



# Carbon Footprint Audit

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Prepared for:



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Contents

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1.0

Background

p. 3 – 5

2.0

Assessment Approach

p. 6 – 16

3.0

Baseline Emissions Assessment

p. 17 – 21

4.0

Reduction Strategy

p. 22 – 25

5.0

Climate Active Overview

p. 26 – 31

6.0

Recommendations and Next Steps

p. 32 – 34



# 1.0

## Background





## 1.1

## Background



Waratah-Wynyard Council's ('Council') is located in north-western Tasmania, bounded by Bass Strait in the north, Central Coast, Burnie and Kentish councils in the east, West Coast Council in the south, and Circular Head Council in the west.

In June 2019, Council joined with other local governments around Australia to develop a strategic response to climate change. The council showed leadership by taking the initial steps to help future proof a range of local social, economic and environmental values. The iCEP was adopted by Council on the 17 August 2020 after a twelve month long combined research, development and consultation period.

One of the actions within iCEP requires Council to set an emissions target to achieve corporate carbon neutrality by 2050 with interim targets on the pathway to this goal.

As a first step, Council needs to understand its baseline carbon footprint before a strategy can be formed to reduce and offset emissions. This formed the basis of the **Carbon Footprint Audit** project.

As leading GHG auditors, Certified Measurement and Verification professionals, and Registered Climate Active Consultants, Ndevr Environmental was engaged to deliver the Carbon Footprint Audit project. An overview of the project is illustrated on the following page.



## 1.2

## Project Overview

Confirm Emissions Boundary

- Ensure all emission sources are identified and assessed for relevance for inclusion in WWC boundary to ensure alignment with the Climate Active standard and best practice.

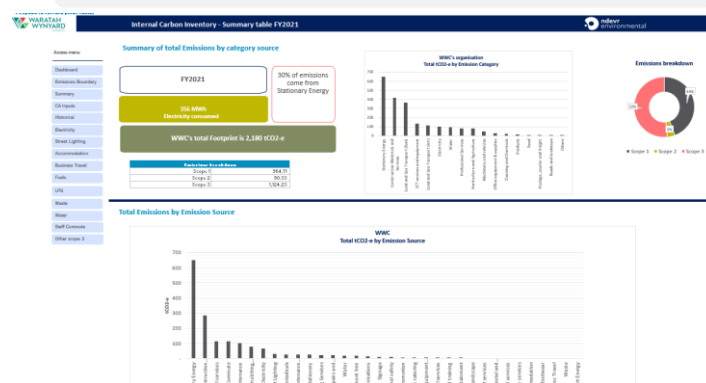
Calculate Inventory

- Editable and updateable inventory tool to facilitate year on year carbon footprint calculations and monitoring.
- Process in line with Climate Active standard.
- Capacity building for WWC to ensure ownership of ongoing updates.

Report and guidance

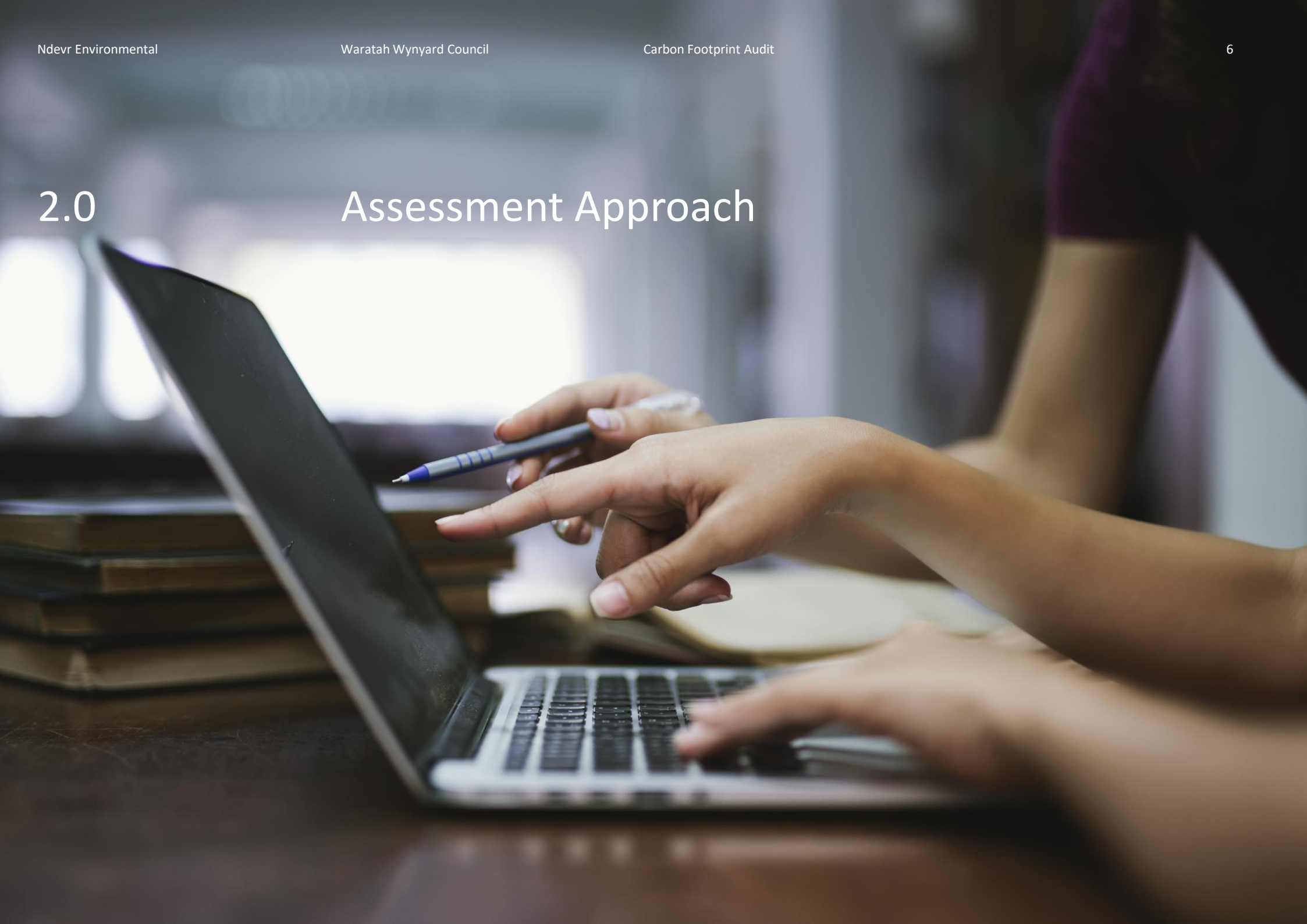
(this document)

- Assist budgeting for climate active registration/certification and carbon offsets.
- Identification and prioritisation of emissions reduction strategies.
- Stakeholder engagement to ensure early engagement for assignment (& ownership) of roles and responsibilities.



