JUNE 2021

CLIMATE & ECOLOGICAL EMERGENCY RESPONSE PLAN

City of KINGSTON

Acknowledgment of Country

Kingston City Council acknowledges the Traditional Custodians of the land that Council and our community is on. We pay our respects to Indigenous Elders past, present and emerging.

As we strive to work towards a climate-just world, we acknowledge there is no climate justice without First Nations justice. We recognise that the knowledge and wisdom of Country has always been here, and it is our vital responsibility to listen, learn and stand in solidarity.

Council will seek to collaborate with Traditional Owners on our Climate and Ecological Emergency response and integrate actions into Council's Reconciliation Action Plan.

Other Acknowledgements

During an emergency there is no time to reinvent the wheel and this plan has drawn on the content of existing emergency response plans from Melbourne and around the world. Council would like to thank the other SECCCA councils; Bayside, and Frankston City Councils, Bass Coast, Mornington Peninsula and Cardinia Shires and the Cities of Greater Dandenong, Port Phillip and Casey for their generosity – sharing their time, expertise and the content of their plans. Also, the Yarra, Maribyrnong and Stonnington city councils and Brighton & Hove (in the UK). Council would especially like to acknowledge Kathryn Davidson and her colleagues for their careful examination of the attributes of successful climate emergency response, the work of SECCCA and the Northern Alliance for Greenhouse Action (NAGA) for their resources and Mary Crooks from the Victorian Womens Trust. Finally, the incredible Kingston community without which, meaningful change would not be possible.

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Summary

Council plays an important leadership role within the City of Kingston, supporting local action and influencing the transition to a more sustainable future, but we need to do more.

While Council has been working for some time to reduce its own emissions and support the community to live more sustainably, it is time to accelerate our emissions reductions, strengthen protection of our natural environment and ramp up the ways we support our community.

Council's Climate and Ecological Emergency response will support community and economic recovery efforts following the COVID-19 pandemic. A return to 'business-as-usual' is no longer an option and a focus on building back better will support climate action and help build a stronger and more connected community and a more resilient local economy. Industry, business, representative organisations, community groups, households, individuals and Council have already taken steps to reduce emissions. Despite this, we are amongst the highest greenhouse gas emitters per capita in the world. We have a strong foundation from which to scale up our collective action to achieve net zero by 2030, but the magnitude of change is huge.

Everyone needs to consider their impact, how they can reduce carbon emissions, protect the natural environment and also adapt to the impacts of climate change.

Council now has a clear vision. We understand where and how we need to accelerate and support existing work to respond to the Climate Emergency, and what we can do to facilitate the scope and scale of reduction within the community needed to bring about meaningful change.

We know we need to target certain industries, grow our capability and capacity to lead effective and sustained climate programs and advocacy and that barriers to change need to be removed.

During early 2021, Council sought feedback on a draft version of this plan via a range of channels. At least 200 individuals provided feedback which was summarised and used to inform this final version.

Council's Climate and Ecological Emergency response will remain focused on the following priority areas:

- Support low carbon living
- Future proof business and industry
- Transition to sustainable transport
- Draw down or capture carbon from the atmosphere
- Adapt to the impacts of climate change
- Transform Council operations

1.
Declaring a Climate & Ecological Emergency

1.1 CLIMATE IMPACTS

Over the past 100 years, global surface air temperatures have risen by almost 1.4°C [1] and 2019 was Australia's hottest year on record.

Both the atmosphere and the oceans have warmed. Human activity is causing climate change through the release of greenhouse gases from the burning of fossil fuels, land use change and agriculture. Atmospheric concentrations of carbon dioxide are now more than 40% higher than they were before industrialisation. In the Greater Melbourne region, the rate of warming has increased since 1960. Rainfall has declined since the 1950s, especially in autumn. The sea level today in the Melbourne region is approximately 225 mm higher than in 1880[2,3].

Climate change is not just an environmental problem. The effects of climate change present substantial risks to our health and wellbeing, economy and society. These impacts are likely to include loss of life, physical and mental health impacts, reduced primary production, property damage, coastal inundation and loss of power, disruption of transport and communications infrastructure. There will also be significant adverse impacts on biodiversity, habitat, health of ecosystems and significant changes to our waterways[4].

Climate change is already resulting in very real impacts for Kingston (Figure 1).

At a local level, the effects of climate change are already being felt with an increase in hot days and heatwave events, more intense rain and flooding and storm surge and sea-level rise. The City of Kingston manages 13km of low-lying foreshore that is increasingly vulnerable to sea-level rise. There is development pressure for tourism, recreation, residential and commercial uses both on and adjacent to the foreshore. The impacts of climate change are likely to reshape the Bay. Sea-level rise, combined with wave action and storm surges will alter sand movements and increase erosion rates. Combined with population pressures, catchment degradation and ageing infrastructure the impacts on our coastline will escalate in coming years.

Increased flooding as a result of major storm events also poses a significant risk to Kingston with the projection of more intense rain events and flooding. This poses a risk to Council infrastructure, private and business assets and community health and safety. The frequency and severity of heatwaves is anticipated to increase, posing a serious threat to vulnerable members of our community including the elderly and those on low incomes. Coupled with rising electricity and gas prices it is expected that this will have a significant impact on the ability for some members of our community to heat and cool their properties.

And these changes are escalating.

Figure 1. **Storm at Mordialloc Pier**

Source: Artist Anthony Hearsey's visualisation of one month of data of locations where fire was detected collected by Nasa's Fire Information for Resource Management System.

In January 2020, Kingston joined with 85 local councils across Australia and resolved to declare a Climate and Ecological Emergency. A copy of the January Council resolution is available here.

The Council resolution was the result of two community petitions. This followed a truly unprecedented fire season in 2019/20 where it is reported that[5]:

- More than 24 million hectares or 20% of the total area covered by Australian forests – excluding Tasmania - was burnt. This figure contrasts dramatically with the proportion of forest burnt in any season on any other continent in that time frame, which for most continents and forest types was 4-5%[6].
- 33 people died and extensive smoke coverage across much of eastern Australia may be responsible for many more deaths and chronic illness.
- Over 3,000 homes were destroyed.
- Estimates of the national financial impacts are over $10 billion.
- Nearly three billion animals were killed or displaced and many threatened species and other ecological communities, were extensively harmed.

There is also compelling evidence that natural disasters give rise to increased rates of stress, depression, anxiety, post-traumatic stress disorder (PTSD), alcohol and substance abuse, aggression and violence, suicide, and exacerbation of other underlying mental health problems[7].

Predictions are dire.

The global community is on track to reach 2°C of global warning before 2050. We're already experiencing the impacts of a 1.4°C increase. Between 1.5°C and 2°C, a non-linear, irreversible, self-sustaining warming may be triggered[8].

This action plan is a direct response to these and other predicted impacts.

The global community is on track to reach 2°C of global warning before 2050.

Maximum and minimum daily temperatures will continue to increase over this century (very high confidence).

By the 2030s, increases in daily maximum temperature of 0.8 - 1.6°C (since the 90's) are expected.

Rainfall will continue to be very variable over time, but over the long term it is expected to continue to decline in winter and spring (medium to high confidence) and autumn (low to medium confidence), but with some chance of little change.

Extreme rainfall events are expected to become more intense on average through the century (high confidence) but remain highly variable in space and time.

By the 2050s, the climate of Melbourne could be more like the current climate of Wangaratta.

Source: Kingston's Climate Change Strategy, 2018-2025

1.2 STRONG FOUNDATIONS

Kingston has a long history of responding to climate change. The Energy Efficiency Strategy 2012-2017 focussed on reducing Council's own energy use, Kingston's Climate Change Strategy 2018-2025 set a clear framework to guide Council and the community towards reduced energy use and carbon emissions and adaptation to climate change. Council's initial target of a 30% reduction in corporate emissions by 2020 has now been achieved.

But it's not enough.

1.3 TRANSFORMATIONAL

We recognise that transformational change is needed to rapidly reduce carbon emissions and draw down emissions from the atmosphere in order to restore a safe climate. This change must occur across society and the economy. It requires large-scale action across all levels of government, businesses and the community to both cut carbon emissions and adapt to living on a hotter planet.

Our plan leverages Council resources and spheres of influence to support and accelerate our community response to the Climate Emergency and remove barriers to change.

Community focussed action will continue and it will be evidence based (see Section 5). In addition, Council's target of a 20% reduction by 2025 has been increased to 40%.

Our ultimate target is net zero community emissions by 2030.

Our plan recognises the importance of capacity building, professional development and accountability. It has a strong advocacy component and there is also an emphasis on monitoring and reporting. This will create opportunities to learn from real projects on the ground, to adjust our response and to share these learnings both internally and with other councils to ensure future project outcomes are not missed.

1.4 EQUITABLE

Council recognises that any major transition needs to occur in a fair and socially equitable way. The most vulnerable people have typically made the least contribution to the problem and often have less capacity to respond and cope with the impacts. A just transition, ensuring our most vulnerable community members are not disadvantaged is a priority of the plan.

