Brighton Council

Emissions Inventory Report FY23/24

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July 2025

Brighton going places

We acknowledge the traditional owners who once walked this country: the Mumirimina people.

The Mumirimina belonged to the Oyster Bay tribe. This was the largest tribe in Tasmania and covered 8000 square kilometres. kutalayna levee in Brighton was a significant meeting place where hundreds of generations of Aboriginal families hunted, gathered, corroboreed, camped and traded.

In the course of colonisation, dispossession of the Mumirimina was early, rapid and extensive.

We acknowledge the Tasmanian Aboriginal Community today as the continuing custodians of this land, and pay our respects to Elders past and present. Through our words and actions we strive to build a community that reflects and respects the history and hopes for all the people of Brighton.

Executive Summary

This Emissions Inventory Report provides a detailed account of Brighton Council's greenhouse gas emissions for the 2023/24 financial year. It also highlights progress towards Council's emissions reduction target of 85% by 2030 on 2021 levels, and net-zero emissions by 2035. The inventory includes Scope 1 emissions from fleet fuel and gas, Scope 2 emissions from electricity, and Scope 3 emissions from municipal-wide waste management.

The results show that in 2024, Brighton Council's total corporate emissions were 6,234 tonnes of carbon dioxide equivalent (tCO_2-e). Most emissions came from landfilled waste (93.5%), followed by fleet fuel (4%), electricity (1.2%), organic waste (1%), and gas (<1%). Brighton Council has seen a reduction in emissions by 5,435 tCO_2-e or 47% since the baseline year in 2021, when total emissions were 11,670 tCO_2-e. The most significant emissions reductions have been achieved in waste, where emissions from landfilled waste dropped by 48% due to the introduction of kerbside food and organic waste collection and a change in landfill supplier to Copping. Fleet fuel and electricity emissions have also decreased since 2021, while emissions from organic waste and gas have increased.

While the reductions in emissions are promising, further action is needed to meet Council's ambitious climate goals. Key recommendations include developing a Waste Management Strategy, expanding the electric vehicle fleet, conducting energy audits of high-consuming sites, and phasing out gas connections across all assets.

The report also notes limitations in comparing data to the 2021 baseline due to changes in methodology and data availability, and highlights the need to expand future inventories to include a broader range of scope 3 emissions. Despite these limitations, this inventory provides a strong foundation for Brighton Council's ongoing climate action and supports transparent, evidence-based decision-making as the Council works toward a low-emissions future.

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Introduction

Preparing an emissions inventory is the process of identifying and measuring greenhouse gas (GHG) emissions emitted by an entity, in tonnes of carbon dioxide equivalent (tCO_2-e). The purpose of preparing an annual inventory is to track emissions over time, identify opportunities to reduce emissions, and to enable reporting on emissions, either voluntarily or under mandatory reporting schemes.

An emissions inventory for Brighton Council has previously been completed for the 2019/20, 2020/21, and 2021/22 financial years as part of the Southern Councils Climate Collaboration. This current emissions inventory has been prepared for Brighton Council for the 2023/2024 financial year and is compared to the chosen baseline year of 2020/21 to track emissions reductions over time. It measures the GHG emissions produced through the operation of the Council, which is comprised of emissions from fleet fuel, gas, electricity, and waste. The inventory does not include emissions generated in the provision of goods and services to the council, aside from waste.

This report outlines the methodology used to produce the emissions inventory, it presents the results of the inventory, and discusses how emissions have changed over time, as well as ways to reduce emissions. Together, this report assists Council to track progress on its commitment to achieve an 85% emissions reduction on 2021 levels by 2030, and net-zero emissions by 2035.

Methodology

This section of the report outlines the methodology used to prepare the emissions inventory and the standards and principles that underpin it. Providing a clear description of the methodology ensures that the inventory can be replicated.

Accounting and Reporting Principles

As with financial accounting, generally accepted GHG accounting principles are intended to underpin and guide the preparation and reporting of emissions inventories. The principles in Table 1 below are outlined by the *Greenhouse Gas Protocol Corporate Accounting and Reporting Standard* and have guided the process of preparing Brighton Council's corporate emissions inventory and this report. These principles are globally accepted and ensure the reported information represents a true and fair account of GHG emissions. The methodology section of this report largely addresses these principles and enables the replication and comparison of Brighton Council's corporate emissions over time.

