

# **City of Melbourne Submission to Victoria's Renewable Energy Roadmap**

**October 2015**

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## Introduction

City of Melbourne (CoM) welcomes the State Government's initiative in developing Victoria's Renewable Energy Roadmap (The Roadmap).

The City is home to over 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.

CoM is committed to transitioning towards a low carbon economy, as expressed through our [Zero Net Emissions by 2020](#) strategy. This Strategy was first adopted by Council in 2002 and twice since endorsed by Council in 2008 and 2014. The Strategy was developed in consultation with stakeholders and has broad stakeholder support.

CoM has a commitment to support the expansion of renewable energy supply to meet a greater proportion of the electricity needs of the municipality. CoM has a target to obtain 25 per cent of the municipality's electricity from renewable sources by 2018<sup>1</sup>. CoM is also working with a major distributor on the future of the grid, including the integration of renewable energy.

State Government action will play a critical role in developing the renewable energy sector, in turn contributing to the CoM's emission reduction and renewable energy ambitions.

The development of the renewable energy sector and decarbonising the electricity system will play an important role in achieving deep carbon reductions. The Zero Net Emissions strategy outlines the actions CoM will take to contribute to a carbon neutral city, acknowledging that CoM is unable to achieve this target alone. It requires action from all sectors of the community, and in particular strong leadership and action by the State and Federal Government.

The Roadmap provides an important framework for identifying and taking advantage of Victoria's strengths and opportunities to maximise the economic benefits of renewable energy presents to the State.

Adopting a strong leadership position will help achieve material emissions reductions to benefit future generations, while also contributing to the economic security and prosperity of current generations of Victorians.

This submission comments on:

1. the objectives and priorities of renewable energy policy outlined in the Roadmap;
2. the actions and initiatives identified as priorities; and
3. whether there are other actions that should be considered in supporting renewable energy

In particular we wish to draw your attention to particular areas in which, CoM considers that the Government could be more impactful by amplifying some initiatives and incorporating several additional actions. These recommendations are outlined in our submission. In summary they include:

- utilising the Government's buying power to further promote renewables. Work undertaken by CoM suggests that the Government could do considerably more in this field;
- building on existing programs, such as those delivered by local government, to reach communities where there has been low penetration of rooftop solar;

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<sup>1</sup> Zero Net Emissions Update 2014, City of Melbourne,  
[http://www.melbourne.vic.gov.au/Sustainability/CouncilActions/Documents/zero\\_net\\_emissions\\_update\\_2014.pdf](http://www.melbourne.vic.gov.au/Sustainability/CouncilActions/Documents/zero_net_emissions_update_2014.pdf)

- working with the Federal Government to reinvigorate the GreenPower brand to drive voluntary uptake of renewable energy in the commercial and residential sectors.

## **Comments on objectives and priorities of renewable energy policy outlined in the Roadmap**

CoM strongly supports the objectives and priorities of The Roadmap.

### ***1.1 Transitioning the wholesale electricity market - A State Based Target.***

CoM supports the transformation of the wholesale electricity sector towards a decarbonised electricity supply. Specifically we support the re-introduction of a state-based renewable energy target as a means of driving the development of renewable energy across the State. This will complement the efforts of Councils in promoting voluntary uptake of renewable energy.

CoM has set a target of decarbonising the electricity supply, recognising the need to reduce emissions in the electricity sector to achieve deep emissions cuts. CoM has established an interim target of achieving 25% of electricity consumed in the municipality being sourced from renewable sources by 2018. This will be achieved through a combination of Federal and State policies (such as the Renewable Energy Target), local rooftop solar, and additional voluntary purchasing of renewably generated electricity through the grid.

A change of this magnitude will require an industry-wide strategy that will take into account the appropriate retirement of assets, employment transition plans for the fossil-fuel generation and realistic, but ambitious rollout of renewable energy. This will result in job creation and developing the capability of local renewable energy industry.

Recognising that CoM does not regulate the electricity supply or retail frameworks, we recognise the role of other tiers of government to support these objectives. This will complement other efforts of Councils, such as promoting local rooftop solar, and encouraging electricity customers to shift their electricity purchasing to renewable sources.