## 2.0

# Assessment Approach



## 2.1

## Calculating the Footprint

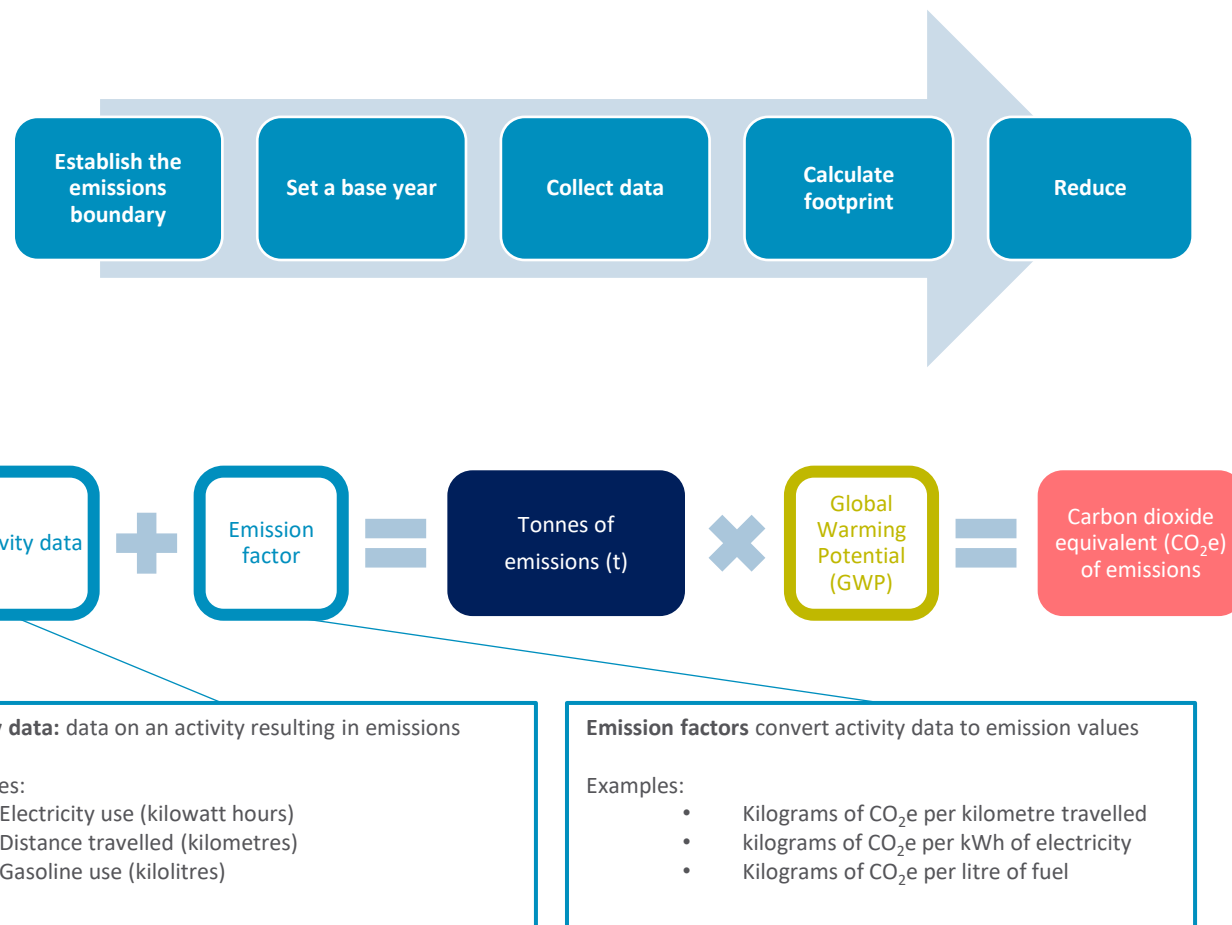
Calculating the carbon footprint follows the process illustrated on the right:

1. Establish emissions boundary
2. Set a baseline year
3. Collect 'activity' data (e.g., kWh of electricity, litres of fuel, dollar spend)
4. Calculate footprint
5. Reduce (you can't manage what you don't measure)

The data used to calculate the footprint is referred to as 'activity data' which may come in the form of dollar spend, energy consumption, waste generated, etc. and can be sourced from bills, fuel cards, general ledger, etc.

Emission factors are then applied to the activity data based on the unit of measurement. Emission factors are usually sourced from the relevant National Greenhouse Accounts or an alternative reputable source.

All emissions are calculated in terms of carbon dioxide equivalent CO<sub>2</sub>-e (i.e., the same currency) for ease of comparison.



## 2.2

## Defining the Boundary

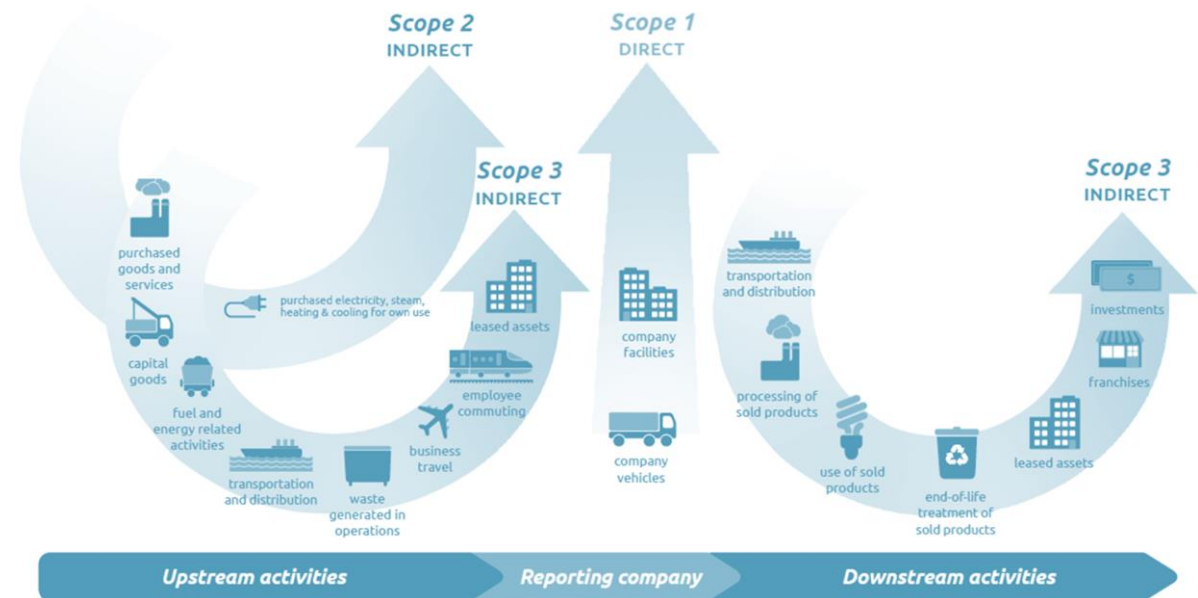
The emissions boundary refers to the coverage and extent of the GHG account and must include all relevant emissions sources. The Australian [Climate Active Carbon Neutral Standard for Organisations](#) (the 'Standard') outlines steps to determine the boundaries in section 2.3.1, incl. defining the organisation, identifying emissions within control and outside of control (financial, operation, or equity share), determining relevance, and establishing quantification or non-quantification.

In accordance with the Greenhouse Gas (GHG) Protocol and Climate Active Organisational Standard, the different sources of emissions across WWC's operations were considered to ensure all scope 1, scope 2 and relevant scope 3 emission sources were identified for inclusion. The different '**scopes**' can be defined as follows:

- Scope 1- direct emissions from sources which the "company" owns or controls
- Scope 2- indirect emissions from electricity consumption
- Scope 3- all other indirect emissions that occur in the value chain

All scope 1 and 2 emission sources are deemed 'relevant' and must be included. Scope 3 emission sources are deemed '**relevant**' if they satisfy 2 out of the following 5 criteria:

1. The emissions from a particular source are likely to be large relative to the organisation's electricity, stationary 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 outsourced activities typically undertaken within the boundary for comparable organisations.





## 2.3

## Defining the Boundary

WWC's proposed organisational boundary includes emissions sources where the Council is considered to have operational control under the 'operational control approach', as defined by the *National Greenhouse and Energy Reporting (Measurement) Determination 2008*, the global Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard and Climate Active as emissions resulting in the delivery of services where Council has capacity to implement operating policies ([Climate Active](#)) and environmental policies ([Greenhouse Gas Protocol](#)). This is operationalised by testing where Council is covering the utility or fuel costs for the asset or operation.

Council owns or controls just over 200 land and building assets. A breakdown of the buildings and land under Council's remit is on the right. These assets were either:

1. owned and operated,
2. leased from a third-party and operated by council, or
3. owned and tenanted out to a third party (typically either leased or licensed), therefore not or only partially operated.

Other assets owned or controlled by Council include roads as well as streetlighting and public lighting.

Building Assets	Amount
Amenities (public toilets, camp kitchen, etc)	19
Sheds/ Awnings / Stores	15
Shelters / Gazebos	10
Community Centres (childcare, sports & rec, etc)	10
Rooms (change, club, band, etc)	8
Public Halls / Information Hut / Ticket Box	6
Office / Headquarters	6
Other Depot	5
Heritage Building / Museum / WOW / Display	4
Residence / Dwelling	4
Waste Enclosures	2
Grand Stands (including amenities)	2
<b>Grand Total</b>	<b>91</b>

Land Assets	Amount
Council-owned land	86
Parcels leased / controlled by Council – TP ownership	28
Parcels with unclear ownership	15
<b>Grand Total</b>	<b>114</b>

