



Baseline Carbon Review

Final Report – 2023 West Coast Council



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Executive Summary

This report details the results of the work undertaken to complete West Coast Council's (Council's) Baseline Carbon Review conducted in 2023. Our work is consistent with our proposal and Scoping Document accepted by Council's General Manager, David Midson.

Scope

The scope of this project included conducting a baseline review of carbon emissions and assisting Council to understand the information, systems and processes required for reporting in future years. Specifically, the scope included:

- Calculating Council's carbon emissions at baseline year (focusing on Scope 1 and 2 emissions)
- Assisting Council to understand potential Scope 3 emissions for future consideration and assessment
- Developing a fit-for-purpose data collection and reporting framework
- Developing high-level strategies and actions for Council to inform future carbon emission reduction programs and initiatives

Background

Local government is the closest level of government to communities and has a responsibility under the *Local Government Act 1993* (Tasmania) to provide for health, safety and wellbeing of the community. The Australia Local Government Association, the peak body representing local government, identified climate change as one of the top priorities to act on ¹. Local governments have the local knowledge and experience, and understand community needs and vulnerabilities, and have a key role in shaping urban landscapes, responding to emergencies and reducing carbon footprints. Council recognises the key role they have working with their communities, in preparing for and managing climate change impacts and lowering greenhouse gas (GHG) emissions.

The municipal area of West Coast Council is a large area of western Tasmania covering 9,575 square kilometres. It has a maritime climate influenced by the exposure to the Southern Ocean. The west coast has high average annual rainfall, and all locations have a strong seasonal cycle. Population centres include Strahan, Queenstown, Zeehan, Tullah, Rosebery and several other small townships.

In 2022, Council committed to develop a strategic approach to measuring and monitoring carbon emissions and the impacts Council has on the environment to help future proof a range of local social, economic and natural assets. One agreed immediate action was to conduct a baseline review of carbon emissions to inform the development of short, medium and long-term strategies and actions to reduce emissions within Council's control.

Synectic was engaged to complete a Baseline Carbon Review as the initial benchmark to guide future activities and priorities.

Objectives

The objective of this project was to complete a baseline review of carbon emissions in accordance with accounting standards, best practice guidance and other relevant

¹ Australian Local Government Association "Climate Change" https://alga.com.au/policy-centre/climate-change/



legislative pronouncements including State Government policies and plans. Additionally, we developed appropriate tools and templates for adaption in future reporting years.

Project Overview

With reference to *The Greenhouse Gas (GHG) Protocol: Corporate Accounting and Reporting Standard* (GHG Protocol), National Greenhouse and Energy Reporting (NGER) Regulations and other relevant guidance material the following work was undertaken:

- 1. Conducted preliminary planning, research and preparation
- Conducted an initial desktop review of Council activities relevant to the emission boundary
- Through consultation with management and relevant key personnel defined boundaries and identified emission sources
- 4. Developed a carbon emission inventory and identified data requirements
- 5. Collected and analysed data
- 6. Developed appropriate data collection requirements and reporting framework
- 7. Calculated baseline emissions
- Through discussions with management and key personnel identified and developed strategies and actions to guide future emission reduction efforts and build on the work already underway
- Prepared final report including carbon baseline calculations and deliverables (provided separately to this report)

In addition to the initial agreed scope of work we were engaged to further assist Council staff to understand required activity data and develop appropriate systems and processes to capture the necessary data. This will go some way to improve calculation practices in future years. This work is ongoing and continues to ensure Council can maintain adequate systems and processes for future reporting purposes.

Overall Assessment

Council's emissions boundary was defined using the "control approach" including assets where Council has financial or operational control. Council's operational emissions included landfill, fuel consumption and electricity as detailed in Council's Emission Sources which includes scope 1 and 2 emission sources but excludes scope 3.

Council's overall Carbon Emissions for the FY22 were estimated at 3,364 tonnes of carbon dioxide equivalent (tCO-2e). With the predominate source of emissions being from Landfill emissions. Baseline emissions estimated are detailed further in the "results" section.





