PUBLIC DISCLOSURE STATEMENT

BRISBANE CITY COUNCIL

ORGANISATION CERTIFICATION
FY 2020-21

Australian Government

Climate Active
Public Disclosure Statement

Dedicated to a better Brisbane An Australian Government Initiative

NAME OF CERTIFIED ENTITY: BRISBANE CITY COUNCIL

REPORTING PERIOD: 1 July 2020 to 30 June 2021

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.

Signature  Date **19/10/2021**

Name of Signatory: Colin Jensen

Position of Signatory: Chief Executive Officer

Australian Government
Department of Industry, Science, Energy and Resources

Version number February 2021

1. CARBON NEUTRAL INFORMATION

Description of certification

Carbon neutral certification is for the business operations of Brisbane City Council and its subsidiary companies, including:

- Brisbane Economic Development Agency Pty Ltd (formerly Brisbane Marketing Pty Ltd)
- Brisbane Powerhouse Pty Ltd
- Brisbane Sustainability Agency Pty Ltd (formerly Brisbane Green Heart CitySmart Pty Ltd)
- City of Brisbane Investment Corporation (CBIC) Pty Ltd
- City Parklands Services Pty Ltd
- Museum of Brisbane Pty Ltd
- Oxley Creek Transformation Pty Ltd
- TradeCoast Land Pty Ltd.

"Brisbane City Council is committed to a clean, green and sustainable Brisbane and is leading the transition to a low carbon city by taking responsibility for the emissions occurring as a result of our operations."

Organisation description

Brisbane City Council (Council) is Australia's largest local government authority in terms of both population and budget. It is dedicated to ensuring Brisbane is a great place to live and providing leadership and good governance for the people of Brisbane.

As Queensland's capital, Brisbane has a thriving economy and significant infrastructure investment. The Greater Brisbane economy is estimated to be valued at $180 billion, accounting for around 48% of Queensland's economic output[1]. Brisbane has a warm, subtropical climate, extensive parklands and recreational facilities, a diverse natural environment and vibrant central business district, retail, arts and entertainment precincts.

Council is made up of 26 wards, spanning an area of 1,342 square kilometres. It provides a broad array of services for the city's 1.27 million residents, manages local infrastructure and assets valued at more than $31.4 billion and has an annual budget in the order of $3.2 billion.

The *City of Brisbane Act 2010* (the Act) creates a framework for the city's day to day operations and long-term plans. The Act provides for the way in which Council is constituted, its responsibilities and powers.

Brisbane Vision 2031 is Council's long-term community plan for the city. The main priorities for the plan are to maintain and improve quality of life for the Brisbane community and ensure Brisbane meets the liveability and sustainability opportunities of the future. *Brisbane Vision 2031* outlines aspirations for the city's future and identifies targets to be achieved by 2031, including carbon neutral status for Council operations.

Brisbane has been a leader in sustainability practices for more than 20 years and has been active in responding to climate change, focusing on the performance of its own operations, as well as delivering initiatives to support Brisbane residents and businesses to reduce their carbon emissions. Council achieved carbon neutrality for its operations in 2017 and obtained certification of its carbon neutral status under the Climate Active Carbon Neutral Program in February 2018. This 2020-21 Public Disclosure Summary (2020-21 PDS) is Council's fifth annual report under the Carbon Neutral Program and provides an update on progress made in 2020-21. It outlines the 2020-21 Carbon Inventory, changes from the 2016-17 base year, recently implemented emission reduction measures, and details of the annual offset reconciliation.

In 2020-21, Council provided the following services to the residents of Brisbane:

- land use planning and development assessment
- operation of public transport services, including one of the largest bus fleets in Australia and the iconic CityCats and city ferry network

[1] Brisbane City Council estimate based on Australian Bureau of Statistics (ABS) and Queensland Treasury data.

- transport network development and maintenance
- waste management services, including operation of a landfill facility
- provision of on and off-street parking services
- development and maintenance of urban parks
- provision and management of arts and cultural facilities and events
- provision and maintenance of libraries, community halls and sports and recreational facilities
- street cleaning and graffiti removal
- animal management
- vaccination services
- mosquito control and pest management
- disaster response and recovery
- flood risk management
- biodiversity conservation
- green community initiatives, including programs and events to support greater sustainability action by households, students and businesses.

