PUBLIC DISCLOSURE STATEMENT

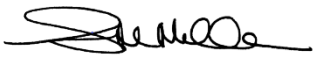
WHITEHORSE CITY COUNCIL

ORGANISATION CERTIFICATION
FY2022-23

Australian Government

Climate Active
Public Disclosure Statement

An Australian Government Initiative

NAME OF CERTIFIED ENTITY	Whitehorse City Council
REPORTING PERIOD	1 July 2022 – 30 June 2023 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.* 
	Simon McMillan Chief Executive Officer 30 August 2024

Australian Government
Department of Climate Change, Energy, the Environment and Water

Version August 2023.

1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	17,549.91 tCO_2-e
OFFSETS USED	15% ACCUs, 11% VERs, 74% VCUs
RENEWABLE ELECTRICITY	52.82%
CARBON ACCOUNT	Prepared by: Whitehorse City Council
TECHNICAL ASSESSMENT	15/05/2024 Ironbark Sustainability Next technical assessment due: FY 25/26
THIRD PARTY VALIDATION	Type 1 15/05/2024 Foresight Consulting Group Pty Ltd

Contents

2.CARBON NEUTRAL INFORMATION

Description of certification

This carbon neutral certification is for the business operations, services and facilities of Whitehorse City Council (ABN 39 549 568 822).

Organisation description

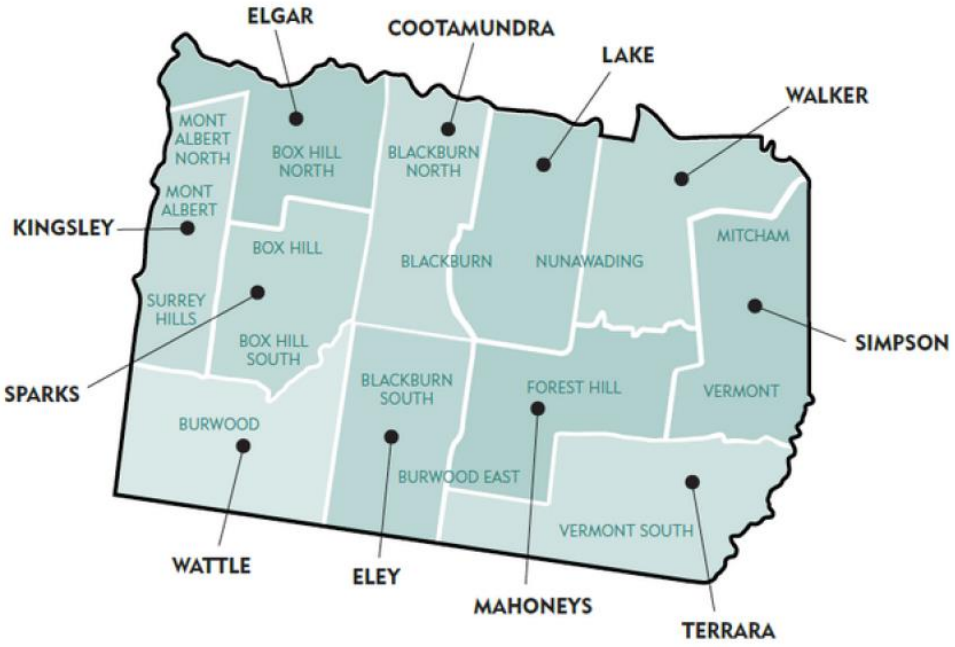
Whitehorse City Council is a Victorian local government authority operating as a public statutory body, incorporated under the Victorian Local Government Act 1989.

The City of Whitehorse covers 64 square kilometers and is located in Melbourne's eastern suburbs, between 12 and 22 kilometers east of the Melbourne CBD. Whitehorse is home to a diverse and vibrant population of around 172,500 people. More than 41.5% of Whitehorse residents were born overseas and 36.7% come from countries where English is not their first language.

The Wurundjeri Woi-wurrung people of the Kulin nation are the traditional custodians of the land on which the City of Whitehorse is located. Historically, the tribe would camp along the banks of the many creeks that flow through the City and named parts of the local area Namenarren or Nunawading. This landscape was radically different from what the municipality now is.

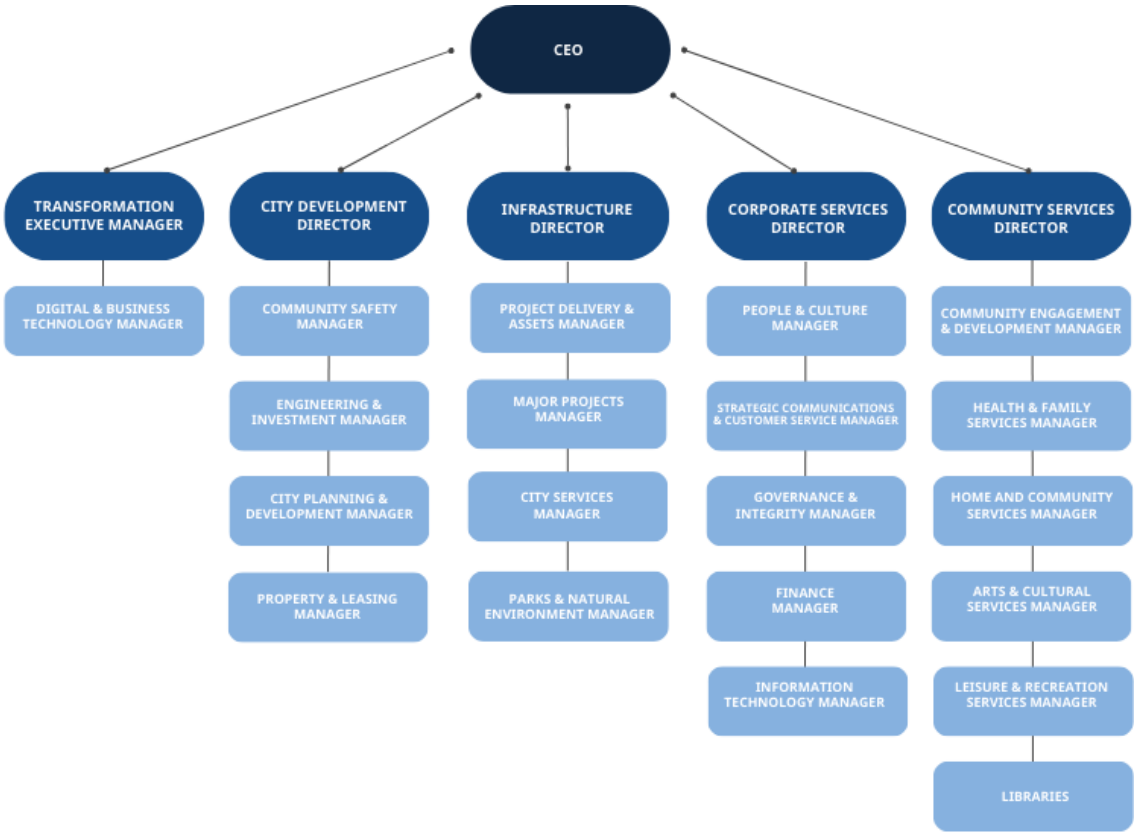
The City of Whitehorse was formed in December 1994 following the amalgamation of the former cities of Box Hill and Nunawading. This reunited the suburbs which formed the original Shire of Nunawading more than 100 years ago.