Table 1. Principles outlined by the GHG Protocol

Principle	Description
Relevance	• Match reporting to the needs of the audiences (internal and external)
Completeness	• Include all emission sources within the inventory boundary • Disclose and justify any specific exclusions
Consistency	• Use consistent methodologies to allow comparison over time • Transparently document any changes • Recalculate baseline when changes affect it
Transparency	• Be factual and clear • Leave an audit trail • Disclose all relevant assumptions, methodologies, and data sources
Accuracy	• Be accurate within reason

Standards

In addition to the above principles, this emissions inventory has generally been prepared in line with the GHG Protocol Corporate Standard. GHG Protocol establishes comprehensive global standardised frameworks to measure and manage greenhouse gas emissions from private and public sector operations, value chains and mitigation actions. It is the world's most widely used greenhouse gas accounting and reporting standard for companies and governments.

Inventory Boundary

An inventory boundary identifies the gases, emission sources, geographic area, and time span covered by a GHG inventory. In this case, the assessment boundary includes all seven

Kyoto Protocol GHGs (expressed as carbon dioxide equivalent) occurring within the geographic boundary of Brighton Council, as well as waste disposal occurring out-of-boundary. The inventory covers a continuous 12-month period from 1 July 2023 to 30 June 2024.

Inclusions

Scope 1 and 2 emissions have been included in this inventory as well as one source of Scope 3 emissions. These are gas use in buildings, and petrol and diesel use in the vehicle fleet (Scope 1 emissions); electricity use in Council owned or managed assets (Scope 2 emissions); and the disposal or treatment of waste managed by Council (Scope 3 emissions). For more information about emission scopes, see Appendix A.

Exclusions

Some sources of emissions have been excluded from the inventory boundary. Table 2 below outlines what has been excluded and the reason for this.

Table 2. Exclusions to the inventory boundary

Exclusion	Reason
Electricity / gas usage paid by a third party	This generally occurs when a Council owned building is leased by a third party and that third party pays for their electricity or gas use. In this case, emissions should not be attributed to the Council.
Fuel not purchased on a fuel card	The data for this is not easily available and it is unlikely that fuel purchased via another method would meet the 1% materiality threshold.*

* An emissions source that constitutes 1% or more of the total carbon account is material. For an emissions inventory of Brighton's size, the materiality threshold is 62 tCO_2-e per annum.

Further items that have not been calculated in this emissions inventory but may be included in future inventories include:

- Hard rubbish collection
- Refrigerants
- Specialty gases used by the depot
- Prior landfill sites owned by Council
- Other scope 3 emissions such as business travel, employee commuting, office supplies, and construction materials

Calculations

A Corporate Greenhouse Inventory Tool was purpose built for Southern Councils by Todd Houstein from the consultancy branch of Sustainable Living Tasmania in 2025. This tool was designed to automate the calculations required to complete the inventory, with minimal updates required to it over time. Table 3 below provides the methodology for the calculations used in the tool to complete this inventory. Note that while the method for calculating emissions should not change over time, the emissions factors themselves may change and these need to be updated in the Inventory Tool annually.

Table 3. *Methodology for emissions calculations by emissions type*

Emissions type	Method	Emissions factor (kg CO_2-e/unit)
Fleet Fuel - Petrol	Litres x emissions factor	2.3126
Fleet Fuel - Diesel	Litres x emissions factor	2.7217
Electricity (grid)	kWh x location-based emissions factor	0.12
Gas	Litres x emissions factor	1.55742
Landfilled Waste	Tonnes x methane commitment emissions factor	1598.027115
Organic Waste	Tonnes x emissions factor	46

Emission Factors

The specific emissions factors used for the inventory have been built into the Corporate Greenhouse Inventory Tool mentioned above. A sheet in the Tool outlines each emissions factor and the source of that factor. Generally, the source is the National Greenhouse Accounts Factors, which are published by the Department of Climate Change, Energy, the Environment and Water each year, as well as the NGER (Measurement) Determination 2008.

Sources of data

Table 4 below indicates where the raw data for the calculations have come from. Where data needed to be amalgamated (e.g., where there were monthly invoices) an additional spreadsheet was used to calculate the annual totals.