The infrastructure and assets managed by Council in 2020-21 included:

- 2,180 parks, comprising 9,940 hectares of natural areas and 6,754 hectares of urban and sports parks
- 6,217 bus stops
- 29 community halls
- 4,935 kilometres of paths and walkways
- 91 wharves, jetties and pontoons
- 158 dog off-leash areas in parks
- 12 cemeteries and crematoria
- 34 libraries, including a mobile library
- 8 cross river bridges
- 22 swimming pools
- 5,781 kilometres of road network
- 22 CityCat and 5 KittyCat ferries
- 1,267 buses
- 595 picnic grounds.

2. EMISSION BOUNDARY

Description of the certification boundary

Council's 2020-21 Carbon Inventory was prepared in accordance with the *Climate Active Carbon Neutral Standard for Organisations* and relevant national legislation and international standards. These included:

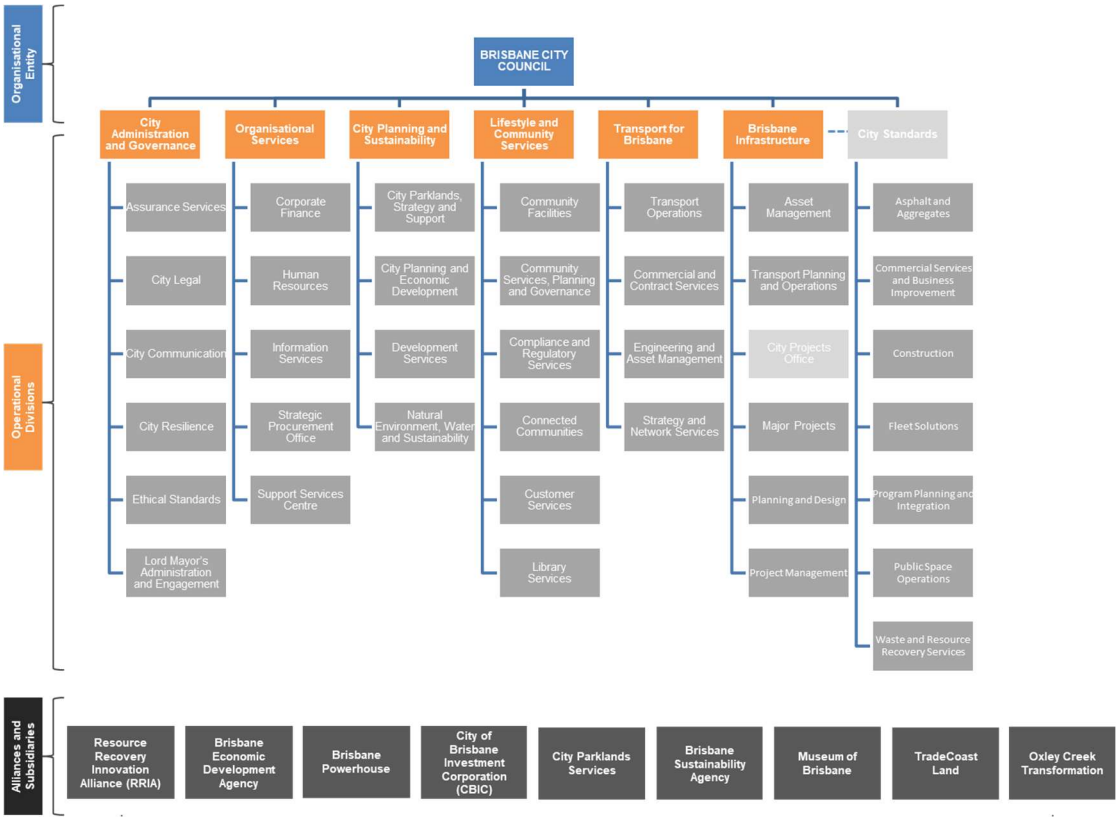
- *National Greenhouse and Energy Reporting (Measurement) Determination 2008 (NGER Measurement Determination), Compilation No. 11, July 2019*
- *Greenhouse Gas (GHG) Protocol Corporate Accounting and Reporting Standard*, 2004
- *GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard*, 2011.

The organisational emissions boundary was defined in accordance with Section 2.3.1 of the *Climate Active Carbon Neutral Standard for Organisations* using an 'operational control' approach. It included all entities for which Council had the full authority to introduce or implement its operating policies.