The municipality is divided into 11 wards: Elgar, Cootamundra, Lake, Walker, Simpson, Terrara, Mahoneys, Eley, Wattle, Sparks, Kingsley. Each ward is represented by one Councillor, giving a total of 11



Councillors. Councillors are responsible for the stewardship and governance of Council. Within the framework of strategic leadership and representative government, a position of Chief Executive Officer

(CEO) is established by the Local Government Act 2020 to oversee the day-to-day management of Council operations in accordance with the strategic directions of the Council Plan. The CEO together with five Directors form the Executive Leadership Team (ELT) that leads the organisation. ELT is supported by managers and employees with specialist skills to develop, implement, manage, and deliver the operational, service and administrative activities required to meet the needs and expectations of the community. Figure 2 describes the organisational structure. There are 19 managers and 1,206 employees (446 full-time, 382 part-time and 378 casual employees, equivalent to 747.7 full-time equivalent staff).



Council operates administrative functions from the following main locations:

- Civic Centre (including Council Chambers) - 379-399 Whitehorse Road, Nunawading
- Customer Service Centres:
    - Forest Hill Customer Service Centre, Level 2, Shop 275, 270 Canterbury Road, Forest Hill.
    - Box Hill Customer Service Centre, 1022 Whitehorse Road, Box Hill.
- Operations Centre - 1 Ailsa St, Box Hill South

Whitehorse City Council is responsible for the management of assets valued at more than $4.27 billion (including land). This includes:

- 606 kilometers of roads
- 32 kilometers of laneways
- 1,221 kilometers of kerb and channel
- 1,175 kilometers of footpath
- 867 kilometers of storm water drainage network
- 355 buildings and facilities, including early childhood and maternal care, leisure and recreation, community and cultural facilities.

- 54 sports fields
- 174 playgrounds
- 660 hectares of open space including quality bushland reserves, parks, formal gardens, recreation reserves and trails.

Over 34 services are provided by Council including: maternal and child health, libraries, community programs, community laws, arts and culture, sports and recreation, statutory and strategic planning, capital works, engineering, placemaking, parks and open spaces, bushland and environment, events, and recycling and waste.

The following entities are excluded from this certification:

Legal entity name	ABN	ACN
Whitehorse Manningham Regional Library Corporation	96 934 505 907	-
Regional Landfill Clayton South Joint Venture	39 223 663 016	-

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 material 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 Whitehorse City Council'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

Scope 1

- Transport (land and sea) (Staff business travel)
- Refrigerants
- Stationary energy (gaseous fuels)
- Stationary energy (liquid fuels)

Scope 2

- Electricity

Scope 3

- Cleaning and chemicals (Cleaning services)
- Construction materials and services (Fencing; Concrete)
- Food
- Horticulture and agriculture (Plants from nurseries)
- ICT services and equipment (Computer and technical services)
- Office equipment and supplies (Paper)
- Transport (land and sea) - Contractors
- Waste
- Water
- Working from home

Non-quantified

Immaterial

- Accommodation and facilities
- Cleaning and chemicals (Cleaning and janitorial equipment and supplies; Chemical products)
- Construction materials and services (Air conditioning equipment; Prefabricated buildings and structures; Asphalt; Bricks; Cement)
- Horticulture and agriculture (Animal food; Construction materials (pebbles, stone rock); Chemical fertilisers; Pesticides)
- ICT services and equipment (Computer and electrical components, hardware and accessories; Telecommunications)
- Office equipment and supplies (Electronic office equipment; Office furniture; Printing and stationery; Paper products; Newspapers, journals and periodicals)
- Postage, courier and freight (Courier services; Road freight)
- Products (clothing; signage)
- Transport (air)
- Transport (land and sea) (Employee commute)
- Waste (Council-operated landfills (closed in 1960-70s))

No data available

- Machinery and vehicles
- Professional services

Outside emission boundary

Excluded

- Community waste
- Leased buildings (excluding electricity and gas)
- Landfills operated by third parties

4.EMISSIONS REDUCTIONS

Emissions reduction strategy

Whitehorse City Council declared a climate emergency on 12 September 2022. A Climate Emergency Declaration highlights that urgent action is needed by all levels of government, including local councils, and at a scale that is required to address the current and future challenges of a changing climate. Since this declaration, Council has taken urgent action to reduce corporate and community emissions.