1.5 IMPLICATIONS OF THE PANDEMIC

It is now accepted that pandemic recovery represents a unique opportunity to address the threats of climate change. Each of the priority areas in our action plan presents opportunities to build back better, support pathways to employment for young people, modernise manufacturing, support local food and beverage production, and generate commercial and professional service opportunities in the industries of the future. These will be identified throughout the plan.

Did you know...

In April 2020, Victoria's new Local Government Act came into effect. This makes 'mitigation and planning for climate change risks' and planning for 'the economic, social and environmental sustainability of the municipal district' a legal requirement for Council.

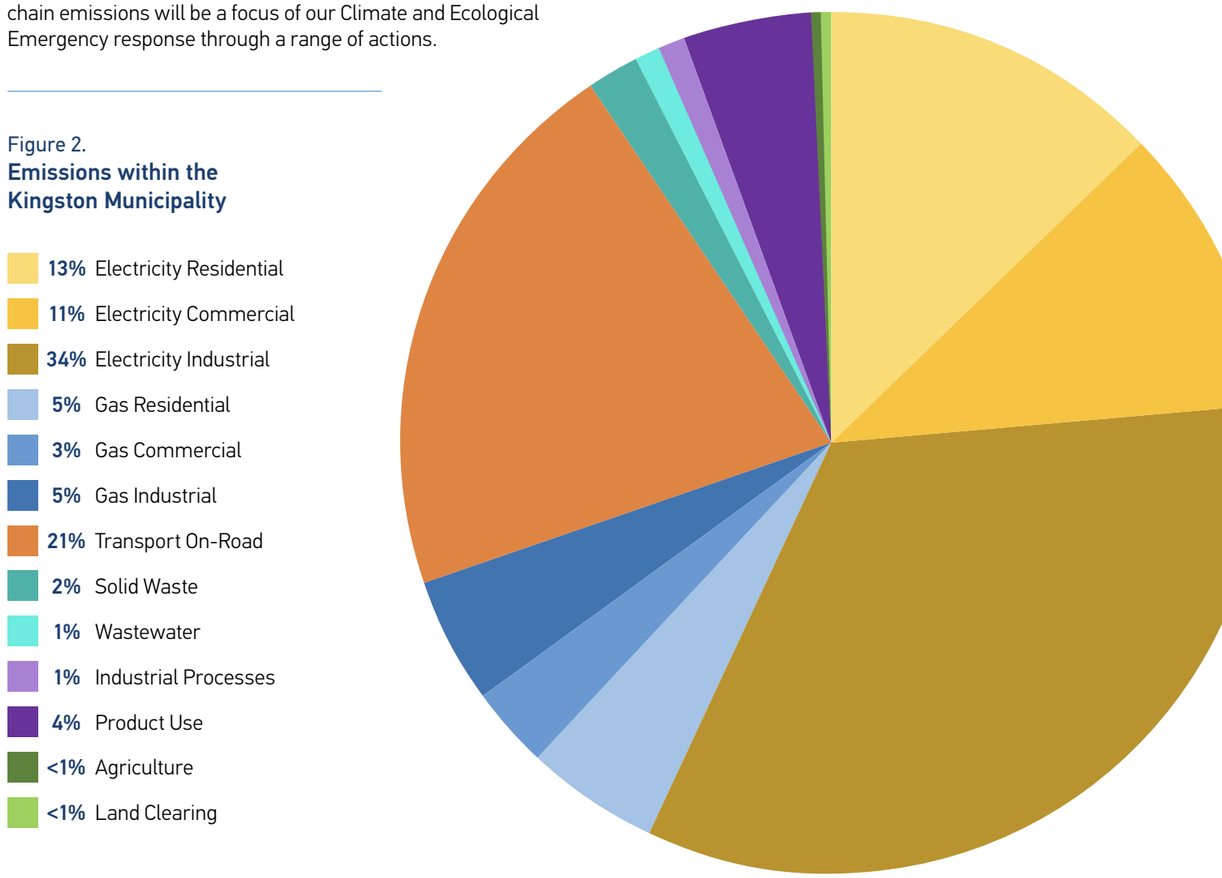
2.
Kingston's Greenhouse Gas Emissions Profile

Kingston's Scope 1 and 2 emissions in the 2018/19 Financial Year were 2,625,000 tCO_2e across a range of sources. The largest source of emissions is electricity use in the industrial sector, which coupled with gas is responsible for 39% of the municipality's total emissions. The proportion of industrial electricity emissions is notably higher than for the region as a whole. On road transport is responsible for 21%. Residential and commercial energy use is also substantial, contributing 18% and 14% respectively. Product use and water and solid waste disposal are just 4% and 3% (Figure 2)[9].

Scope 3 (supply chain or other out-of-boundary) emissions are not included in the emission profile boundary as they are generated outside the municipality and will be 'counted' as part of another city's scope. Whilst 'counted' elsewhere, Council recognises its role as a source of demand, and supply chain emissions will be a focus of our Climate and Ecological Emergency response through a range of actions.

Also, due to insufficient data available, emissions could not be calculated for Moorabbin Airport. Whilst work in other jurisdictions has indicated that air travel emissions are relatively low, Kingston will continue to collaborate with Moorabbin Airport Corporation as part of our Climate and Ecological Emergency response.

Figure 2.
Emissions within the Kingston Municipality



Source: City of Kingston Opportunities Report 2021, Ironbark Sustainability

3.
Kingston's Science-derived Target

Since the adoption of the Paris Climate Agreement in 2015 there have been ongoing discussions in scientific communities and the climate sector to determine whether the over-arching targets are strong enough to maximise the chance of avoiding catastrophic climate change. While these issues will continue to be discussed, it is clear that the central aim of the Paris Agreement is to limit the increase in the global average temperature to well below 2°C above pre-industrial levels and pursue efforts to limit the temperature increase to 1.5°C above pre-industrial levels[10].

The Paris Agreement, which entered into force in November 2016, explicitly recognises and engages local and subnational governments and their critical role in supporting the climate action, including setting goals and strategies aligned with the science. The development of a target for the Kingston Local Government Area enables us to understand the scale of action that is required at a municipal level to align with the commitments of the Paris Agreement.

Kingston as a member of the South East Councils Climate Change Alliance (SECCCA), recently advocated to the Victorian State Government to adopt a "1.5°C" target. This was based on the interpretation of regional and global impacts of an increase of "well below 2°C" being an unacceptable risk to SECCCA councils and communities and an acknowledgement of the role Victoria, and indeed Australia can play as a well-resourced, developed nation in reducing emissions.

The calculated science-derived target for remaining within 1.5°C for the City of Kingston is provided in Table 1.

The remaining budget for the City of Kingston is the total amount of carbon that the region can emit if it is to make a fair contribution to limit the temperature increase to 1.5°C. The remaining budget for the City of Kingston is 20,952,264 tCO_2e from 2018/19.

The "Runway" or Remaining years without change (7.1 years) calculates how long this carbon budget would last, based on the emissions released in 2018/19. If the region were to significantly reduce annual emissions this runway would extend as Kingston would not be "spending" it's carbon budget as rapidly.

The Required annual reduction and Required rate of reduction shows that Kingston's emissions need to reduce by 205,095 tCO_2e (7%) per year until 2035, if the carbon budget is to be used linearly over this time. To give an idea of the scale of action required, this is roughly the same as taking half the cars off the road in Kingston, each year up to 2035.

Did you know...

In May 2021 the Victorian State Government announced Victoria's climate targets for the next decade.
Targets aim for a 28-33% reduction in carbon emissions by 2025, a 45-50% reduction by 2030 and net-zero emissions by 2050.

Table 1.
Scaled science-derived 1.5°C target for the City of Kingston

Remaining budget (tCO2-e)	20,952,264
"Runway" years - Remaining time without change (years)	7.1
Required linear annual reduction 2021 – 2035 (tCO_2e per annum)	205,095
Required linear rate of reduction 2021 – 2035 (%)	7%

Kingston's linear emissions reduction trajectory to meet our target is very steep. Since 2018, the municipality's emissions have decreased by approximately 3%. At this pace, Kingston would wildly overshoot the science-derived target and our contribution to limiting Global temperatures to 1.5°C above pre-industrial levels would not be met.

Whilst understanding the necessity of meeting this target, it is also important to understand Council's level of accountability. Reducing municipal greenhouse gas emissions is a whole of community effort and by working with representative organisations, the state and federal government and other councils in the SECCCA region, Kingston has an opportunity to leverage Council resources more effectively. Section 4 of this plan details Council's approach.

4.
Approach

We are in a climate emergency and Kingston's response will reflect the scope, scale and urgency of that emergency.

4.1 CLIMATE VISION

Kingston's vision is to leverage Council resources and spheres of influence to support and accelerate our community response to the Climate Emergency and remove barriers to change.

The question of how to do this is faced by every council that declares a climate emergency. Kingston is no exception.