The entities included within the organisational emissions boundary are Council and its six operational divisions, the Resource Recovery Innovation Alliance (RRIA)[2] and Council's eight wholly owned subsidiaries:

- Brisbane Economic Development Agency Pty Ltd (formerly Brisbane Marketing Pty Ltd)
- Brisbane Powerhouse Pty Ltd
- Brisbane Sustainability Agency Pty Ltd (formerly Brisbane Green Heart CitySmart Pty Ltd)
- City of Brisbane Investment Corporation (CBIC) Pty Ltd
- City Parklands Services Pty Ltd
- Museum of Brisbane Pty Ltd
- Oxley Creek Transformation Pty Ltd
- TradeCoast Land Pty Ltd.

Diagram 1: Organisational emissions boundary



[2] The RRIA is an alliance arrangement between Council and a third-party contractor for the innovative and environmentally sustainable management of Council's resource recovery centres and Rochedale landfill facility. The alliance was previously known as the Brisbane Waste Innovation Alliance.

In addition to the wholly owned subsidiaries, Council has part or shareholder interests in a number of other entities. However, as Council does not have operational control of these entities, they are excluded from the certification boundary. The excluded entities and Council's equity share are as follows:

- Brisbane Bus Build (50%)
- Brisbane Housing Company Ltd (9.1%)
- Major Brisbane Festivals (50%)
- Queensland Urban Utilities (85%)
- SEQ Regional Recreational Facilities (12.5%)
- Council of Mayors (SEQ) Pty Ltd (9.1%).

All direct emissions (scope 1) and indirect emissions from purchased electricity (scope 2) arising from the activities of the included entities have been identified and included within the certification boundary, where possible. Other indirect supply chain emissions occurring as a result of the included entities' activities (scope 3) were considered by Council and have been included within the certification boundary, where they were deemed to be relevant and material. There were no emissions generating activities associated with TradeCoast Land Pty Ltd in 2020-21. Emissions generated from activities undertaken by Oxley Creek Transformation Pty Ltd were captured within Council's operational footprint[3].

The *GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard* was applied in the consideration of other scope 3 emissions sources. Council considered emissions from the 15 categories listed in Section 5.4 of the standard and sought to quantify emissions from all relevant sources. The following criteria were applied in determining the relevance of identified scope 3 emissions sources:

- the source is likely to be large relative to Council's fuel and electricity use
- the source has the potential to contribute to Council's greenhouse gas risk exposure
- the source is deemed to be relevant to key stakeholders
- Council has the potential to influence reductions from the source
- the source relates to emissions from outsourced activities previously performed in-house or activities outsourced by Council that are typically performed in-house by other local government authorities.

When assessing whether scope 3 emissions sources were large relative to Council's fuel and electricity use, a one percent threshold was applied.

As noted in Section 1 above, Council provides municipal waste management services to the residents of Brisbane. These services are delivered by Council and RRIA, either directly or under contract, and include kerbside waste collection, operation of four resource recovery centres, transportation of waste from resource recovery centres for final disposal or processing and operation of the city's landfill at Rochedale. Where these services are delivered directly by Council or RRIA, they are accounted for under scope 1 and 2 emissions. Where the services are provided by contractors, they are accounted for as scope 3 emissions.

As Council (through RRIA) is deemed to have operational control of the Rochedale landfill, all emissions generated from waste disposal at the site, including the disposal of municipal waste, is included in the certification boundary and accounted for under scope 1 emissions. However, any emissions occurring as a result of the disposal or processing of municipal waste at sites operated by third parties (e.g. private landfill, composting or recycling facilities) are excluded from the emissions boundary on the basis that they are associated with the resident population, rather than Council operations.

Emissions of carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) and sulphur hexafluoride (SF_6) were considered in preparing Council's carbon account. All emissions are accounted for in tonnes of carbon dioxide equivalent (tCO_2-e). No PFC or SF_6 emissions were identified in 2020-21.

[3] TradeCoast Land Pty Ltd and Oxley Creek Transformation Pty Ltd operated out of Council facilities in 2020-21 and any associated emissions are accounted for together with Council's operational divisions.