Whitehorse City Council's carbon neutrality objectives are driven from key strategic documents including the Council Plan 2021-2025 and Whitehorse 2040 Community Vision. Strategic Direction 5 in the Community Vision contains the objective that "Council will take a leadership role in addressing climate change and ensure we protect and enhance our natural environment." These documents inform and guide our endorsed corporate strategies and policies that seek to reduce our carbon emissions including:

- *Sustainability Strategy 2016-2022*, which includes the following targets:
    - 45% reduction in corporate greenhouse gas emissions by 2022
    - Carbon Neutral by 2022 (subject to detailed review.)
    - 30% reduction of corporate water consumption by 2022
    - 65% diversion of kerbside waste from landfill by 2022
    - Progressive increase in the use of renewable energy by Council and the community.
- *Interim Climate Response Plan 2020- 2022*, which includes the following targets:
    - 45% reduction in corporate greenhouse gas emissions by 2022
    - 30% reduction of corporate water consumption by 2022
    - 60% diversion of kerbside waste from landfill by 2023

Note that at the time of writing, the *Sustainability Strategy 2016-2022*, and *Interim Climate Response Plan 2020- 2022* have been superseded *Climate Response Strategy 2023-2030*, adopted on 27 November 2023. This document is Council's emissions reduction strategy. It includes Carbon Offset Purchasing Principles to guide Council's purchase of carbon offsets, as well as the following targets:

- Maintain carbon neutral status for corporate emissions,
- Source 100 per cent renewable electricity for Council operations by 2025,
- Achieve net zero corporate emissions by 2032, and
- Aspire for net zero community emissions by 2040.

As part of Council's endorsed *Climate Response Strategy 2023-2030*, Council has committed to the following flagship actions:

- Transitioning electricity procurement for all Council's operations to 100 percent renewable

electricity from 1 July 2024.

- Developing a business case to transition Council buildings and assets off gas to electric in FY 2024/25.
- Developing a business case to transition Council's fleet to zero emissions in FY 2024/25.
- Developing and implementing a Net Zero Emissions Reduction Plan for Council operations, including energy efficiency, electrification, on-site renewable energy and fleet opportunities in FY 2025/26.
- Embedding and implementing *Environmentally Sustainable Design (ESD) Policy* for Council Buildings and Infrastructure, with the Policy to be reviewed in FY 2025/26.

5.EMISSIONS SUMMARY

Use of Climate Active carbon neutral products, services, buildings or precincts

N/A

Emissions summary

The electricity summary is available in the Appendix B. Electricity emissions were calculated using a market-based approach.

Emission category	Sum of Scope 1 (t CO_2-e)	Sum of Scope 2 (t CO_2-e)	Sum of Scope 3 (t CO_2-e)	Sum of Total Emissions (t CO_2-e)
Accommodation and facilities	0.00	0.00	0.00	0.00
Cleaning and chemicals	0.00	0.00	294.71	294.71
Climate Active carbon neutral products and services	0.00	0.00	0.00	0.00
Construction materials and services	0.00	0.00	1176.53	1176.53
Electricity	0.00	3591.58	475.36	4066.94
Food	0.00	0.00	278.35	278.35
Horticulture and agriculture	0.00	0.00	702.67	702.67
ICT services and equipment	0.00	0.00	324.17	324.17
Machinery and vehicles	0.00	0.00	0.00	0.00
Postage, courier and freight	0.00	0.00	0.00	0.00
Products	0.00	0.00	0.00	0.00
Professional services	0.00	0.00	0.00	0.00
Refrigerants	31.59	0.00	0.00	31.59
Roads and landscape	0.00	0.00	0.00	0.00
Stationary energy (gaseous fuels)	2657.22	0.00	206.27	2863.49
Stationary energy (liquid fuels)	0.01	0.00	0.01	0.02
Stationary energy (solid fuels)	0.00	0.00	0.00	0.00
Transport (air)	0.00	0.00	0.00	0.00
Transport (land and sea)	1412.56	0.00	348.71	1761.27
Waste	0.00	0.00	1796.71	1796.71
Water	0.00	0.00	575.22	575.22
Working from home	0.00	0.00	261.46	261.46
Office equipment and supplies	0.00	0.00	22.74	22.74
Transport (land and sea) - Contractors	0.00	0.00	2558.32	2558.32
Total	**4101.38**	**3591.58**	**9021.25**	**16714.20**

Uplift factors

An uplift factor is an upwards adjustment to the total carbon inventory to account for relevant emissions that cannot be reasonably quantified or estimated. This conservative accounting approach helps ensure the integrity of the carbon neutral claim.

Reason for uplift factor	**tCO_2-e**
Machinery & Vehicles - emission source unquantified and requires uplift (2%)	334.28
Professional Services - emission source unquantified and requires uplift (3%)	501.43
Total of all uplift factors	835.71
Total emissions footprint to offset *(total emissions from summary table + total of all uplift factors)*	**17,549.91**

6.CARBON OFFSETS

Offsets retirement approach

This certification has taken an in-arrears offsetting approach. The total emissions to offset is 17,549.91 t CO_2-e. The total number of eligible offsets used in this report is 17,550. Of the total eligible offsets used, 17,550 were newly purchased and retired. No offsets are remaining and have been banked for future use.