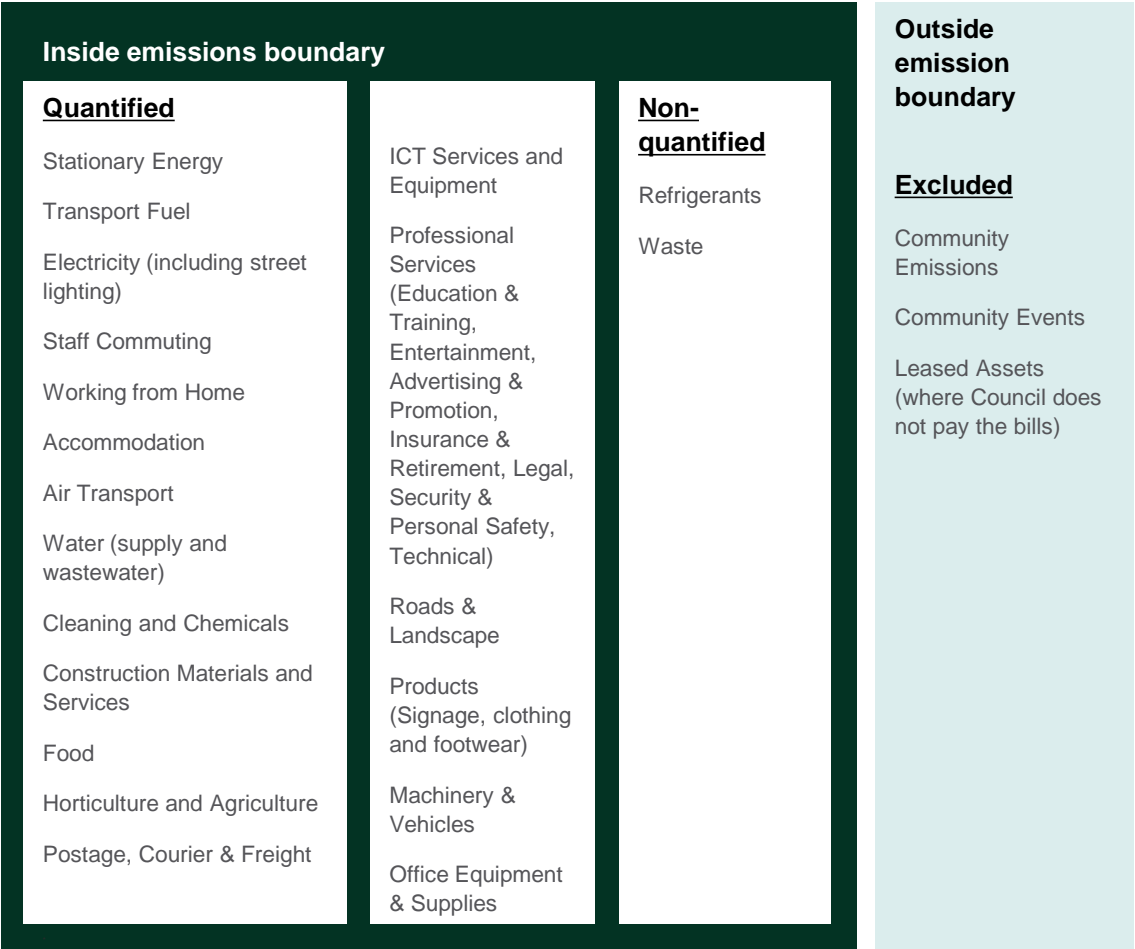


# 2.4 Defining the Boundary

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 the Council.

- self-administration of council operations, incl. the staff and operating administrative facilities and the vehicle fleet
- the provision and maintenance of many facilities, such as public toilets, sporting complexes, performance centres, recreation centres, caravan parks, community & public hall
- the provision and maintenance of public open spaces, such as parks and reserves, BBQ facilities, toilet blocks, playgrounds, and car parks
- the provision and maintenance of local roads, pathways, bridges, pedestrian structures, stormwater pits and drains

The figure to the right illustrates Council’s proposed boundary in line with Climate Active.

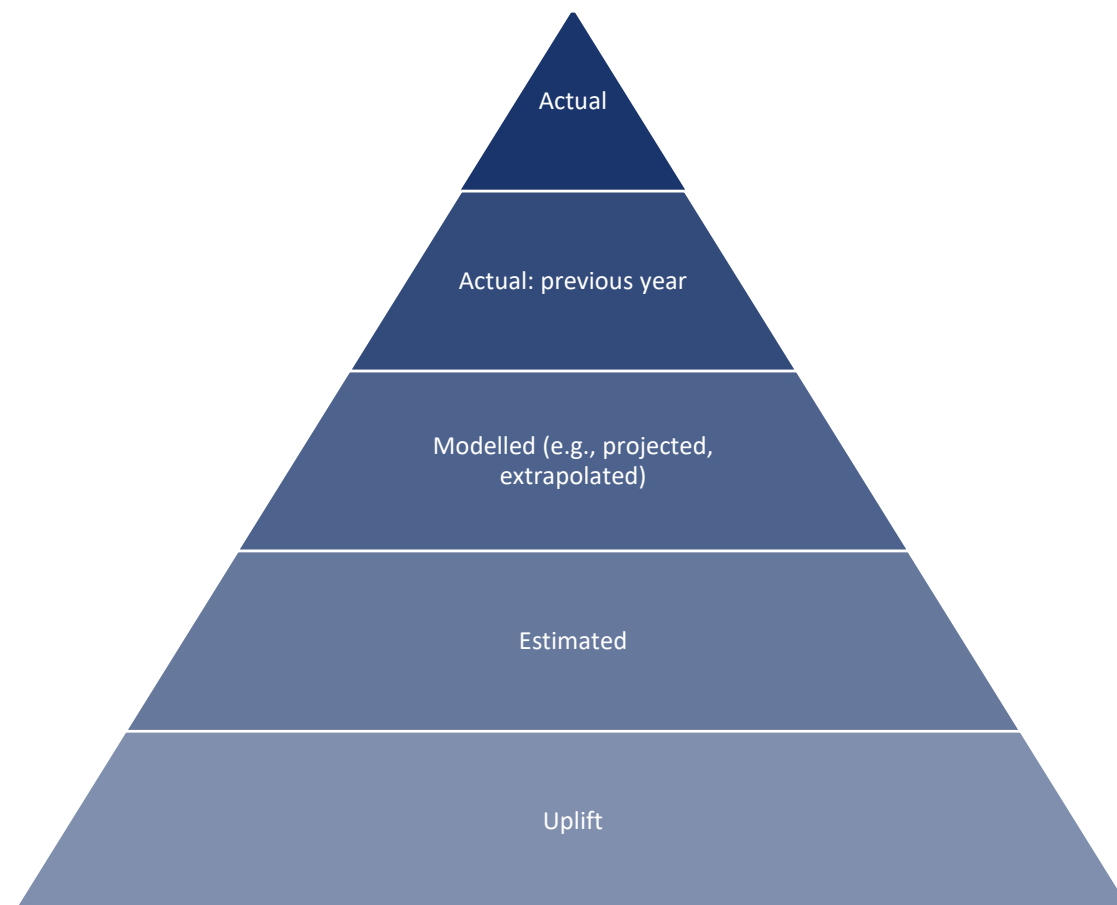


## 2.5

## Activity Data Quality

### Data hierarchy

- Estimating emissions requires 'activity data' which can come in different forms and may vary in level of accuracy.
- Data improvement recommendations are based on the Climate Active Standard for data accuracy (Figure to the right).
- Actual data of usage quantities (e.g., kWh of electricity, litres of fuel) is the most accurate data, while uplift factors (i.e., percentages attributing a portion of the overall emissions profile to a particular emissions source) is the least accurate.



## 2.6

## Activity Data and Improvement Opportunities

Emission category	Activity data type	Activity data source	Improvement opportunity
Stationary Energy	Actual	Fuel card, depot bowser and transaction records, ELGAS bills	<p>For WWC's boundary, stationary energy is inclusive of LPG as well as petrol and diesel used for stationary purposes (i.e., plant and machinery). No improvement opportunities identified.</p> <p>However, data collection and storage opportunities can be refined further as the current process of searching bulk PDF invoice scans for utilities is time consuming. WWC can explore alternatives for data storage such as eFiles and portals.</p>
Refrigerants	Uplift	Estimate based on Climate Active certified peers	<p>WWC can collect invoices from subcontractors for kilograms of refrigerant that is replaced, so emissions can be calculated using actual data.</p> <p>As above, data storage options can be considered to reduce time in capturing source data.</p>
Transport Fuel	Actual	Fuel card, depot bowser and transaction records	No improvement opportunity identified.
Electricity (location based)	Actual / Modelled	Electricity bills Street lighting nominal power	<p>Significant effort has been made to collate NMIs by asset which should be continued going forward. Electricity bills provide actual kWh consumed through WWC's operations. Streetlighting electricity consumption has been modelled based on number of lights, wattage and assumed daily operating hours. WWC can liaise with Aurora to obtain actual kWh consumed by streetlights.</p> <p>Data collection and storage opportunities can be refined further as the current process of searching bulk PDF invoice scans for utilities is time-consuming. WWC can explore alternatives for data storage such as eFiles and portals.</p>





## 2.6 Activity Data and Improvement Opportunities

Emission category	Activity data type	Activity data source	Improvement opportunity
Waste	Uplift	Estimate based on Climate Active certified peers	WWC can model its emissions based on an estimation of the portion Council contributes to kerbside collection of waste streams (from buildings and public spaces). Alternatively, WWC can request its waste provider to provide details on the weight of each waste stream it collects from Council assets.
Water	Actual / Modelled	Water supply Bills/ Wastewater modelled as percentage of water consumption	Significant effort has been made to collate water bills by asset. Improvements can be made to obtain invoices for a full year for a complete data set.  Data collection and storage opportunities can be refined further as the current process of searching bulk PDF invoice scans for utilities is time consuming. WWC can explore alternatives for data storage such as eFiles and portals.
Working from Home	Estimated	Climate Active Calculator	In order to better capture energy-related emissions produced by remote employees, data including the frequency that employees work from home versus in the office, their location, home type, and home office settings will contribute to more accurate measurement of emissions. This could be captured through a survey, WFH agreements and/or timesheet records. Further, knowledge of actual electricity consumption (i.e., from a bill) will also result in a more accurate estimation of WFH emissions.
Professional Services	Actual	Financial records	A limitation of this emission factor type is that the only way to record a reduction is through reduced spend (or choose a carbon neutral provider). If more accurate estimations can be made to apply a different or bespoke emission factor, actual reductions can be captured.  Consideration on the descriptions of ledger accounts in the finance system and consistency in costing invoices may help to identify data sources for future audits.



