PUBLIC DISCLOSURE STATEMENT

MORELAND CITY COUNCIL

ORGANISATION CERTIFICATION
FY2020–21

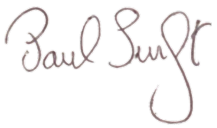
Australian Government

Climate Active
Public Disclosure Statement

Moreland City Council

An Australian Government Initiative

Climate Active

NAME OF CERTIFIED ENTITY	Moreland City Council
REPORTING PERIOD	1 July 2020 – 30 June 2021 arrears report
DECLARATION	*To the best of my knowledge, the information provided in this public disclosure statement is true and correct and meets the requirements of the Climate Active Carbon Neutral Standard.* 
	Paul Swift Acting Unit Manager Sustainable Built Environment 22 February 2022

Australian Government
Department of Industry, Science, Energy and Resources

Version September 2021. To be used for FY20/21 reporting onwards.

1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	6,302 tCO2-e
OFFSETS BOUGHT	100% VERs
RENEWABLE ELECTRICITY	97.6%
TECHNICAL ASSESSMENT	December 2019 Ironbark Next technical assessment due: October 2022

Contents

2.CARBON NEUTRAL INFORMATION

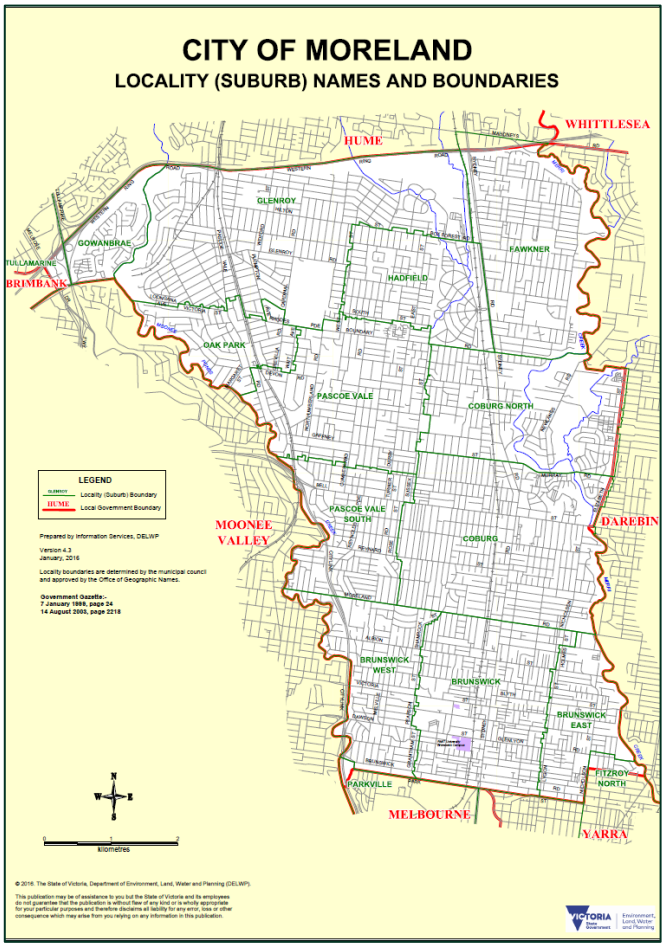
Description of certification

Moreland City Council (Council) has been certified carbon neutral for its organisational corporate emissions since 2012. Council works hard to continually reduce emissions. This is demonstrated by the Zero Carbon Moreland – Climate Emergency 2040 Framework, adopted in 2018. The Framework combines three previous strategies, the Zero Carbon Evolution Strategy (2014) (ZCE), the ZCE – Refresh to 2020, and the Corporate Carbon Reduction Strategy.

Council is seeking carbon neutral certification for its operations for the financial year 2020/21, with the baseline year 2011/12. To be certified carbon neutral, Moreland City Council must measure and offset all remaining emissions.

Council's carbon neutral certification includes the following Council entities and activities:

- Administration buildings
- Community facilities
- Childcare centres
- Theatre and art galleries
- Kindergartens
- Libraries
- Parks
- Leisure/recreation centres
- Public (street) lighting
- Unmetered electricity supplies
- Vehicle fleet
- Contractor fleet, including waste collection



Organisation description

Moreland City Council covers the inner and mid-northern suburbs of Melbourne. It lies between 4 and 14km north of central Melbourne and covers a diverse range of communities. Moreland City Council covers the suburbs of Brunswick, Brunswick East, Brunswick West, Pascoe Vale, Pascoe Vale South, Coburg, Coburg North, Hadfield, Fawkner, Glenroy, Oak Park and Gowanbrae. Small sections of the suburbs of Fitzroy North and Tullamarine are also located in the City.

