GREATER SHEPPARTON CITY COUNCIL 2030 ZERO EMISSIONS PLAN



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# TRADITIONAL OWNERS

We, Greater Shepparton City Council, acknowledge the Yorta Yorta Peoples of the land which now comprises Greater Shepparton, we pay our respect to their tribal elders, we celebrate their continuing culture and we acknowledge the memory of their ancestors.

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# EXECUTIVE SUMMARY

Greater Shepparton City Council has declared a Climate Emergency, and committed to a net zero emissions target by 2030 for Council's internal operations. Council is currently developing a Climate Emergency Action Plan in partnership with our community, which will embed climate mitigation and adaptation in our community.

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The Zero Emission Plan outlines the key areas Council will focus on to transition to net zero emissions by 2030, and the actions it will undertake to reach the target.

Council has committed to undertaking all feasible emissions reduction actions by 2030, rather than relying on offsets to reach the target. This is an important demonstration of leadership and genuine commitment to do what we can to reduce carbon emissions and restore a safe climate. In doing so, we join a growing number of regional Councils who have also declared climate emergencies and are developing zero emission plans.

Council acknowledges there are both challenges and opportunities in reaching zero emissions by 2030. While some emission reduction technologies are not yet commercially viable in Australia (such as green hydrogen for our heavy vehicle fleet), we know from experience that some emissions reductions can result in both reduced emissions and reduced costs (such as the VECO renewable electricity contract), or improved health outcomes within our community (such as reduced pollution from electric vehicles).

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Our Council vision highlights our commitment to 'adapt and respond in a way that is innovative, sustainable and accountable' – and we can meet this challenge in emissions reduction by working together with our staff, businesses, other Councils and Climate Alliances to achieve genuine emissions reduction in a cost effective way.

Council has undertaken many actions to reduce carbon emissions, including delivering an energy reduction of 20% by 2020 from 2014/15 levels through the Energy Reduction Plan, incorporating electric vehicles into its passenger pool fleet, installation of over 500kw of solar panels on Council facilities, and replacing street lighting with energy efficient globes.

Our themes – Zero Emission Facilities, Fleet and Plant, Towards Zero Waste to Landfill, Goods and Services, Governance, Our Council, and Carbon Sequestration are underpinned by 63 actions that will guide our planning, budgeting and resourcing. These are listed in the Implementation Plan that includes Actions, Responsible Teams, indicative Budget, Resource Intensity, and Timelines for implementation.

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## **Council Plan**

#### **Our Community Vision**

"A diverse, vibrant and connected community valuing accessible opportunities for everyone. We adapt and respond in a way that is innovative, sustainable and accountable. We acknowledge where we have been and look forward to where we are going.

# Together we are Greater!"

The Greater Shepparton City Council has developed our Council Plan in partnership with our community. We have committed to undertaking actions under our five themes:

- Community Leadership
- Social Responsibility and Wellbeing
- Vibrant and Diverse Economy
- Infrastructure and Technology
- Environment and Climate Emergency

#### Environment and Climate Emergency

Under our Council Plan we have committed to taking immediate action to drive climate change mitigation and action:

"We will prioritise our environment and take urgent action to reduce emissions and waste in order to protect public health and create a region that mitigates and adapts to climate change."

Our target is to address 50% of Zero Emissions Plan actions within 4 years (by 2025).

# Vision

That Greater Shepparton City Council will be certified Net Zero Emissions by 2030 for all its operations and services.

# Let's plant One tree Der Child in Greater Shepparton

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# **Achievements to Date**

Greater Shepparton City Council has been working to reduce emissions for many years, and has achieved significant climate change outcomes within the community.

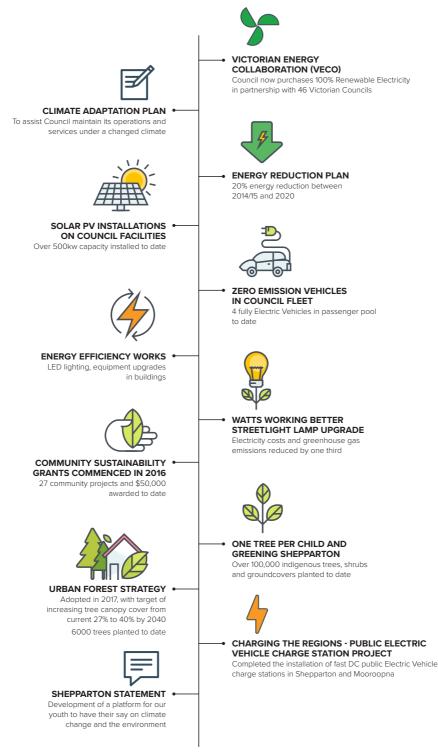


Figure 1. Greater Shepparton City Council climate change activities and projects.



# 2030 Zero Emissions Target

Greater Shepparton City Council declared both a Climate Emergency and a 2030 Zero Emissions Target for council operations in March 2020. Council also resolved to develop a Climate Emergency Action Plan and a 2030 Zero Emission Plan to deliver on the declaration and target. These commitments by Council are in line with Intergovernmental Panel on Climate Change (IPCC) recommendations to keep global warming to 1.5 degrees Celsius, to play our part in acting now for a safe climate. Council has a responsibility to reduce its own emissions (including those emitted by the community through our operation of the Cosgrove Landfill), but also a responsibility to demonstrate leadership and share our learnings with our community, industry and businesses. This includes advocating for investment in low emission solutions to be available to regional communities.