## 2.7

## Activity Data and Improvement Opportunities

Emission category	Activity data type	Activity data source	Improvement opportunity
Cleaning and Chemicals	Actual	Financial records	A limitation of this emission factor type is that the only way to record a reduction is through reduced spend (or choose a carbon neutral provider). If more accurate estimations can be made to apply a different or bespoke emission factor, actual reductions can be captured (i.e., kL of chemicals and fuel used itemized in invoicing) will provide a more accurate estimation of emissions.
Contractor Fuel	Modelled	Financial records	Currently only includes contractors that provide waste collection services. WWC should review its financial record to determine other contractors which may use a significant amount of fuel for operations. Assumed 20% of contractor spend is for fuel. Obtain actual fuel consumption data for more accurate measurement WWC could request contractors to provide an estimation of fuel consumption in their tenders or include a fuel (by type or weight) on their invoice/final report, where practical.
Horticulture and Agriculture	Actual	Financial records	A limitation of this emission factor type is that the only way to record a reduction is through reduced spend (or choose a carbon neutral provider). If more accurate estimations can be made to apply a different or bespoke emission factor, actual reductions can be captured.
Accommodation	Actual	Travel records	Consideration on the descriptions of ledger accounts in the finance system and consistency in costing invoices may help to identify data sources for future audits.
			No improvement opportunities identified. However, data is difficult to capture in the current systems. WWC can consider adjustments to the finance structure or exploring booking systems to incorporate travel related expenditure, such as flights, accommodation, car hire etc.



## 2.8

## Activity Data and Improvement Opportunities

Emission category	Activity data type	Activity data source	Improvement opportunity
Staff Commuting	Modelled	Staff Survey	Commuting data for an average work week (mode of transport, distance travelled, number of days in which employee commutes to work) is captured by an online survey and extrapolated out for the year by number of FTE. This is usually the least time intensive approach to get as accurate as possible is recommended going forward.
Food	Actual	Financial records	<p>A limitation of this emission factor type is that the only way to record a reduction is through reduced spend (or choose a carbon neutral provider). If more accurate estimations can be made to apply a different or bespoke emission factor, actual reductions can be captured.</p> <p>Consideration on the descriptions of ledger accounts in the finance system and consistency in costing invoices may help to identify data sources for future audits.</p>
Office Equipment & Supplies	Actual	Financial records	<p>A limitation of this emission factor type is that the only way to record a reduction is through reduced spend (or choose a carbon neutral provider). If more accurate estimations can be made to apply a different or bespoke emission factor, actual reductions can be captured.</p> <p>Consideration on the descriptions of ledger accounts in the finance system and consistency in costing invoices may help to identify data sources for future audits.</p>
ICT Services & Equipment	Actual	Financial records	<p>A limitation of this emission factor type is that the only way to record a reduction is through reduced spend (or choose a carbon neutral provider). If more accurate estimations can be made to apply a different or bespoke emission factor, actual reductions can be captured.</p> <p>Consideration on the descriptions of ledger accounts in the finance system and consistency in costing invoices may help to identify data sources for future audits.</p>



## 2.8

## Activity Data and Improvement Opportunities

Emission category	Activity data type	Activity data source	Improvement opportunity
Postage Courier and Freight	Actual	Financial records	A limitation of this emission factor type is that the only way to record a reduction is through reduced spend (or choose a carbon neutral provider). If more accurate estimations can be made to apply a different or bespoke emission factor, actual reductions can be captured.
Machinery and Vehicles	Actual	Financial records	A limitation of this emission factor type is that the only way to record a reduction is through reduced spend (or choose a carbon neutral provider). If more accurate estimations can be made to apply a different or bespoke emission factor, actual reductions can be captured.
Roads and Landscape	Actual	Financial records	A limitation of this emission factor type is that the only way to record a reduction is through reduced spend (or choose a carbon neutral provider). If more accurate estimations can be made to apply a different or bespoke emission factor, actual reductions can be captured.
Products	Actual	Financial records	A limitation of this emission factor type is that the only way to record a reduction is through reduced spend (or choose a carbon neutral provider). If more accurate estimations can be made to apply a different or bespoke emission factor, actual reductions can be captured.
			Consideration on the descriptions of ledger accounts in the finance system and consistency in costing invoices may help to identify data sources for future audits.
Construction Materials and Services	Actual	Financial records	A limitation of this emission factor type is that the only way to record a reduction is through reduced spend (or choose a carbon neutral provider). If more accurate estimations can be made to apply a different or bespoke emission factor, actual reductions can be captured (e.g., WWC can request information from contractors through tenders and contracts about the weight of construction materials used, particularly asphalt and bitumen).





# 3.0 Baseline Emissions Assessment





3.1 Carbon Footprint 2021

Emission boundary

- Assets where WWC has financial or operational control
- WWC operational emissions

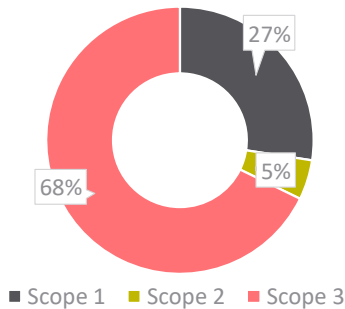
FY21 Baseline

- With 94.1 full-time equivalent (FTE) staff employed within WWC this equates to approximately 20.9 tCO<sub>2</sub>-e/FTE.
- 27% of WWC’s emissions are scope 1 (transport and stationary energy).
- More than half of WWC’s emissions are scope 3 emissions, with Construction materials and services representing the largest portion at around 19% of the overall share of the emissions profile (made up of repairs and maintenance, park maintenance, building maintenance). Fuel used by third-party contractors represent another 17% of the WWC’s total footprint.
- While scope 3 emissions are associated with sources which WWC has less control over, there are still opportunities to influence emissions reductions.