In developing a response plan, Kingston sought out available resources from a community of like-minded councils. We then drew on existing climate emergency plans from around the world and reviewed an analysis of their effectiveness.

We now understand that a best practice approach to climate emergency action exists and we can learn from others. Kingston is prepared to fail as long as we learn from our mistakes and change course as required. But we must act quickly and every decision and action must count.

4.2 APPROACH

For decades, Australian local governments have been at the forefront of climate action, even in the face of challenging federal and state policy environments. Councils have implemented energy efficiency and renewable energy projects which have led to the abatement of millions of tonnes of greenhouse gases. Kingston Council has achieved a 30% reduction in emissions since 2016[11]. Communities have also mobilised to join the challenge. Kingston's community has reduced emissions by approximately 3% since 2018[12].

Member councils of SECCCA have undertaken a range of projects. Individually and in collaboration they have achieved significant emissions reductions in their corporate operations. This includes upgrading residential streetlights to LEDs, implementing Ecologically Sustainable Development (ESD) guidelines to reduce emissions from buildings, commissioning building upgrades and trialling electric vehicles. There has also been work undertaken in community engagement and support for emissions reductions at the residential level.

But it's not enough.

At the current rate of reduction, the global community is on track to reach 2°C of global warning before 2050. 2°C is considered extremely dangerous (see Section 1.1) and a non-linear, irreversible, self-sustaining warming may be triggered between 1.5 and 2°C [13].

There is not a minute to lose.

Working to reduce emissions as soon as possible is a clear intent of the plan. However, when considering reducing community emissions against a science-derived target, the scale of reductions required is exceptionally high. For this reason, it's important for councils to carefully consider how best to leverage resources. It must be acknowledged that most often, direct action by Council will not be the most efficient way to achieve the target. However, there are a number of ways that councils can engage and work with stakeholders and other levels of government to facilitate significant emissions reductions.

Where to start?

4.3 PRINCIPLES

Whilst there is currently no definitive framework for putting a climate emergency declaration into practice, an accepted approach to 'best practice' climate emergency response is emerging across the sector and is broadly summarised below:

- Business-as-usual is no longer acceptable.
- Acknowledgement of a climate emergency without significant, additional, urgent action is empty rhetoric.
- Transitional measures like 'smaller' and 'low emission' and time frames longer than 10 years are not part of an emergency response.

A climate emergency mode away from business-as-usual includes[14]:

- Clarity of action (near term targets)
- Institutional resource mobilisation, including:
  - Whole of organisation action
  - Inclusion in Council's risk management framework
  - Adequate funding for action
  - Senior management accountability (Figure 4 overleaf)
  - Leadership
- The active acknowledgement that failing is not an option

Council will hold itself accountable to the above and use it to support decision making and project design across Council. Kingston's Climate and Ecological Emergency Response Plan has been informed by the above and other best practice guidance and is:

- Evidence based;
- Just (ensuring that those most vulnerable in the community are not disadvantaged); and
- Has a strong advocacy and engagement focus. Upwards, sideways, inwards and outwards (Figure 3).

Did you know...

As the level of government closest to the community, Council remains committed to its longstanding tradition of lobbying state and federal governments on behalf of the Kingston community.

Figure 3.
Advocacy approach

UPWARDS
Lobbying state and national governments to adopt and fund a climate emergency response

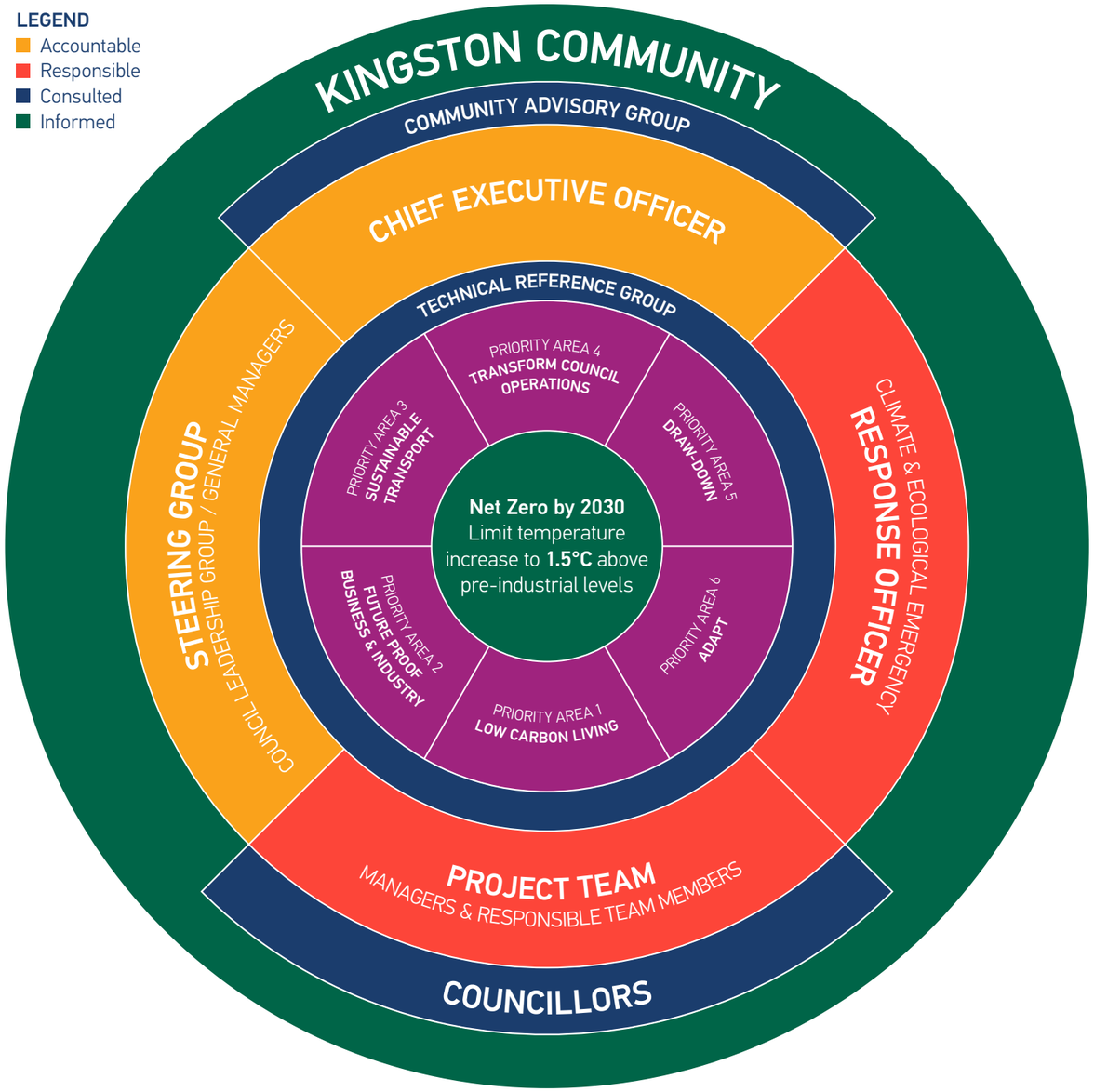
SIDEWAYS
Encouraging other councils to implement a climate emergency response through networks and by leading by example.

INWARDS
Educating council staff about the climate emergency and what a council can do to respond from the CEO down.

OUTWARDS
Local action through education, mitigation and resilience building.

Source: Northern Alliance for Greenhouse Action (Climate Emergency from Declaration to Practice) - adapted from the community group Council Action in the Climate Emergency (CACE)

Figure 4.
Organisational Accountability



Note:
Organisational Accountability is indicative and the name, structure and terms of reference for each group are yet to be determined and may be subject to change

4.4 COMMUNITY ACTION PLANNING

When planning for action on climate change, it's critical to consider pathways to emissions reductions that will be effective and efficient. How we can reduce emissions beyond business-as-usual, either by making them happen earlier or to a greater extent should also be considered. In order to do this, it's important to understand the emissions reductions that are already happening in the community and try to understand how to accelerate them. A program of targeted monitoring, evaluation, review and learning should also be applied.

In early 2020, Kingston City Council began working with Ironbark Sustainability on a Community Action Planning process. We now have a thorough understanding of how we can support community emission reductions. We have committed to a series of actions that can facilitate community emission reductions. Facilitating community actions at a regional level increases the scale of opportunity and cost effectiveness. Implementation is detailed in Section 5.

Importantly we also understand our limitations. While Kingston City Council can and must play a pivotal role, Council is not responsible for the municipality achieving its science-derived target in full. Emissions reductions at this scale will require substantial contributions from businesses and industry (the most significant emission sources), residents, as well as representative organisations and the state and federal government. Education and training, professional development and financial mechanisms are also required but most importantly...