Co-benefits

Project description	Type of offset units	Co- benefits
Aydin Salavatli Dora-1 Geothermal Power Plant (ID 120)	VCU	Located in the Aydın Mountains, this 7.95 MW project generates renewable geothermal power. Co-benefits include reducing air pollution and increasing health outcomes as renewable wind power displaces fossil fuel dominated electricity generation.
Sanya Landfill Gas Power (ID 2337)	VCU	Located in Hainan Province, this project captures methane from the landfill site, turning it into a valuable source of electricity. Co-benefits include reducing air pollution and increasing health outcomes as renewable wind power displaces coal dominated electricity generation.
Green Infrawind (ID 7468) *Stapled to* EcoAustralia – Mt Sandy	GS VER	Located in the Kutch district in Gujarat, India, this 300 MW project generates renewable wind power. Co-benefits include reducing air pollution and increasing health outcomes as renewable wind power displaces fossil fuel dominated electricity generation. Offsets from this project have been stapled to an Australian traditional land management project for biodiversity conservation in wetlands and woodlands between the Coorong National Park and Lake Albert. The site is one of the last remaining areas of native vegetation in the region, providing a strategic wildlife corridor, and is of great significance to the local Ngarrindjeri people.
Jayowyn Fire Project (ID EOP100639 or ERF102021)	ACCU	Located in the Northern Territory, Australia, this project aims to reduce the frequency and extent of late dry season wildfires through strategic, controlled savanna burning resulting in fewer greenhouse gas emissions and more carbon being sequestered in dead organic matter. The fire project's co-benefits include protecting wildlife and delivering social, cultural and economic benefits to Indigenous Australians.

Eligible offsets retirement summary

Offsets retired for Climate Active carbon neutral certification											
Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Stapled quantity	Eligible quantity retired (tCO_2-e)	Eligible quantity used for previous reporting periods	Eligible quantity banked for future reporting periods	Eligible quantity used for this reporting period	Percentage of total (%)
Aydin Salavatli Dora-1 Geothermal Power Plant (ID 120)	VCU	Verra	8 May 2024	https://registry.verra.org/app/projectDetail/VCS/120 https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=234793 https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=232471 https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=234792	2019-2021	-	10,941	0	0	10,941	62
Sanya Landfill Gas Power (ID 2337)	VCU	Verra	8 May 2024	https://registry.verra.org/app/projectDetail/VCS/2337 https://registry.verra.org/myModule/rpt/myrpt.asp?r=206&h=234791	2021	-	1977	0	0	1977	11
Green Infrawind (ID 7468) *Stapled to*	GS VER	Gold Standard and	8 May 2024	https://registry.goldstandard.org/projects/details/1835 https://registry.goldstandard.org/batch-	2020, 2022	2,000	2,000	0	0	2,000	11

Offsets retired for Climate Active carbon neutral certification											
Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Stapled quantity	Eligible quantity retired (tCO_2-e)	Eligible quantity used for previous reporting periods	Eligible quantity banked for future reporting periods	Eligible quantity used for this reporting period	Percentage of total (%)
EcoAustralia – Mt Sandy and		Biodiversity Credit Exchange South Australia		retirements/details/176848 and Not applicable							
Jayowyn Fire Project (ID EOP100639 or ERF102021)	ACCU	Emissions Reduction Fund	8 May 2024	https://cer.gov.au/schemes/australian-carbon-credit-unit-scheme/accu-project-and-contract-register/project/ERF102021	2021-2022	-	2,632	0	0	2,632	15
									Total eligible offsets retired and used for this report	**17,550**	
									Total eligible offsets retired this report and banked for use in future reports	**0**	

Type of offset units	Eligible quantity (used for this reporting period)	Percentage of total
Australian Carbon Credit Units (ACCUs)	2,632	15
Verified Emissions Reductions (VERs)	2,000	11
Verified Carbon Units (VCUs)	12,918	74

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)*	2,431

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

^ Note that this figure includes an additional 1 MWh to account for a *Revised Data Adjustment* received Council from Red Energy for CY 2021 (see Appendix A).

Project supported by LGC purchase	Project location	Eligible unit type	Registry	Surrender date	Accreditation code	Certificate serial number	Generation year	Fuel source	Quantity (MWh)
Dundonnell Wind Farm - VIC	VIC, Australia	LGC	REC Registry	11 August 2023	WD00VC37	994714-996276	2022	Wind	1563
Dundonnell Wind Farm - VIC	VIC, Australia	LGC	REC Registry	9 March 2023	WD00VC37	1039537-1040404	2022	Wind	868^
Total LGCs surrendered this report and used in this report									**2431**

APPENDIX A: ADDITIONAL INFORMATION

Revised Data Adjustment **received Council from Red Energy for CY 2021**

2022 Summary

The total electricity consumption of Whitehorse City Council for the period Jan-Dec, 2022 was 2,281 MWh. As per agreement, a total of 2,281 LGC were surrendered: 989 (previous Voluntary Surrender for Jan-Jun, 2022), 425 (Mandatory Surrender) and 867 (Voluntary Surrender for Jul-Dec, 2022).

2021 Revised Data Adjustment

As per the market regulations, your meter provider may submit Revised Data up to 26 weeks after each settlement period. Unfortunately, this 26 week period is well outside the timeframe for provision of the 2021 LGC Surrender Letter. Hence, all 2021 Revised Data changes will also be included in the 2022 Surrenders.

Council was provided Revised Data for the 2021 period which resulted in an increase of 2MWh from 911MWh to 913MWh. Due to the increase and Red Energy's contractual obligation to submit LGCs to the regulator on your behalf, we will be submitting an extra 1 Voluntary LGCs along with an accounting of 1 Mandatory LGCs for the 2021 period.

At the end of the letter, you will find screenshots related to 868 voluntary surrendered LGCs for the Jul-Dec, 2022 (867) and the 2021 Revised Data Adjustment (1).

Screenshot of certificate surrender from Renewable Energy Certificate Registry

Surrender details

Surrender ID:	6686
Status:	Accepted
Certificates offered:	868
Surrender type:	Voluntary
Surrender reason:	Altruistic purposes
Time surrender offer created:	22/2/2023 10:31:37
Performed by user:	Arunesh Choubey (CHOUA52587)
Surrender note:	Red Energy surrendered on behalf of VECO Whitehorse City Council
Auditor note:	Offer of voluntary surrender (Offer ID: 6499-6500, 6504, 6508-6523, 6549, 6551, 6560, 6565, 6574, 6580, 6595-6600, 6602-6608, 6611-6613, 6615-6616, 6634, 6641-6642, 6644-6646, 6685-6695, 6699, 6707, 6708) has been accepted by the Clean Energy Regulator on 09/03/2023.