Table 4. *Source of data for each emissions type*

Emissions source	Data source
Fleet Fuel	Monthly invoices from Ampol, BP and United
Electricity (including solar generation & export)	Provided directly by Aurora (includes street lighting and solar export)
Gas	Monthly invoices from Supagas
Landfilled Waste	Spreadsheet maintained by Asset Services with monthly collection tonnages
Organic Waste	Spreadsheet maintained by Asset Services with monthly collection tonnages

Results

This section of the report presents the results of the calculations provided in the methodology section. Emissions data is presented in a wholistic and systematic way to allow for useful interpretation of emissions sources together, separately, and compared with the 2021 (baseline) results.

Summary of 2024 emissions

Brighton Council's total corporate emissions for the 2023/24 financial year (henceforth 2024) was 6,234 tCO_2-e. Emissions are most significantly from landfilled waste (93.5%), followed by fleet fuel (4%), electricity (1.2%), organic waste (1%), and gas (<1%) as can be seen below in Table 5.

Table 5. Breakdown of emission categories and their contributions to the overall emissions output

Emissions source	Activity data	Unit	Emissions (tCO_2-e)	% of total emissions
Gas	14,267	Litres	22	<1%
Fleet Fuel	95,211	Litres	251	4%
Scope 1 total			**273**	**4%**
Electricity	621,495	Kilowatt hours	75	1%
Scope 2 total			**75**	**1%**
Landfilled waste	5,609	Tonnes	5,828	94%
Organic waste	1,269	Tonnes	58	1%
Scope 3 total			**5,886**	**95%**
TOTAL			**6,234**	**100%**

Waste

Waste is the largest source of Council's emissions at a total of 5,886 tCO_2-e. This is a combination of emissions from landfilled and organic (food and garden) waste collected from the municipality-wide kerbside bins and the Brighton Waste Transfer Station.

Table 6. Emissions from waste by type

Waste	Waste collected (t)	Emissions (tCO_2-e)	% of waste emissions	Emissions avoided (tCO_2-e)
Landfilled	5,609	5,828	99%	N/A
Organic	1,269	58	1%	1,260
TOTAL	**6,878**	**5,886**	**100%**	**1,260**

As can be seen in Table 6 above, organic waste makes up almost a fifth of the total tonnage of waste collected, but only accounts for 1% of waste emissions. This is because of the higher emissions factor for landfilled waste compared with organic waste that is composted. Therefore, by collecting organic waste separately via the FOGO bin, Council has avoided 1,260 tCO_2-e.

Fleet fuel

Fleet fuel is the second largest source of Council's emissions at a total of 251 tCO2-e. Emissions from fleet fuel are generated by council owned vehicles and plant. Over three quarters of fleet fuel emissions are from the use of diesel, with the remaining 18% from petrol, as can be seen below in Table 7. Not only does council consume far more diesel than petrol, but diesel also has a higher emissions factor. This means that for every 100 litres of fuel consumed, diesel generates 40kg CO_2-e more than petrol.

Table 7. Emissions from fleet fuel by fuel type

Fleet Fuel	Fuel use (L)	Emissions (tCO_2-e)	% of fuel emissions
Petrol	19,687	45.5	18%
Diesel	75,524	205.5	82%
TOTAL	**95,211**	**251**	**100%**

Electricity

Electricity is Council's third largest source of emissions at a total of 75 tCO_2-e. Emissions are produced from metered electricity used by council owned assets and unmetered street lighting in the municipality. Table 8 below shows that Council assets account for almost three quarters of emissions from electricity use, where street lighting accounts for just over a quarter.

Table 8. Emissions from metered vs unmetered electricity

Electricity	Electricity use (kWh)	Emissions (tCO_2-e)	% of electricity emissions
Metered (council assets)	447,858	54	72%
Unmetered (street lighting)	173,637	21	28%
TOTAL	**621,495**	**75**	**100%**

As can be seen in Table 9, the top five electricity consuming sites across the municipality in 2024 were the Council Chambers, Pontville Regional Sports Complex, the Civic Centre, the Works Depot and the Jobs Hub. Together the top five sites account for almost two thirds of all electricity emissions.