#### **Net Zero Emissions**

Net Zero Emissions (or carbon neutrality) refers to measuring and actively reducing greenhouse gas emissions before offsetting those that are unavoidable. Offsets can include programs such as revegetation or soil carbon credits, and can be purchased both nationally or internationally. Accreditation and certification of offsets is required to ensure the integrity of the emissions accounting process.

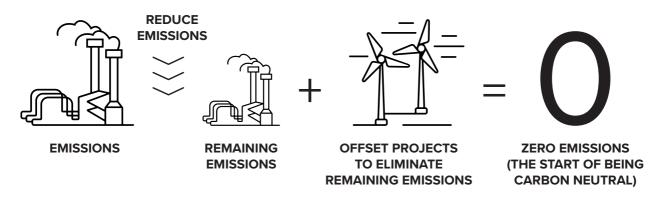


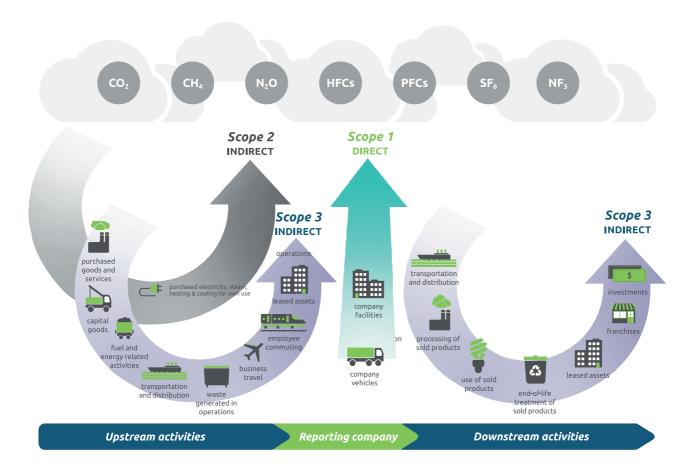
Figure 2. Process to achieving zero emissions

#### **Carbon Emissions Assessment and Options Paper**

In 2020/21, Council undertook a comprehensive carbon emissions assessment which included preparation of an Options Paper for Emissions Reduction by NDEVR Environmental1. This Options Paper provided the basis for Council's Zero Emission Plan.

The emissions assessment was conducted for the 2018/19 Financial Year as there was adequate emissions data available. It also provided the most recent pre-Covid-19 data making it reflective of Business as Usual for Council. The assessment was conducted to Climate Active certification standard, and included Scope 1, 2 and 3 emissions. Some emissions have been estimated and these data gaps will be addressed in future assessments.

- Scope 1- direct emissions from sources which the company owns or controls
- Scope 2 **indirect** emissions from electricity consumption
- Scope 3 all other indirect emissions that occur in the organisation's value chain but within its sphere of **influence**



#### Figure 3. GHG Protocol diagram of Scope 1, 2 and 3 emission sources.

The Options paper laid out three scenarios for achieving zero emissions, which assessed the role of emissions reduction actions versus offset purchase. Options considered were:

- Do nothing: Undertake no emissions reductions activities and rely on purchasing offsets to reach Zero Emissions by 2030.
- Do Planned: Undertake already planned emission reduction activities such as transitioning the passenger fleet to electric, purchasing 100% renewable electricity, and increasing the energy efficiency of some buildings. This was estimated to reduce Councils emissions by 22%, with all remaining emissions to require purchasing of offsets to reach Zero Emissions by 2030.
- Do All: Implement all feasible emissions reduction activities, leaving minimal offsets required to reach Zero Emissions by 2030.

The Zero Emissions Plan is based on the third option assessed, which was to undertake all feasible emission reduction actions to minimise the need for offsets at 2030. This was based on the urgent need to decarbonise and prevent catastrophic climate change, ability of energy efficiency works to reduce ongoing operational costs, reducing potential exposure of Council to future carbon liability, and high risk of rising offset prices.

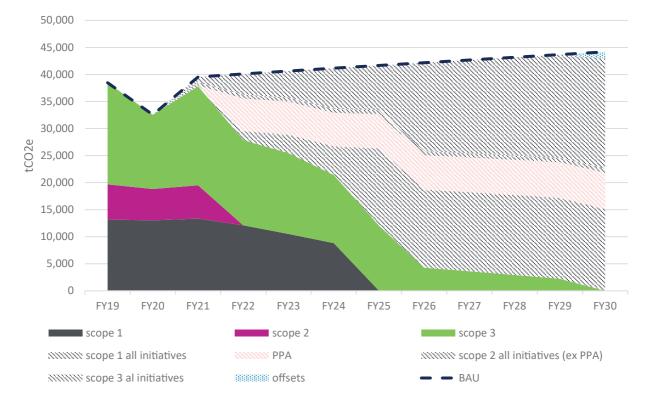


Figure 4. 'Do All' abatement potential of Zero Emissions Pathway including all scopes and avoided emissions.