Certificate details

10 records per page

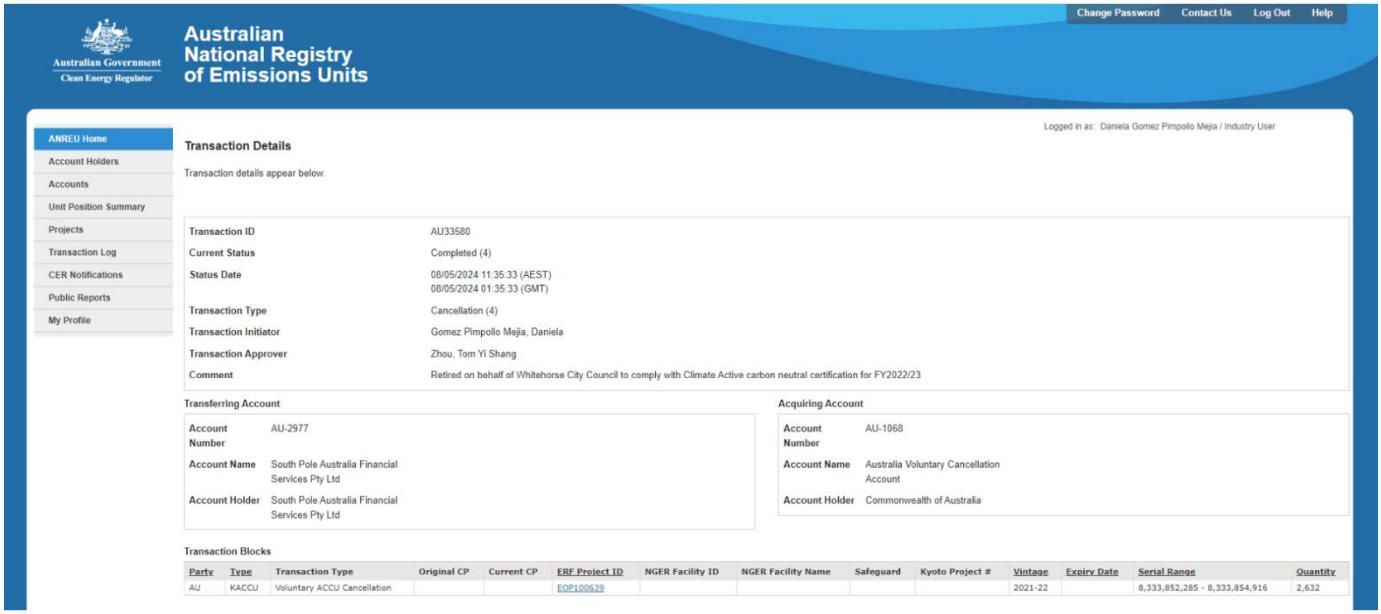
Certificate type	Fuel source	Generation year	Creation year	Certificate quantity
LGC	Wind	2022	2022	868

Certificate details

10 records per page

Certificate type	Accreditation code	Fuel source	Generation year	Creation year	Generation state	Registered person ID	Certificate tag	Serial number range	Certificate quantity
LGC	WD00VC37	Wind	2022	2022	VIC	24485	C & I Customers 2022 Voluntary	1039537-1040404	868

Retirement certificates for carbon offsets



Australian Government
Clean Energy Regulator

Australian National Registry of Emissions Units

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ANREU Home
Account Holders
Accounts
Unit Position Summary
Projects
Transaction Log
CER Notifications
Public Reports
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Transaction Details

Transaction details appear below.

Transaction ID	AU33580
Current Status	Completed (4)
Status Date	08/05/2024 11:35:33 (AEST) 08/05/2024 01:35:33 (GMT)
Transaction Type	Cancellation (4)
Transaction Initiator	Gomez Pimpollo Mejia, Daniela
Transaction Approver	Zhou, Tom Yi Shang
Comment	Retired on behalf of Whitehorse City Council to comply with Climate Active carbon neutral certification for FY2022/23

Transferring Account

Account Number	AU-2977
Account Name	South Pole Australia Financial Services Pty Ltd
Account Holder	South Pole Australia Financial Services Pty Ltd

Acquiring Account

Account Number	AU-1068
Account Name	Australia Voluntary Cancellation Account
Account Holder	Commonwealth of Australia

Transaction Blocks

Party	Type	Transaction Type	Original CP	Current CP	ERF Project ID	NGER Facility ID	NGER Facility Name	Safeguard	Kyoto Project #	Vintage	Expiry Date	Serial Range	Quantity
AU	KACCU	Voluntary ACCU Cancellation			EOP100639					2021-22		8,333,852,285 - 8,333,854,916	2,632

Climate
Positive Action for Planet + People

We are delighted to confirm the retirement of

2000 Verified Emission Reductions (VERs)

by

South Pole Carbon Asset Management Ltd.

on **08/05/2024**

These credits were retired on behalf of Whitehorse City Council.

Retired on behalf of Whitehorse City Council to comply with Climate Active carbon neutral certification for FY2022/23

Project: 300 MW Wind Energy Project by Green Infra Wind Energy Limited

These credits have been retired, saving ***2000*** *tonnes of CO2 emissions from being released into the atmosphere.*
Thank you for investing in a safer climate and more sustainable world.

View retirement

Gold Standard

Retirement certificates are hosted on the Gold Standard Impact Registry, view your certificate.

