the City of Melbourne has not received negative feedback on the impact of the RET on electricity prices from either business or the community and has received clear support for our renewable energy target for our municipality.

Business resilience

The City of Melbourne recognises the improved business resilience that renewable energy has provided. Renewable energy sources have played a critical role in ensuring the integrity of the electricity grid during extreme heatwaves, like the one Melbourne experienced in early 2014. The integrity of the grid averted the need for load shedding, ensuring that business operations and community health were protected by avoiding blackouts.⁴ Further analysis to understand the effects of distributed generation in alleviating network constraints in peak demand periods will help inform future policy and investment in distributed renewable energy and network infrastructure.

The City of Melbourne supports further investigation into the impact that renewable energy can have on increasing the resilience of business to extreme events and reducing exposure to international variables including volatile resource markets.

Manufacturing sector

The RET has effectively reduced wholesale energy prices for manufacturers within Melbourne which improves competitiveness by reducing input costs. This effect is due to the renewable energy generators suppressing the wholesale energy prices, particularly at peak periods. Importantly, large manufacturing is significantly insulated from the renewable energy component of electricity pricing through exemptions from RET liabilities that have been granted to energy intensive manufacturers of between 60 – 90 per cent of the subsidy component of renewable energy. The result is that energy intensive manufacturers within the City of Melbourne effectively have access to more affordable electricity due to the positive impact of the RET while avoiding the energy cost increases associated with the implementation of the RET.⁵

Australian households

The City of Melbourne's Zero Net Emissions Strategy and our target to achieve 25 per cent of electricity consumption in our municipality sourced from renewable energy by 2018 have been endorsed by our community through our extensive consultation process and indicate the high levels of community support for the growth and expansion of renewable energy for our municipality.

The City of Melbourne supports the RET as an integral tool to achieving the goals of Zero Net Emissions and delivering on community expectations.

⁴ <http://reneweconomy.com.au/2014/solar-saved-southern-states-from-new-and-costly-demand-peaks-92609>

⁵ <http://www.businessspectator.com.au/article/2013/12/19/policy-politics/old-abbott-and-newmans-ret-confusion>

The expanding supply of renewable energy sources improved the integrity and performance of the grid during the extreme heatwaves that Melbourne experiences.⁶ This presents a significant community benefit during heat wave events such as those experienced in early 2014. Further analysis on these effects is needed before decisions to significantly alter the SRES are taken.

The RET has therefore has an important role to play in providing availability of both sufficient energy resources during the heatwave to avoid load shedding, and reduction in wholesale prices during peak demand..

Emissions Intensity of Business

An increasing number of businesses in Melbourne have established corporate targets to reduce the carbon footprint of their operations. The RET is an important tool to support Melbourne's business community reduce the emissions intensity of their operations both in enabling installation of rooftop solar, and in driving investment in upstream renewables.

The City of Melbourne supports efforts to reduce the emissions intensity of doing business in the municipality. The City of Melbourne that achieving a low emissions economy is important to ensure that Melbourne remains an attractive location to conduct business in the future.

Role of the RET and interaction with government policies

The City of Melbourne has a target to obtain 25 per cent of the municipality's electricity from renewable sources by 2018.⁷ The RET plays a critical role in the City of Melbourne's efforts to achieve this goal and has been factored into the calculations that determine our renewable energy target is possible.

The City of Melbourne's community has been comprehensively engaged on both targets and has strongly endorsed both programs. The City of Melbourne's policies to decarbonise the economy and increase the contribution of renewable energy to our electricity supply are deeply interconnected with the RET. The City of Melbourne is concerned that a reduction to the RET will reduce our ability to meet community expectations on these policies and risk the achievement our renewable energy and zero net emissions targets.

The City of Melbourne notes that a number of other local governments in Australia share similar emissions reduction targets and goals that have been approved by their local communities. These include the City of Sydney's plan to reduce emissions by 70 per cent by 2030.

There is additional concern that removing or reducing the RET will have a negative economic impact on the City of Melbourne by increasing the number of offsets that will need to be purchased to ensure the municipality achieves zero net emissions.

The City of Melbourne supports the retention of the existing 41,000 GWh target. The target is an integral part of the City of Melbourne's strategy to achieve Zero Net Emissions by 2020 and is included in the calculations which support the 25 per cent of electricity from renewable sources by 2018.