#### **Climate Active Certification**

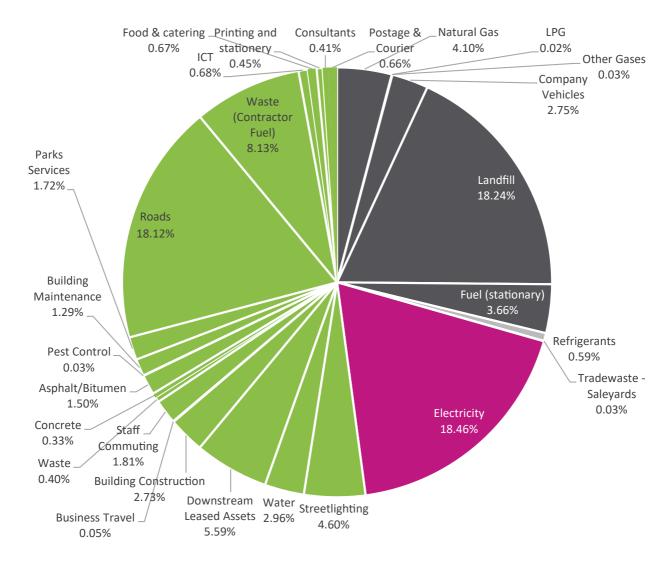
Greater Shepparton City Council will be aligning emissions reporting with the Climate Active Certification process to ensure all emissions and activities are regularly reported in a clear and transparent methodology by 2030.



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# **Greater Shepparton City Council Emissions Profile**

Council's total emissions including Scopes 1, 2 and 3 for the 2018/19 financial year was 35,211 t/CO2e. This included Scope 1 emissions from the Cosgrove Landfill, fleet and gas emissions, Scope 2 emissions from electricity, and Scope 3 emissions from goods and services and leased assets.



# Figure 5. Greater Shepparton City Council Emissions profile for the 2018/2019 financial year detailing all scopes and major categories.

As a demonstration of Council's commitment to achieving this target, from July 1 2021, Council purchases 100% renewable electricity for its small and large market facilities through the VECO project. This means that the 18.46% of electricity emissions have already been eliminated from our profile at a lower cost than through purchasing fossil-fuelled electricity.

# Themes

Seven key themes have been identified as focus areas for action within Council.

#### **Zero Emission Facilities**

Our facilities are varied and encompass buildings of various functions and complexity (e.g. Aquatic Centres and pools, office buildings, and resource recovery centres to childcare and community centres); lights (streetlights, sports field lighting and safety lighting); and reserves (including ground management and maintenance). These facilities use energy, water, and gas in their operations, and have embodied emissions in the products that make up their construction.

Council can reduce emissions in the operations of our facilities by:

- Decarbonising all buildings through electrification or renewable gas options
- Improving the energy efficiency of our appliances such air conditioning, lighting and maintenance plant
- Ensuring all new builds are constructed using low emission products and to high efficiency standards.

Leased facilities and those managed by Community Asset Committees are considered Scope 3 emissions as they are Council owned. Council can assess these sites for emission sources and assist tenants reduce emissions by:

- Providing energy reduction education materials to tenants
- Outlining processes for energy works on Council buildings (such as solar PV installation).

### **Fleet and Plant**

Vehicles and Plant are Scope 1 emission sources as we burn the fossil fuels that power these vehicles and equipment. Council has already begun the transition to zero emission electric passenger pool fleets, and will continue to replace fuel vehicles with electric vehicles where fit for purpose.

There are currently no commercially available, fit for purpose vehicle replacements for our light commercial and heavy fleet, so Council will continually assess the market and implement zero emission replacement vehicles (e.g. Green Hydrogen/ gas) when these vehicles and supply chains are established. In the meantime, Council can:

- Update our policies to ensure we prioritise fuel efficient vehicles across our entire fleet
- Introduce fuel efficient driver training for our staff to support our staff to reduce fuel consumption and costs.

Council has already begun replacing fossil fuel equipment and plant (e.g. chainsaws) with electric versions, and will continue to do so as new options become available.

#### **Towards Zero Waste to Landfill**

Leadership in waste minimisation will be a focus as the Cosgrove Landfill is a Scope 1 emission source as it is owned and operated by Council. All waste that enters the landfill contributes to our emission profile, so waste diversion to other streams such as recycling or organic and green waste will be prioritised. Council is preparing the Circular Economy Strategy, which will clearly outline how waste to landfill will be reduced by 2030.

There are many opportunities for waste to be reduced or eliminated at Council facilities. Council can:

- Audit sites to determine focus areas
- Improve recycling facilities on site
- Research challenging waste streams and finding solutions such as sharps disposal and childcare waste.

#### **Goods and Services**

Our Goods and Services are Scope 3 emissions and comprise a large proportion of our emissions. Although not under our direct control, a third party generates them on our behalf so they are attributed to our profile. Road maintenance and waste contractor fuel make up a large proportion of our Scope 3 emissions so will require particular focus.