> "....a radical, urgent mobilisation of economic and social resources at an abnormal level of intensity and scale to appropriately address the scale of the reduction required and ensure a safe climate"
>
> David Spratt[15]

4.5 GOALS

Council is committed to three main goals and a range of targets:

1. Reduce sources of emissions in line with our science-derived target

- Support the community to reduce emissions by 40% by 2025 and achieve net zero by 2030
- Reduce Council's corporate emissions to achieve net zero by 2025
- Expand waste services to further reduce waste to landfill and increase organic waste collection
- Improve sustainable building design
- Support low emission transport

2. Support sinks that reduce emissions and absorb carbon simultaneously

- Offset residual Council corporate emissions
- Encourage the community to offset
- Grow our Urban Forest
- Investigate opportunities to draw down or sequester greenhouse gas emissions

3. Involve and benefit communities

- Campaign alongside other local councils, partners and the community to drive advocacy outcomes
- Prepare for the impacts of climate change
- Include climate change risks in Council's Public Health and Wellbeing Plan

> *Did you know...*
>
> ***From July 2021 mixed plastics are banned from export from Australia.*** *In 2020 Kingston City Council began work with 16 other councils on the procurement of advanced waste processing services aimed at maximising resource efficiency and reducing waste.*

4.6 CLIMATE ACTION

Minimising Council's own emissions now represents the minimum expected of Council. There is a clear community expectation that Council will take two types of action:

- **Supporting community:** Council will leverage resources to support residents, businesses, and organisations across Kingston to reduce emissions
- **Corporate:** Council will reorientate its operations to respond holistically to the climate emergency

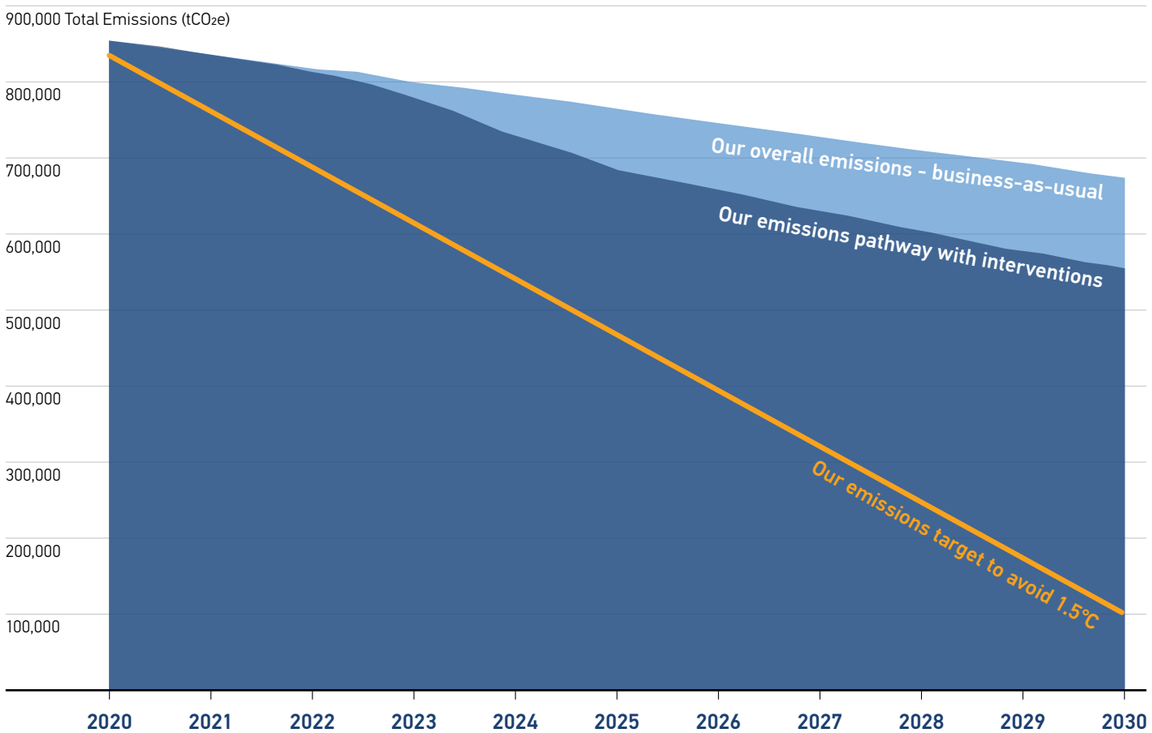
As detailed above, Council has considered a range of actions across most sources of emissions and a number of priority council actions have been analysed to understand their possible impact on emission trends within Kingston.

It is now understood, that through the priority council actions identified, Kingston has the capacity to achieve ongoing reduction in municipal emissions of around 2.8 million tCO_2e to 2030 (Figure 5). The estimated cost of achieving this is around $3.5 million over the next seven to ten years. It should be noted that this budget allocation and emissions reductions represent the maximum, and that for many programs a lower budget allocation is possible, but will result in lower emissions savings.

Priority council actions aimed at reducing community emissions are based on stakeholder collaboration and will need to be refined to align with specific stakeholder needs and challenges. This may result in changes to the overall cost of the program.

4.6 CLIMATE ACTION cont.

Figure 5.
Overall Trend in Emissions - Impact of Kingston City Council Actions



It is obvious from Figure 5 that the gap between what can be achieved through the proposed actions and what needs to be achieved in order to meet the science-derived target is large. As detailed in Section 4.4, Council is not responsible for the municipality achieving its science-derived target in full. Emissions reductions at this scale will require significant contributions from business and industry (the most significant emission sources), residents, as well as representative organisations and the state and federal government. In addition to the priority council actions detailed in Section 5, Council will investigate opportunities to collaborate with other councils to support projects which remove / sequester carbon from the atmosphere.

The next steps will be carefully planned to ensure all key stakeholders are involved, willing to invest as required, prepared to participate in actions and test assumptions. Only then will the abatement potential be realised.

4.7 COSTS AND BENEFITS

The total investment required to deliver the actions outlined below is unknown at present. Costs associated with program delivery, personnel, capital and ongoing operations have been estimated and are subject to change:

- **Low** – <$50,000 or absorbed within existing Council operating costs and capital works
- **Medium** – $50,000 - $500,000. A Council resolution is required to support initiative
- **High** – >$500,000. A Council strategy or plan is required to support initiative

It should be recognised that climate action in unlikely to be cost neutral and the costs must be shared amongst those responsible for the sources of emissions. Council recognises its share and will shoulder the burden of emissions reduction through the council actions detailed below. As a first step council has committed to additional resources to enable work to commence in areas most likely to generate meaningful emissions reductions. As implementation of the plan progresses, the need for additional resources will be identified.

Council also recognises the enormous cost of inaction.

A recent study by Deloitte Access Economics found polices inconsistent with a target of net zero emissions by 2050 and keeping global warming to 1.5°C could shrink the Australian economy by 6%, remove 880,000 jobs from the economy and lose $3.4 trillion in economic opportunity. Deloitte concludes that "Australians need policy and regulatory reform that modernises our economy and unleashes business investment. The benefits of acting are huge, but we are fast running out of opportunity"[16].

Australian companies are also under increasing pressure to disclose their exposure to climate-related risks and articulate their strategies to ensure resilience and competitive advantage in a net zero world[17].

The very real, climate related impacts for Kingston are detailed in Section 1.1.

Benefits of decisive climate action include:

- New jobs and cheaper power
- Reduced air pollution
- Preparedness and resilience to the impacts of climate change
- Healthy habitats and an enhanced urban forest
- More connected communities

4.8 TIME FRAMES

Whilst the impact of council action has been modelled to 2030, it is assumed that actions will have rolling commencement dates from 2021 and have a duration of 3-4 years depending on the project type. Given our declaration of a Climate and Ecological Emergency, high priority actions (those with the highest emission abatement potential) will commence in the next 12 months; medium priority actions by 2023 and low priority actions by 2025.

4.9 WHO WILL TAKE ACTION?

Areas of council with clear responsibility for certain actions have been identified.

Council provides a range of services **that prepare us for the future.**

We do so much more than roads, rates & rubbish

Children and families

- Childcare
- Kindergarten
- Maternal & child heath
- Playgroups
- Immunisation
- Playgrounds

Health and wellbeing

- Disability & youth services
- Home maintenance
- Home & community care (AccessCare)
- Meals on wheels
- Food safety
- Open space

Your home

- Planning permits
- Building permits
- Pet registrations
- Rubbish and recycling
- Graffiti removal
- Major projects

Sport and leisure

- Sports grounds
- Swimming pools
- Leisure centres
- Parks and gardens
- Festivals and events
- Coastal & foreshore management

Roads and safety

- Roads, footpaths & drains
- Car parks
- Street lighting
- Crossing supervisors
- Emergency management
- Street trees

Your community

- Libraries
- Volunteering
- Theatre and arts
- Grants
- Community centres
- Environmental education

5.
Implementation

This section details priority areas and a series of actions that are understood, at the time of writing, to best leverage Council resources to reduce emissions at a meaningful scale.