Centrally located on the northern doorstep of Melbourne's CBD, Moreland is undergoing a sustained period of urban regeneration. Moreland has housing choices ranging from restored heritage cottages, modern family homes and stylish inner-urban apartments to recycled industrial buildings.

Moreland's current population of 188,762 (as of 2020) is forecast to grow to 228,425 by 2036. Significant growth has occurred in the last five years (the largest increase for two decades).

Key features of Moreland's regional context include:

- Proximity to Melbourne's Central Business District (CBD); and
- Good transport links to the CBD, ports, airport and industrial areas.

Moreland City Council (Council) (ABN 46 202 010 737) provides services to the community within its geographic area. Council provides these services through its buildings and facilities, including six aquatic centres, vehicle fleet, in-house waste collection services as well as the use of contractors for waste collection services and the provision of public (street) lighting. These services are the primary business activities that result in carbon emissions.

Moreland City Council currently has over 300 buildings within its portfolio, including civic centres, aquatic and sports leisure centres, community centres, pavilions, maternal/childcare centres, kindergartens, libraries

and depots, as well as other facilities including public lighting and parks and reserves. The majority of these buildings/facilities are owned and operated by Council; however, some are leased by third parties. Council also leases some third-party buildings/facilities to provide various community services.

This inventory has been prepared based on the Climate Active Carbon Neutral Standard for Organisations. The standard is aligned with the National Greenhouse and Energy Reporting Act 2007 (NGER Act), as well as the Greenhouse Gas Protocol's Corporate Accounting and Reporting Standard.

This submission considers the following greenhouse gases:

- carbon dioxide
- methane
- nitrous dioxide
- synthetic gases (HCFC-22, HFC-32, HFC-410a, HFC-134a)

3.EMISSIONS BOUNDARY

Inside the emissions boundary

All emission sources listed in the emissions boundary are part of the carbon neutral claim.

Quantified emissions have been assessed as relevant and are quantified in the carbon inventory. This may include emissions that are not identified as arising due to the operations of the certified entity, however are **optionally included**.

Non-quantified emissions have been assessed as relevant and are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. All materially significant emissions are accounted for through an uplift factor. Further detail is available at Appendix C.

Outside the emissions boundary

Excluded emissions are those that have been assessed as not relevant to an organisation's or precinct's operations and are outside of its emissions boundary or are outside of the scope of the certification. These emissions are not part of the carbon neutral claim. Further detail is available at Appendix D.

Inside emissions boundary

Quantified

- Council fleet fuel (diesel, unleaded, LPG)
- Stationary energy (gas, oils, greases)
- Contractor fuels (diesel, unleaded, LPG)
- Water (for irrigation and sent to wastewater treatment)
- Construction materials (asphalt)
- Refrigerants
- Electricity (facilities, street lighting and unmetered supplies)
- Waste (office)
- Accommodation and facilities (business travel)
- Air transport (km) (business travel)
- Land and sea transport (km) (taxis and hire cars)
- Office equipment & supplies (paper)
- Carbon neutral products and services (paper)

Non-quantified

- Some outdoor events
- Embodied emissions of purchased products and services (other than asphalt, water and paper)
- Construction/de molition activities
- Leased sites where Council does not pay the energy bills
- Transport emissions of purchased products and services

Outside emissions boundary

Excluded

- Community emissions and other emission sources outside of Council's operational control

Data management plan for non-quantified sources

The data management plan below outlines how more rigorous quantification can be achieved for material (greater than 1%) non-quantified emission sources.

In the next two years Council is looking to develop a data management and collection process to account for the non-quantified emissions listed below:

- Embodied emissions of purchased products and services, e.g., steel, concrete: Council will first determine what spend data is available and what it covers. Council will then analyse available data, identify key emission sources and identify steps to improve data quality.

