4.1 FAST TRACKING COUNCIL'S RESPONSE TO CLIMATE CHANGE

Responsible Director: Ossie Martinz

RECOMMENDATION

That Council:

1. Endorses the Zero Net Carbon Action Plan as a framework to guide council to be carbon neutral by 2025.

2. Notes that the Action Plan will also provide leadership for the Monash community and businesses to reduce emission across the whole municipality, working toward zero waste, increasing use of recycled materials, and enhancing our green spaces and tree canopy.

3. Refers to the 2021/2022 budget process development of a business case for to fund the key actions including the use of energy performance contracts or similar to guarantee savings where applicable and support for 1.8 FTE to support action delivery.

INTRODUCTION

The draft Zero Net Carbon Action Plan (Action Plan) has been prepared to guide Council actions to meet its carbon neutral commitment by 2025, as well as set actions to reduce Municipal GHG emissions, work towards zero waste, the increased use of recycled materials and a commitment to protect and enhance our green spaces and tree canopy.

This Action Plan has been prepared in response to the resolution at the February 2020 Council meeting. The proposed Zero Net Carbon Action Plan is attached and will guide Council to meet its carbon neutral commitment by 2025.

BACKGROUND

In February 2020, Council committed to a target to be carbon neutral by 2025, with the focus toward on-ground actions using a proactive and cost effective methodology. This commitment was based on detailed independent modelling by CarbonetiX, which determined the annual corporate Greenhouse Gas (GHG) emissions generated by Council, and identified actions required for Council to achieve carbon neutrality by 2025 and minimise our impact on the environment.1

The Action Plan is based on the following recommendations from the September 2019 Council Meeting including:

1. ***Resolves to strengthen and further prioritise its response to dealing with environmental and climate concerns.***

[1] CarbonetiX, Trajectory to Carbon Neutrality for Council's Corporate Emissions - Carbon modelling internal report, 2020

2. ***Setting actions which Council could take to reduce greenhouse gas emissions within Council's operation***
3. ***Measures Council can take to enhance local community resilience to the effects and impacts of global warming and to assist the community with their efforts to reduce greenhouse gas emissions***
4. ***Ways in which Council can prioritise the use of recycled materials in its operations***
5. ***Prioritises the delivery of a whole of Council strategy for tackling climate change, as referred to in the Environmental Sustainability Strategy 2016-2026, with an aim to have it presented to Council by September 2020.***

Council's baseline net GHG emissions for 2018-19 was **20,503 tCO_2e.** Nearly 90% of the GHG emissions are sourced from electricity, gas, transport fuel, and concrete and asphalt.

Key actions to reduce GHG emissions include:
1. Sourcing 100% renewable electricity through the LGPPA
2. Main Road Street Lighting Changeover to LED
3. Improving energy efficiency of our largest major buildings
4. Energy efficiency and roof top solar for key community facilities
5. Fleet optimisation to reduce fuel use and transition to electric
6. Sustainable Procurement to reduce GHG emissions and increase recycled content, and
7. Environmental Sustainable Design for Council buildings and infrastructure

Achieving Carbon Neutrality

These actions will reduce our net corporate GHG emissions by over 70%, so council will still need to source Carbon offsets to be carbon neutral. To achieve carbon neutrality, Council may need to source carbon offsets, where emissions cannot be avoided. It is Council's preference to source carbon offsets or credits from local businesses or which provide a high social-economic benefit, where possible.

Leading a reduction in Community GHG emissions

In 2018/19, the Community GHG emissions generated Monash businesses and residents was 2,903,000 tCO_2-e. Being the highest employer outside of the CBD, Monash is ranked 6th highest in Great Melbourne for Community GHG Emissions. Ninety seven percent of the GHG emissions are generated from electricity, gas and transport fuel.

While our corporate emissions contribute less than 1% to this total, Council has a responsibility to support its businesses and residents to reduce GHG emissions and maintain a healthy local environment. Supporting activities would include:

- Community and Business programs to reduce energy, costs and GHG emissions for the whole municipality, and improve resilience to a changing climate,.e.g. Zero Net Carbon Foundation

- Reduce GHG emissions by diverting waste from landfill and creating markets for recycled content products, e.g. advanced waste processing, circular economy shop.
- Urban Carbon Forestry – increase and maintain tree canopy and vegetation to provide local storage of carbon, reduce heat island impact, improve local amenity and benefit biodiversity.