Other Important Information

The baseline carbon emissions have been developed and calculated in accordance with relevant legislation guidance and best practice standards. All laws and regulations are subject to change which may affect the accuracy of

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output calculations using the deliverables associated with this project in future years. The calculation basis used for the FY22 reporting year are valid for subsequent years until newer calculations and factors are released by relevant agencies and bodies.

The information gathered for the initial baseline review is not exhaustive and in some circumstances activity data was based on estimates and / or best available data at the time the work was completed. Calculations are intended to be used for guidance purposes only to assist Council in their future assessments and reporting practices and do not comply with mandatory reporting requirements as Council is not deemed a "reporting entity" under NGER thresholds.



Methodology

Carbon accounting principles

The following five principles underpin and guide carbon accounting and reporting which allow the calculation of an approximate carbon footprint to establish materiality and highlight key areas of focus to undertake a full carbon inventory. These principles are considered best practice when calculating a carbon account, their primary function is to guide the implementation of *The GHG Protocol*, particularly when the application of the standards to specific issues or situations is ambiguous.

- Relevance fit for purpose for users, both internal and external, to make decisions
- Completeness include all emissions within the chosen inventory boundary
- Consistency apply the same methodology across processes and over time
- Transparency provide audit trail, disclose assumptions
- Accuracy reduce uncertainties

Calculating the carbon footprint and carbon management follows the process illustrated on the right, the approach taken to calculate the Council's baseline emissions is described on the following page.



Figure 1: Carbon Management Process

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(i.e., the same currency) for ease of

Approach – calculating the baseline





Calculating the Baseline

Activity Data e.g.,

Activity data + emission factor = tonnes of emissions (t) x global warming potential (gwp) = carbon dioxide equivalent (CO2e) of emissions

Emission Factors - convert activity data to emission values (as Carbon Dioxide) e.g.,

- Kilograms per kilometre travelled
- Kilograms per KWh of electricity
- Kilograms per litre of fuel used



Defining the Boundary

The emissions boundary refers to the coverage and extent of the GHG account and must include relevant emission sources. Defining the boundary includes assessing the organisation, identifying emissions within control and outside of control (financial, operational or equity share), determining relevance and establishing quantification or non-quantification. The organisational and operational boundaries define which emission sources are included and excluded and how those sources are categorised. The organisational boundary provides clarification when organisations vary in structure, operations and ownership. Operational boundaries define the scope of direct and indirect emissions within the established organisation boundary. The combination of the organisation and operational boundaries together constitute the inventory / emissions boundary.

In accordance with the *GHG Protocol: Corporate Accounting and Reporting Standard* the different sources of emissions across Council's operations were considered to ensure all Scope 1 and 2 emission sources were identified for inclusion. While Scope 3 emission sources were not included in the scope of the initial baseline calculation given Council is not deemed a "reporting entity" ² required to comply with mandatory requirements under the NGER Act, some relevant Scope 3 sources were identified for Council to consider and assess for inclusion in future emission calculations. Additionally, commitments to reduce national emissions may result in targets being imposed for local government in future.

Table 1: potential GHG emission sources relevant to Council

GHG Emission Scopes		Activities
Scope One	Direct emissions from sources owned or controlled by the organisation.	 Council owned and / or managed landfill Fuel consumption from Council vehicle fleet Fugitive emissions from leaking air conditioning and refrigeration units Waste water treatment (Council owned and managed)

² *Reporting entities are corporates which meet the National Greenhouse and Energy Reporting (NGER) threshold.*



Scope Two	Indirection emissions produced by consuming purchased electricity from a provider.	 Purchased electricity for heating and energy Metered lighting such as security lighting at community centres Council pumps and irrigation
Scope Three	Indirect emissions (not owned) produced from Council activities, but by sources not owned / controlled by the organisation. All other emissions which occur upstream or downstream in the value chain.	 Staff business travel Transmission and distribution losses with the supply chain Water supply treatment Goods and materials including chemicals, cleaning, agriculture, horticulture, roads and construction materials Outsourcing and shared service arrangements (whereby the activity would typically be undertaken by Council)

All Scope 1 and 2 emissions are deemed "relevant" and mandatory for reporting purposes ³. Scope 3 emissions are deemed "relevant" if they satisfy two out of the five criteria below set out in the GHG Protocol.