⁶ <http://burkekb.wordpress.com/2014/01/19/vic-sa-just-broke-a-new-demand-record-for-electricity-but-you-wouldnt-know-that-without-solar-data/>

⁷ Zero Net Emissions Update 2014, City of Melbourne, http://www.melbourne.vic.gov.au/Sustainability/CouncilActions/Documents/zero_net_emissions_update_2014.pdf

SRES

The SRES is critical to encouraging the installation of small-scale renewable energy systems in the City of Melbourne. Traditionally the inner city has had one of the lowest levels of renewable installation rates in metropolitan Melbourne due to relatively low uptake of solar systems in the residential sector. The City of Melbourne understands that this is changing as the solar installation industry is beginning to develop the capabilities to provide small-scale renewable energy systems to small-medium sized businesses. Rooftop solar is well suited in these commercial and industrial sectors as their peak electricity demand periods tend to correspond to periods when the sun is shining.

The SRES needs to be maintained to ensure the solar industry has time to develop the experience and skills required to provide competitive renewable energy systems to Melbourne's small to medium business community.

The City of Melbourne supports the continuation of the SRES scheme for a period sufficient for the solar installation industry to develop the skills and experience needed to provide competitive renewable energy systems to the small to medium business community.

LRET

The City of Melbourne supports the retention of the LRET mechanism at its current level. The LRET is critical to driving investment in the large scale renewable projects which will underpin the City of Melbourne's goal of securing 25 per cent of the municipality's energy use from renewable sources by 2018.

The City of Melbourne does not support the inclusion of low emission energy sources within the LRET as this would undermine the City of Melbourne's community endorsed strategy of achieving Zero Net Emissions by 2020. The inclusion of gas based energy sources is seen as particularly high risk due to the increasing exposure of the Australian gas market to international demand. This is expected to result in significant increases in the cost of gas and would flow on to higher electricity prices for the business sector and community.

Recombination of the LRET and SRES schemes

The SRES and LRET schemes each play an important role in supporting Melbourne's business sector and the community to access appropriate and affordable sources of renewable energy. The SRES mechanism continues to enable small to medium sized business and homeowners to install solar systems, and improves certainty about future electricity costs. The LRET meanwhile is critical to the City of Melbourne achieving its goal of sourcing 25 per cent of the municipality's electricity from renewable sources by 2018. The experience prior to the separation of the RET into LRET and SRES was of high volatility in certificate prices leading to lack of investment certainty, high investment risk, and lack of business confidence in investment.

The City of Melbourne supports the continuation of the SRES and LRET as separate schemes operating within the RET.

Role of battery storage and electric vehicles

The City of Melbourne supports further investigation into the potential benefits that battery storage and electric vehicles may have on improving the availability and reliability of renewable energy.

Frequency and effectiveness of the RET reviews

The City of Melbourne supports a review period that enables local business and community to invest with confidence in renewable energy systems. Under the current RET operation a review frequency of every four years is seen to be appropriate. Shorter review timeframes are likely to impact adversely on business decision making, given the lead times involved in developing new renewable energy projects. A new investigation into investment decision making factors would need to be undertaken if substantial changes to the RET are undertaken.

Summary of recommendations

The City of Melbourne:

- Strongly recommends that the benefits of the RET on economic, environmental and social outcomes be considered equally during the review process. This includes consideration of matters such as such as: competition benefits from diversification of electricity supply; effect on wholesale electricity pricing, including peak electricity prices; reduction in network demand and generation demand in peak periods; consumer resilience resulting from distributed generation; investment and job creation; and broader benefits to the Australian economy as a whole considered.
- Notes the reduction of the wholesale energy prices stemming from the RET and notes that no significant feedback was received during council's consultation process on emissions reduction policies about costs arising from the RET.
- Supports the uptake of renewable energy as a hedge against increasing energy costs, particularly those resulting from input fuel cost increases, namely coal and gas.
- Supports further investigation into the impact that renewable energy can have on increasing the resilience of business to extreme events and reducing exposure to price swings in the volatile resource markets.
- Recommends further research and analysis on the effect of the SRES in reducing network demand at peak periods, before any decisions to significantly alter the SRES are taken.
- Supports the RET as an integral mechanism to achieving the goals of Zero Net Emissions by 2020, delivering on Melbourne's community expectations.
- Supports the RET as a mechanism that reduces the emissions intensity of business activity in Melbourne and enhancing local investment in clean technology industries.
- Supports the retention of the existing 41,000 GWh target as an integral supporting mechanism to achieve Zero Net Emissions by 2020.
- Supports the continuation of the SRES scheme for a period sufficient for the solar installation industry to assist in developing the skills and experience needed to provide competitive renewable energy systems to the small to medium business community.

- Supports the retention of the LRET mechanism at its current level as a critical mechanism that underpins the goal of securing 25 per cent of the municipality's electricity use from renewable sources by 2018.
- Supports the continuation of the SRES and LRET as separate schemes operating within the RET that support Melbourne's business sector and the community to access appropriate and affordable sources of renewable energy.
- Supports further investigation into the potential benefits that battery storage and electric vehicles may have on improving the availability and reliability of renewable energy.