Diagram 2: Emissions boundary

Inside emissions boundary

Quantified

Fuel Combustion – Stationary energy

Fuel combustion – transport

Fuel use – oils and greases

Fugitive emissions – landfill

Fugitive emissions – refrigerants

Electricity use – buildings and facilities

Electricity use – Council controlled streetlights

Asphalt production input materials

Business travel – accommodation

Business travel – flights

Business travel – rental cars

Cleaning services

Community bike hire service

Construction materials and services

Contracted bus services

Employee commuting

Employee work from home

Energy extraction, production and transportation

Ferries and boast

Ferry operations

Food and catering

Green waste processing and transportation

Hired vehicles and equipment

Horticultural services

ICT applications and services

ICT equipment

Machinery and equipment

Motor vehicles

Mowing and tree maintenance services

Municipal waste transportation

Office supplies

Paper use

Postage, courier and freight

Printing and publications

Professional Services

Quarry services

Third-party controlled streetlights

Transportation components and systems

Transportation repairs and maintenance

Venue hire

Waste

Partially quantified

Downstream leased assets

Upstream leased assets – base building services

Water use

Outside emissions boundary

Excluded

Fugitive emissions – landfill (closed prior to 2016)

Fugitive emissions – landfill gas management

Investments

Municipal waste disposal and third-party facilities

Office equipment

Other purchased good and services

Non-quantified sources and data management plan

The following emissions sources are included in the certification boundary, but were partially accounted for in 2020-21, due to gaps in the available data.

Council is continuing to work towards filling data gaps by taking the steps outlined in the table below. It should be noted, however, that Council is relying on contractors, tenants and landlords to provide data that is generally not required to be reported under existing contracts or lease agreements. Data will therefore only be included in future emissions reports, where provided.

Table 2: Partially quantified emissions

Scope		
3	Downstream leased assets	Council has over 640 downstream leases, including approximately 27 commercial and retail leases, 22 pools, two golf courses and more than 590 community leases (e.g. halls, sporting venues etc.). Electricity consumption data was obtained for 15 commercial leases, all 22 pools, two golf courses and 193 community facilities in 2020-21. Council will continue to seek data from all lessees and work towards comprehensive reporting of emissions from downstream leased assets in future carbon accounts.
3	Upstream leased assets – base building services	Council and its subsidiaries occupy 20 leased facilities where base building services are provided by the lessor. In 2020-21, emissions have been quantified for nine Council facilities, including the primary tenancy at Brisbane Square, 69 Ann Street and facilities occupied by Brisbane Economic Development Agency, City Parklands Services Pty Ltd and Brisbane Sustainability Agency. Data will continue to be sought from all lessors to enable quantification in future carbon accounts.
3	Water use	Water consumption data is currently available and associated emissions have been estimated for all Council owned facilities and 28 of 49 upstream leased sites. Data will continue to be sought for all remaining upstream leases to enable comprehensive quantification in future carbon accounts.

In addition, Council is continuing to rely on expenditure data and emissions factors developed using generalised input-out analysis[4] to estimate emissions associated with several scope 3 sources, including construction materials and services. While the input-output factors are expected to generate conservative estimates of emissions associated with these sources, Council is working to improve the accuracy of its emissions calculations by moving to alternative activity-based methods, where available.

[4] Input-output factors represent the emissions intensity of a dollar spent in a particular sector of the Australian economy and are derived from Australian Bureau of Statistics (ABS) data for total sector emissions and expenditure.

Excluded sources

Emissions excluded from the certification boundary and the reasons for their exclusion are outlined below. Details of the relevance assessment for these sources is included at Appendix 1.

Table 3: Excluded emissions

Scope		
1	Fugitive emissions – landfill (closed prior to 2016)	Council is responsible for managing around 150 closed landfill sites, all of which ceased operations between 1940 and 1996, long before Council committed to achieve carbon neutral status for its operations. While active landfill gas management still occurs at five of these legacy sites, the vast majority have been converted for alternative use as public parks or sporting fields and are no longer identifiable as landfills. In most cases, limited (or no) information is available about the waste that was deposited, making it difficult to accurately estimate emissions continuing to be released.
1	Fugitive emissions – landfill gas management	Council works with a third party to manage fugitive emissions at its operating landfill at Rochedale, through landfill gas capture and combustion via electricity generation or flaring. Any emissions (or reductions) associated with the capture and combustion of landfill gas at the site are excluded from Council's certification boundary on the basis these activities are undertaken by an independent third party and are outside of Council's operational control. The third party retains all rights and responsibilities in relation to landfill gas captured and transferred.
3	Investments	Council has interests or shareholdings in a number of entities that are excluded from the certification boundary on the basis that they are outside of Council's operational control.
3	Municipal waste disposal at third party facilities	Council provides municipal waste collection, transportation and disposal services for Brisbane residents. Emissions associated with the collection transportation and disposal of waste at Council's operating landfill at Rochedale are deemed relevant to Council operations and included the certification boundary. Emissions generated from the final disposal of municipal waste at third party facilities (outside of Council's control) are excluded from the boundary as these are the result of resident activities, rather than Council operations.
3	Office equipment	Emissions from office equipment are estimated to be less than one per cent of emissions from Council's fuel and electricity use and do not meet other relevance criteria.
3	Other purchased goods and services	Emissions from other purchased goods and services are individually estimated to be less than one per cent of emissions from Council's fuel and electricity use and do not meet other relevance criteria.