These actions will leverage of some current programs including the roll out of food organics in the green bin service in July 2020, Environmental Upgrade Agreements to help building owners to reduce their utility costs and GHG emissions, and helping residents to state government rebates to install solar and save costs, including low rate loan through Solar Savers.

POLICY IMPLICATIONS

This report supports Priority 3: Climate Change of the Environmental Sustainability Strategy, in particular the following action:
3.1.1 To develop and implement a Climate Change Action Plan which recognises a whole of council approach to mitigation, adaptation, risk management, innovation and alternative energy sources.

The Action Plan also aligns with many strategies and policies:

- Sustainable procurement will increase the use of recycled content materials to reduce embodied energy, reduce waste to landfill and deliver actions under the Waste Management Strategy and Digital strategy, and apply to the Procurement Policy.
- Focus on retaining trees and increasing tree planting to store carbon, improve community amenity, and support biodiversity, also aligns with the vision of the Urban Biodiversity Strategy, Monash Urban Landscape and Vegetation Canopy Strategy, Street Tree Strategy, and the Open Space Strategy.
- Leadership and support to the Monash community and businesses to reduce energy costs and GHG emissions across the municipality and be resilient in a changing climate which supports Healthy and Resilient Monash (the Integrated Health and Wellbeing Plan) 2017-2021 and Monash Integrated Transport Strategy 2017

SOCIAL IMPLICATIONS

With electricity and gas sourced from coal being the key sources of GHG emissions, approaches to improve energy efficiency and seek alternative renewable sources can also reduce living costs for the community, and improve the local environment. The Action Plan includes a range of actions to support businesses and residents to reduce their GHG emissions, divert waste from landfill programs, and enhance the local environment which will have positive impacts on the community wellbeing.

This action plan clearly identifies and provides a clear response to climate change, and a defined way forward.

CONSULTATION

The draft Zero Net Carbon Action Plan has been presented to the Environmental Advisory Committee and Executive leadership team for feedback. The Eastern Alliance for Greenhouse Action (EAGA), which support many of our larger GHG emission reduction projects, were also consulted on the Action Plan.

FINANCIAL IMPLICATIONS

Investment in the actions set out in the Action Plan will not only reduce GHG emissions, but will significant reduce overall energy and maintenance costs, creating ongoing savings and improved amenity benefits for council.

Monash Council is currently participating in the Local Government Power Purchase Agreement with 46 other council to source 100% renewable electricity from July 2021. This will reduce Council's GHG emissions by two thirds and cost the same or less than our current electricity contracts.

The other proposed actions will need upfront investment but are estimated to have a less than 9 year return on investment (11.6% saving per annum) for major infrastructure and building works. To minimise upfront investment, energy service agreements provide an attractive approach to fast track implementation, as they can be structured to avoid upfront costs and utility costs savings can pay for operation costs, resulting in significant on-going financial and environmental savings for Council.

Alternative options for funding are being explored, such as low interest loans, energy performance contract or an energy service agreement (ESA) to deliver the key actions.

The latter two both offer guaranteed energy savings to Council. Under an ESA, Council would pay a management fee for the energy services provided rather than the paying for equipment upfront and Council would not be responsible for the equipment maintenance during the agreement. ESA upgrades remain off the balance sheet, so the monthly payments can be funded from the savings in operational budgets.

ESAs can be structured to be cash flow positive and provide savings to Council immediately, and to fund other programs. Risk assessment would need to be completed to determine the best options for Council.

Offsets that may be required are estimated to cost $90-100,000 pa (@ $14 per tCO2e) from 2025, but decrease annually as efficiencies are realised.

Beyond the infrastructure projects, coordination of the emission reduction projects and delivery of community activities will require 1.8 FTE dedicated staff resources which could be funded through savings generated in energy efficiency projects.

CONCLUSION

The Zero Net Carbon Action Plan will provide a comprehensive approach for Council to become Carbon Neutral by 2025 and lead our community to

Monash businesses and community to reduce GHG emission, waste and protect the environment across the whole municipality.