- 1. The emissions from particular sources are likely to be large relative to the organisation's electricity, stationery energy and fuel emissions.
- 2. The emissions from a particular source contribute to the organisation's greenhouse gas risk exposure.
- 3. Key stakeholders deem the emissions from a particular source are relevant.
- 4. The responsible entity has the potential to influence the reduction of emissions from a particular source.
- 5. The emissions are from outsourced activities previously undertaken within the organisation's boundary, or from outsources activities typically undertaken within the boundary for comparable organisations.

³ In accordance with the GHG Protocol Corporate Standard



Emission Sources

Control approach

Based on our discussions with Council, the proposed organisational boundary includes emission sources which Council is considered to have operational control under the "operational control approach", as defined by the *NGER (Measurement) Determination 2008, GHG Protocol: Corporate Accounting and Reporting Standard* – A Corporate Accounting and Reporting Standard ⁴. The control approach sets the basis for determining what emissions are under the direct "control" of the organisation where Council has capacity to implement operating and environmental policies. Council owns a range of land and building assets which were considered in the baseline review. Council holds no equity shares in any third parties. Assets within Council's operational control include the below.

- 1. Owned and operated
- 2. Leased from a third-party and operated by Council
- 3. Owned and tenanted out to a third party "typically either leased or licensed", therefore not or only partially operated

Council delivers a wide range of community services and maintains infrastructure, which are the primary business activities resulting in GHG emissions in the operations of Council, this includes:

- Administration of Council operations including staff and operational facilities e.g., depots
- Vehicle fleet
- The provision and maintenance of public open spaces, parks and reserves, playgrounds, sporting complexes, caravan parks, public halls and other community facilities
- The provision and maintenance of car parks, local roads, pathways, bridges pedestrian structures, stormwater pits and drains

Additionally, assets owned or controlled by Council includes roads as well as streetlighting and public lighting. Other buildings considered in the initial review are listed below.

• Amenities, community centres, shelters and public halls

⁴ Whereby an organisation reports 100 per cent of operations over which it has "the ability to direct the financial and operating policies of the latter with a view to gaining economic benefits from its activities".



- Heritage buildings, museums and visitor information centres
- Residences and dwellings owned or controlled by Council
- Sheds and stores
- Waste enclosures, transfer stations and landfill
- Swimming pools

The operational boundary defines which emission sources are included or excluded and how those sources are categorised. Setting the operational boundary occurs after the organisational boundaries have been defined and involves:

- 1. Identifying emissions associated with the organisation's operations
- 2. Categorising them as direct (emissions from sources owned or controlled by the organisation) and indirect (emissions due to the organisation's activities, but occurring from sources owned or controlled by another organisation) emissions
- 3. Choosing the scope of accounting and reporting for indirect emissions

Emission sources included and excluded from the boundary and baseline calculations are outlined on the following pages.