CoM supports the Victorian Government's adoption of targets in both 2020 and 2025 commensurate with a pathway towards deep economy-wide carbon reduction by mid-century. CSIRO modeling undertaken for ClimateWorks and others for the [Pathways to Deep Carbonisation by 2050](#) study shows it is possible to achieve 50% to 70% by 2030, and a zero-carbon electricity system by 2050.

In setting these targets consideration should be given to the pipeline for renewable energy projects over the next ten years, as well as the scheduled or early retirement of existing fossil-fuel assets. This combined with the limited likelihood of future private sector investment in new coal fired electricity generation highlights the need for the State Government to ensure a smooth transition to a renewable energy economy. This involves ensuring that there is sufficient capacity and capability in the marketplace to construct and maintain renewable energy facilities, and that there is adequate capacity to meet electricity demand before the retirement of existing plant.

Increasing the proportion of renewable energy in the electricity supply system improves energy resilience for consumers in the long term by lowering wholesale energy prices, reducing peak demand and easing demand on the network.<sup>2</sup> This will improve the reliability of electricity supply during

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<sup>2</sup> The *Report of the Expert Panel on the Renewable Energy Target* - commonly referred to as the Warburton Review – identifies the likely reduction in electricity prices resulting from the greater deployment of renewable energy in the grid.

[AEMC 2014 Residential Electricity Price Trends](#) – references the downward pressure on wholesale electricity prices caused by declining consumption in the market place. Pp121-131).

heatwaves, and reduce the exposure of thousands of Melbourne residents and businesses to electricity price increases.

## ***1.2 Reducing barriers to continued development of distributed generation and energy storage.***

CoM recognises the need to support the development of small and large scale energy storage as a means to ensuring the successful transition to a renewable energy grid. Supporting the evolution of utility scale battery technology to support renewable generation is an important step towards ensuring the long term success and viability of the sector. The State Government has an important role to play in this transition.

The need for distributed generation to support utility scale generation has been demonstrated in the recent decade with rooftop solar having a measurable effect on reducing demand from central generation. Distributed generation and storage will continue to play an important role and in so doing will support the creation of jobs and securing the energy needs of the Victorian economy.

In particular, CoM encourages a focus on those sectors where uptake of distributed generation has not been strong, such as the commercial sector, strata housing, social and community housing, and the not-for-profit and community services sectors.

This Objective is supported.

## ***1.3 Encouraging household and community development of renewable generation and products.***

CoM supports this Objective, particularly with respect to assisting households and businesses to access renewable energy options through a range of business models.

## ***1.4 Government Support for renewable energy development, with a focus on job creation in Victoria.***

This Objective is supported.

CoM considers that the development of renewable energy in Victoria plays an important role in ensuring the prosperity of the State. In order to ensure a robust and viable renewable electricity sector, it is important that the development of a skilled labour force be supported. This will ensure the ongoing sustainability of the sector.

## **Comments on actions and initiatives identified as priorities in the roadmap.**

### ***Priority area: Transforming Victoria's generation stock towards renewable energy***

#### **3.3 Using Government energy purchasing to support renewables**

The Victorian Government can play a very significant role in developing the industry through its own energy purchasing decisions. These opportunities are significant and should not be overlooked or understated.

CoM believes that there are considerable opportunities for State Government leadership in utility scale wind and solar projects and rooftop solar installations at a scale far beyond the stated 100MW of solar. These are outlined below.

### **Utility scale off-take agreements**

There is an opportunity to strategically support new renewable energy projects through its electricity supply agreements to supply State government needs.

CoM has identified that the largest barrier preventing utility scale renewable energy projects from proceeding is the lack of bankable off-take agreements, rather than the availability of finance or capital.

The State Government, as a highly credit worthy customer with long-term energy needs, is ideally placed to provide off-take agreements to enable development of enable new emerging generation facilities (such as utility scale solar or large scale storage solutions).

In so doing, the State Government could strategically foster skill creation and the development of supply chains in areas such as manufacturing components for renewable energy projects, construction, installation and maintenance roles, engineering and project management.