- Transport emissions from purchased products and materials e.g. postage, couriers, freight: Estimates of embodied emissions of purchased goods and services will largely rely on EEIO (environmentally extended input-output) factors, which convert spend to emissions. These factors include transport emissions. It will not be feasible to gather transport emissions specific to purchased goods and services.

- Construction/demolition activities – Council will gather available data and assess its usefulness.

Council is also looking to improve the available data for contractor fuel consumption. Currently total contractor fuel consumption is estimated by doubling fuel consumption of Council's waste contractor.

All emissions not listed above were determined to be outside the inventory boundary. One example of an excluded emissions source is domestic waste from the community. Emissions from Council and contractor waste trucks are within the inventory boundary. However, emissions from community waste in landfill are outside the boundary since the landfill is operated by Darebin City Council. Since Moreland City Council has no operational control over the boundary, these emissions are outside Council's boundary. Emissions generated by Moreland residents or businesses are also outside the inventory boundary for the same reason, that they are outside Council's operational control.

4.EMISSIONS REDUCTIONS

Emissions reduction strategy

Moreland City Council has always been a leader in environmental initiatives, including action on climate change. Council's three previous strategies, the Climate Action Plan, Carbon Management Strategy and Corporate Carbon Reduction Strategy, were combined into the Zero Carbon Moreland – Climate Emergency 2040 Framework in 2018.

The Moreland Zero Carbon – 2040 Framework provides a pathway for Moreland City Council to maintain its commitment of corporate carbon neutrality and for Council to aim for a zero-carbon municipality by 2040. The Framework defines priorities for driving emissions reductions across three target areas: energy transition, sustainable transport and waste and consumption. The Framework informs 5-yearly action plans which set medium-term targets and map out priority projects and programs (including advocacy). The initial Zero Carbon Climate Emergency Action Plan (2020 – 2025) has been adopted by Moreland City Council.

Emissions reduction actions

Moreland City Council has achieved low emissions due to a number of projects:

Melbourne Renewable Energy Project

The Melbourne Renewable Energy Project (MREP) marked the first time in Australia that a group of local governments, cultural institutions, universities and corporations have collectively purchased renewable energy from a newly built facility. The 39-turbine Crowlands Windfarm near Ararat is owned and operated by Melbourne-based clean energy company Pacific Hydro. Under this project, fourteen members of the buying group combined their purchasing power and committed to purchase 88 GWh of electricity per year from the windfarm under a long-term power purchase agreement. The agreement enabled financing and construction arrangements for the project; and because the windfarm generates more than the purchasing group's needs, it brings additional renewable energy into the market.

Council has been a partner in the Melbourne Renewable Energy Project (MREP) consortium for the full 2020/21 financial year. Through this consortium, the majority of Council's electricity has been sourced from Crowlands Windfarm. This electricity is therefore 100% (zero emissions) renewable, backed by Large-Scale Generation Certificates (LGCs). The only electricity emissions not covered by MREP are a few small unmetered sites that cannot be incorporated into the contract, or leased sites where a third party is paying the electricity bill.

Renewable energy – solar

In 2020/21 Council installed 20 kW of solar power on Council buildings leased to the community under the 'Solar on Leased' programme. Under this programme, Council pays for initial installation of solar systems and on-going maintenance. The community group leasing the site then repays the cost of the system over 10 years from cost savings made on their electricity bills. Significant efforts were also made in 2020/21 to carry out maintenance and improve monitoring across Council's solar portfolio. Council currently has 828 kW of solar installations across 38 sites.

Degasification

Council manages six aquatic centres, four of which have outdoor heated pools. These aquatic centres are responsible for 89% of corporate gas consumption. Consultant reports were commissioned on all aquatic sites to understand the feasibility of transitioning them off gas. Council plans to carry out a large-scale refurbishment on Fawkner Aquatic Centre in 2023, and initial modelling has been carried out to determine how heating this site could be carried out using heat pumps.

Electric vehicles (EVs)

Moreland Council now has 26 pure electric vehicles (EVs) in its light vehicle fleet, making it the largest council EV fleet in Victoria. Council's public EV charging network sees over 1,200 charging sessions per month. In April 2021, Brunswick EV Hub was the busiest on the Chargefox network in Australia. All electricity at chargers is supplied through Pacific Hydro (Crowlands Wind Farm). Council is considering whether to purchase an electric tipper truck, which would be the first electric vehicle in Council's 'medium' fleet.