Emissions Sources Included

Emission Type GHG Reporting ⁵ Activities / Description		GHG Reporting ⁵	Activities / Description
	Transport Fuels (Diesel / Petrol)	Mandatory	Council consumes petrol / diesel used in controlled vehicles such as cars, trucks, vans, buses, tractors, generators, excavators, mowers for transportation or equipment operation.
Scope One	Fugitive Emissions - Waste and Landfill	Mandatory	Where a local government operates a landfill within the municipality, emissions from the landfill likely account for a substantial proportion of total emissions. Emissions from landfill occur when organic matter disposed of decomposes, predominately forming methane and carbon dioxide. These greenhouse gases seep through the ground into the atmosphere as fugitive emissions. Landfills which are owned and operated by Council are Scope 1 emissions. Landfills operated by a third party are likely to be Scope 3 emissions. In most cases there is limited or no information available on closed landfills, making it unfeasible to estimate emissions. In this case it should be documented but no further action is required.
Scope Two	Purchased Electricity – heating & cooling	Mandatory	Council's operation of controlled facilities, parks and public lighting is dependent on electricity. Emissions associated with purchased electricity are the dominant source of emissions in Council's inventory. Note "purchased" electricity indicates it is generated off site and delivered by the grid i.e., from an energy provider. Emissions from purchased electricity are not created at the point of use, thus for this reason electricity is defined as a Scope 2 emissions source. It is used within the consumer's premises or location, but the emissions are created elsewhere, by the generator. In Tasmania, most electricity is generated by hydro power, gas-fired generation and wind. Hydro power supplies around 80 per cent of the state's power.

⁵ Reporting requirement in accordance with GHG Protocol Corporate Standard

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Purchased	Mandatory (subject	Electricity consumed in network-owned streetlighting is deemed to be within Council's
Electricity –	to boundary	operational control whereby Council is responsible for maintenance of poles and replacement
Streetlighting	determination)	of globes. While emissions from electricity consumed for public streetlighting is typically considered Scope 3, we determined Council has operational control through maintenance obligations and pays a portion of electricity costs. This contributes to a significant share of overall emissions.

Emissions Sources Excluded

Scope 3 involves looking upstream at the organisation's suppliers and downstream at the customers and outsources, contractors and other service providers. Scope 3 emission sources were not considered in the initial baseline calculation for this project as they were out of scope. Council should consider what activities in these areas may be included in its inventory for reporting purposes for reasons of completeness or compliance with carbon inventory assessment in accordance with the criteria set out in the GHG protocol for future reporting periods. Additionally, some Scope 1 and 2 emission sources were not included as they were deemed negligible as detailed below.

Emission Type GHG I		GHG Reporting ⁶	Activities / Description
: One	LPG Cylinders	Optional	Council has 4 x 80-pound bottles at Council. Two at Zeehan and two at Queenstown, oxy acetylene bottles. Additionally, Council has one generator at Lake Burbury for solar system backup for residence. Aside from emissions from the consumption of fuel used in the generator captured under fuel consumption included in Scope 2, emissions from LPG Cylinders were considered to have a negligible contribution to Council's overall emissions.
Scope	Natural Gas	Mandatory	Not applicable / no usage

⁶ Reporting requirement in accordance with GHG Protocol Corporate Standard

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	Fugitive Emissions – Refrigerants	Mandatory	 Refrigerants, usually hydrofluorocarbons (HFCs) are often powerful GHGs with long lifetimes in the atmosphere. Refrigerants are found in domestica (canteen) fridges, commercial and retail chillers and fridges, office air condition systems and air-conditioned cars. Examples of common refrigerants found in the workplace are R22and R134a. Appliances purchased after approximately 2015 onwards may use less harmful "natural" refrigerants such as ammonia (R717) can carbon dioxide (R744). HFCs in cooling appliances can be removed by decommissioning the unit (by qualified contractor) or reduced by treating existing refrigerants (to ensure minimal leakage). Additionally, roughly 90% of refrigerant emissions occur at the equipment's end of life, this means proper disposal is essential. In future Council should consider the impact upon disposal of units along with emissions from domestic refrigerators and freezers have been excluded as they were considered negligible. However, in future Council should: Identify any new equipment installed during each reporting period. Estimate known leaks during operation (if any). Identify pieces of equipment which were disposed of during the reporting period and how they were disposed of to assess the potential emissions.
hree	Leased Assets	Optional	Leased assets not considered within the "operational control" of Council are excluded from the carbon inventory as they are considered to fall outside the defined boundary. However, where Council controls the asset e.g., leased fleet vehicles, emissions from the consumption of fuel related to the use is included.
Scope T	Employee Commuting (personal vehicles)	Optional	While this inventory presents a major emission under Council's indirect control, employee commuting was not considered in the scope of the baseline review. Further detailed analysis, likely by way of survey, would be required to determine the relevance of these emissions. Commuting in Council-owned / leased vehicles where personal-use is allowed, and fuel usage is paid by Council, is included in Scope 2 emissions.