There are a number of State Government contacts sufficient in scale to support solar projects above 50MW in size. These would be among the largest in Australia.

CoM has identified that potential projects of this sort exist in Victoria and that these could proceed to development with access to off-take agreements. Council is facilitating a group of 14 smaller customers to proceed to market to sign long-term off-take agreements under similar arrangements.

### **Aggregation of smaller customers**

Replicating the model discussed above, The State Government can use this position of influence to further demand for renewable energy by facilitating and aggregating renewable electricity off-take agreements among other significant electricity customers such as local governments, institutions (e.g. universities), the church sector, and other similar groups.

### **Public transport**

CoM recognises that Public Transport contributes 60% (552.6 ktCO<sub>2</sub>-e, City of Melbourne ZNE 2014 update) to the City's greenhouse gas emissions. Sourcing renewable energy for the train and tram fleet, through a renewable energy off-take agreement, would show leadership in emissions reductions while making a significant contribution to renewable energy development. Such an approach provides a highly visible opportunity for community engagement and encourages renewable energy purchasing across the community more broadly.

### **State Government rooftops**

An audit of all State Government building rooftops to identify solar opportunities, (including schools, hospitals, emergency services, etc.) enables a strategic deployment of rooftop solar across the State Government building portfolio. Installing solar on leased facilities is enabled through the Government's newly legislated Environmental Upgrade Agreements. This approach provides an opportunity to increase installed capacity while demonstrating leadership and increased community awareness of solar opportunities. The NSW Government's work on solar service/solar leasing agreements is a model that could be considered.

## **3.4 Shifting Victoria's economy to a low-emission future**

CoM supports the strategic approach outlined in this initiative.

Initiatives should be targeted to maximise opportunities for transitioning existing fossil fuel industries, and taking advantage of Victoria's strengths in the energy, manufacturing and services sectors. This can result in regional job creation, manufacturing and supply chain job opportunities, and development of training and apprenticeships opportunities. Preference can be given to renewable energy projects located in areas where fossil fuel infrastructure exists, such as the Anglesea coal fired power station, soon to be decommissioned.

### **Innovation in storage**

In developing policy to shift Victoria's economy to a low-emission future, regard should be given to encouraging innovation in energy storage and fostering emerging opportunities. Such opportunities may include promotion of large scale storage development (e.g. pumped hydro, molten salt, etc.) wind-solar-hybrid facilities, pairing with distributed generation customers, and other initiatives that drive innovation. This could be done either through the Government's electricity purchasing activities, through facilitation of other public sector purchasing of renewable energy, or through other policy measures.

Developing an emerging energy storage sector has the potential to enable more ambitious renewable energy targets in the longer term by reducing the need for fossil fuel generation to supplement renewable energy at times of intermittent generation. Furthermore fostering innovation positions Victoria well as a leading and competitive economy.

## ***Priority area: Addressing barriers to distributed generation and storage***

### **4.1 Improving process for distributed generation connections**

CoM supports this initiative. We understand that grid connection barriers are more prevalent outside central city areas. We are working with utility distributor to identify where opportunities for distributed generation exist and to take advantage of these.

### **4.2 Removing barriers to innovative projects and business models**

Through extensive engagement with the rooftop solar sector, CoM has identified several opportunities to enable greater solar uptake through innovative business models.

Enabling local net credits and addressing current restrictions on virtual net metering, or enabling customers to 'share generation' across property boundaries has the potential to drive further growth in solar uptake in residential and commercial areas.

Generous feed-in tariffs have stimulated the residential solar market to the point where the sector is now well established in that market. There remain, however, significant opportunities to drive further solar uptake in other markets. These include the commercial sector, community and not for profit sectors, residential strata, and rental markets. Policies supporting greater uptake of installations in these sectors should be considered. This could be through re-introduction of sector-specific feed-in tariffs or rebates, or through other targeted means.

CoM has demonstrated the potential for relatively large solar installations on residential strata buildings through the [Smart Blocks](#) program – a national program helping apartment owners and their managers to improve the energy efficiency of common property in apartment buildings. Increasingly, CoM has been assisting with solar projects (including rebates). This program could be used by the State Government to deliver further assistance around increasing solar uptake in the strata community.