Initial tasks for Council officers responsible for priority areas of the plan will be:

- Engagement with specific stakeholders to ensure the actions are scalable, robust and cost effective, and;
- A process of detailed design to determine if actions address specific barriers or need to be updated

This will be co-designed alongside a program of monitoring, review, evaluation and reporting (Section 7) to establish performance indicators and identify trigger points.

Council acknowledges that action across a number of priority areas must be taken concurrently in order to accelerate existing action and deliver the scope and scale of emissions reductions required.

An implementation plan with targets, responsibilities and budget will be developed and regularly updated once the detailed program design is complete.

The actions detailed below have the potential to abate over 2.8 million tonnes of CO_2e before 2030.

Whilst this will make a significant contribution towards zero carbon by 2030 in Kingston and the SECCCA region, as detailed above significant contributions from business and industry (the most significant emission sources), residents, as well as representative organisations and the state and federal government remain essential.

Communications will be developed to support the response plan to drive awareness regarding the urgency of the Climate and Ecological Emergency for Kingston and create a vision for the community of a different future. A focus on education and inspiring positive behavior change will remain critical.

Kingston will endeavour to collaborate with other SECCCA councils on most if not all actions detailed below. This will increase the abatement potential of actions and reduce costs. More information on the benefits of collaboration is provided in the technical report that informs this plan.

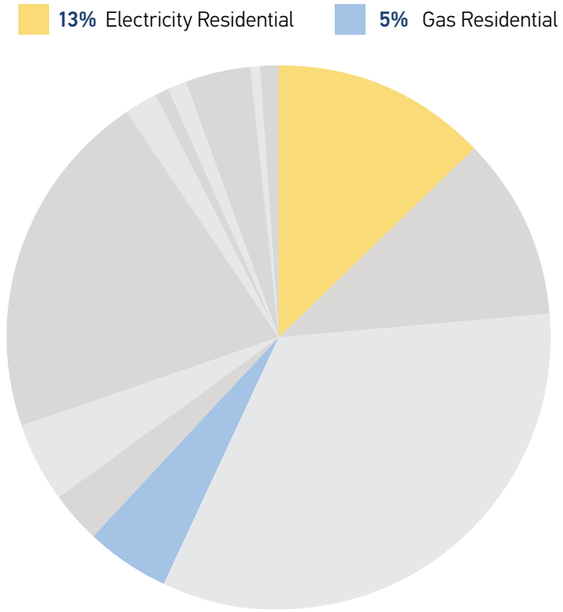
Priority Area 1
Support Low Carbon Living

The actions detailed in this Priority Area have the potential to abate approximately 913,000 tonnes of CO2e before 2030.

Residential sector description:
The City of Kingston is a large middle-ring municipality. It houses approximately 163,430 people in an area of 91 square kilometres, and the population is growing and changing. The State Government's Victoria in Future (ViF) population projection forecasts Kingston to grow to 201,090 people by 2036[18]. In 2016 the majority of dwellings in Kingston were separate houses (58.2%), however new forms of medium and high density residential development are becoming more commonplace in locations close to transport. Housing affordability is a growing issue within Kingston. Kingston's residential community comprises a large number of individuals with a diverse range of values, skills and resources, which makes scalable initiatives difficult.

Sector emissions: 18%
Total abatement potential to 2030: 913,000 tCO_2e
Approximate cost to 2030: $810K

Figure 2.
Emissions within the Kingston Municipality



Priority Area 1
Support Low Carbon Living

Aim	Priority Actions	Emissions abatement potential	Responsible area	**Priority** (low,med, high)	**Estimated cost** (low, med, high)
Low emissions buildings through design	**Working within existing regulations** - Council planning teams work to ensure a consistently high standard of interpretation and implementation of the existing local planning ESD requirements and train all staff to be consistent in the assessment of planning applications. - Work with developers to understand this consistent interpretation and application of existing ESD requirements. In doing so, developers will be better able to plan buildings and prepare applications to meet this high ESD standard. **Developing new regulations** - Undertake a planning amendment that requires all new buildings that are subject to planning approval to achieve net zero emissions or be net zero emissions ready. This may be via CASBE or a Kingston specific amendment. - Expand consideration of transport emissions through the requirement for installation (or readiness for installation) of private Electric Vehicle charging infrastructure. **Enforcing regulations** - Enforce planning conditions to ensure consistent implementation of a high standard of ESD. **Designing and delivering incentives** - Council planning teams design and deliver planning "incentives" to further encourage developers to submit planning applications that meet a high standard of ESD. - Draw on case studies from other municipalities and in collaboration with all relevant teams (parking, local laws, compliance, finance etc). - Consult with large developers and construction associations that are active within the municipality to provide industry insights. **Educational content** - Design and deliver information regarding available financing options.	710K tCO_2e	Planning & Development	High	High
Solar scheme for renters	**Facilitating a rental solar scheme** - Research existing programs that target this action. - Consult with real estate agents, renters groups, strata committees or other relevant local property consultants. - Engage with existing solar loan providers on financial mechanisms and payback scenarios. - Incorporate successful elements of other schemes and lessons learned into program design. - Investigate partnerships with other greenhouse alliances, the state government and representative bodies such as the Municipal Association of Victoria (MAV) to establish the legal, financial and market mechanisms to support this program. - Once mechanisms are established, connect local market operators offering solutions for multi-unit dwellings or rental properties to rental organisations operating within the region.	160K tCO_2e	Planning & Development	Low	Medium

Did you know...

The City of Kingston, together with other Victorian Councils have developed a consistent and transparent sustainable design assessment process in relation to Planning Applications. The SDAPP (Sustainable Design Assessment in the Planning Process) program refers to the inclusion of 10 key environmental performance considerations into the Planning Permit approvals process in order to achieve a more sustainable building outcomes for the long-term benefit of the wider community. Large and medium developments are required to address these criteria in order to receive planning permission.

Priority Area 1
Support Low Carbon Living

Aim	Priority Actions	Emissions abatement potential	Responsible area	**Priority** (low,med, high)	**Estimated cost** (low, med, high)
Energy efficiency retrofits for homes (including social housing)	**Educational workshops with service providers** - Research existing similar programs that target this action. - Engage with relevant local businesses through workshops that train professionals on the benefits of energy efficient appliances. - Consider of working with professional industry associations such as Master Builders, Master Plumbers and Master Electricians.	10K tCO_2e	Planning & Development	Medium	Medium
Low emissions infrastructure	- Build on the results of trials already undertaken in Kingston and other municipalities to increase acceptance and build confidence. - Discuss with service providers the capacity of existing supply chains and understand the barriers. - Ensure existing Department of Transport (DoT) requirements are included in Council's infrastructure guidelines and implemented. - Work with DoT to improve road and pathway building requirements.	20K tCO_2e	City Assets & Environment	Low	Low
Community renewable energy	**Facilitating community renewable energy projects, including:** - Facilitate planning approval. - Support the administration of these projects. - Facilitate stakeholder engagement and connections. **Facilitating services to community groups interested in community renewable energy projects. These services could include:** - Developing legal templates. - Providing meeting locations. - Establishing virtual networks. - Providing information and resources relevant to community renewable energy projects.	4K tCO_2e	Planning & Development	Low	Low

Did you know...

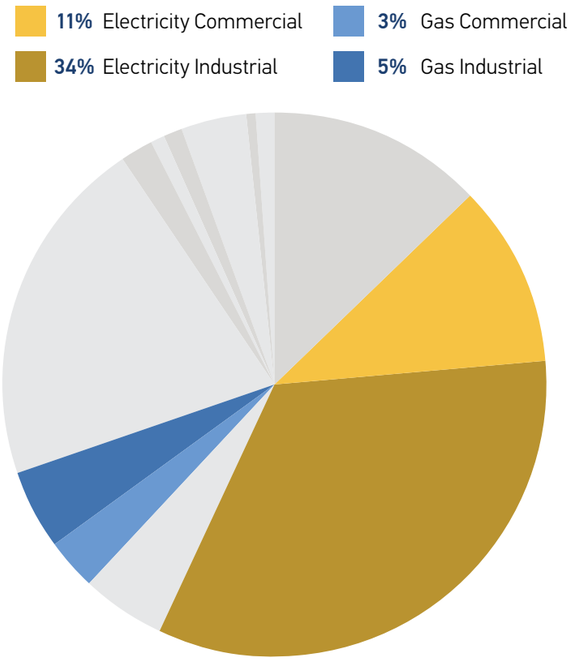
Council's Green Wedge Management Plan identifies opportunities for large scale solar within Kingston.

Priority Area 2
Future Proof Business and Industry

Industrial and business sector description:
Kingston's industrial sector is one of the largest and most concentrated in the State. There is also a significant retail and service-based economy in Kingston anchored by a regional shopping centre at Southland, several major activity centres and numerous smaller local and neighbourhood shopping precincts. The manufacturing sector is the largest employer followed by retail trade and wholesale trade[19]. This sector is characterised by a smaller number of large organisations and numerous small to medium sized enterprises (over 17,000). Industrial zoned land covers an area of 12.38 square kilometres.