Under construction – Glenroy Community Hub

Construction of the Glenroy Community Hub, costing $27.5m, will be completed in November 2021. The building will house a range of Council services, including a library, kindergarten and maternal child health. The building will be Passive House-certified, demonstrating Council's commitment to world-leading, sustainable design. Currently no community centre in Australia has received such certification. The site will be highly energy-efficient, will have 270 kW of solar installed, and will support the health and well-being of users.

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5.EMISSIONS SUMMARY

Emissions over time

Table 1 compares 2020/21 emissions to 2019/20 as well as to the baseline year 2011/12. Greenhouse gas emissions were 4% lower in 2020/21 compared to 2019/20. Scope 1 emissions, referred to as 'direct emissions', include the burning of fuel for transport, or gas for heating. Scope 2 emissions, referred to as 'indirect emissions', primarily relate to emissions from electricity. These emissions are indirect because they occur during the generation of electricity. Scope 3 emissions are indirect emissions other than scope 2 emissions. These emissions occur as a consequence of an organisation's activities, but from sources not owned or controlled by that organisation. Examples include emissions from the production of purchased goods or due to business travel.

Emissions since base year for key years by scope			
	Base year 2011-12	**Previous year 2019-20**	**Current year 2020-21**
Scope 1	4,970	4,098	3,714
Scope 2	5,879	0	61
Scope 3	10,404	2,464	2,527
Total tCO_2e	21,253	6,562	6,302

Emissions since base year for all years		
		Total tCO_2-e
Base year:	2011-12	21,253
Year 1:	2012–13	19,481
Year 2:	2013-14	20,485
Year 3:	2014-15	19,770
Year 4:	2015-16	17,869
Year 5:	2016-17	15,503
Year 6:	2017-18	15,282
Year 7:	2018-19	16,327
Year 8:	2019-20	6,562
Current year:	2020-21	6,302

Significant changes in emissions

Factors which influenced the decrease in emissions from 2019/20 to 2020/21 include:

- Council's contractors reported a 6% decrease in diesel consumption in 2020/21 compared to 2019/20. This is believed to be due to Covid-19 restrictions.
- Fewer refrigerant leaks occurred in 2020/21 than in 2019/20, and as a result less refrigerant was purchased to refill air-conditioning systems.
- Due to Covid-19 restrictions, fewer road-building and repair projects were undertaken. This reduced asphalt consumption by 49%.
- Due to Covid-19 restrictions, office printing and use of hire cars and taxis dropped significantly.
- The methodology for calculating emissions from water was updated for 2020/21. In previous years the assumption was made that all consumed water was used for irrigation. In 2020/21 improved data quality confirmed that 30% of Council's consumed water is sent to wastewater treatment, incurring higher carbon emissions, while the remainder is used for irrigation.
- Unmetered electricity supplies are included in the boundary for the first time. These supplies relate to watchman lights (spotlights attached to street lights), pedestrian crossing lights and sprinkler systems. This electricity is not currently covered by renewable certificates from the Melbourne Renewable Energy Project (MREP).
- Updates to the National Greenhouse Accounts Factors, published by the Department of Environment in August 2020.
- Employee public transport emissions accounted for 570 kg CO_2e in 2019/20. Due to Covid-19 restrictions there was negligible business travel in 2020/21, in particular travel using public transport. As a result this category is considered to be *de minimis* for this financial year.

Emission source name	Current year (kL fuel)	Previous year (kL fuel)	Detailed reason for change
Diesel oil post-2004 (contractor fuels)	612	575	Under Covid restrictions, Council contractors undertook less travel in 2020/21 than in 2019/20

Use of Climate Active carbon neutral products and services

Council purchased 6 tonnes of carbon neutral paper (Winc® carbon neutral copy paper1), covering 99% of business requirements. Only 76 kilograms of standard paper was purchased.

[1] https://www.winc.com.au/

Organisation emissions summary

Electricity emissions shown below were calculated using a market-based approach. The electricity summary, which includes emissions calculated using both market- and location-based approaches, is available in Appendix B.