Council can:

- Strengthen its Procurement Policy, contract and supply panels with low emission requirements
- Investigate and switch our purchases to products and companies that consider the environmental impact of their products and services, such as those with Climate Active or B Corp certification
- Collaborate with other Councils and agencies to increase supplies of low-emission products in our region
- Support our local suppliers as they transition to low emission products and services
- Significantly reduce our paper usage by transitioning to online activities and electronic solutions
- Update our purchasing reporting to ensure we can capture goods and services that are emission free or are already offset (and therefore don't add to our emission profile) from those that will continue to form part of our Scope 3 emissions.

#### Governance

Successful implementation of the Zero Emissions Plan will be underpinned by strong governance and reporting. Council can:

- Implement robust procedures within Council to assess, monitor, report, and communicate our zero emission journey
- Align zero emission projects with budget processes (both operational and Capital 10 year budget)
- Include zero emission considerations in administration of grant funds.

# Our Council

Staff directly contribute a relatively small proportion of emissions through business travel and their commute to work. Council can:

- Offset any staff business flights
- Provide information on low emission transport
- Support passive commute options such as cycling and walking through adequate facilities and car-pooling.

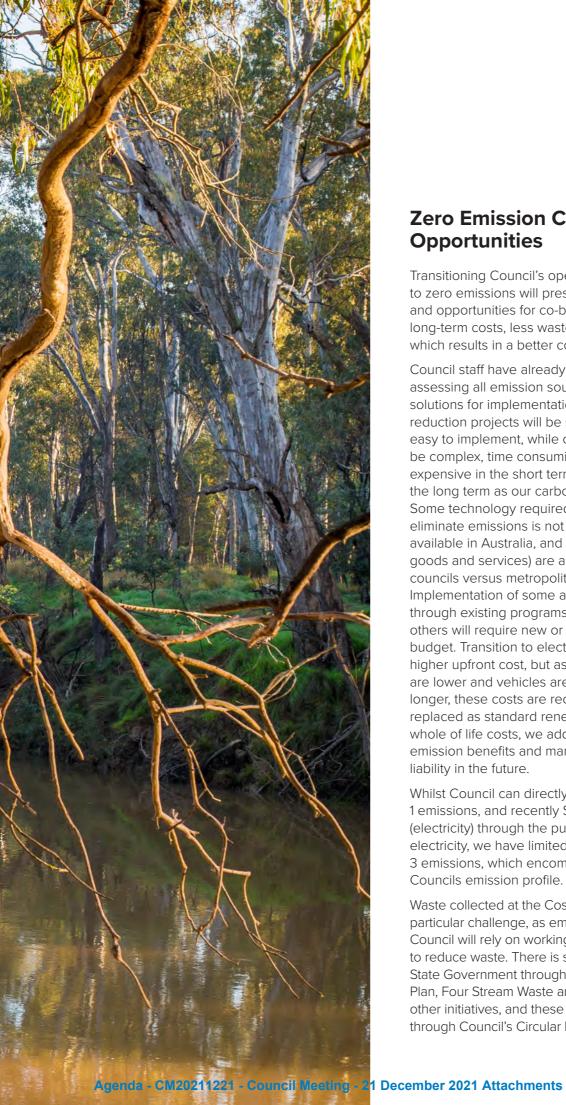
#### **Carbon Sequestration**

Council has an opportunity to investigate local carbon sequestration opportunities (such as revegetation, wetlands or soil carbon) to offset unavoidable emissions and potentially enter the Carbon Trading market which could become a source of income. Although the market is immature at the moment, Council can:

• Continue to keep up to date with and policies and pricing and assess opportunities as they arise.

Carbon sequestration through revegetation would also intrinsically hold extra values for community and biodiversity.





## **Zero Emission Challenges and Opportunities**

Transitioning Council's operations and services to zero emissions will present both challenges and opportunities for co-benefits, including lower long-term costs, less waste and less pollution, which results in a better community for us all.

Council staff have already begun the process of assessing all emission sources and identifying solutions for implementation. Some emission reduction projects will be straightforward and easy to implement, while others are likely to be complex, time consuming and potentially expensive in the short term, but cost effective in the long term as our carbon liability is reduced. Some technology required to reduce and eliminate emissions is not currently commercially available in Australia, and some items (particularly goods and services) are a higher cost for regional councils versus metropolitan or urban councils. Implementation of some actions will be delivered through existing programs and budgets, while others will require new or increased capital budget. Transition to electric vehicles requires higher upfront cost, but as operational costs are lower and vehicles are retained in the fleet longer, these costs are recouped over time, and replaced as standard renewals. By assessing whole of life costs, we address short term emission benefits and manage the risk of carbon liability in the future.

Whilst Council can directly control most Scope 1 emissions, and recently Scope 2 emissions (electricity) through the purchase of renewable electricity, we have limited control over Scope 3 emissions, which encompass roughly half of Councils emission profile.

Waste collected at the Cosgrove Landfill is a particular challenge, as emissions reduction for Council will rely on working with the community to reduce waste. There is strong support from the State Government through its Circular Economy Plan, Four Stream Waste and Recycling system and other initiatives, and these will be targeted locally through Council's Circular Economy Strategy.