Business Travel (flights, taxis, shuttles, public transport)	Optional	Difficult to measure and deemed negligible. At this stage it has been excluded as it is not mandatory.
Resource Sharing / Outsourcing	Optional	Considered immaterial, although where Council outsources a significant activity which would normally be performed in-house, emissions are normally included in Scope 2. This includes emissions generated from contractors' activities they are hired to do for Council. At this point activities performed by contractors have been excluded from the carbon inventory, however, in future Council should considered if data can be calculated to a satisfactory level of accuracy and relevance for inclusion. Business related travel resulting from current resource sharing arrangements with neighbouring Councils has been included in Scope 1 emissions based on kilometres of business-related travel and the corresponding estimated fuel usage as this can be reliably estimated.
Corporate Waste	Optional	Where Council operates / controls a landfill within the municipality general corporate waste is captured and reported in Scope 1 – emissions from landfill.
Waste – street litter bins, tree pruning, sweepings, draining pits, construction materials	Optional	As above, public waste data is captured in Scope 1 landfill emissions where Council operates / controls a landfill within the municipality. Tree pruning and other vegetation waste from Council's operations which goes into Landfill would also be captured in Scope 1 landfill emissions. Where construction materials, contaminated soils and sands from street sweeping and other activities are reclaimed, recycled and reused they are excluded from the carbon inventory. Any other waste which is disposed of in landfill is included in Scope 1 emissions.
Asphalt and Cement Production	Optional	Not applicable to Council – no processing / production of chemicals or materials such as cement or aluminium identified other than waste / landfill processing activities included in waste to landfill.



Paper Use	Optional	Paper use is generally a major product used in the office environment and should be considered for inclusion in Scope 3 for future reporting purposes.
Materials and Goods (including roads, horticulture, cleaning, chemicals, construction materials and other products) embodied emissions	Optional	Emissions generated from materials and goods have been excluded but should be considered in future inventories if data can be collected and calculated to a satisfactory level of accuracy. This includes the use of asphalt, cement and related construction material used in road works and resurfacing. Scope 3 emissions associated with repairs and maintenance, parks and gardens activities and building may account for a considerable portion of Council's overall emissions.
Water use and associated production, treatment and distribution emissions	Optional	Water use (and associated production and distribution emissions) has been excluded since it is Scope 3, however, should be considered in future inventories based on whether Council determines it to be a major source of emissions.



Activity Data

Estimating emissions requires "activity data" which can come in different forms and may vary in level of accuracy. Some data improvement recommendations, based on best practice guidance, have been identified to ensure the data capture process can be efficiently administrated and data is accurate. Missing data for 2021/22 calculations is also included below where relevant. Actual data of usage quantities is the most accurate, while uplift factors (i.e., percentages attributing a portion of the overall emissions profile to a particular emission source) is less accurate.

Emissions Category	Activity data type	Activity data source	Improvement opportunity
Electricity	Actual	Electricity bills and street lighting asset data	Data collection and storage opportunities can be enhanced as the current process of searching PDF scanned invoices for utilisation is extremely time consuming. Council should explore alternatives for data collection and storage including whether utility providers can share the required information electronically in an appropriate format for data analytics and calculations to be performed. Alternatively, Council should review the data entered in the general ledger to ensure all activity data required is captured appropriately.
Stationery (plant & equipment) & Transport Fuel	Actual	Fuel card, depot bowser and transaction records.	A considerable amount of time was required to collect, collate and analysis data for baseline emissions relating to fuel usage. Actual data was largely sourced from source documents (supplier invoices) based on registration and fuel card information, however, in some cases this was missing, and it was difficult to attribute fuel to a particular vehicle or plant & equipment. More data could be entered into Council's accounting system to allow data to be exported to excel and manipulated as required. In some instances, fuel cards are also used for several vehicles and some estimation of the relevant emission factors to be applied (depending on the type of vehicle) was required.