1,971 tCO<sub>2</sub>-e

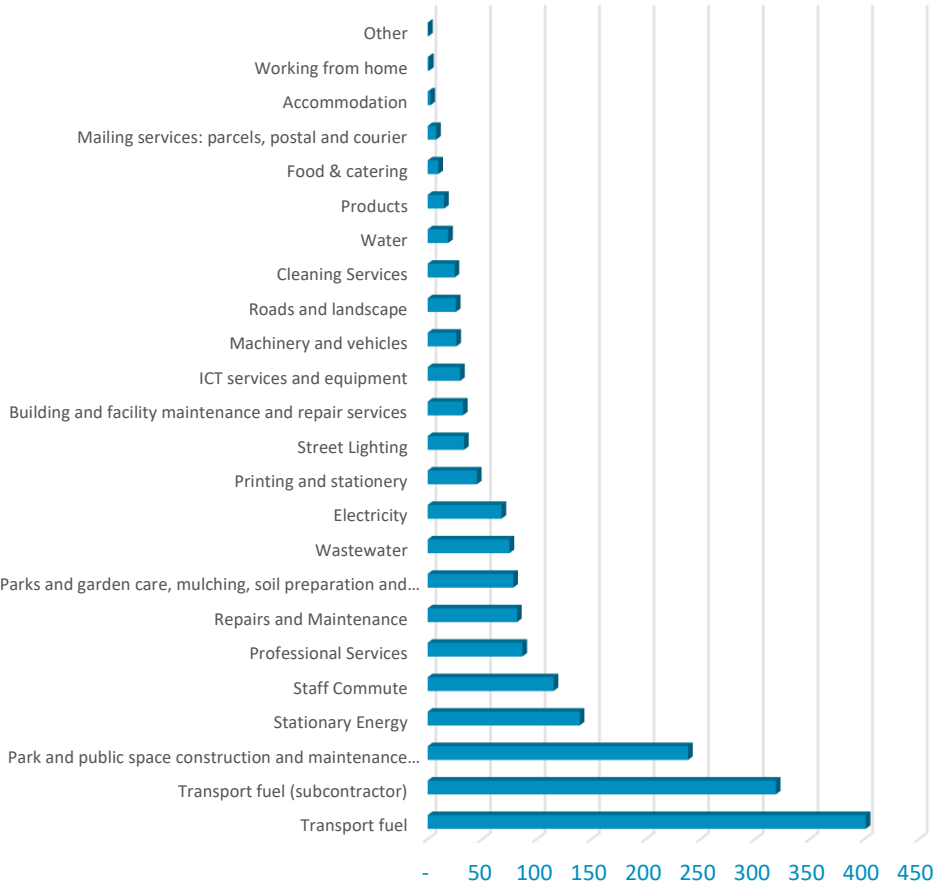
Total emissions base year FY2021\*

Emissions breakdown by scope



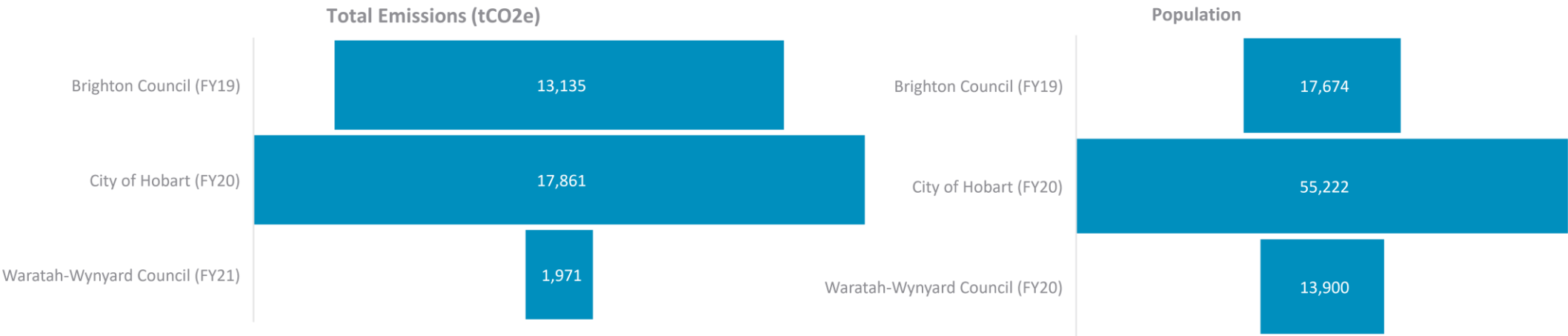
\*including 5% uplift factor

WWC  
Total tCO<sub>2</sub>-e by Emission Source



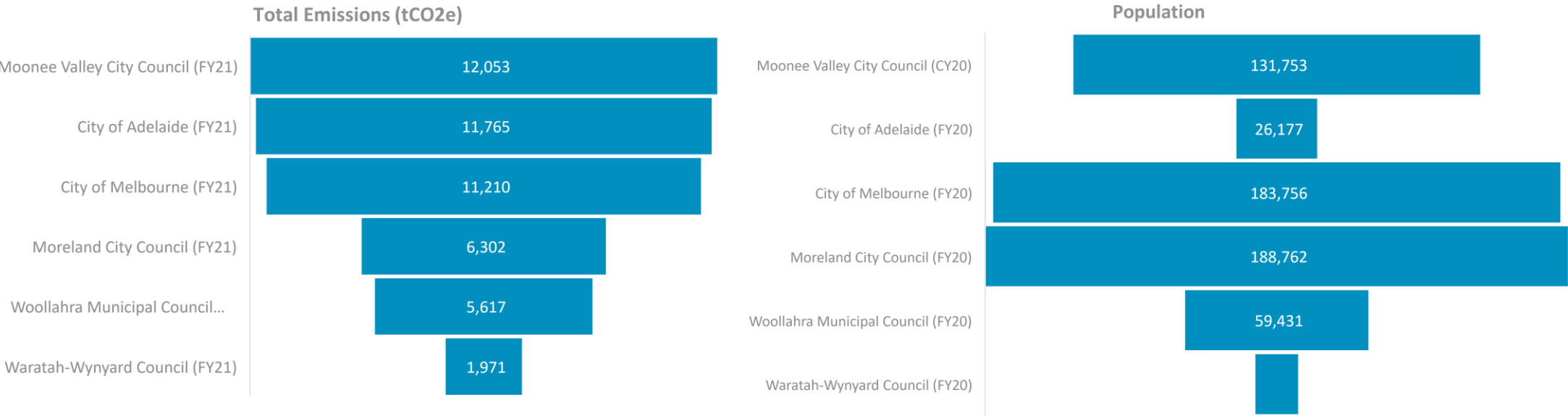
3.4 Peer Review – Tasmanian Councils

Compared with other Tasmanian local governments that report publicly on their corporate emissions, WWC has a much lower total for its corporate emissions and lowest emissions intensity at 142 kgCO<sub>2</sub>-e per capita behind Hobart’s 323 kgCO<sub>2</sub>-e per capita and Brighton’s 743 kgCO<sub>2</sub>-e per capita. Note that Hobart and Brighton have not followed best practice frameworks and report only on fuel, energy and waste.



3.2 Peer Review – Climate Active Certified

Compared with the below Climate Active certified local governments, WWC has a much lower total for its corporate emissions yet has the second-highest emissions intensity at 142 kgCO<sub>2</sub>-e per capita behind Adelaide’s 449 kgCO<sub>2</sub>-e per capita.





### 3.3 Peer Review – Emissions Hotspots

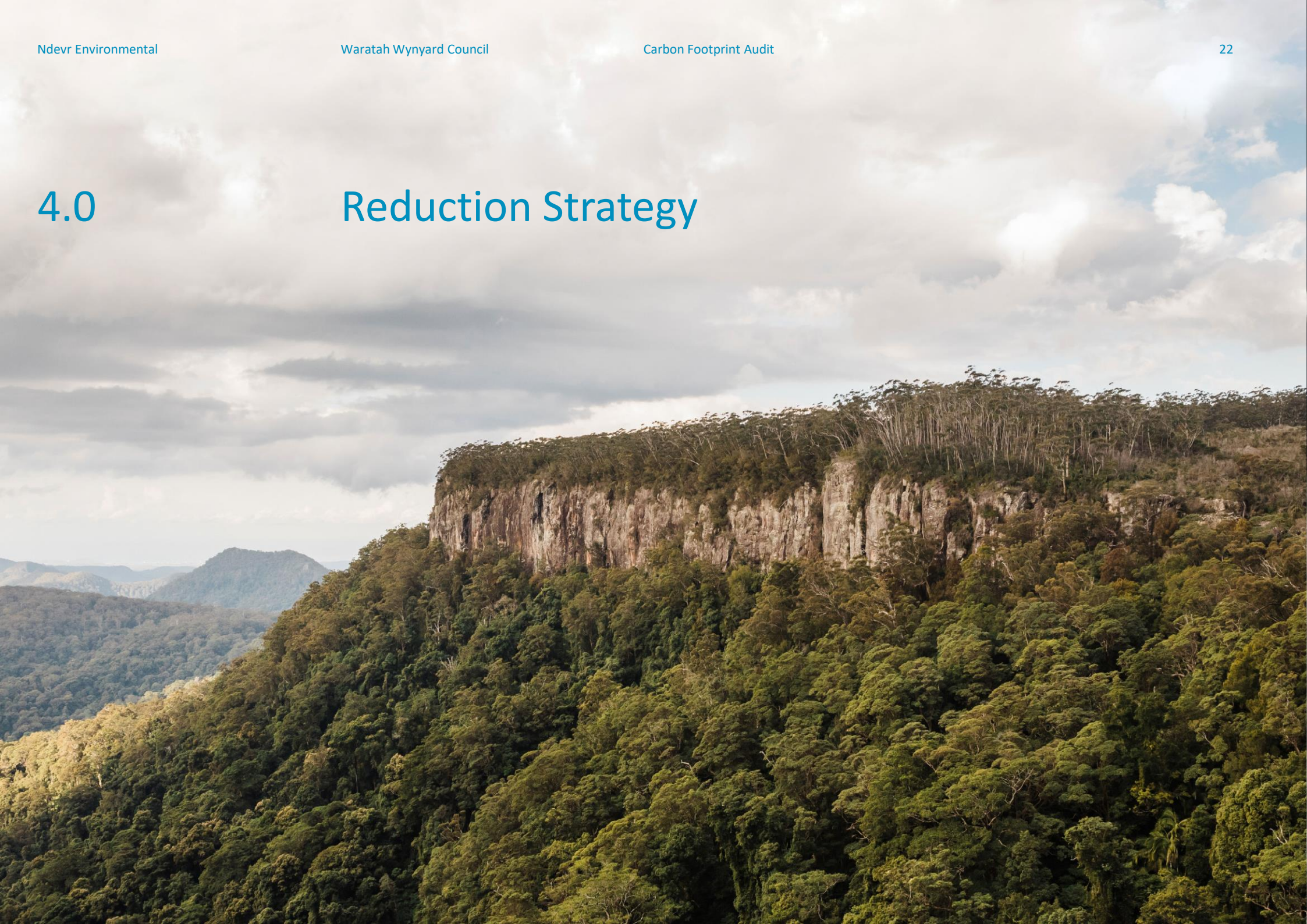
Organisation	Total emissions (tCO <sub>2</sub> -e)	Main emission sources	Emissions reduction strategy
<a href="#">Moonee Valley City Council</a>	12,053 FY21	<ul style="list-style-type: none"> <li>Electricity</li> <li>Land and Sea Transport (fuel)</li> <li>Stationery Energy</li> </ul>	<ul style="list-style-type: none"> <li>Purchase 100% renewable energy</li> <li>Prioritise electric over gas infrastructure in new and existing Council buildings</li> <li>Energy efficient retrofits</li> <li>Implement opportunities to maximise ESD</li> <li>Collaborate with VicRoads to fund the transition of LED lighting in major roads</li> <li>Council Fleet Policy to transition to low and zero emission vehicles</li> </ul>
<a href="#">City of Adelaide</a>	11,765 FY21	<ul style="list-style-type: none"> <li>Stationery Energy</li> <li>Waste</li> <li>ICT services and equipment</li> </ul>	<ul style="list-style-type: none"> <li>Encourage energy-efficient and adaptive reuse of commercial buildings &amp; public lighting</li> <li>Utilisation of regulatory levers to encourage energy efficiency uptake</li> <li>Increase uptake of LEVs</li> <li>Increase the frequency and quality of public transport services</li> <li>Increase investment in large scale renewables across the state</li> <li>Increase uptake of renewable energy and battery storage</li> </ul>
<a href="#">City of Melbourne</a>	11,210 FY21	<ul style="list-style-type: none"> <li>Land and sea transport (fuel)</li> <li>Stationery Energy</li> <li>Water</li> </ul>	<ul style="list-style-type: none"> <li>Solar installation across 26 sites</li> <li>Renewable electricity</li> <li>Reduction of over 50% in COM's corporate fleet vehicles</li> </ul>
<a href="#">Moreland City Council</a>	6,302 FY21	<ul style="list-style-type: none"> <li>Council fleet fuel</li> <li>Stationery Energy</li> <li>Contractor fuels</li> </ul>	<ul style="list-style-type: none"> <li>Increase ESD outcomes for energy efficiency and renewables</li> <li>Encourage switch from using gas for cooking and heating to electric</li> <li>Transition fleet to low-zero emission vehicles</li> <li>Behaviour change campaigns</li> <li>Reduce the amount of organics sent to landfill</li> </ul>
<a href="#">Woollahra Municipal Council</a>	5,617 FY21	<ul style="list-style-type: none"> <li>Electricity</li> <li>Land and Sea Transport (fuel)</li> <li>Stationery Energy</li> </ul>	<ul style="list-style-type: none"> <li>Replacement of all residential streetlights with energy-efficient fixtures</li> <li>Installation of a 62.7 kW solar PV system</li> <li>Replacing three internal combustion engine vehicles in Council's fleet with electric vehicles</li> </ul>