Table 9. Emissions from top 5 electricity consuming sites

Name	Address	Electricity use (kWh)	Emissions (tCO_2-e)	% of total electricity emissions
Council Chambers	1 Tivoli Rd, Old Beach	120,705	14.5	19%
Pontville Regional Sports Complex*	325 Brighton Rd, Pontville	100,053	12	16%
Civic Centre	25 Greenpoint Rd, Bridgewater	95,735	11.5	15%
Works Depot	2 Cobbs Hill Rd, Bridgewater	48,137	5.8	8%
Jobs Hub	371 Brighton Rd, Pontville	35,662	4.3	6%
TOTAL		**400,292**	**48.1**	**64%**

*Includes all metres at the complex except the Pavilion as the building is leased.

Solar

In addition to the electricity that is drawn from the grid, Council also has four solar PV systems that generate renewable electricity. This electricity is used on site and excess generation is fed into the grid. Table 10 below shows the estimated generation from the four solar sites and the recorded export to the grid from Aurora. Using the same location-based methodology as electricity, approximately 20 tCO_2-e have been avoided due to the total electricity generated by the solar systems.

Table 10. Solar generation and export by site

Name	Address	Capacity (kW)	Generation (kWh)*	Emissions avoided (tCO_2-e)	Export (kWh)	Emissions avoided (tCO_2-e)
Council Chambers	1 Tivoli Rd, Old Beach	69.5	86,911	10.4	42,212	5.1
Depot	2 Cobbs Hill Rd, Bridgewater	30	37,500	4.5	21,645	2.6
Civic Centre	25 Green Point Rd, Bridgewater	26.5	33,125	4	8,409	1
Old Beach Community Hall	86 Jetty Rd, Old Beach	6	10,527	1	0	0
TOTAL		128	168,063	19.9	72,266	8.7

*Some estimation was required to calculate the generation figure. See explanation in Appendix C.

Gas

Gas is the smallest source of Council's emissions, with a total of 22 tCO_2-e. Emissions are generated from three council owned buildings that use liquified petroleum gas. Table 11 shows that all gas use is from the various changerooms at the Brighton Regional Sports Complex (325 Brighton Rd, Pontville), with almost two thirds of total gas use attributed to the Brighton Football Oval (the Pavilion).

Table 11. Emissions from gas by building

Name	Address	Gas use (L)	Emissions (tCO_2-e)	% of total gas
Brighton Football Oval (the Pavilion)	325 Brighton Rd, Pontville	9,214	14	64%
Fergusson Oval Changerooms	325 Brighton Rd, Pontville	3,721	6	27%
Gun Oval Changerooms	325 Brighton Rd, Pontville	1,332	2	9%
TOTAL		**14,267**	**22**	**100%**

Comparison to baseline

The purpose of completing an annual emissions inventory is to track progress towards Council's emissions reduction target of 85% by 2030 and net-zero by 2035. Net-zero is relative to a baseline year, which for Brighton Council is 2021. Therefore, Table 12 below compares emissions from 2021 and 2024 to see what change has occurred.

Table 12. Comparison of Scope 1, 2 & 3 emissions from 2021 (baseline) to 2024 (current)

	2020/2021 (baseline)		2023/2024 (current)		Change from baseline	
Emissions Source	Emissions (tCO_2-e)	% of total emissions	Emissions (tCO_2-e)	% of total emissions	Emissions (tCO_2-e)	Emissions change (%)
Gas	0	0%	22	0.4%	+22	N/A
Fleet Fuel	309	3%	251	4%	-58	-19%
Scope 1 total	**309**	**3%**	**274**	**4.4%**	**-36**	**-12%**
Electricity	108	1%	75	1.2%	-33	-31%
Scope 2 total	**108**	**1%**	**75**	**1.2%**	**-33**	**-31%**
Landfilled waste	11,252	96%	5,828	93.5%	-5,424	-48%
Organic waste	1	0%	58	0.9%	+57	N/A
Scope 3 total	**11,253**	**96%**	**5,886**	**94.4%**	**-5,366**	**-48%**
TOTAL	**11,670**	**100%**	**6,256**	**100%**	**-5,435**	**-47%**

The table shows that emissions from all sources, aside from gas and organic waste, have decreased since 2021. This has resulted in an overall reduction in emissions by 5,435 tCO_2-e or 47%.

