



11.2 **BASELINE OF MUNICIPAL GREENHOUSE GAS EMISSIONS PROJECT**

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1. PURPOSE

- 1.1 To report the results of the Baseline of Municipal Greenhouse Gas Emissions Project and to amend the reported baseline in the Sustainable City Community Action Plan.

2. EXECUTIVE SUMMARY

- 2.1 The Baseline of Municipal Greenhouse Gas Emissions Project ('the Project') is a Council Plan Priority in Outcome 3.2 "A City with lower carbon emissions".
- 2.2 The purpose of the project was to develop a greenhouse gas (GHG) emissions profile for the municipality to provide an evidence base for the *Act and Adapt Sustainable Environment Strategy (2018-28)*.
- 2.3 A greenhouse gas emissions profile compiles all the best available data relating to sources of emissions. In the City of Port Phillip, the relevant sources are energy use in homes and businesses, transport, waste and waste water.
- 2.4 The selection of data and the process used to calculate GHG emissions complied with the 'Global Protocol for Community Scale Greenhouse Gas Emissions'.
- 2.5 A draft figure of 978,095 tCO₂e was calculated based on data provided by energy companies and published in the Sustainable City Community Action Plan endorsed by Council on 7 March 2018. During the verification process, it was identified that data related to non-residential energy use was incorrect due to gaps in the data provided by energy companies. Rather than use this incorrect data, modelling was used to estimate energy use. The modelled data has resulted in a significantly higher greenhouse gas emissions estimate.
- 2.6 The new verified estimated greenhouse gas (GHG) emissions for the 2016 calendar year for the municipality was 1,735,646 tonnes of carbon dioxide equivalent emissions (tCO₂e).
- 2.7 The verified figure of 1,735,646 tCO₂e was used to inform the new Sustainable Environment Strategy *Act and Adapt* which was endorsed by Council on 20 June 2018.
- 2.8 The GHG emissions baseline is a valuable tool for developing and prioritising appropriate sustainability actions and for communicating with the community and other stakeholders.



3. RECOMMENDATION

That Council:

- 3.1 Notes the greenhouse gas emissions profile of 1,735,646 tonnes of carbon dioxide equivalent emissions for the municipality for the 2016 calendar year.
- 3.2 Endorses an amendment to page six of the Sustainable City Community Action Plan to read "The estimated total greenhouse gas emissions across the municipality is 1,736,646 tonnes of carbon dioxide equivalent".

4. KEY POINTS/ISSUES

- 4.1 In 2017/18 Council approved a project to develop a baseline of the Community's Greenhouse Gas (GHG) Emissions to provide an evidence base for the new Sustainable Environment Strategy, Act and Adapt and the Sustainable City Community Action Plan.
- 4.2 The project developed a GHG emissions profile using the Global Protocol for Community Scale Greenhouse Gas Emission Inventories (GPC). This is a globally recognised standard that provides a platform for benchmarking between cities. Compliance with the GPC is a requirement of our commitment to the Global Covenant of Mayors for Climate and Energy and allows for aggregation at a state level across the GPC key sectors. For Port Phillip, the relevant sectors are: Stationary Energy (Gas & Electricity), Transportation, Waste and Wastewater.
- 4.3 A draft figure of 978,095 tCO₂-e was calculated based on data provided by energy companies and published in the Sustainable City Community Action Plan endorsed by Council on 7 March 2018. During the verification process, it was identified that data related to non-residential energy use was incorrect due to gaps in the data provided by energy companies. Rather than use this incorrect data, modelling was used to estimate energy use. The modelled data has resulted in a significantly higher greenhouse gas emissions estimate of 1,735,646 tCO₂-e attributable to the municipality for the 2016 calendar year.
- 4.4 The verified figure was quoted in Act and Adapt: Sustainable Environment Strategy 2018-28 endorsed by Council on 20 June 2018. No change is required to this document.
- 4.5 Council's operational GHG emissions for 2016/17 were 10,950 tCO₂-e (reduced to 6,464 tCO₂-e with the use of offsets). These are included in the above figure and represent less than 0.6% of total municipal GHG emissions.
- 4.6 Seventy-four percent of municipal wide GHG emissions relates to the use of electricity and gas. The remainder is 23 percent transport, two percent waste and one percent waste water.



- 4.7 Seventy-two percent of electricity and gas usage relates to the commercial and industrial sectors. The remaining 28 percent is residential usage.
- 4.8 The GHG emissions profile will be used for:
- Developing and prioritising appropriate actions to reduce greenhouse gas emissions. For example, as 72% of GHG emissions are related to the non-residential sector, the Sustainable City Community Action Plan has developed a program that supports businesses to reduce their GHG emissions.
 - Communicating with community and other stakeholders. The scale of GHG emissions and the sources of emissions are a useful educational tool as they provide an indication of environmental impact across the municipality.

5. CONSULTATION AND STAKEHOLDERS

- 5.1 The baseline project was developed and delivered within the Sustainability and Transport Department.
- 5.2 Two external consultants, Kinesis and Ironbark Consulting, were used to ensure that the Global Protocol for Community Scale Greenhouse Gas Emission Inventories compliant modelling approach was used, based on the types of industry in our municipality and the number of employees to close the data gaps.

6. LEGAL AND RISK IMPLICATIONS

- 6.1 No legal and risk implications have been identified.

7. FINANCIAL IMPACT

- 7.1 The project was budgeted at \$150,000 and delivered at a cost of \$57,000
- 7.2 Savings were made due to the lack of detailed data available from energy companies. This significantly reduced the amount of analysis and reporting of data that was originally planned.

8. ENVIRONMENTAL IMPACT

- 8.1 Greenhouse Gas emissions have been identified by the global scientific community as a key driver of climate change.
- 8.2 The project was developed to support the development and delivery of the *Act and Adapt: Sustainable Environment Strategy 2018-28* and the *Sustainable City Community Action Plan*. Both documents include initiatives to reduce Greenhouse Gas emissions.

9. COMMUNITY IMPACT

- 9.1 The municipal GHG emissions profile has been used to support the development of the community actions in the *Act and Adapt: Sustainable Environment Strategy* and the allocation of resources in the *Sustainable City Community Action Plan*.



- 9.2 The scale of GHG emissions and the sources of emissions is useful information for engaging with the community to reduce its environmental impact.

10. ALIGNMENT TO COUNCIL PLAN AND COUNCIL POLICY

- 10.1 The Baseline of Municipal Greenhouse Gas Emissions Project is a Council Plan Priority in Outcome 3.2 “A City with lower carbon emissions”.

11. IMPLEMENTATION STRATEGY

11.1 TIMELINE

4 October 2018. Officers will review and update the Sustainable City Community Action Plan and any other existing public references to the municipal GHG emissions profile to ensure that there is a consistent use of the figure 1,735,646 tCO₂e.

12. COMMUNICATION

- 12.1 Council has a priority outcome “A City with lower carbon emissions” and is committed to support our community to become more sustainable.
- 12.2 The estimated GHG emissions profile helps us to communicate to the community the scale of our municipality’s impact on our environment.
- 12.3 Council’s own operations only account for 0.6 percent of the total emissions profile. In order to reduce GHG emissions, we need to work with our community to support them to take action.
- 12.4 The Municipal GHG profile figure will be published on the ‘Sustainable Port Phillip’ website.

13. OFFICER DIRECT OR INDIRECT INTEREST

- 13.1 No officers involved in the preparation of this report have any direct or indirect interest in the matter.

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ATTACHMENTS Nil