## 4.0

# Reduction Strategy



## 4.1

## FY21 Achievements

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### Achievements in FY21 (Outside of iCEP)

- Planting of 3,500 trees throughout the municipality during 2020/21, including a large rehabilitation at the Ballast Pit site
- Updated the 10-year Corporate Strategic Plan 2017-2027 to reflect the environmental philosophies and priorities contained within iCEP
- Development of an Environmental Sustainability Policy
- Installation of a solar panel system for the use of renewable energy at the Wynyard Council Chambers
- Development of the Draft Fossil Bluff and Surrounds Master Plan in partnership with the Wynyard Landcare Group
- Installation of a Recycling Hub at the Wynyard Council Chambers
- Development of a Settlement Strategy
- Installation of virtual fencing devices on the Sisters Beach Road in partnership with the Sisters Beach Community Association
- Agreement with Wynyard Landcare to translocate several species of heathland plants (several of which are rare in Tasmania and some are the only example of their species known in the Wynyard area) to a public reserve
- Recycling of insitu pavement material to reduce use of natural materials, fewer truck kilometers on the road and fewer carbon emissions as part of pavement renewal works on Deep Creek Road, George Street and Pelissier/Raglan roundabout
- Developed and implemented a paperless Planning, Building and Plumbing assessment process
- Provided compostable dog poo bags in our public dispensers with the added benefit of this style being more cost effective than the plastic alternative that was being used
- Supported the Wynyard High School's Climate Awareness Day by participating in workshop/s and providing sustainability educational information
- Added an environmental sustainability criteria to the tender evaluation process to ensure future tenders are assessed accordingly
- Continued sustainability efforts at Warawyn Early Learning Centre





## 4.2 iCEP Actions (Carbon Footprint)

Priority	Action	Emission Source
<b>4. Reducing Council's resource consumption and carbon footprint</b>	4.1 Develop a Council emissions target to achieve corporate carbon neutrality, in line with Tasmania's existing target of achieving (or maintaining) carbon neutrality by 2050; and in doing so, set interim targets on the pathway to this goal.	All
	4.2 Track Council's carbon emissions and conduct energy audits of Council facilities as appropriate to assess opportunities for improvement.	All
	4.3 Undertake works to minimise energy consumption and maximise energy efficiency in Council buildings as circumstances allow and upgrades are undertaken.	Electricity
	4.4 Continue to transition from fluorescent to LED lighting in all Council buildings.	Electricity
	4.5 Install solar panel system at the Wynyard Council Chambers building.	Electricity
	4.6 Undertake a cost-benefit analysis to assess the viability of installing solar power on Council owned land, buildings and lighting infrastructure, including through partnerships with other agencies.	Electricity
	4.7 Trial electric passenger vehicles in Council fleet.	Land & Sea Transport (fuel)
	4.8 Investigate opportunities for bulk-buying an electric vehicle fleet with other councils.	Land & Sea Transport (fuel)
	4.9 Investigate opportunities to implement additional charging stations in the Waratah-Wynyard area.	Land & Sea Transport (fuel)
	4.10 Complete a water-saving feasibility study that identifies water saving and non-potable water recommendations for Council's facilities and operations with a view to setting targets; and develop a Sustainable Water Use Plan.	Water
<b>5. Managing waste sustainably</b>	5.1 Continue to implement the initiatives and recommendations from the Waste and Resource Recovery Strategy 2019-2024.	Waste
<b>8. Aligning Council's purchasing with principles of sustainability.</b>	8.1 Develop a Sustainable Purchasing Strategy and/or policy to ensure purchasing decisions consider quality and sustainability (incl. carbon footprint) as well as price.	Goods and Services
	8.3 Through Council's contracting and procurement processes, seek ongoing innovation from suppliers to minimise waste going to landfill.	Goods and Services





## 4.3 Additional Reduction Actions

Emission Source	Portion of Emissions Profile	Scope	Carbon Reduction Initiative
Stationery Energy	7%	1	<ul style="list-style-type: none"> <li>Fuel efficiency improvements of plant and machinery</li> <li>Fuel switching</li> </ul>
Land & Sea Transport (fuel)	21%	1	<ul style="list-style-type: none"> <li>Encourage virtual meetings</li> </ul>
Construction materials & services	19%	3	<ul style="list-style-type: none"> <li>Sustainable performance standards (e.g., building policy, Sustainable Infrastructure Design Manual)</li> <li>ESD considerations including low-impact materials</li> </ul>
Contractor fuel	17%	3	<ul style="list-style-type: none"> <li>Obtain actual fuel consumption data for more accurate measurement</li> <li>Encourage fuel efficiency and fuel switching through procurement and contract negotiation</li> </ul>
Staff Commuting	6%	3	<ul style="list-style-type: none"> <li>Flexible Working Arrangements (80% WFH)</li> <li>Active transport incentives</li> <li>Leasing hybrid/EV cars instead of using Taxi/Uber</li> <li>Encourage more ride share</li> </ul>
Electricity	4%	2	<ul style="list-style-type: none"> <li>Procure 100% renewable energy</li> <li>Energy efficiency improvements, focussing on biggest consumers first (Top 5: 21 Saunders Street, Wynyard; Somerset Rec Centre, 7 Arthur St, Wynyard; Wynyard Child Care Centre, 21 Saunders Street, Wynyard; 2A Bells Pde, Somerset; 0 Smith Street, Waratah)</li> <li>Motion detectors and timers</li> <li>'Switch off' behaviour</li> <li>Install meters to heating/cooling system to track its energy use</li> <li>Regularly maintain and repair the existing heating/cooling system</li> <li>Building fabric improvements (e.g., insulation, double glazed windows)</li> </ul>



5.0

## Climate Active Overview



## 5.1

## What are the Benefits of Joining Climate Active?

### Stand Out or Match Your Competitors

The environmental and social pledges of organisations across all sectors is becoming a valuable source of competitive advantage in a crowded and noisy market. Some of the nation's best-known organisations are taking action to ensure Australia meets its carbon reduction commitments. Climate Active carbon neutrality is a genuine and demonstrable contribution to the environment, that goes beyond an organisation's corporate social responsibility.