Sector emissions: Industrial (39%) and Commercial (14%)
Total abatement potential to 2030: 810,000 tCO_2e
Approximate cost to 2030: $510K

Figure 2.
Emissions within the Kingston Municipality



Priority Area 2
Future Proof Business and Industry

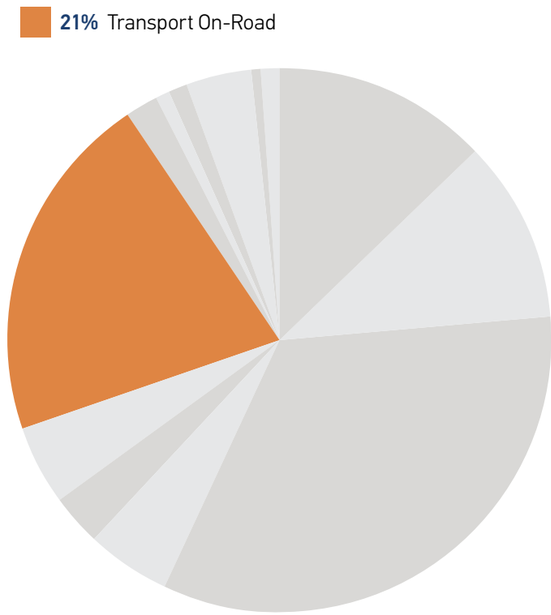
Aim	Priority Actions	Emissions abatement potential	Responsible area	**Priority** (low,med, high)	**Estimated cost** (low, med, high)
Transitioning business and industry towards more energy efficient technology and away from gas as an energy source **Electrifying industry from renewable sources**	**Engage a specialist facilitator to:** - Develop regional working group or groups. Groups will be based on types of industries or industries with similar operations or energy use and begin with those with the highest emissions. - Seek expertise, advice and support from collaborators in the research, business or sustainability. - Use resources such as Beyond Zero Emissions Electrifying Industry (2018) or DELWP's Electrification Opportunities in Victoria's Industrial Sector (2019), which include specific examples of alternative technologies based on industrial sub-sectors, to start discussions with industrial stakeholders around energy efficiency and degasification. - Bring technology specific service providers or research institutions on board to provide more in-depth information and feasibility studies. - Facilitate onsite power generation and sharing via rooftop solar and batteries. - Bring energy market experts to the table to explore group Power Purchase Agreement (PPA) opportunities. - Support access to finance mechanisms e.g., EUF loans for business and Energy Performance Contracts. - Facilitate waste minimisation in business operations. **As part of SECCCA** - Co-ordinate a regional approach for SECCCA councils. - Leverage SECCCA's existing and other business networks. - Seek funding and support from the State Government for program delivery that aligns with the State's target of net zero by 2050. - Work with the Federal Government on program deployment within the region e.g., the Business Energy Advice Program. - Advocate to the South East Melbourne Manufacturer's Alliance (SEMMA) and Greater South East Melbourne (GSEM) group to manage these working groups and take an active role in supporting local businesses to implement emissions reduction actions. - Develop case studies and showcase positive examples from across the region **Sustainable economic development** - Embed Kingston's focus on sustainable economic development and a strong circular economy into Council policy and process.	810K tCO_2e	Planning & Development	High	High

Priority Area 3
Transition to Sustainable Transport

Kingston's Integrated Transport Strategy (KITS) was adopted in September 2020 and is provided here. A background report was prepared to inform the KITS and includes detailed information on Kingston's population, land use, transport modes, car ownership, road safety record, work profile, income, wellbeing and housing type. Almost 69% of Kingston residents travel to work by car, which is higher than neighbouring councils and median car ownership in Kingston is 1.6 cars per dwelling. The below actions align with a number of actions in the KITS. Decisions in relation to car parking will be considered in the context of the actions below. Collaboration with Moorabbin Airport Corporation is ongoing.

Sector emissions: 21%
Total abatement potential to 2030: 1.1M tCO_2e
Approximate cost to 2030: $930K

Figure 2.
Emissions within the Kingston Municipality



Priority Area 3
Transition to Sustainable Transport

Aim	Priority Actions	Emissions abatement potential	Responsible area	**Priority** (low,med, high)	**Estimated cost** (low, med, high)
Expand the Electric Vehicle charging network	**Strategic planning** - Contribute to the planning of a rapid charging network and map across the SECCCA region. - Identify and set aside land for charging points, including select parking spaces. - Review Council's current strategic approach to parking and requirements for parking in new developments. - Deliver an updated parking policy. **Facilitate installation by private charging companies** - Encourage electric vehicle (EV) charging companies to install infrastructure at key sites. - Ensure electricity distribution businesses have network connections at relevant sites. - Work with developers or car park managers to ensure that additional space is made available to charging companies for infrastructure. **Advocacy** - Work with SECCCA on a regional approach. - Work with other Victorian Climate Alliances. - Assist business to trial new technologies.	500K tCO_2e	Planning & Development	High	High
Implement key aspects of the Kingston Integrated Transport Strategy	- Prioritise sustainable transport modes over private cars through a 'road user hierarchy'. - Allocate more road space to sustainable modes (bus, cycle, pedestrians). - Install bike lanes, paths and other cycling infrastructure throughout Kingston which link key public transport routes and destinations. **Policy support for car share programs** - Adopt a Council policy that promotes car share programs through provision of dedicated parking for car share vehicles. - Facilitate discussions with car share companies. **Community education about sustainable transport** - Implement community education to promote active transport (walking and cycling). - Use existing environmental education channels to promote sustainable transport education.	210K tCO_2e	City Assets & Environment	Medium	High
Supporting electric and other low carbon vehicle uptake	- Education, incentives and procurement support for EVs. - Provide an education program that addresses barriers around misinformation and range anxiety regarding the functionality of EVs. - Promote EV benefits and location of charging infrastructure through Council's website and other communication channels. - Use existing education channels to promote the uptake of EVs to the broader community. - Provide incentives for the uptake of EVs for example via the provision of reserved car parking spaces for EVs. - Deliver an updated parking policy.	350K tCO2e	City Assets & Environment	Medium	Medium

Priority Area 4
Transform Council Operations

In order to deliver on the evidence-based actions aimed at supporting the community (detailed above), Council is committed to re-orientating its operations to respond holistically to the climate emergency. Organisational accountability will be co-ordinated via Council's Governance team and structured to ensure senior leaders hold their departments and each other to account (Figure 4).

Total abatement potential: The below actions have not been modelled so the abatement potential in unknown. However, it is understood that they are either pivotal for supporting delivery of the modelled actions detailed above or another aspect of Kingston's Climate and Ecological Emergency response, or understood to be a minimum expectation of the community.

Aim	Priority Actions	Responsible area	**Priority** (low,med, high)	**Estimated cost** (low, med, high)
Accountability	- Commit to Climate Emergency Action in the new Council Plan. - Include Climate Emergency Key Performance Indicators for the Leadership Team. - Regularly update Council's Audit & Risk Committee with relevant climate change information.	Corporate Services	High	Low
Financial management	- Develop a strategy which sets out Kingston's plan to avoid lending, investing in or buying from commercial entities including superannuation funds and insurers engaging in listed 'environmentally damaging' activities, primarily thermal coal. - Quantify the investment opportunities, financial benefits and employment opportunities associated with well planned, proactive climate emergency action for both Council and the community	Corporate Services	High	Low
Governance	**Complete a gaps and opportunities assessment of Council's existing policies, strategies and action plans to highlight how Council can accelerate and support existing work to respond to the Climate Emergency and remove barriers. Key focus areas will be:** - Contract management (using service providers and suppliers which use renewable energy, zero carbon vehicles, equipment and plant, optimise transport and resource efficiency and minimise transport distances). - Statutory planning policy and practice (elevating standards, consistent application of requirements, incentives, enforcement). - Sustainable procurement (maximising resource efficiency, minimising embodied carbon and operational energy use, pollution prevention and responsible sourcing). - Zero carbon council buildings (continue investing in shaded, insulated, air tight buildings, energy from renewable sources, energy efficient appliances). - Continue transitioning Council's fleet to zero carbon (offsetting residual emissions associated with unavoidable fuel use). - Minimising waste (further reducing waste to landfill and increasing organic waste collection) - Low carbon infrastructure (increased use of priority, low carbon, recycled materials). - Establish a community advisory group focused on climate action aimed at ongoing, two way consultation. - Report on Council's response to the Climate and Ecological Emergency through Council's Quarterly Reporting to the community. - Review and evaluate Kingston's community emissions reduction action plan using the modelling conducted to develop the plan. - Consider use of the United Nation's Sustainable Development Goals (SDGs) as a framework through which climate action alongside other Council priorities can be viewed during business planning and Council decision-making.	Corporate Services	High	Low