We can selectively target our procurement and undertake advocacy for cost-effective solutions, but we will still largely need to rely on industries and other large organisations to reduce their emissions in order to reduce our Scope 3 emissions by 2030 if we want to avoid procuring offsets. We know many other businesses and organisations have announced similar emission targets, and so envisage that our suppliers will also be decarbonising their supply chains, but we cannot guarantee at this point in time that they will be providing zero emission goods by 2030. We have therefore taken the cautious approach in maintaining these Scope 3 emissions in the Plan, while factoring into future reviews the potential for these goods and services to already be offset at the point of sale and therefore not requiring offsetting at our end.

Emissions reduction opportunities and solutions are developing at a rapid pace, and this requires ongoing research, assessment and decision making on the cost/benefit of any potential measure. Flexibility and close collaboration with staff will be key to ensuring opportunities are identified and implemented, and all staff are supported during this time of transition. It is expected that technologies, grant opportunities and policies (both State and Federal) will continue to rapidly change during the period of the Plan, so we need to ensure our systems are developed to maximise opportunities and minimise costs and resources.

Our staff throughout the entire organisation will be the key to successful implementation of the Plan. Each team holds a wealth of expertise in their area, and ongoing support, education and organisational culture will play a large role in embedding climate action and emissions reduction into all projects and programs that Council undertakes. Supporting staff through continual education and promoting positive behaviour change will enable additional opportunities and partnerships to be developed as the emissions reduction transition evolves. Council staff collaborate and partner with other Councils and agencies to achieve emissions reduction outcomes in a cost effective way, such as the successful implementation of the Victorian Energy Collaboration (VECO) power purchase agreement project, and will continue to utilise their networks to overcome the challenges involved in decarbonising our operations. Council already works very closely with the Goulburn Murray Climate Alliance and other Alliance networks, to share and collaborate on emissions reductions actions. Council has also recently joined the Cities Power Partnership program, which provides support for member councils to share implementation actions from local governments around the world.

Due to the rapid developments and complexity in emissions policies, costs and technologies, it will be imperative to conduct annual reviews of the Action List to ensure fit-for-purpose decisions are made throughout the life of this Plan.

# **Implementation Plan and Action List**

Actions for the Zero Emissions Plan were developed through detailed discussions with staff in each team within Council. Staff provided insights on challenges and opportunities in their teams, and this feedback has been captured into the action list.

Further consultation will occur with staff as detailed actions, budgets and timelines are developed and refined, to ensure actions are the best fit-for-purpose solution in the rapidly changing emissions reduction journey.

There are 63 actions listed for implementation, with responsible teams, indicative budget range, resource intensity, priority and targeted year/s for implementation.

Timelines are reflective of a current assessment of feasibility for implementation. Some technologies do not currently have adequate supply chains or market mechanisms in place, and although it is probable that they will be commercially viable in coming years, further assessment, scoping and budgeting will be required prior to implementation.

The action plan will be reviewed annually, taking into account Federal and State Government policy, funding opportunities, technology accessibility and other collaborative opportunities.

Budget Symbol	Budget Range
Nil	\$0
\$	\$1 - \$50,000
\$\$	\$50,000 - \$500,000
\$\$\$	\$500,000 +

#### **Indicative Budget**

The actions have been identified on cost benefit analysis in relation to the highest carbon reduction versus financial investment. Grant funding will be sought for all actions, in particular, the largest cost actions.

A budget line item has already been included for Zero Emission Plan actions within the Council Budget, and an additional Zero Emission budget contingency has been proposed to enable actions to be implemented over the life of the Plan. A percentage of the capital works plan has been allocated to capital initiatives for 2030 Zero Emissions. The amounts and timings will develop when cost estimates are performed on initiatives identified.

# **Action List**

#### **Zero Emissions Facilities**

Subtheme	Action	Responsible Team/s	Budget	Resource Intensity	Timeline
Gas	Decarbonise large complex facilities by investigating zero emission energy sources for Aquamoves, SAM and Welsford St Offices; join VECO All Electric Councils project to explore electrification options, and explore green hydrogen/gas opportunities.	Building Maintenance; Leisure Services	\$\$\$	Medium	2022 onwards
Gas	Transition all small facilities to electric by commencing decommissioning gas with replacement electric appliances for cooking, space and water heating through either targeted or on- fail replacement.	Building Maintenance; Asset Owners	\$\$	Low - Medium	2022 - 2023
Gas	Transition to all electric buildings by assessing all sites with LPG to explore options for decommissioning gas component and replacement with electricity and/or battery options.	Building Maintenance; Asset Owners		Low - High	2022 - 2027
Building Construction	Ensure all building and facility upgrades and renewals incorporate Zero Emissions design, build and appliance selection.	Project sponsors; Project Management Office		Medium	2022 onwards
Building Construction	Ensure all new or major refurbishment projects achieve minimum 6 Greenstar Rating.	Project sponsors; Project Management Office		Medium	2022 onwards
Building Construction	Develop supporting materials for staff to assist zero emission project developments including net zero build guidelines, low emission construction and recycled materials, and budget options including whole of life cost assessments.	Sustainability and Environment; Building Maintenance; Finance; Project Management Office		Low	2022
Energy Efficiency	Creation of a new Energy Management Officer position, to manage energy contracts and billing, energy efficiency assessments, energy efficiency works, and energy reporting.	Strategic Assets; Sustainability and Environment		Medium	2022 onwards
Energy Efficiency	Improve energy efficiency of Council buildings by undertaking assessment and implementation of actions including sensor lights, window coverings to reduce heat transfer, insulation, glazing, replacement of all applicable lights with LEDs, and HVAC upgrades. Develop detailed zero emission plans for complex sites including Welsford St/Eastbank, SAM, Aquamoves, Sports Stadiums, and Pools.	Building Maintenance; Relevant Teams	\$\$	Medium	2022 onwards