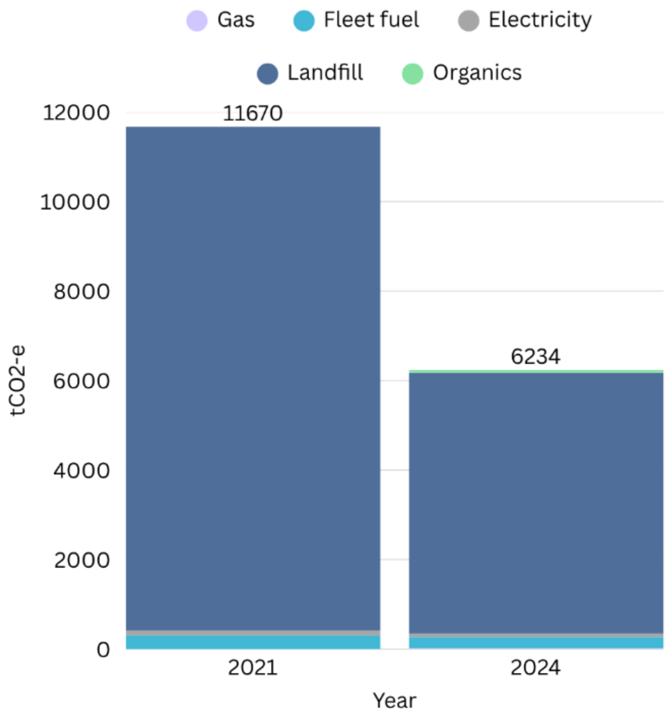

Figure 1. Comparison of Scope 1, 2 & 3 emissions over time

The majority of this reduction has come from landfilled waste, which has decreased by 5,424 tCO_2-e since 2021. Smaller emissions reductions have come from fleet fuel (58 tCO_2-e) and electricity (33 tCO_2-e). Emissions from both gas and organic waste have increased from 0 and 1 tCO_2-e in 2021 to 22 tCO_2-e and 58 tCO_2-e respectively, in 2024.

If we consider Scope 1 and 2 emissions only, the overall emissions reduction from 2021 to 2024 is 69 tCO_2-e, which equates to an 17% reduction, as can be seen in Table 13 below.

Table 13. Comparison of Scope 1 & 2 emissions from 2021 (baseline) to 2024 (current)

	2020/2021 (baseline)		2023/2024 (current)		Change from baseline	
Emissions Source	Emissions (tCO_2-e)	% of total emissions	Emissions (tCO_2-e)	% of total emissions	Emissions (tCO_2-e)	Emissions change (%)
Gas	0	0%	22	6%	+22	N/A
Fleet Fuel	309	74%	251	72%	-58	-19%
Scope 1 total	**309**	**74%**	**273**	**78%**	**-36**	**-12%**
Electricity	108	26%	75	22%	-33	-31%
Scope 2 total	**108**	**26%**	**75**	**22%**	**-33**	**-31%**
TOTAL	**417**	**100%**	**348**	**100%**	**-69**	**-17%**