Emission category	Sum of total emissions (tCO_2-e)
Council fleet fuel (diesel, unleaded, LPG)	2,216
Stationary energy (gas, oils, greases)	1,731
Contractor fuels (diesel, unleaded, LPG)	1,661
Water (for irrigation and sent to wastewater treatment)	371
Construction materials (asphalt)	182
Refrigerants	67
Electricity (facilities, street lighting and unmetered supplies)	61
Waste (office)	11
Accommodation and facilities (business travel)	1
Air transport (km) (business travel)	1
Land and sea transport (km) (taxis and hire cars)	0
Office equipment & supplies (paper)	0
Carbon neutral products and services (paper)	-
Total	**6,302**

Uplift factors

Reason for uplift factor	tCO_2-e
None	0
Total footprint to offset (uplift factors + net emissions)	6,302

6.CARBON OFFSETS

Offsets strategy

Offset purchasing strategy: In arrears		
1.	Total offsets previously forward purchased and banked for this report	1,967
2.	Total emissions liability to offset for this report	6,302
3.	Net offset balance for this reporting period	4,335
4.	Total offsets to be forward purchased to offset the next reporting period	0
5.	Total offsets required for this report	6,302

Co-benefits

Council has purchased its offsets from the Prony Wind Power project in New Caledonia is expected to generate an average of 40GWh annually, providing an alternative to fossil fuels. In addition, the project provides 26 jobs to stabilise incomes and boost the local economy, as well as technological know-how for the wind energy sector in New Caledonia. The project will mitigate 36,000 tCO_2e annually.

Offsets summary

Proof of cancellation of offset units

Offsets cancelled for Climate Active Carbon Neutral Certification										
Project description	**Type of offset units**	**Registry**	**Date retired**	**Serial number (and hyperlink to registry transaction record)**	**Vintage**	**Eligible quantity (tCO_2-e)**	**Quantity used for previous reporting periods**	**Quantity banked for future reporting periods**	**Quantity used for this reporting period claim**	**Percentage of total (%)**
Gold Standard-accredited Prony Wind Power in New Caledonia	GS VERs	Impact Registry	27 Sep 2021	GS1-1-NC-GS566-12-2014-5968-14543-20042	2014	5,500	0	1,165	4,335	69%
Gold Standard-accredited Mersin Wind Farm Project, Turkey	GS VERs	Impact Registry	25 Jan 2021	GS1-1-TR-GS753-12-2014-7213-15354-21293	2014	5,940	3,973	0	1,967	31%
Total offsets retired this report and used in this report									6,302	
Total offsets retired this report and banked for future reports								1,165		

Type of offset units	Quantity (used for this reporting period claim)	Percentage of total
Verified Emissions Reductions (VERs)	6,302	100%

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) summary

The following RECs have been surrendered to reduce electricity emissions under the market-based reporting method.

1. Large-scale Generation certificates (LGCs)*	5,303
2. Other RECs	0

Project supported by LGC purchase	Eligible units	Registry	Surrender date	Accreditation code (LGCs)	Certificate serial number	Generation year	Quantity (MWh)	Fuel source	Location
Crowlands Wind Farm	LGC	LGC Registry	2020	WD00VC32	144962 - 146185	2020	1224	Wind	Victoria, Australia
Crowlands Wind Farm	LGC	LGC Registry	2020	WD00VC32	223584 - 224738	2020	1155	Wind	Victoria, Australia
Crowlands Wind Farm	LGC	LGC Registry	2021	WD00VC32	67024 - 68381	2021	1,358	Wind	Victoria, Australia
Crowlands Wind Farm	LGC	LGC Registry	2021	WD00VC32	92216 - 93781	2021	1,566	Wind	Victoria, Australia
					Total LGCs surrendered this report and used in this report		5,303		

* LGCs in these tables only include those surrendered voluntarily (including through PPA arrangements),and do not include those surrendered in relation to the LRET, GreenPower, and jurisdictional renewables.

APPENDIX A: ADDITIONAL INFORMATION

NA

APPENDIX B: ELECTRICITY SUMMARY

Moreland City Council has chosen to use the market-based methodology to calculate electricity emissions reported in our carbon inventory.

Electricity emissions are calculated below using both market-based and location-based approaches.

Market-based method

The market-based method provides a picture of a business's electricity emissions in the context of its renewable energy investments. It reflects the emissions intensity of different electricity products, markets and investments. It uses a residual mix factor (RMF) to allow for unique claims on the zero emissions attribute of renewables without double-counting.