Energy Efficiency	Develop and implement an energy efficiency procedure with actions for staff that provides guidance on lowering energy consumption in Council facilities such as optimising IT equipment, lighting and AC.	Sustainability and Environment; Information Communication Technology; All Staff	Nil	Low	2022
Energy Efficiency	Audit and upgrade current sporting light tower globes for energy efficiency and ensure new facilities use low emission globes.	Parks, Sport and Recreation	\$\$	Medium	2022
Energy Efficiency	Replace all outstanding low-efficiency public lighting (street lighting, walking tracks, car parks, Aerodrome) with high efficiency or LED lights.	Works; Parks, Sport and Recreation; Community Strengthening	\$\$	Medium	Renew As required
Energy Efficiency	Re-integrate the energy auditing tool and implement energy audits actions for remaining assets with ongoing monitoring and reporting.	Sustainability and Environment	Nil	Medium	2022
Community Asset Committees/Leased Assets	Develop communication materials on energy efficiency and renewable energy including solar PV and distribute to Community Planning, Community Asset Committees, and tenants of leased facilities.	Sustainability and Environment; Community Strengthening; Property		Low	2022
Community Asset Committees/Leased Assets	Develop procedure for undertaking audits and works on council facilities	Sustainability and Environment; Community Strengthening; Property		Low	2022
Water	Investigate alternative re-use options for waste water from Council pools.	Leisure Services; Building Maintenance	\$\$	Medium	2024 onwards
Water	Develop and implement Integrated Water Management Strategy for best practice water efficiency and re-use for all Council facilities.	Sustainability and Environment; Planning; Parks, Sport and Recreation; Works; Leisure Services; Building Maintenance	\$\$	Medium	2022 onwards
Refrigerants	Review the different refrigerants used in all refrigeration and air- conditioning assets and assess emissions and replacement requirements.	Building Maintenance	Nil	Low	2024
Renewable Energy	Investigate 100% green electricity for unmetered electricity accounts.	Sustainability and Environment; Works; Parks, Sport and Recreation; Strategic Assets; Finance		Low	2022
Renewable Energy	Investigate and/or renew renewable electricity contract.	Strategic Assets; Procurement		Low	2028
Leased Assets	Assess leased sites for water, waste, gas and electricity usage (determine NMIs/MIRNs or LPG), and develop strategy for transitioning all leased sites to zero emissions by 2030 including options for solar PV installations, extension of VECO PPA and energy efficiency implementation.	Property; Sustainability and Environment	Nil	Low	2022

#### **Fleet and Plant**

Subtheme	Action	Responsible Team/s	Budget	Resource Intensity	Timeline
Fleet Policy	Review and update Fleet Policies to deliver zero emission fleets. Ensure policies prioritise highly fuel efficient vehicles for all fleet types.	Fleet; ELT; Procurement	Nil	Low	2022
Fleet Policy	Provide staff education and training to drive in a fuel efficiency manner, such as through implementation of 'Eco-Driver' principles.	Fleet; All Teams	\$	Low	2022
Heavy Fleet	Investigate and plan for heavy fleet changeover to green hydrogen/gas. Undertake feasibility studies, with implementation when commercially available.	Fleet; ELT	\$\$\$	High	2024 onwards
Heavy Fleet	Advocate for accelerated research and deployment of green hydrogen/gas supply chains and infrastructure for heavy vehicles.	Governance; Economic Development	Nil	Medium	2022 onwards
Light Vehicle Fleet	Transition passenger pool and private fleet to electric or hydrogen by 2025.	Fleet	\$\$\$	Medium	2021 - 2025
Light Vehicle Fleet	Develop and implement an education and behaviour change program on EVs to ensure all staff are confident using EVs and Zero Emission Vehicles.	Fleet; Sustainability and Environment	Nil	Low	2022
Light Vehicle Fleet	Provide education and support to staff to consider alternatives to vehicle use for council business.	All Teams	Nil	Low	2022
Light Commercial Vehicle Fleet	Investigate and commence transition of Light Commercial Vehicle fleet vehicles to either electric or hydrogen by 2030	Fleet	\$\$\$	High	2024 onwards
Plant	Investigate and consider alternatives to diesel pumps such as solar or electric for council operations.	Works	\$\$	Medium	2024 onwards
Plant	Investigate and consider alternatives to gas-fired BBQ trailer for community events.	Community	\$	Medium	2024 onwards
Plant	Investigate Zero emission waste compactors, and plan for implementation when commercially available.	Waste	\$\$\$	High	2024 onwards
Plant	Investigate and continue to implement alternatives to diesel and petrol equipment including mowers, chainsaws etc.	Parks, Sport and Recreation	\$\$	Medium	2021 onwards
Plant	Investigate alternatives to diesel generators to support events within the municipality.	Economic Development	\$\$\$	High	2024 onwards