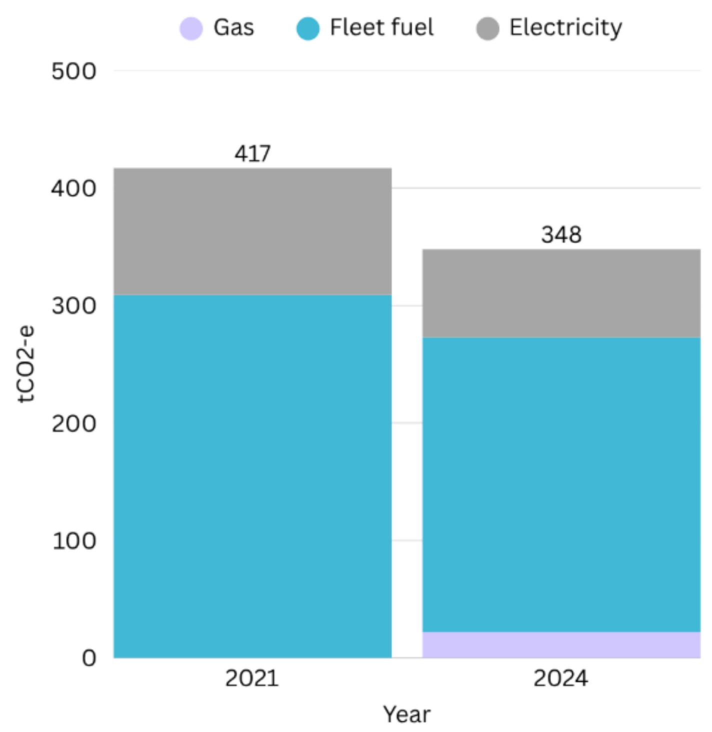

Figure 2. Comparison of Scope 1 & 2 emissions over time

Discussion

As can be seen by the results, good progress to reduce corporate emissions has been made. However, further timely action is required to meet Council's target of 85% emissions reduction by 2030 and net-zero by 2035. Therefore, this discussion will take a deeper look at the change over time for each emissions source and actions to pursue net-zero. For Council's roadmap to net-zero, please view the Corporate Emissions Reduction Plan which outlines a more comprehensive list of required actions.

Waste

Landfilled waste

The results show that emissions from landfilled waste have drastically reduced since 2021. This is a result of two factors:

1. FOGO Collection

The introduction of kerbside FOGO collection is diverting waste that was previously sent to landfill. For every tonne of organic waste that is diverted from landfill, there is an emissions saving of around 1.5 tCO_2-e. In 2024, this has meant an avoidance of 2,145 tCO_2-e.

2. Change of landfill supplier

Council changed its landfill supplier to Copping, which utilises the capture and combustion of methane from the landfill to produce electricity. If waste was sent to a landfill without this technology, total landfill emissions would be 8,965 tCO2-e. Therefore, by sending landfill to Copping, council has avoided 3,138 tCO2-e. While this method of gas capture and combustion reduces emissions significantly, carbon credits are sold from this process, which must be accounted for in the inventory so that emissions reductions are not double counted. See Appendix D for the assumptions and calculations for landfilled waste emissions.

Organic waste

The results show that emissions from organic waste have increased since 2021. This is a result of the introduction of kerbside FOGO collection. Unlike other sources, an increase in emissions from organic waste can be a good thing if it is a result of additional organic waste being diverted from landfill. This is because when organic waste decomposes in a landfill, it produces methane, which is a far more potent greenhouse gas than carbon dioxide. Therefore, diverting organic waste from landfill is a highly effective way to reduce emissions from waste.

Reducing waste emissions

Waste is both the greatest opportunity for emissions reductions, but also the most difficult to shift as waste generation is largely outside Council's sphere of control. Despite this, there are several actions Council can take to reduce waste and its associated emissions. These include:

1. Developing and implementing a Waste Management Strategy

2. Conducting an audit on kerbside bins to inform a targeted waste campaign or education program and collaborate with other southern councils on effective messaging around waste reduction
3. Creating a dedicated Waste Officer role at Council to undertake or coordinate the above actions

Fleet Fuel

The results show that emissions from fleet fuel have decreased by almost one fifth (19%) since 2021. This can in part be explained by the transition of five commuter vehicles with internal combustion engines to hybrid/electric alternatives, including:

- 1x plug-in hybrid electric vehicle (Mitsubishi Eclipse Cross)
- 2x hybrid electric vehicles (Toyota RAV4)
- 2x fully electric vehicles (MG ZS)

In addition to the fleet, much of the outdoor power equipment such as brushcutters and blowers are now electric rather than being powered by petrol or diesel.

Reducing fleet fuel emissions

To continue this downward trend of emissions from fleet fuel, there must be a reduction in the use of fuel being consumed. This will likely involve a combination of reduced travel, fuel efficient driving behaviour, and moving towards more electric and low emissions fleet vehicles. Actions Council should take to support this include:

1. Driver education and training
2. Setting transition targets for the electrification of the fleet and developing a Fleet Transition Plan
3. Strengthening the Vehicle Procurement Policy

Electricity

The results show that emissions from electricity have decreased by almost a third (31%) since 2021. However, this result requires careful interpretation. This is because unlike most other emissions sources, the emissions factor for electricity changes from year to year depending on the average emissions intensity of the electricity grid in Tasmania for that year. For the current financial year, the location-based emissions factor for Tasmania was 0.12, which is the lowest it has been since 2006. In comparison, the location-based emissions factor for 2021 was 0.14. While it seems small, this would translate to an additional 12 tCO2-e if this year's factor were 0.14 rather than 0.12. Comparing total kilowatt hours as well as emissions would be useful to see if electricity consumption is trending downwards. However, this data is not readily available for 2021.