Priority Area 4
Transform Council Operations

Aim	Priority Actions	Responsible area	**Priority** (low,med, high)	**Estimated cost** (low, med, high)
Economic development	- Embed Kingston's focus on environmentally sustainable economic development to enable a strong circular economy that significantly reduces environmental impact of business operations. - Facilitate emission reduction activities in the industrial and business sector through engagement with regional, state and federal agency programs. - Advocate for business to adopt 'climate risk disclosure and net zero planning' as standard practice. - Include requirements to address environmental impacts in leases of Council property, specifically energy and water use and waste management.	Planning & Development	High	Low
Zero waste	**Finalise Kingston's Resource Management Strategy, specifically:** - Phase out single use plastics across Council's operations. - Further engage the community to reduce plastics. - Support organic recycling across business and industry. - Implement state and federal government legislative requirements aimed at significantly reducing waste to landfill , increasing glass recycling, minimising e-waste and streamlining plastic processing. - Negotiate waste contracts that maximise resource efficiency and reduce waste.	City Assets & Environment	Medium	High
Capacity building and professional development	- Develop and implement training for staff focussed on Council's response to the Climate and Ecological Emergency and their role. The initial focus will be on staff with purchasing power and contractor and event management responsibilities. - Embed competencies relevant to climate emergency action into staff roles and responsibilities and performance planning. - Collaborate with Traditional Owners on Council's Climate and Ecological Emergency response. - Recognise the Climate and Ecological Emergency in Council's Reconciliation Action Plan.	Corporate Services	High	Medium
Operations	**Continue climate action already in progress across a range of Council programs including:** - Energy efficiency upgrades across Council buildings. - Renewable energy procurement including for Council's small market sites. - Transition away from gas. - Reduce Council's fleet (number, size and fuel use) and transition away from vehicles with internal combustion engines. - Programs and services detailed in Council's Urban Cooling Strategy that mitigate and build community resilience to the heat impacts of climate change. - Support and education for the community about the importance of biodiversity and the role they can play in contributing to green infrastructure and restoration of natural processes. - Up-to-date, practical and evidence based environmental education for the community to stay informed, connected and take action in response to the Climate and Ecological Emergency. - Participation in ASPIRE and support for local businesses to work together to exchange waste as a resource. - Low carbon community grants for organisations and initiatives that prioritise low emissions - Zero waste Council events.	All areas	Medium	High

> ***Did you know...***
>
> *By 2030 a new 4-bin waste and recycling system will be standard for households across Victoria. And by 2022–23 a container deposit scheme will exist to facilitate the swapping of empty cans and bottles for cash*

Priority Area 4
Transform Council Operations

Aim	Priority Actions	Responsible area	**Priority** (low,med, high)	**Estimated cost** (low, med, high)
Advocacy	**Develop and implement Council's advocacy priorities to address the Climate and Ecological Emergency via an endorsed Council position. Specific advocacy initiatives may include:** - A plan to avoid lending, investing in or buying from commercial entities engaged in listed 'environmentally damaging' activities (yet to be developed). **Future proofing business and industry:** - Encourage industry organisations such as the SEMMA to investigate new technologies, educate their members and facilitate renewable energy PPAs for their members. **Low carbon living:** - Work with other levels of government and various agencies to identify ways to improve comfort and energy costs of housing for low-income and vulnerable communities. - Collaborate to drive improved planning and building permit compliance. - Collaborate with other local councils, via CASBE to improve local and State planning policy requirements especially in relation to ESD. **Supporting sustainable transport:** - Work with other levels of government to support a second hand electric and other low emission vehicle market. - Determine specific improvements to the public transport network that could result in increased uptake, and advocate to the State Government for these changes. - Determine specific improvements to the public transport network that could lower emissions (e.g., electrification), and advocate to the State Government for these changes. - Advocate to private operators and the State government to support deployment of electric buses (including school buses). **Communications and engagement:** - Implement a communications and engagement plan aimed at supporting the inwards and outwards aspects of councils advocacy work (see Section 6).	Corporate Services	Medium	Low

Did you know...

Council has already minimised investments in financial institutions that fund the fossil fuel industry while maintaining compliance with the Investment Policy Risk Management Guidelines which form part of the Local Government Act. Opportunities to place additional funds with "sustainable" financial institutions while still enabling Council to diversify its investment portfolio and minimise financial risks are always being examined

Priority Area 5
Draw Down or Sequester Carbon from the Atmosphere

Aim	Priority Actions	Responsible area	**Priority** (low,med, high)	**Estimated cost** (low, med, high)
Urban Forest	**Scope, commission, finalise and implement Council's Urban Forest Strategy aimed at significantly expanding vegetation and tree canopy cover across Kingston.** **Specific objectives include:** - Protecting existing vegetation and canopy cover (private and public land) - Expanding vegetation and canopy cover (private and public land) - Strengthen biodiversity and habitat using appropriate native species, and restore natural resource area ecosystems where possible - Reducing urban heat island effects - Contributing to draw down (the removal of carbon from the atmosphere) Note: the full scope of Council's Urban Forest Strategy is still being developed and is subject to change	Planning & Development	High	Medium
Offset	Offset residual Council emissions (gas supplied sites, Council fleet, contractor vehicle emissions, waste, corporate travel, etc) via Climate Active (formally the National Carbon Offset Scheme (NCOS)) Note: "local" offsets are preferred.	Corporate Services	Low	High
Draw down	Investigate opportunities to collaborate with other councils to support projects which maintain and enhance carbon 'sinks' that remove / sequester carbon from the atmosphere (forests, sea grass, freshwater wetlands etc)	City Assets & Environment	Medium	High

Did you know...

In 2020 Council removed approximately 1,500 trees but planted over 2,800. During the same period Council planted more than 27,000 plants. We know we need to do more, so we'll continue to focus on protecting and expanding vegetation and canopy cover on all suitable private and public land.

Priority Area 6
Adapt

Aim	Priority Actions	Responsible area	**Priority** (low,med, high)	**Estimated cost** (low, med, high)
Adapt to the impacts of climate change	**Develop and deliver a Climate Adaptation Plan which will include:** - Assess the vulnerability to climate change impacts of Kingston's built, natural and coastal environment, and our community. - Identify pathways to address vulnerabilities in our natural and built environment over time, including planning for sea level rise impacts in our low-lying coastal areas. - Strengthen the resilience of our community to the impacts of climate change including food security. - Develop Council's climate adaptation capabilities. - Work in partnership with Federal and State Government agencies, neighbouring local governments, industry and the community to implement regional climate adaptation programs. Note: the full scope of Council's Climate Adaptation Plan is yet to be developed and is subject to change	Planning & Development	Medium	Medium
Health & Wellbeing	**Develop and deliver Council's Public Health and Wellbeing Plan which includes climate change considerations. Sustainability indicators for inclusion in the plan and tracked over time may include:** - Understanding of climate change and biodiversity loss. - Patterns of shopping . - Plant based diets. - Transport choices. - Climate vulnerability and related impacts on physical and mental health.	Community Sustainability	High	Medium

Did you know...

Community feedback has provided Council with a clear mandate: prioritise protection of existing trees from damage, prevent tree removal and facilitate new tree planting and growth on public and private land.

What can you do?

Did you know...

Getting involved in public conversations, educating yourself on the issues and engaging with politicians at all levels can shift the public policy agenda ....from business as usual to the real issues people are concerned about.

Aim	Priority Actions	**Priority** (low,med, high)	**Estimated cost** (low, med, high)
Industry	- Source energy from technology such as on-site solar photovoltaics (PV) installations or biomass boilers, or through purchased renewables. - Replace gas powered machinery with viable alternatives. - Transition lighting at industrial sites away from high-pressure sodium and metal halide to LEDs. - Improve the energy efficiency of air compressor systems, refrigeration systems and other pieces of industrial plant through refurbishment, replacement, optimisation and more frequent maintenance.	High	High
Business	- Install solar PV and batteries on all available sites, including commercial building rooftops and other structures, and ground mount solar PV on appropriate land. - Implement suggested changes to the National Construction Code (NCC) (achieve a level of thermal comfort equivalent to 7 stars NatHERS and net zero annual energy use for regulated building services, i.e. space conditioning, heated water systems, lighting and pool and spa pumps). - Utilise Environmental Upgrade Finance to improve energy efficiency. - When designing and building a new premises, future proof for EV charging. - Implement communications program (NABERS) to raise public awareness of the emissions footprint of new buildings. - Replace inefficient and expensive heating and cooling appliances. - Trial use of low carbon recycled priority materials (glass, plastic, rubber, paper or cardboard) and recycled civil materials (e.g. soil, rock, crushed concrete, recycled asphalt pavement) in infrastructure projects.	High	Medium
Residential	- Install solar PV and batteries on all available sites, including residential building rooftops and other structures, and ground mount solar PV on appropriate land. - Form or join a community group to investigate opportunities/ decide on revenue mechanisms for community energy. - Plan for the replacement of inefficient appliances (heating and cooling). - Aim for net zero energy when designing and building a new home. - Allow for maximum tree retention and consider green infrastructure when building a new home. - Future proof your home for electric vehicle charging . - Research electric and other low emission vehicle benefits, location of charging infrastructure and government and other incentives. - Consider purchasing an electric vehicle.	Med	Low
Individuals	- Advocate to banks and other entities to divest from listed 'environmentally damaging' activities, primarily thermal coal. - Use public transport. - Participate in active transport (walking and cycling) over private car use. - Research the convenience and practicality of using car share programs. - Adopt a plant based diet. - Shop locally. - Buy renewable energy. - Buy fewer disposable products, reduce waste, use your organics bin and recycle. - Offset air, other travel, freight and other unavoidable emissions. - Plan for increased extreme weather events such as heatwaves and flooding.	Low	Low

6.
Communications and Engagement

Council's response plan will be underpinned by engagement which helps communicate to the community:

- Council is taking significant, additional, urgent action and we need the community to join us.
- Everyone in Kingston can do their fair share, to maintain a safe climate.
- We're part of the net-zero carbon movement taking off around Victoria and the world.
- We can do better than business-as-usual.