#### Towards Zero Waste to Landfill

Subtheme	Action	Responsible Team/s	Budget	Resource Intensity	Timeline
Circular Economy	Develop and implement Circular Economy Strategy to reduce community waste to landfill; implement Kerbside Collection Strategy, reduce business and industry waste, and expand Redcycling facilities into all communities.	Waste	\$\$\$	High	2022 onwards
Circular Economy	Expand ERF landfill gas capture project as required.	Waste	\$\$\$	High	2022 onwards
Zero waste to Landfill	Reduce waste to landfill from all council facilities; conduct regular waste audits at Council facilities to drive increased recycling, redcycling and organic waste diversion from kitchens and tea rooms.	Waste; All Staff	\$	Medium	2022 onwards
Zero waste to Landfill	Implement Single Use Plastic policy and promote and encourage reusable crockery, bottles, and cutlery for internal use and events.	Sustainability Working Group; Economic Development; Waste; All Staff	\$	Medium	2022
Zero waste to Landfill	Facilitate the sorting and recycling of waste collected through daily Council staff activities and clean up days, including additional recycling facilities at the DRC and appropriate PPE.	Waste; Risk; Occupational Health and Safety	\$	Low	2024
Zero waste to Landfill	Identify complex products/waste items that are not easily recycled and develop tailored, fit for purpose solutions (e.g. sharps from immunisation programs, childcare centre waste, dumped asbestos).	Waste; Relevant Teams	\$	High	2025

Subtheme	Action	Responsible Team/s	Budget	Resource Intensity	Timeline
Supply Chain	Review Procurement Policy to prioritise purchase of low emission products, and ensure whole of life, and carbon offset costs, are reflected in purchase evaluations.	Finance; Procurement	Nil	Low	2022
	Drive low emission procurement through contracts and panel of suppliers by evaluating and prioritizing zero emissions materials and services (such as Climate Active/B Corp certification) and the ability to review and report against Council's Scope 3 emissions.	Governance; Procurement	Nil	High	2022 onwards
Supply Chain	Identify options for rationalising and optimising ICT and technology. Investigate devices that have multiple capabilities such as video conferencing and webinars, and drawing (to replicate notes on paper). Provide support and ongoing training for staff to use IT effectively.	Information Communication Technology; Procurement	\$	Medium	2022
Supply Chain	Reduce Council paper and stationary consumption by 95% through transitioning all possible activities online, using IT programs and solutions such as electronic signatures and implement regular reporting against usage.	All Teams/Staff; Corporate Governance; Information Communication Technology; Procurement		Low	2022
Supply Chain	Investigate low-emission products and alternatives, and trial where appropriate including Council mandated clothing, chemical supplies, and landscaping products.	All Teams	\$	Medium	2022 onwards
Supply Chain	Undertake initial and ongoing stakeholder engagement and collaboration to support low emission goods and services and building construction in our region. Utilise collaborative procurement to reduce transport costs, and trial new technologies.	Corporate Governance; Project Management Office; Works	\$\$	Medium	2022 onwards
Supply Chain	Determine and implement process for capturing offset supplier emissions.	Finance; Procurement	Nil	Low	2024 onwards
Supply Chain	Investigate process to enable staff to identify local and low emission suppliers.	Procurement	Nil	Medium	2024

#### **Goods and Services**

#### Governance

Subtheme	Action	Responsible Team/s	Budget	Resource Intensity	Timeline
Leadership	Implement ZEP Internal Working group to oversee implementation of ZEP including assessment of projects, budgets, policies, collaboration and grant opportunities. Include key teams within Council with annual reporting to Council.	Sustainability and Environment; Finance; Strategic Assets; Leisure Services; Governance	Nil	Low	2022
Leadership	Develop 2030 Zero Emissions Communications and Engagement Plan to engage staff in all areas of zero emissions actions and activities.	Sustainability and Environment; Marketing and Communications	Nil	Low	2022
Leadership	Include Zero Emissions outcomes into Council Grants (both awarded and received).	Sustainability and Environment; Governance; Economic Development	Nil	Low	2022
Monitoring and Reporting	Develop and implement annual ZEP monitoring and reporting plan, based on NDEVR reporting tool. Support relevant staff to complete Carbon Accounting training.	Sustainability and Environment, All Teams		Medium	2022
Monitoring and Reporting	Incorporate Zero Emission actions into all relevant Council reports, plans, policies, strategies and documents.	Governance; All Teams	Nil	Low	2022
Monitoring and Reporting	Review and update Authority purchasing categories to capture emissions source and whether offsets have already been applied pre-purchase.	Finance; Sustainability and Environment; Procurement	Nil	Medium	2022
Budget	Undertake Cost/Benefit analysis of different renewable energy and energy efficiency options for Council facilities such as Solar PV/Batteries/Energy Efficiency works.	Finance; Procurement; ELT	Nil	Low	2022