Landfill Actual / Estimated	Annual waste statistics and weighbridge data (post implementation) as provided to EPA. Note: opening stock of degradable organic carbon has been estimated based on historical data of quantities of waste disposed of in landfill for all prior years of the landfill's operation using an annual average tonnage for the years based on volumetric survey and or industry estimate practices in accordance with techniques 4 and 6 of the SWC ⁷ .	Zeehan landfill is the only public landfill operating in the municipal area and is believed to have been operating since 1977 serving the Zeehan Township and greater West Coast region since 1999. Until recently, without a facility for commercial cardboard and recycling this resource was disposed of at the transfer station and landfilled. An estimated total of 3,814 tonnes of waste is considered legacy waste based on the 2017 EMP analysis of site surveys undertaken in 1996 and 2016 by GHD. This figure was used for opening landfill stock to calculate legacy emissions. Prior to a weighbridge being installed waste data was estimated by Council based on the number of bins / lifts associated with general waste, kerbside collections and commercial bin lifts. In recent years data has been enhanced based on weighbridge volumes. Weighbridge volumes may be further enhanced based on recording waste mix in line with state legislation and other best practice guidance relating to the types of general rubbish used for calculation purposes. This will enable associated percentages to be updated in the Solid Waste Calculator (SWC) where known to improve the accuracy of future calculations based on relevant emission factors. Additionally, limited or no information was available for closed landfills, making it unfeasible to estimate emissions for sites other than Zeehan. However, we note Council deemed this not necessary as many of the sites have been handed over to other authorities and are no longer under the operational control of Council.
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⁷ The Clean Energy Regulator Solid Waste Calculator (SWC) used for estimating emissions and energy from solid waste and landfill guideline defines techniques for estimating opening stock. Technique 4 and 6 relates to volumetric surveys and industry estimation practices used to determine the tonnage of solid waste disposed on in landfill over the lifetime of the landfill until the first reporting period. Refer to the NGER Measurement Determination for further detail.



Refrigerants	N / A	N / A	While not included in baseline emissions future data storage options should be considered to allow Council to appropriately assess the relevance of emissions and determine whether they should be included in future reporting periods.



Results

Emissions Boundary

- 1. Assets where Council has financial or operational control.
- 2. Council's operational emissions (as detailed under "Emission Sources").
- 3. Scope 3 emissions excluded.

FY22 Baseline

Overall, the total emissions for the 2021/22 financial year were estimated at 3,364 tCO-2e.

The distribution of emissions across each activity and subsequent scope is shown in above. The most significant source of emissions was emissions associated with landfill, 97% of Council's total emissions relate to Scope 1 emissions.

- Waste, 85% of emissions (2,929 tCO-2e)
- Mobile combustion (fuel usage), 12% of emissions (409 tCO-2e)
- Purchased electricity, 3% of emissions (115 tCO-2e)









Carbon Inventory

Table 2: Summary Carbon Inventory for FY22 Baseline Estimate

Scope / Category		Emission Source	Consumption	Consumption Units	Tonnes (CO2-e)
Scope One	Fleet	Diesel – mobile	143,292.9	Litres	389
	Fleet	Petrol – mobile	8164.73	Litres	19
	Waste – Fugitive Emissions	Landfill (legacy)	2,402 (average)	Tonnes	2,211
	Waste – Fugitive Emissions	Landfill (non-legacy)	35,999.20	Tonnes	718
	Total				3,338
Scope Two	Lighting & heating	Purchased electricity	550,805	Kilowatt hours (kWh)	88
	Streetlighting	Purchased electricity	165.969	Kilowatt hours (kWh)	27
					115
Total Scope 1 & 2					3,3364