There is also a second confounding factor that might explain the emissions reduction from electricity. That is, electricity consumption in the current financial year excludes electricity used by a third party, where that third party paid for the electricity consumption. This does not appear to be the case when emissions were calculated in 2021, which may explain some of the difference. If all electricity charged to Brighton Council in 2024 were included in the inventory, this would equate to an additional 178,791 kWh or 21.5 tCO2-e.

Despite these two concerns, some emissions would have genuinely been avoided over the three-year period due to the installation of the 26.5kW solar PV system on the Civic Centre in 2022.

Reducing electricity emissions

Reducing emissions from electricity requires consideration of the energy hierarchy. The hierarchy involves first reducing the amount of energy used. Second, improving energy efficiency. Third, producing renewable energy onsite, and finally, purchasing renewable energy. Actions Council should take that align with this include:

1. Conducting energy audits on the top 5 energy consuming sites to identify opportunities to reduce energy use
2. Identifying opportunities for solar and battery installations and ensure all new built assets include these (where relevant)
3. Purchase green electricity for all remaining electricity consumption after other actions have been

Gas

The results show that emissions from gas have increased since 2021. This is largely due to the construction of the Pontville Sports Pavilion in 2022, which has a gas connection for the hot water system and commercial kitchen.

Reducing gas emissions

The fastest way to reduce emissions from gas is to:

1. Electrify current gas connections
2. Ensure no new assets are built with gas connections

Limitations

While great care has been taken to develop the emissions inventory and this report according to best practice carbon accounting, there are several limitations that should be acknowledged. First, some caution should be taken when comparing the current emissions inventory to the baseline year in 2021. This is because: a) it was completed by a different person; and b) there is not a clear audit trail from 2021, so it is possible there are differences in the inventory boundary and the methodology used. A second limitation is that aside from waste, this inventory does not account for other scope 3 emissions such as business travel, employee commuting, office supplies, and construction materials. This is something that can be improved in the next inventory and built on over time.

Appendices

Appendix A: Emissions Scopes

The three emissions scopes (1, 2 and 3) are a way to categorise and understand where a company's greenhouse gas emissions originate. The image below provides a visual representation of the different emissions scopes, while Table 14 provides a description of each scope and the types of emissions sources in each.