Gold Standard | Chemin de Balexert 7-9 1219 Châtelaine, International Environnment House 2, Switzerland | goldstandard.org. +41 22 788 70 80, help@goldstandard.org

BIODIVERSITY UNIT CERTIFICATE

MOUNT SANDY CONSERVATION PROJECT

This certificate confirms that

2,000

Australian Biodiversity Units
(3,000 square metres)

have been purchased and are being retired by

Whitehorse City Council

CRN: 110419

Serial Numbers: 109298-111297

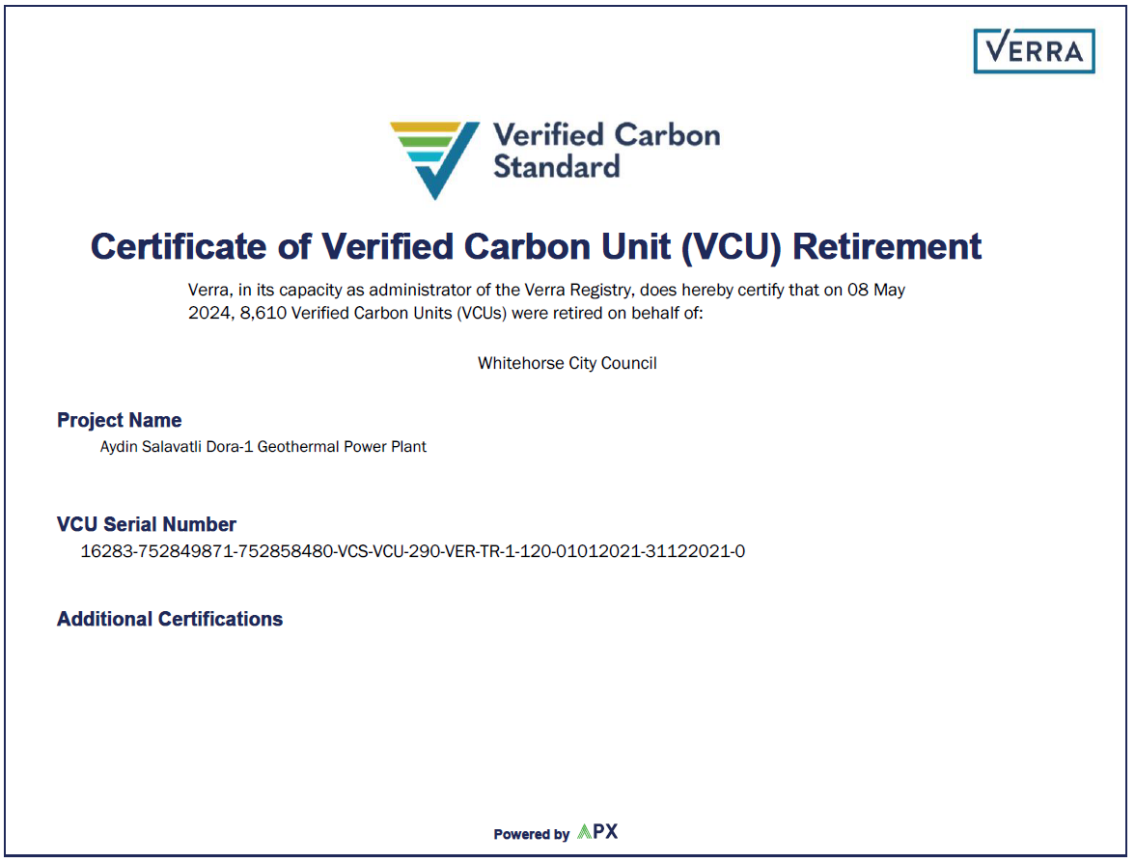
An Australian Biodiversity Unit (ABU) represents the permanent protection of 1.5 square metres of high conservation value native habitat

07/05/2024

Registrar Certification | date

NVCR ALLOCATION REFERENCE: NVS2019-4003-182 VOL003

vegetationlink
Verified Biodiversity Units



VERRA

Verified Carbon Standard

Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 08 May 2024, 8,610 Verified Carbon Units (VCUs) were retired on behalf of:

Whitehorse City Council

Project Name

Aydin Salavatli Dora-1 Geothermal Power Plant

VCU Serial Number

16283-752849871-752858480-VCS-VCU-290-VER-TR-1-120-01012021-31122021-0

Additional Certifications

Powered by APX

VERRA

Verified Carbon Standard

Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 08 May 2024, 691 Verified Carbon Units (VCUs) were retired on behalf of:

Whitehorse City Council

Project Name

Aydin Salavatli Dora-1 Geothermal Power Plant

VCU Serial Number

16171-743809857-743810547-VCS-VCU-290-VER-TR-1-120-01012020-31122020-0

Additional Certifications

Powered by APX

VERRA

Verified Carbon Standard

Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 08 May 2024, 1,640 Verified Carbon Units (VCUs) were retired on behalf of:

Whitehorse City Council

Project Name

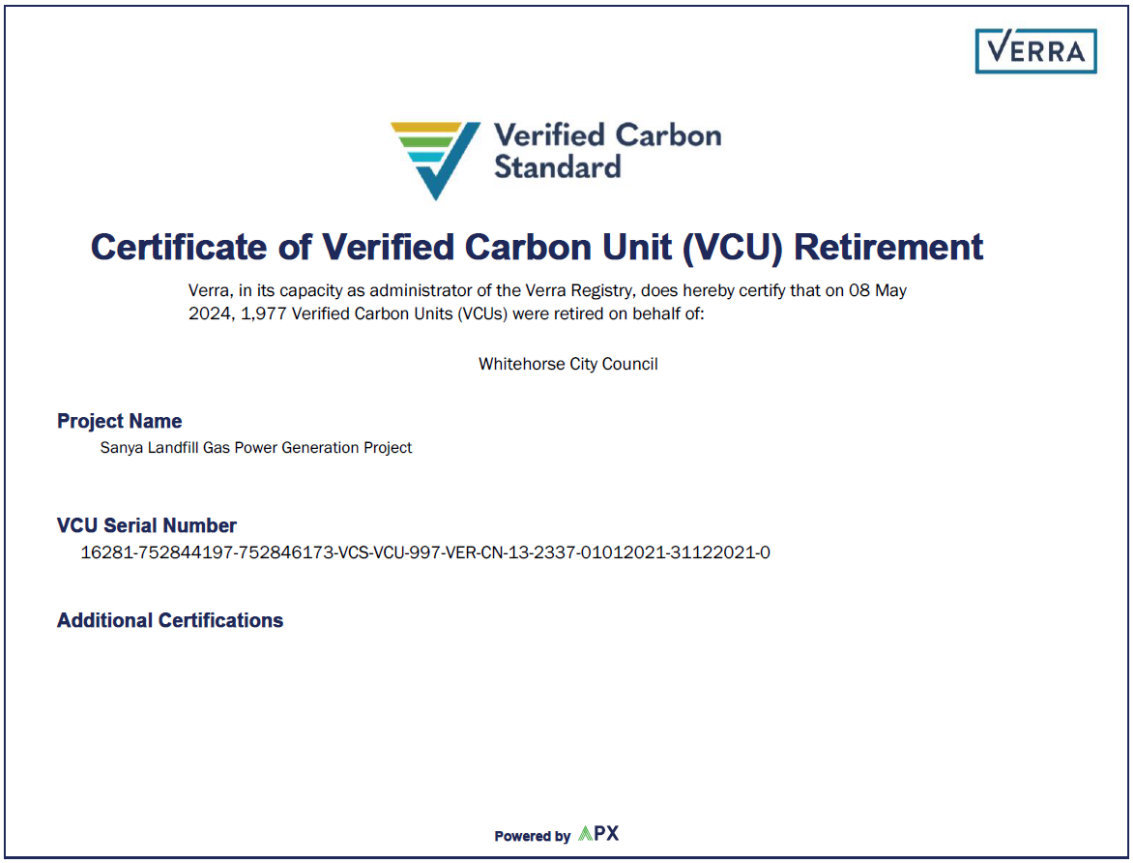
Aydin Salavatli Dora-1 Geothermal Power Plant

VCU Serial Number

16282-752848231-752849870-VCS-VCU-290-VER-TR-1-120-01012019-31122019-0

Additional Certifications

Powered by APX



VERRA

Verified Carbon Standard

Certificate of Verified Carbon Unit (VCU) Retirement

Verra, in its capacity as administrator of the Verra Registry, does hereby certify that on 08 May 2024, 1,977 Verified Carbon Units (VCUs) were retired on behalf of:

Whitehorse City Council

Project Name

Sanya Landfill Gas Power Generation Project

VCU Serial Number

16281-752844197-752846173-VCS-VCU-997-VER-CN-13-2337-01012021-31122021-0

Additional Certifications

Powered by APX

APPENDIX B: ELECTRICITY SUMMARY

There are two international best-practice methods for calculating electricity emissions – the location-based method and the market-based method. Reporting electricity emissions under both methods is called dual reporting.

Dual reporting of electricity emissions is useful, as it provides different perspectives of the emissions associated with a business's electricity usage.

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 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.

For this certification, electricity emissions have been set by using the **market-based approach**.

Market Based Approach Summary

Market Based Approach	Activity Data (kWh)	Emissions (kg CO2-e)	Renewable Percentage of total
Behind the meter consumption of electricity generated	787,980	0	9%
Total non-grid electricity	**787,980**	**0**	**9%**
LGC Purchased and retired (kWh) (including PPAs)	2,431,000	0	27%
GreenPower	0	0	0%
Climate Active precinct/building (voluntary renewables)	0	0	0%
Precinct/Building (LRET)	0	0	0%
Precinct/Building jurisdictional renewables (LGCs surrendered)	0	0	0%
Electricity products (voluntary renewables)	0	0	0%
Electricity products (LRET)	0	0	0%
Electricity products jurisdictional renewables (LGCs surrendered)	0	0	0%
Jurisdictional renewables (LGCs surrendered)	0	0	0%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	0	0	0%
Large Scale Renewable Energy Target (applied to grid electricity only)	1,548,817	0	17%
Residual Electricity	4,258,571	4,066,935	0%
Total renewable electricity (grid + non grid)	**4,767,797**	**0**	**53%**
Total grid electricity	**8,238,388**	**4,066,935**	**44%**
Total electricity (grid + non grid)	**9,026,368**	**4,066,935**	**53%**
Percentage of residual electricity consumption under operational control	100%		
Residual electricity consumption under operational control	**4,258,571**	**4,066,935**	
Scope 2	3,760,816	3,591,579	
Scope 3 (includes T&D emissions from consumption under operational control)	497,755	475,356	
Residual electricity consumption not under operational control	**0**	**0**	
Scope 3	0	0	

Total renewables (grid and non-grid)	**52.82%**
Mandatory	**17.16%**
Voluntary	**26.93%**
Behind the meter	**8.73%**
Residual scope 2 emissions (t CO2-e)	**3,591.58**
Residual scope 3 emissions (t CO2-e)	**475.36**
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO2-e)	**3,591.58**
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO2-e)	**475.36**
Total emissions liability (t CO2-e)	**4,066.94**

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

Location Based Approach Summary

Location Based Approach	Activity Data (kWh) total	Under operational control			Not under operational control	
Percentage of grid electricity consumption under operational control	**100%**	**(kWh)**	**Scope 2 Emissions (kg CO2-e)**	**Scope 3 Emissions (kg CO2-e)**	**(kWh)**	**Scope 3 Emissions (kg CO2-e)**
ACT	0	0	0	0	0	0
NSW	0	0	0	0	0	0
SA	0	0	0	0	0	0
VIC	8,238,388	8,238,388	7,002,630	576,687	0	0
QLD	0	0	0	0	0	0
NT	0	0	0	0	0	0
WA	0	0	0	0	0	0
TAS	0	0	0	0	0	0
Grid electricity (scope 2 and 3)	**8,238,388**	**8,238,388**	**7,002,630**	**576,687**	**0**	**0**
ACT	0	0	0	0		
NSW	0	0	0	0		
SA	0	0	0	0		
VIC	787,980	787,980	0	0		
QLD	0	0	0	0		
NT	0	0	0	0		
WA	0	0	0	0		
TAS	0	0	0	0		
Non-grid electricity (behind the meter)	**787,980**	**787,980**	**0**	**0**		
Total electricity (grid + non grid)	**9,026,368**					