#### **Our Council**

Subtheme	Action	Responsible Team/s	Budget	Resource Intensity	Timeline
Business Travel	Purchase offsets for all corporate air travel at time of booking.	People and Development	\$	Low	2022 onwards
Business Travel	Develop strategy for streamlined communications such as IT equipment, collaborative software (such as SharePoint) and internal virtual communication hubs to facilitate online opportunities to reduce business travel requirements.	Information Communication Technology; Building Maintenance		Medium	2022
Commute	Build emissions reduction checklist into Flexible Working Arrangements, to encourage staff working from home to consider home office energy usage and commute emissions. Create factsheet to assist staff reduce home energy consumption and assess vehicle emissions.	People and Development; Corporate Governance	Nil	Low	2022 onwards
Commute	Facilitate active transport to work through provision of staff change rooms and secure bike facilities at main staff hubs.	Strategic Assets		High	2022 - 2027
Commute	Promote opportunities to increase car pooling to work with staff.	Sustainability Working Group; Marketing and Communications	Nil	Low	2023
Commute	Re-activate Cycling Strategy and improve bike/shared path infrastructure to facilitate active transport for staff and the community.	Planning; Project Management Office	\$\$\$	High	2024 onwards
Commute	Develop and implement annual survey on staff commute to capture data on commuting emissions.	Sustainability and Environment; People and Development	Nil	Low	2022
Leadership	Implement an internal behaviour change competition (similar to pedometer challenge) for staff emissions reduction.	Sustainability Working Group; Sustainability and Environment		Low	2022

#### **Carbon Sequestration**

Subtheme	Action	Responsible Team/s	Budget	Resource Intensity	Timeline
Offsets	Investigate the most cost-effective offset options for unavoidable emissions, including opportunities for internal revegetation or soil carbon sequestration.	Sustainability and Environment; Finance; Procurement; Property	\$	Medium	2025 - 2030
Offsets	Investigate carbon trading potential of revegetation (e.g. One Tree Per Child) or soil carbon for carbon sequestration on Council land.	Sustainability and Environment; Finance; Procurement; Property	\$	Medium	2025 - 2030



	Cost Ove	er Time	\$	\$\$	\$\$\$				
Action	2022/2023	2023/2024	2024/2025	2025/2026	2026/2027	2021/2028	2028/2029	2029/2030	203012031
Decarbonise energy supply at large sites - Aquamoves, SAM and Welsford St Offices									
Transition to all electric buildings by decomissioning gas at all small-market sites							_		
Transition to all electric buildings by assessing and decommissioning all LPG									
Ensure all building and facility upgrades and renewals incorporate Zero Emissions considerations									
Ensure all new or major refurbishment projects achieve minimum 6 Greenstar Rating									
Creation of a new Energy Management Officer position									
Improve energy efficiency in Council buildings									
Audit and upgrade current sporting light tower globes									
Replace all outstanding low-efficiency public lighting (streetlighting, paths, car parks, Aerodrome) with LED lights									
Investigate alternative re-use options for waste water from Council pools									
Develop and implement Integrated Water Management Strategy			-			-			
Investigate 100% green electricity for unmetered electricity accounts									
Provide education and training to staff to drive fuel efficiency savings in fleet									
Investigate transition to zero emission heavy fleet (e.g. electric, green hydrogen/gas), and implement when feasible									
Transition passenger pool and private fleet to electric or green hydrogen by 2025									
Investigate and commence transition of Light Commercial Vehicle fleet vehicles to either electric or green hydrogen by 2030									
Investigate and consider alternatives to diesel pumps such as solar or electric for council operations									
Investigate and consider alternatives to gas-fired BBQ trailer for community events									
Investigate Zero emission waste compactors, and plan for implementation when commercially available									
Investigate and continue to implement alternatives to diesel and petrol equipment							_		
Investigate alternatives to diesel generators to support events within the municipality									
Develop and implement Circular Economy Strategy									
Expand ERF landfill gas capture project as required									
Reduce waste to landfill from all council facilities; conduct regular waste audits at Council facilities									
Implement Single Use Plastic policy and promote									
Facilitate the sorting and recycling of waste collected through staff activities, including additional recycling facilities									
Identify complex products/waste items that are not easily recycled and develop tailored, fit for purpose solutions									
Identify options for rationalising and optimising ICT and technology, including support and ongoing training									
Reduce Council paper and stationary consumption by 95% through transitioning all possible activities online									
Investigate low-emission products and alternatives, and trial where appropriate including Council mandated supplies									
Undertake stakeholder engagement and collaboration to support low emission goods, services and building construction									
Purchase offsets for all corporate air travel at time of booking									
Develop strategy for streamlined communications such as IT equipment, software and virtual communication hubs									
Facilitate active transport to work through provision of staff change rooms and secure bike facilities at main staff hubs									
Re-activate Cycling Strategy and improve bike/shared path infrastructure to facilitate active transport									
Investigate cost-effective offset options for unavoidable emissions, including revegetation or soil carbon sequestration									
Investigate carbon trading potential of revegetation or soil carbon for carbon sequestration on Council land									

Agenda - CM20211221 - Council Meeting - 21 December 2021 Attachments

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# References

NDEVR Environmental (2021). Emissions Reduction Options Paper. Prepared for Greater Shepparton City Council.

## CONTACT US

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