Location-based method

The location-based method provides a picture of a business's electricity emissions in the context of its location, and the emissions intensity of the electricity grid it relies on. It reflects the average emissions intensity of the electricity grid in the location (State) in which energy consumption occurs. The location-based method does not allow for any claims of renewable electricity from grid-imported electricity usage.

Market Based Approach Summary

Market Based Approach	Activity Data (kWh)	Emissions (kgCO2e)	Renewable Percentage of total
Behind the meter consumption of electricity generated	701,389	0	9%
Total non-grid electricity	**701,389**	**0**	**9%**
LGC Purchased and retired (kWh) (including PPAs & Precinct LGCs)	5,303,000	0	71%
Large Scale Renewable Energy Target (applied to grid electricity only)	1,279,175	0	17%
Residual Electricity	177,004	189,940	0%
Total grid electricity	**6,759,179**	**189,940**	**88%**
Total Electricity Consumed (grid + non grid)	**7,460,568**	**189,940**	**98%**
Electricity renewables	7,283,564	0	
Residual Electricity	177,004	189,940	
Exported on-site generated electricity	**165,005**	**-128,704**	
Emission Footprint (kgCO2e)		61,236	

Total renewables (grid and non-grid)	**97.63%**
Mandatory	**17.15%**
Voluntary	**71.08%**
Behind the meter	**9.40%**
Residual Electricity Emission Footprint (TCO2e)	**61**

Figures may not sum due to rounding. Renewable percentage can be above 100%

Location Based Approach Summary

Location Based Approach	Activity Data (kWh)	Emissions (kgCO2e)
Vic	6,759,179	7,367,505
Grid electricity (scope 2 and 3)	**6,759,179**	**7,367,505**
Vic	701,389	0
Non-grid electricity (Behind the meter)	**701,389**	**0**
Total Electricity Consumed	**7,460,568**	**7,367,505**

Emission Footprint (TCO2e)	**7,368**

APPENDIX C: INSIDE EMISSIONS BOUNDARY

Non-quantified emission sources

The following sources emissions have been assessed as relevant, are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. These emissions are accounted for through an uplift factor. They have been non-quantified due to one of the following reasons:

1. **Immaterial** <1% for individual items and no more than 5% collectively
2. **Cost effective** Quantification is not cost effective relative to the size of the emission but uplift applied.
3. **Data unavailable** Data is unavailable but uplift applied. A data management plan must be put in place to provide data within 5 years.
4. **Maintenance** Initial emissions non-quantified but repairs and replacements quantified.

Relevant-non-quantified emission sources	(1) Immaterial	(2) Cost effective (but uplift applied)	(3) Data unavailable (but uplift applied & data plan in place)	(4) Maintenance
Some outdoor events	Yes	No	Yes	No
Construction/demolition activities	No	No	Yes (data plan in place)	No
Embodied emissions of purchased products and services, e.g., IT equipment, chlorine, office printing, telecommunications, stationery, food and catering, cleaning services	No	No	Yes (data plan in place)	No
Leased sites where Council does not pay the energy bills	Yes	No	Yes	No
Transport emissions from purchased products and materials, e.g., postage, couriers, freight.	No	No	Yes (data plan in place)	No

APPENDIX D: OUTSIDE EMISSIONS BOUNDARY

Excluded emission sources

The below emission sources have been assessed as not relevant to an organisation's or precinct's operations and are outside of its emissions boundary. These emissions are not part of the carbon neutral claim. Emission sources considered for relevance must be included within the certification boundary if they meet two of the five relevance criteria. Those which only meet one condition of the relevance test can be excluded from the certification boundary.

Emissions tested for relevance are detailed below against each of the following criteria:

1. **Size** The emissions from a particular source are likely to be large relative to the organisation's electricity, stationary energy and fuel emissions

2. **Influence** The responsible entity has the potential to influence the reduction of emissions from a particular source.

3. **Risk** The emissions from a particular source contribute to the organisation's greenhouse gas risk exposure.

4. **Stakeholders** Key stakeholders deem the emissions from a particular source are relevant.

5. **Outsourcing** 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.

Emission sources tested for relevance	(1) Size	(2) Influence	(3) Risk	(4) Stakeholders	(5) Outsourcing	Included in boundary?
Community waste	Yes	No	No	No	No	No
Community energy	Yes	No	No	No	No	No

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