This will be delivered alongside promotion of a series of inclusive, accessible, targeted and deep engagement programs involving specific stakeholder groups designed to drive positive behaviour change.

The Kingston community wants to be empowered with a vision of Kingston in 2030 as a healthy, renewable and connected place to be. Council's communications and engagement team will support delivery of this vision.

7.
Monitoring, Evaluation, Review and Learning

This will contribute to growing the knowledge base in local government, enable others to learn from Kingston's program and ensure emissions reductions are well targeted and effective in future.

7.1 PROGRESS MONITORING

Progress monitoring refers to internal monitoring of the implementation of the plan. This confirms that the response plan has been implemented as intended, however it does not measure the success of the plan in tCO_2e abated.

Once budget, resources and timelines have been allocated, a plan for progress monitoring will be developed. Tracking against the timelines and budget estimations in the plan will ensure that projects are implemented in a timely fashion and within the expected budget.

Actions and key performance indicators (KPIs) set out in the Council Plan and departmental business plans will be monitored via approved internal and external reporting processes.

7.2 IMPACT MONITORING

Impact monitoring measures the success of the plan in tCO_2e abated. It is used to understand whether an action is effective and to what degree. Impact monitoring must be conducted at regular periods during the implementation of the plan. If this monitoring demonstrates that an action is not having the anticipated effect (by meeting a certain trigger point), a more detailed analysis should be conducted into the effectiveness of the action. Council can then use this information to decide whether to change or remove the action from the program.

Please note that the implementation period of an action refers to the time that the action is expected to be active in reducing emissions. For example, emission reductions as a result of action focused on “Low Emissions Buildings Through Design” will not be measured from when engagement between teams commences but when the various planning changes come into effect.

Monitoring of corporate emissions reduction projects will occur through the ongoing collection of data. This may be via an independent third party platform provider or Council's own systems. By analysing changes to the overall corporate greenhouse gas inventory and monitoring particular, relevant sources such as bills for specific sites, cost savings and emissions abatement will be evident.

Monitoring the impact of action in the community emissions trajectory is much more complex because Council does not have access to accurate, real time data. Instead, Council may be required to collect and assess data from particular sources and compare it to a cohort municipality – that is, another Australian municipality with similar characteristics that is not implementing the program. By comparing the data, it will be evident whether there is a change in emissions that is occurring beyond business-as-usual.

A monitoring tool in excel format which will be used for impact monitoring has been prepared.

7.3 EVALUATION TRIGGER

When an evaluation trigger is reached for an action, this means that the action is not having the anticipated impact in reducing emissions. Evaluation triggers will highlight one of three scenarios:

- Action is having a lower-than-anticipated impact. This may result in significantly lower emissions reductions, meaning the action may not be effective. If so, Council should explore whether it is valuable to continue directing effort to this action.
- Action is having higher-than-anticipated impact. In this case, an increase in scope of this action may be considered. Or, this may mean that there are external factors at play.
- The business-as-usual trajectory for the action is considerably different to anticipated. In this case, Council should re-evaluate how it interacts with this action.

In any case, when an evaluation trigger is reached, it is a sign that more detailed analysis must be undertaken to determine the future of the action.

7.4 EVALUATION, REVIEW AND LEARNING

Through regularly collecting and completing data analyses, Council will essentially be undertaking minor evaluations. Initially, this evaluation will be a simple assessment of whether the program outcomes are within the acceptable threshold or whether a trigger point has been reached. If a trigger point is reached, Council will need to investigate why the project has deviated from what is expected. Based on this information, Council will then need to decide whether to continue with revised expectations, adjust the program itself, or abort the program and focus resources on a different area.

At the conclusion of the implementation of each action, Council will compile monitoring data and conduct a full evaluation of program effectiveness. Using data collected throughout the implementation together with further research and review of information from other local government areas, Council will be able to establish an understanding of the relative effectiveness of the program. This is an incredibly important contribution to growing the knowledge base in the local government sector and enabling others to learn from Kingston’s program and ensure emissions reductions are well targeted in future.

Climate related risks and issues, captured in Council’s strategic risk profile will also be monitored.

Finally, learning. The information gathered through the monitoring and evaluation process will be shared so that it can contribute to continuous learning and improvement, both internally within Council teams and externally, for other local governments, community members and a range of other stakeholders. Council will continue to seek out avenues for sharing information.

8.
Consultation

In July 2020, Kingston was involved in a Regional Emissions Reduction Stakeholder Workshop involving stakeholders with the greatest potential to support emissions reductions in the SECCCA region. More than 20 business, industry and government stakeholders participated and contributed to discussions about emissions reductions. The workshop was focussed on hearing from business and industry stakeholders about their emissions reduction projects and priorities and barriers they face in achieving large-scale and long lasting emissions reductions. A summary is provided here. Stakeholder feedback was captured in the analysis undertaken by Ironbark Sustainability.

During early 2021, Council sought feedback on a draft version of this plan via a range of channels. At least 200 individuals provided feedback which was summarised and used to inform this final version.

Specific actions suggested via feedback have been captured and a community advisory group will be established focused on climate action aimed at ongoing, two way consultation.

In the immediate term, modelled actions that will support significant stakeholders' emission reduction efforts such as working collaboratively with industry and connecting stakeholders will remain the focus of ongoing Council action.

Council will continue to engage with relevant stakeholders to discuss future collaboration opportunities. As we develop strategies and actions we will check back with stakeholders about their appropriateness and likelihood of success.

Council welcomes feedback on how were tracking against our ambitious targets and is always open to ideas about how to reduce emissions in line with our science derived emissions reduction target.

9. Glossary

Adaptation
A response to climate change, that seeks to reduce the vulnerability of social and biological systems to change and thus reduce the impacts of climate change. Adaptation generally occurs locally as a response to local impacts.

Community
The individuals and businesses that reside, work and operate within the City of Kingston.

City/ municipality
These terms are used interchangeably to refer to the total area within a given municipal boundary and under the jurisdiction of the presiding local government of that area.

Community emissions
Greenhouse gas emissions attributable to the community and outside of operational control of Kingston City Council as an organisation.

Corporate emissions
Greenhouse gas emissions attributable to Council's own operations and with the direct operational control of Kingston City Council as an organisation.

Mitigation
Actions to limit the magnitude or rate of long term climate change. Climate change mitigation generally involves reducing the source of human emissions of greenhouse gases and enhancing capture of emissions.

Offset
A carbon offset (or carbon credit) is generated from an activity that prevents, reduces or removes greenhouse gas emissions from being released into the atmosphere to compensate for emissions occurring elsewhere.

Drawdown
The future point in time when levels of greenhouse gases in the atmosphere stop climbing and steadily start to decline. Drawdown is a milestone in reversing climate change, and eventually reducing global average temperatures.

Draw down
Use of permanent trees and other woody biomass and well managed soil to remove carbon dioxide from the atmosphere. Other draw down techniques (teal and blue carbon sequestration) and carbon capture technologies are being researched.

SECCCA
South East Councils Climate Change Alliance. SECCCA region is used to refer collectively to the seven councils participating in this project. These include Bayside City Council, Cardinia Shire Council, City of Casey, Frankston City Council, City of Greater Dandenong, City of Kingston and Mornington Peninsula Shire. SECCCA councils that are not participating in this project have been excluded from all calculations, charts, and modelling.

Scope 1 and 2 emissions
Scope 1 emissions are direct emissions from owned or controlled sources for example, generator sets and bottled gas (usually smaller). Scope 2 emissions are indirect emissions from the generation of purchased energy (our major source of emissions)

Scope 3 (supply chain or other out-of-boundary) emissions
All indirect emissions (not included in scope 2) that occur in the value chain of the reporting entity, including both upstream and downstream emissions

Zero carbon Causing or resulting in no net release of carbon dioxide into the atmosphere

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20 In this context “technology agnostic” refers to an unbiased use of different technology tools to solve different problems. The electric vehicle landscape is rapidly developing. The technology of today may not be appropriate for the future and this needs to be planned for.

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