Recommendations & Reduction Strategies

Council is committed to a strategic priority of "an environment for all" to ensure natural assets are protected and enhanced for future generations. The implementation of additional recycling collection services aligns with Council's Waste Strategy and will have significant impact on reducing carbon emissions. We note in the FY22 the percentage volume of recycling compared with landfill waste improved since benchmarks were established. Additionally, Council is committed to a range of sustainable infrastructure projects with significant budget allocations made to capital projects in the FY23. This includes a \$6m capital project to develop the Zeehan Landfill, which has been a long-time in design and is becoming urgent to address critical issues with current cells close to end of life. The construction of a new cell and development of wetlands in accordance with EPA requirements will allow the continuation of the landfill on the West Coast for future generations. The addition of a landfill compactor will also see the volume of waste to landfill reduced. Additionally, Council has allocated a budget for light electric vehicle replacements. Further recommendations and reduction strategies for consideration are summarised below

- 1. Vehicle Replacements: with fuel consumption accounting for 12% of total emissions it is recommended fleet use, and fleet type, is reviewed and greater emphasis is placed on supporting a rapid switch to electric vehicles in line with light vehicle replacement initiatives supported by Council. The development and introduction of a Council Fleet Policy will assist with guiding future decision making in this regard.
- 2. Electricity Consumption & Lighting: with four locations / buildings contributing to almost 50 per cent of energy consumption, reviewing building energy efficiency may be worth analysing further to consider other energy efficiency projects / upgrades. Additionally, Council should continue to periodically switch to LED lighting wherever possible, the further transition and upgrading of street lighting to LED lighting will continue to reduce energy consumption while providing better lighting, increased lifespan and a reduction in operating costs.
- 3. Food Organics Garden Organics (FOGO): aligned with Council's longer-term waste strategies the implementation of kerbside FOGO services should be further explored and implemented to divert a large percentage of organics away from landfill. Exploring other initiatives to further divert materials from landfill will assist Council in reducing emissions from landfill operations which currently account for approximately 85% of overall carbon emissions.
- 4. Environmental Sustainability Policy: the development of an overall Environmental Sustainability Policy would be useful to capture all reduction strategies and guide future decision making. It would also be helpful in supporting staff and developing public awareness programs and waste reduction efforts more broadly.



- 5. Scope 3 Emissions: to account for the lack of data in Scope 3 emissions, it is recommended additional data from staff commuting and supply chain analysis be assessed against the GHG principles. Appropriate systems and processes should be developed to capture relevant data to gain a better understanding of indirect emissions occurring "upstream" and "downstream" of Council where relevant.
- 6. Emission Reduction Targets: to achieve Council's desire to actively manage carbon emissions, a series of yearly emission reduction milestones should be developed. The establishment of milestones to promote change to tackle carbon emissions and limit the level of emissions over time should align with government targets and goals announced as part of Tasmanian's legislative framework for action on climate change and sectoral based Emissions Reduction and Resilience Plans. By establishing consumption targets, monitoring activities can be enhanced and will assist Council to assess performance of emission reduction actions and objectively measure and proactively manage emissions.



Appendices

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Appendix 1 – References

Regulations

Council operates within the jurisdiction of the Australian Government and Tasmanian State Government. While the baseline carbon emissions have been calculated with reference to relevant legislation including the GHG Protocol, Clean Energy Act, NGER Act, National Carbon Offset Standard (NCOS) and Energy Efficiency Opportunities Act 2006, Council does not trigger any of the regulatory thresholds for reporting requirements.

In addition to the above, through the establishment of Tasmania's new greenhouse gas emission reduction target or net zero, or lower, recent amendments to the *Climate Change (State Action) Act 2008* set the agenda for the Tasmanian Government's agenda for action of climate change. Legislative requirements in accordance with the Act should be considered and guide Council's future decision making and reporting as Council may be subject to the development of sectoral based Emissions Reduction and Resilience Plans.