Residual scope 2 emissions (t CO2-e)	**7,002.63**
Residual scope 3 emissions (t CO2-e)	**576.69**
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO2-e)	**7,002.63**
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO2-e)	**576.69**
Total emissions liability (t CO2-e)	**7,579.32**

APPENDIX C: INSIDE EMISSIONS BOUNDARY

Non-quantified emission sources

The following emissions sources have been assessed as relevant, are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. 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	Justification reason
Machinery and vehicles	Data unavailable, uplift applied
Professional services	Data unavailable, uplift applied
Domestic hotel 4 Stars	Immaterial
Domestic hotel 5 Stars	Immaterial
Cleaning and janitorial equipment and supplies	Immaterial
Chemical products	Immaterial
Fabricated metal products	Immaterial
Air conditioning equipment	Immaterial
Prefabricated buildings and structures	Immaterial
Asphalt (standard hot mix)	Immaterial
Bricks	Immaterial
Cement	Immaterial
Animal food	Immaterial
Construction materials (pebbles, stone, rock)	Immaterial
Chemical fertilisers	Immaterial
Pesticides	Immaterial
Computer and electrical components, hardware and accessories	Immaterial
Electronic office equipment	Immaterial
Office Furniture	Immaterial
Printing and stationery	Immaterial
Paper Products	Immaterial
Newspapers, journals and periodicals	Immaterial
Courier services	Immaterial

Relevant non-quantified emission sources	Justification reason
Road freight ($)	Immaterial
Clothing	Immaterial
Signage	Immaterial
Short economy class flights (>400km, ≤3,700km)	Immaterial
Bicycle	Immaterial
Walk	Immaterial
Bus	Immaterial
Motorbike/scooter	Immaterial
Light rail and tram	Immaterial
Medium Car: unknown fuel	Immaterial
Metro train	Immaterial
Waste (Council-operated landfills (closed in 1960-70s))	Immaterial

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. This plan will be implemented over the next 5 years.

While a data management plan may not be required for all non-quantified sources, Council intends to continuously improve data quality for all emissions sources over time. This may include refinement of data collection methods, and recalculation if new emissions sources are included.

Relevant non-quantified emission sources	Scope	Data management plan
Machinery and vehicles	3	Climate Active reporting requirements to be progressively included in all tenders and contracts. It may take several reporting periods to allow for accurate, complete emissions data from this source.
Professional services	3	Climate Active reporting requirements to be progressively included in all tenders and contracts. It may take several reporting periods to allow for accurate, complete emissions data from this source.

APPENDIX D: OUTSIDE EMISSIONS BOUNDARY

Excluded emission sources

The below emission sources have been assessed as not relevant to this Whitehorse City Council'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.

Excluded emissions sources summary

Emission sources tested for relevance	Size	Influence	Risk	Stakeholders	Outsourcing	Justification
Community waste	Y	N	N	N	N	**Size:** The emissions source is likely to be <48,752 t-CO2-e, which is large compared to the total emissions from electricity, stationary energy and fuel emissions (~9,800 t-CO2 -e). **Influence:** Council is unable to influence the emissions from this source, this is a community and landfill operator emission source. **Risk:** There are no relevant laws or regulations that apply to limit emissions specifically from this source, the source does not create supply chain risks. **Stakeholders:** Key stakeholders, including the public, are unlikely to consider this a relevant source of emissions for our business. **Outsourcing:** We have not previously included this emission source within our corporate emissions boundary, similar to other local government authorities.
Tenant emissions other than electricity and gas	N	N	N	N	N	**Size:** The emissions source is likely to be <200 t-CO_2-e, which is not large compared to the total emissions from electricity, stationary energy and fuel emissions (~9,800 t-CO_2 -e). **Influence:** Council is unable to influence the emissions from this source, as sources are within the control of the third-party leasing Council's buildings. **Risk:** There are no relevant laws or regulations that apply to limit emissions specifically from this source, the source does not create supply chain risks, and it is unlikely to be of significant public interest. **Stakeholders:** Key stakeholders, including the public, are unlikely to consider this a relevant source of emissions for our business. **Outsourcing:** We have not previously included this emission source within our corporate emissions boundary.
Landfills operated by third parties	Y	N	N	N	N	**Size:** The emissions source is likely to be around 9,600 t-CO2-e, which is comparable to the total emissions from electricity, stationary energy and fuel emissions (~9,800 t-CO2 -e).

Emission sources tested for relevance	Size	Influence	Risk	Stakeholders	Outsourcing	Justification
						Influence: Council does not have operational control and cannot influence the emissions from this source. Landfill gas capture at these facilities is managed by third parties that submit regular NGER emissions reporting which captures these emissions. All emissions associated with operating the facilities (including electricity and fuel usage) are included within Council's emissions boundary and inventory. **Risk:** There are no relevant laws or regulations that apply to Council to limit emissions specifically from this source (these relate to the third-party managing landfill gas at the site) and the source does not create supply chain risks. **Stakeholders:** Key stakeholders, including the public, are unlikely to consider this a relevant source of emissions for our business as this is a closed landfill and the emissions generated from the landfill are the responsibility of a third party. Including these emissions within Whitehorse City Council's emissions boundary could/would account to double counting. **Outsourcing:** The services provided are outside the technical expertise of Council staff and have been consistently carried out by a third party in the past and will continue to be for the foreseeable future.

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