The highly successful Darebin Solar Saver program used existing provisions in the *Local Government Act* to apply special rates charges to properties to finance the installation of solar arrays on pensioners' properties. The solar systems are paid back through rates over several years. The

initiative was highly successful in increasing the uptake of solar among pensioners, while driving down household energy costs. The scheme could be targeted at any group of residents without access to up-front cash for installing solar rooftops.

While many Councils are interested in delivering similar programs most do not have access to upfront capital required.

Low-income, elderly and rental households could be supported to adopt solar through similar Council based delivery programs, backed by a State Government loan fund. As the funds are repaid, they can be returned to Government, or can be returned to provide further loans funding additional solar systems.

Targeted funding and tailored delivery models are required to deliver rooftop solar, and solar hot water to the social and community housing sectors. Other approaches may include targeted feed-in tariffs.

## ***Priority area: Encouraging household and community renewable generation***

### **6.1 Promoting new energy jobs and technologies**

CoM recognises the opportunities presented by the renewable energy sector for job creation, innovation, economic growth and transitioning vulnerable economies.

While the \$20 million New Energy Jobs Fund is supported, it will only go a small way to realising the potential that the renewable energy sector presents in job opportunities to Victorians. Jobs growth will be driven by a range of initiatives discussed throughout this submission. Strategic government procurement and policy making are critical in realising these benefits. We recommend that the Government consult extensively with industry to identify opportunities for ensuring effective use of the fund to maximise benefits to Victorians.

## **Comments on other actions that should be considered in supporting renewable energy development in Victoria**

### ***GreenPower***

City of Melbourne research has identified that the GreenPower product lacks credibility and understating in the market and that the brand is seen by consumers as 'tired'. Nevertheless, GreenPower enables consumers to purchase renewable energy through the grid. There is an opportunity for Government to reinvigorate the GreenPower brand, establish credibility, and promote voluntary renewable energy purchasing. This is particularly the case for households and SMEs who cannot install their own rooftop renewable energy.

*Four opportunities have been identified:*

- Brand awareness and consumer campaigns presenting GreenPower and a simple way to support the renewable energy industry in Australia.
- Product awareness among commercial building owners and tenants - GreenPower may be a simple shift to help lift a building's NABERS rating.
- Considering mechanisms to drive uptake of GreenPower products. E.g. introduction of obligations on licensed electricity retailers; for example to require retailers to have available a GreenPower product; or to require retailers to offer a GreenPower product as part of an offer to new customers.
- Promote GreenPower through State Government facilities, and highly visible energy usage contracts, such as trams.

## ***Public and Social Housing***

There are opportunities to support installation of rooftop solar for social and community housing. Establishment of a fund, similar to the New Energy Jobs Fund, targeted feed-in tariffs or grants could support these efforts. This would help reduce electricity bills for low-income households. These households tend to be at home during the day when solar rooftops generate energy, aligning generation with consumer demand profiles. For example, Hume City Council, has recently run an initiative to support low-income pensioners to install rooftop solar through access to State Government low-interest finance.

## ***Commercial buildings***

There are opportunities to stimulate rooftop solar installations in building sectors where solar installations haven't been adopted at the same pace as in the residential sector. Targeted use of feed-in tariffs for limited periods of time could be used on commercial buildings, large roof factories, and similar building types. This could be directed at business types where the load profile would minimise export into the grid and be used in daylight hours. The FiT could be kept in place for a sufficient period to drive 'normalisation' of solar installation on commercial buildings before being wound back, as in the case of the residential FiT.

## ***Building on existing programs***

To achieve efficient delivery of solar programs to new and traditionally 'difficult to reach' segments, opportunities should be considered to scale existing delivery vehicles. These include [Smart Blocks](#), The Darebin Solar Saver Incentive and [Positive Charge](#).

## ***Planning Considerations***

With uptake rates for residential and commercial solar power increasing, and a rapid urban renewal and development agenda across the State, uncertainty in planning provisions in relation to solar needs to be addressed and guidance provided to ensure that households and businesses plan for solar and are able to gain the maximum potential from their solar systems. Such considerations need to be included in The Roadmap.