The following existing Australian and international standards and legislation provides the basis for a range of guidance material. These documents provide further detailed information on how to develop a carbon account.

- Australian Standard (AS) ISO 14064 series including:
 - AS ISO 14064:2006 Greenhouse Gases Part 1: Specification with guidance at the organisaiton level for the quantification and reporting of greenhouse gas emissions and removals
 - AS ISO 14064:2006 Greenhouse Gases Part 1: Specification with guidance at the project level for quantification and reporting of greenhouse gas emission reductions and removal enhancements
 - AS ISO 14064:2006 Greenhouse Gases Part 1: Specification with guidance for the valuation and verification of greenhouse gas assertions
- International Standard ISO 14040 series, including:
 - ISO 14040:2006 Environmental management Life cycle assessment Principles and frameworks
 - ISO 14040:2006 Environmental management Life cycle assessment Requirements and guidelines
- The Greenhouse Gas Protocol standards
- The National Greenhouse and Energy Reporting Act 20017 (NGER Act) and supporting legislation and documentation including:
 - National Greenhouse and Energy Reporting Regulations 2008
 - o National Greenhouse and Energy Reporting (Measurement) Determination 2008
 - o National Greenhouse and Energy Reporting (Audit) Determination 2009
 - National Greenhouse and Energy Reporting Technical Guidelines
 - National Greenhouse Account Factors

All standards and legislation are subject to revision. Responsible entities must use the most recent version or editions of any listed standards, guidance material or legislation.



Appendix 2 - Basis of Findings

Inherent limitations

This report has been prepared in accordance with the approved Internal Audit Scoping Document. The services provided in connection with the engagement comprise an advisory engagement which is not subject to Australian Auditing Standards or Australian Standards on Review or Assurance Engagements, and consequently no opinions or conclusions intended to convey assurance will be expressed.

Due to the inherent limitation of any internal control structure, it is possible that fraud, error or non-compliance with laws and regulations may occur and not be detected. Further, the internal control structure, within which the control procedures that have been subject to the procedures we performed operate, has not been reviewed in its entirety and, therefore, no opinion or view is expressed as to its effectiveness of the greater internal control structure. The procedures performed were not designed to detect all weaknesses in control procedures as they are not performed continuously throughout the period and the tests performed on the control procedures are on sample basis. Any projection of the evaluation of control procedures to future periods is subject to the risk that the procedures may become inadequate because of changes in conditions, or that the degree of compliance with them may deteriorate.

We believe that the statements made in this report are accurate, but no warranty of completeness, accuracy or reliability is given in relation to the statements and representations made by, and the information and documentation provided by West Coast Council Management and personnel. We have not sought to independently verify those sources unless otherwise noted within the report. We are under no obligation in any circumstance to update this report, in either oral or written form, for events occurring after the report has been issued in final form unless specifically agreed with West Coast Council. The findings and recommendations expressed in this report have been formed on the above basis.

Third party reliance

This report is intended for use by West Coast Council only for the purpose set out herein. The report is not to be used for any other purpose or distributed to any other party without Synectic Audit & Assurance Pty Ltd ("Synectic") prior written consent.

This report has been prepared at the request of the West Coast Council's general manager or its delegate in connection with our engagement to perform consulting services. Other than our responsibility to Management of West Coast Council, neither Synectic nor any member or employee of Synectic undertakes responsibility arising in any way from reliance placed by a third party, including but not limited to West Coast Councils external auditor or regulatory authority, on this report. Any reliance placed is that party's sole responsibility.

Access to Information

We received full co-operation and assistance from management and staff, and we were provided with access to all the information we required for the audit. We express our appreciation to staff for their assistance in our work, and in particular Alison Shea, Eleanor Strang and Scott Butler.





Accountants. Auditors. Advisers.

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