### Enter the Carbon Neutral Supply Chain

Increasingly corporations are embedding sustainability requirements including emissions reduction into their supply chains. Similarly, governments and councils across Australia are committing to ambitious emissions reduction targets. Climate Active certification provides, at recognisable guarantee a product will not contribute to the carbon footprint of the supply chain and will meet the procurement requirements of both the private and public sectors.

### Connect with the Community

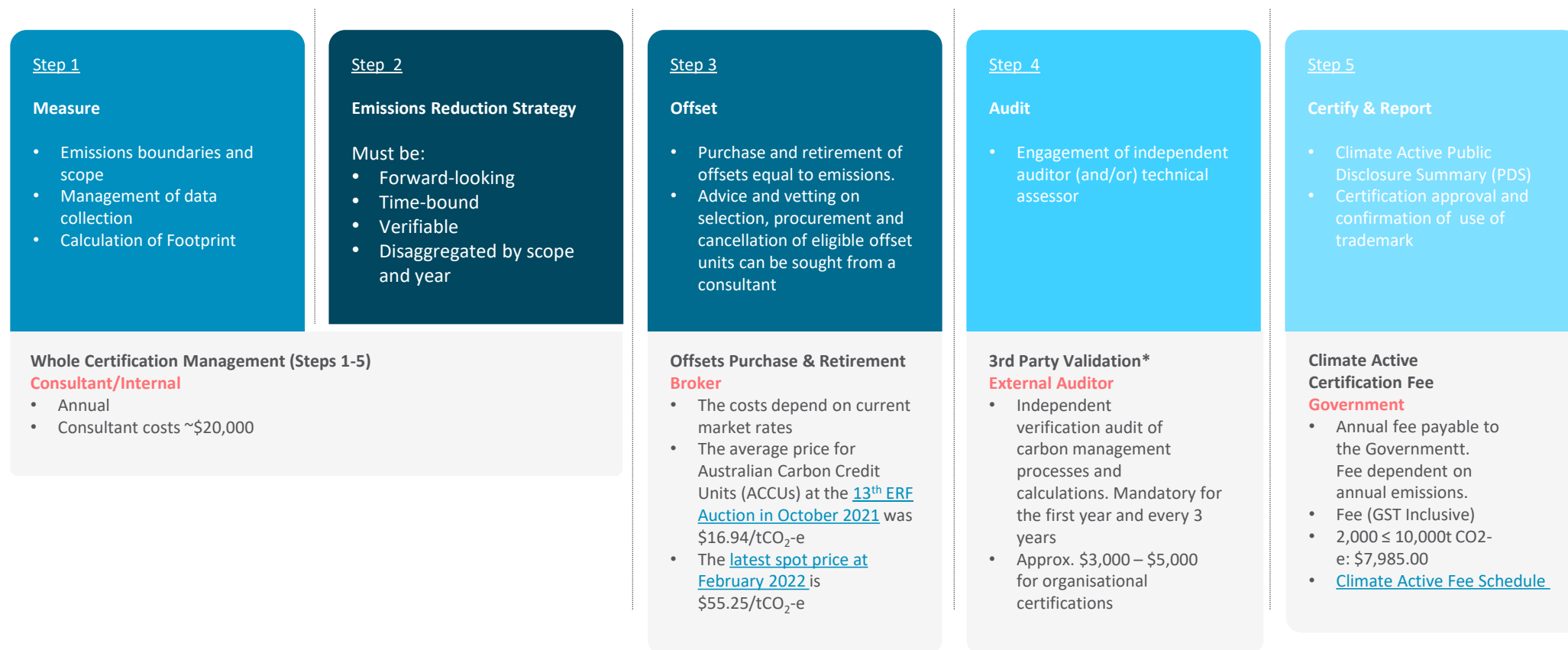
Businesses that join these initiatives and pledge to be part of the collective solution to climate change through carbon neutral certification are demonstrating a commitment to their local community. The subsequently enjoy the benefits this brings such as engaged staff, customer loyalty and a strengthened brand and reputation.

### Credible Commitment to Corporate Sustainability

Organisations recognise that climate change is one of the most urgent problems facing our world today and that most business services are a growing contributor to the problem. Certified carbon neutrality presents powerful proof of a commitment to tackling climate change and certified organisations can promote carbon neutral certifications showing excellence in sustainability practices.



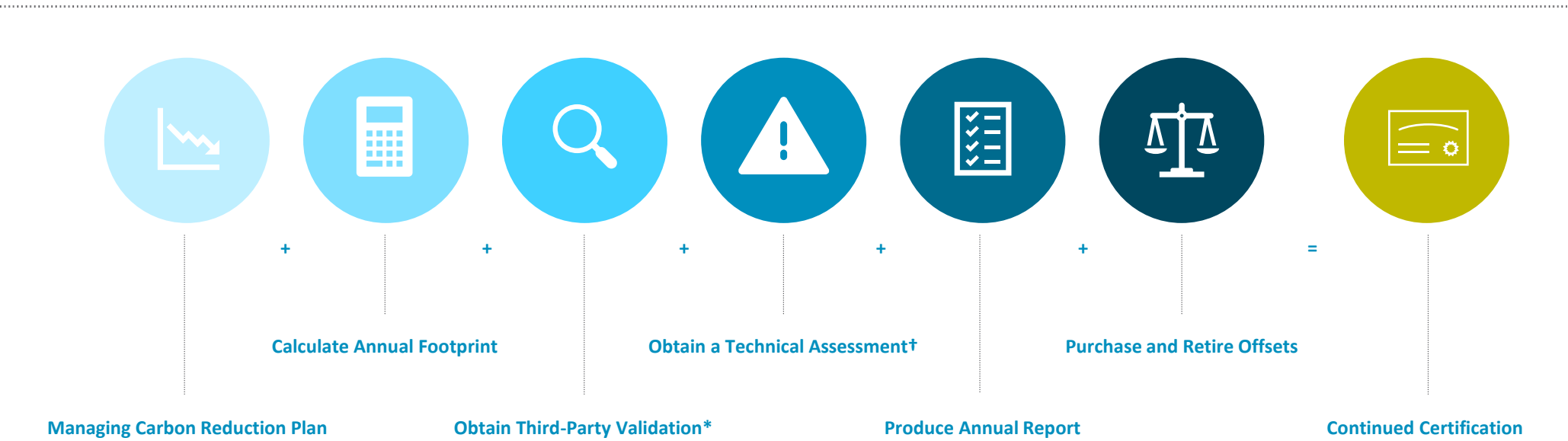
## 5.2 Climate Active Certification Process



5.3

Ongoing Requirements to Maintain Certification

Climate Active certification is a cycle. After achieving initial certification, annual requirements must be fulfilled under the licence agreement to maintain certification. Each year requires measurement, calculation, reporting, the possibility of additional validation\* or assessment† and the purchase of offsets.



The Microsoft Excel calculator accompanying this report will assist WWC in the ongoing management of its carbon account. This greatly simplifies the work required to manage Climate Active certification each year, especially since the calculator is already aligned with Climate Active emissions categories.

*Note: \*Required when a Base Year Recalculation is required.*  
*†Required every three years or whenever a Base Year Recalculation is required, depending on certification type.*



## 5.4

# Emissions Reduction Strategy & Offsetting

### Emissions Reduction Strategy

If WWC wish to be certified under Climate Active, its emissions reduction meet Climate Active requirements:

- **Forward-looking:** indicate future planning a minimum of five years ahead
- **Time-bound:** objectives and actions must have clear timelines and be bound by deadlines, with actions that are measurable (set KPIs and monitor emissions ongoing).
- **Clearly stated future emissions reduction target or goal.** Where possible, the target should commit to a minimum 30% reduction in total emissions over a 10-year period, compared to the base year or reporting period of choice. For WWC, a 30% reduction on the FY21 base year would be 1,730 tCO<sub>2</sub>-e.
- **Verifiable.** For WWC, this would be setting KPIs to monitor actions and ongoing measurement of its footprint. The iCEP and annual reporting reflects verification.
- Emissions reduction actions should be **disaggregated by scope and year.**

Importantly, as mentioned earlier, most material emissions sources are currently accounted for based on financial spend, which does not necessarily provide an accurate figure of absolute emissions. A recommended first step to implementing reductions would be to begin measuring absolute emissions by collecting activity data.