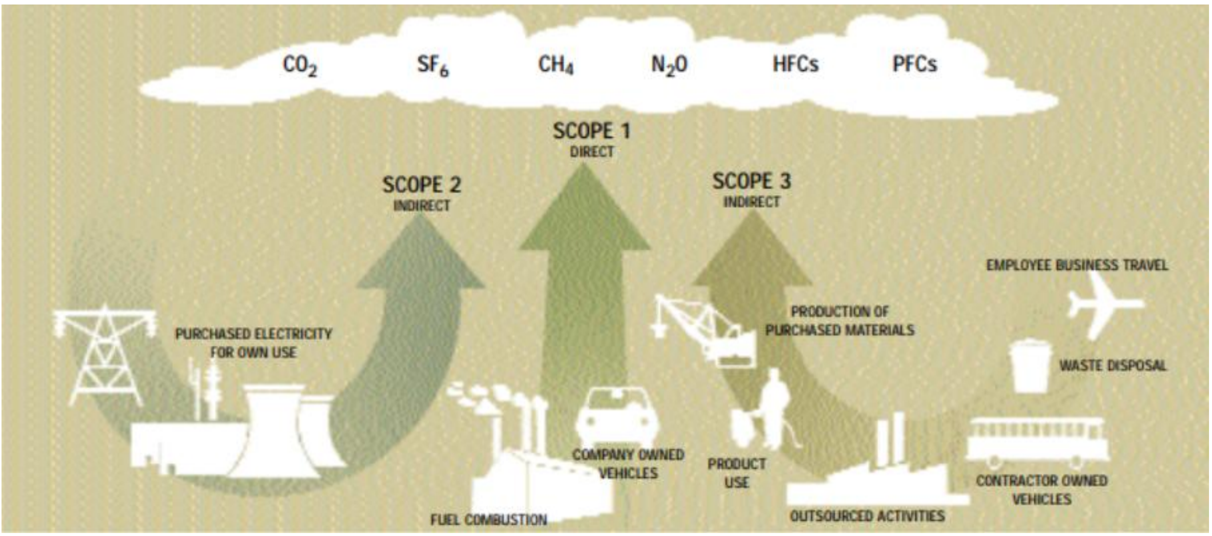

Table 14. Description of emissions scopes from the GHG Protocol

Scope	Description
Scope 1: *Direct GHG emissions*	Direct GHG emissions occur from sources that are owned or controlled by the company, for example, emissions from combustion in owned or controlled vehicles.
Scope 2: *Electricity indirect GHG emissions*	Scope 2 accounts for GHG emissions from the generation of purchased electricity consumed by the company. Purchased electricity is defined as electricity that is purchased or otherwise brought into the organizational boundary of the company. Scope 2 emissions physically occur at the facility where electricity is generated.
Scope 3: *Other indirect GHG emissions*	Scope 3 is an optional reporting category that allows for the treatment of all other indirect emissions. Scope 3 emissions are a consequence of the activities of the company, but occur from sources not owned or controlled by the company. Some examples of scope 3 activities are extraction and production of purchased materials; transportation of purchased fuels; and use of sold products and services. As Brighton Council does not own or manage the facilities where waste collection is taken, emissions from this source are considered Scope 3.

Appendix B: Electricity and gas use excluded from calculations

The electricity meters in Table 15 below were excluded from the boundary as they were all connected to buildings that were leased, and the lessee paid the electricity bill in full.

Table 15. Electricity meters excluded from Council's emissions inventory

NMI	Address	kWh
8000292983	1 Bedford St, Brighton TAS 7030	36,701
8000132156	25 Old Main Rd, Bridgewater TAS 7030	14,977
8000236089	2A Eddington St, Bridgewater TAS 7030	17,517
8000002568	325 Brighton Rd, Pontville TAS 7030	75,983
8000136181	371 Brighton Rd, Pontville TAS 7030	6,183
8000135075	85 Gunn St, Bridgewater TAS 7030	27,430
TOTAL		**178,791**

Gas use at 25 Old Main Rd, Bridgewater was also excluded from calculations as the building was leased, and the lessee paid the gas bill in full. Gas use at this address was 270L during the inventory period.

Appendix C: Calculations for solar generation

Table 16 below provides the calculations that were used to determine the solar generation of each solar system, where a solar monitoring system was unavailable or where the data was incomplete or incorrect.

Table 16. Calculations used to determine solar generation by site

Solar Location	Explanation of generation calculations
Council Chambers	The online data monitoring portal was not functioning between March 2024 and June 2024. However, data from the previous 3 years (2021-2023) was available for these months. Therefore, for each month the portal wasn't working, the average of these three years was used. These averages were then added to the actual generation data from the portal from July 2023 to February 2024 to calculate the total generation.
Works Depot	The solar system at the works depot is not connected to an online data monitoring portal. Therefore, total generation was estimated by multiplying the power rating of the system (i.e., 30kW) by 1,250, which is a standard way to calculate solar generation in Tasmania. 30kW x 1,250 = 37,000 kWh
Civic Centre	The online data monitoring portal had been configured incorrectly since installation, so no accurate data was recorded until the issue was resolved in December 2024. Therefore, total generation was estimated using the above calculation of the power rating of the system by 1,250. 26.5 kW x1250 = 33,125 kWh

Appendix D: Assumptions about Copping

To accurately calculate emissions from landfilled waste, several factors need to be considered. These include: 1) the gas capture efficiency of the landfill; and 2) the percentage of carbon credits sold from the process of gas capture and combustion. The gas capture efficiency determines the emissions avoided compared to no gas capture, while the carbon credits sold determines what percentage of emissions avoided are allocated elsewhere versus to Council. It is extremely important to include carbon credits sold as part of this equation otherwise emissions avoided are counted twice, once by Council and once by the organisation who bought the credit. The assumptions about Copping Landfill used in this equation is that gas capture efficiency is 70%, while the carbon credits sold from this gas capture and combustion process is 50%. This information has been provided by the consultancy offering of Sustainable Living Tasmania.