### Offsets

Once WWC has reduced its emissions through identified actions as much as possible, remaining residual emissions can be 'cancelled out' through the purchase of offsets.

Carbon offset units are generated from activities that prevent, reduce or remove greenhouse gas emissions from being released into the atmosphere. Examples of offset projects are provided overleaf.

When the offsets purchased by an organisation equal the emissions produced, they are carbon neutral.

Offsets can be purchase internationally or nationally. National offsets are known as Australian Carbon Credit Units (ACCUs).

The cost of offsets is uncertain. The average price for Australian Carbon Credit Units (ACCUs) at the [13<sup>th</sup> ERF Auction in October 2021](#) was \$16.94/tCO<sub>2</sub>-e, while the [latest spot price in February 2022](#) was \$55.25/tCO<sub>2</sub>-e.

Given WWC's FY21 carbon footprint and assuming an offset cost range between \$16.94 and \$55.25 per tCO<sub>2</sub>-e, it is expected that offsets will cost in the order of \$33,389 - \$108,898.





## 5.5

## Examples of Offset Projects



## Local projects with environmental and social co-benefits

## Indigenous Fire Projects - Australia

The North East Arnhem Land Project is owned exclusively by Aboriginal people with custodial responsibility for those parts of Arnhem Land under active bushfire management.

- New employment and training opportunities
- Supporting Aboriginal people in returning to, remaining on and managing their country.
- Preservation and transfer of traditional knowledge.

**\$25 - \$35 per unit\***

## International projects with environmental and social co-benefits

## Efficient Cookstove Project - Cambodia

The New Lao Stove Project has introduced a healthier, more efficient cook stove that reduces the combustion of wood by 22% while reducing exposure to airborne pollutants.

- Jobs created in manufacturing, distribution and sales
- Improved living conditions and indoor air quality
- Reduced costs and competition for firewood
- Reduced burden placed upon women and children

**\$10 - \$18 per unit\***

## International Emission Reductions (e.g. VCU or VERs)

## Wind Power Project - India

In Tamil Nadu, India, a collective of farmers have sold small portions of their land for the installation of wind turbines coordinated by the Tamil Nadu Spinning Mills Association.

- 84 wind turbines installed
- 48.1 MW wind energy generation
- Saving approx. 837,722 tones of CO<sub>2</sub> every 10 years
- 5% of project revenue invested into local community

**\$8 - \$10 per unit\***

*Note: \*all presented projects are examples only and subject to availability and costs per unit vary according to market fluctuations and required volumes.*





## 6.0 Recommendations and Next Steps





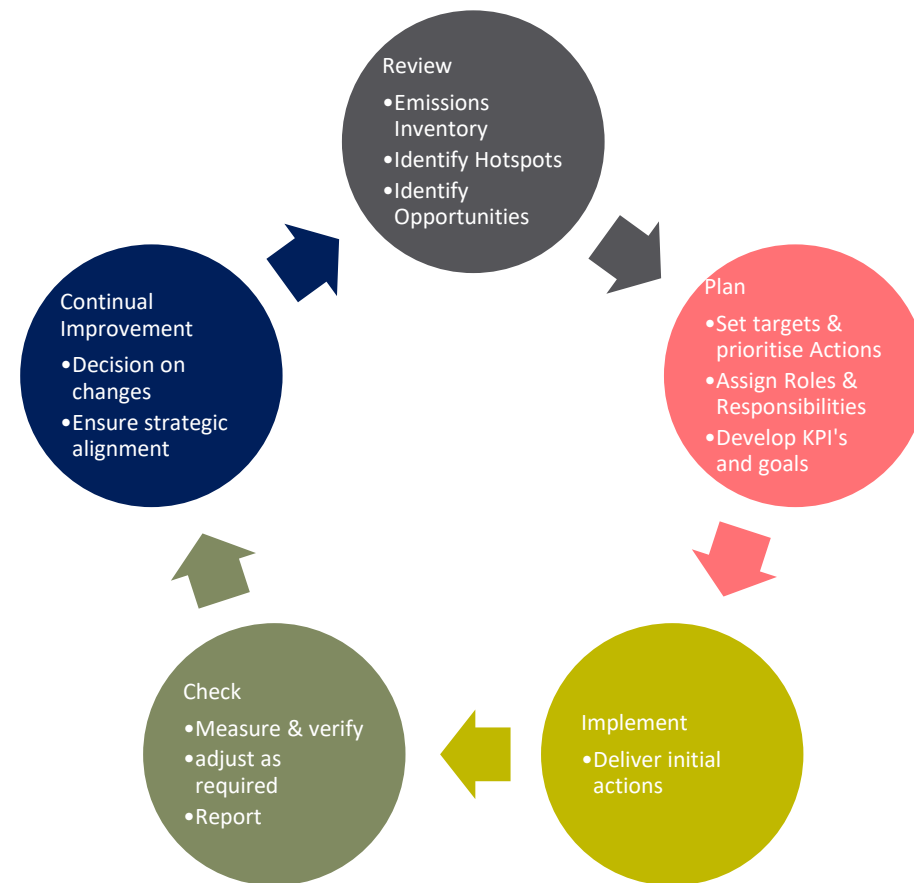
## 6.1 Ongoing Monitoring and Evaluation

### Continuous Improvement Cycle

This Carbon Footprint Audit has enabled WWC to measure its operational emissions in line with best practice standards which ensures sufficient rigour and robustness that will withstand public scrutiny. This represents the first step in Council's carbon neutral pathway and the first step of the continuous improvement cycle as illustrated to the right ("Review").

The ongoing monitoring of WWC's emissions is important to track progress towards corporate carbon neutrality by 2050, meeting interim emissions reduction targets on the pathway to this goal, as well as reducing costs of inaction. Improved accuracy of data and estimations will also assist with this. Therefore, it is recommended that WWC continue to measure its emissions in line with best practice standards (i.e., GHG Protocol and Climate Active) and follow data improvement recommendations outlines in chapter 2.

The accompanying spreadsheet tool will allow WWC to update its year-on-year footprint and track progress towards its reduction targets and assist in prioritising reduction opportunities. The process to achieve carbon neutrality will be a continual improvement journey as illustrated to the right.



## 6.2 Ongoing Monitoring and Evaluation

### Plan: Target Setting

Now that WWC has a deeper understanding of its emissions boundary and footprint, it can work to set emissions reduction targets as required in the iCEP. In line with Climate Active, a 30% reduction on the baseline over a 10-year period is the minimum requirement. Note that WWC can become certified as carbon neutral under Climate Active at any time as long as Council continues to reduce its emissions with offsetting residual emissions as a last resort.

### Plan: Identify and Prioritise Actions

The FY21 baseline assessment reveals that WWC's carbon footprint is in the order of **1,971 tCO<sub>2</sub>-e**. Assuming expansion of Council services to meet the needs of a growing population to 2050, emissions are expected to rise if no action is taken. This would require Council to offset its emissions to meet its carbon neutral target. Currently, offsets are expected to cost WWC in the order of \$33,389 - \$108,898. In 2050, the offset task will only be greater in 2050 if no action is taken to reduce emissions.

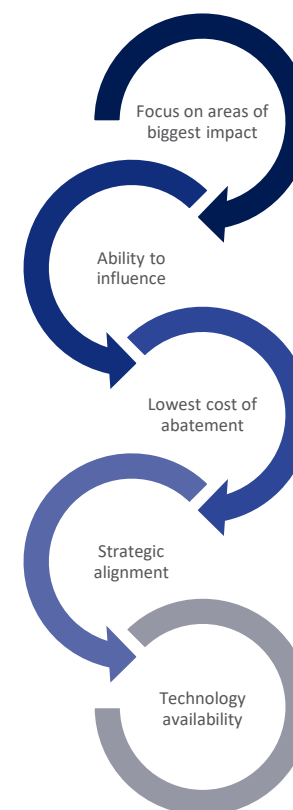
Implementing emissions reduction action will reduce WWC's carbon footprint, reduce the cost of offsetting and will most likely result in operational cost savings (after the payback period if at a premium). Therefore, funding would be better spent towards emissions reduction efforts which could potentially result in long-term operational cost savings, reduce carbon liability and mitigate financial risks associated with carbon pricing in the future.

Emissions reductions actions should be prioritised according to emission sources that will have the biggest impact that WWC is able to influence, which have the lower cost of abatement (considering whole of life costs), align strategically with Council's other objectives, and which are technologically available. This prioritization framework has been illustrated to the right.

Stationary energy and transport fuel represent the greatest share of WWC's footprint and should be areas of focus. More than half of WWC's emissions are scope 3, occurring outside of Council's direct control. However, improvements in procurement procedures can influence the majority of scope 3 emission sources.

### Check

An important element of the annual reporting process is to evaluate ("check") the success or otherwise from actions implemented and incorporate learnings into remaining actions.







Thank you for the opportunity  
to provide these important services.

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