3. EMISSIONS SUMMARY

Emissions reduction strategy

Council is reducing its carbon footprint through investments in energy efficiency and emissions reduction projects, as well as renewable energy purchases. From 2016-17, carbon offsets have been purchased on a financial year basis to negate remaining emissions and maintain Council's carbon neutral status.

The *Corporate Plan 2016-17 to 2020-21 – 2017 Update* outlined Council's objective to continually improve energy and carbon management (Program 3 – Clean, Green and Sustainable City). This has been achieved through the ongoing identification, analysis and prioritisation of a pipeline of energy and carbon abatement opportunities.

The *Carbon Neutral Council Emissions Management Plan (EMP) 2017-18 to 2020-21* outlined Council's emissions reduction strategy. It comprised a four-year rolling program of priority energy efficiency and emissions reduction projects and actions in the following areas.

1. Improve the energy efficiency and emissions profile of **existing assets and services**, where possible and cost-effective.
2. Ensure the design and delivery of **new assets and services** is informed by an understanding of expected energy consumption and associated emissions and, where practical, incorporates measures to improve energy and emissions performance.
3. Encourage changes in **employee behaviour** to support improved energy efficiency and emissions reduction outcomes.
4. Develop **organisational capacity** to identify and deliver ongoing improvements in energy and carbon management across Council operations.

Emissions over time

Council has prepared carbon inventories and reported publicly on its operational greenhouse gas emissions since achieving carbon neutral status in 2016-17. As the first year of comprehensive carbon reporting, the 2016-17 carbon inventory formed the baseline for Council's emissions reporting.

In 2020-21, Council's overall carbon footprint had declined 19% from baseline levels. While this was largely due to reduced scope 1 emissions and increased renewable energy purchases since 2016-17, substantial reductions were also reported in 2020-21 following the adoption of nationally consistent input-output emission factors by the Climate Active program. It is anticipated that these methodology changes accounted for around half of the reported reduction from the 2016-17 baseline.

Scope 1 emissions had reduced by 14% in 2020-21, primarily due to reduced fugitive emissions from landfill. Lower emissions were the result of improvements to landfill gas collection infrastructure since 2016-17, which saw a corresponding decrease in fugitive emissions. These reductions have been partially offset in 2020-21 through an increase in the Global Warming Potential of methane (CH_4).

Scope 2 emissions were reduced to zero for the second year in a row in 2020-21, through the use of 100% renewable energy. Council has used an increasing volume of renewable energy since 2016-17, resulting in a gradual decline in scope 2 emissions from baseline levels. Council used 63,746 MWh of renewable energy in 2020-21, comprising on-site renewable energy generation, accredited GreenPower and the purchase and voluntary retirement of 47,781 Large-Scale Generation Certificates (LGCs). In addition, 338 MWh of renewable electricity was generated on-site at Council facilities and exported to the grid, reducing emissions for other grid users.

Scope 3 emissions had reduced 17% on 2016-17 levels in 2020-21, primarily driven by adoption of the Climate Active emission factors which offset increased emissions from growth in Council's infrastructure construction program. Scope 3 emissions also increased in recent years due to improved data collection, which increased coverage of partially accounted for emission sources.

Table 4: Emissions since base year

Emissions source	Base year: 2016-17 (tCO_2-e)	Current year: 2020-21 (tCO_2-e)	Emissions change (tCO_2-e)	% change
Scope 1	285,376	245,188	-40,188	-14%
Scope 2	51,563	0	-51,563	-100%
Scope 3	329,896	274,891	-55,009	-17%
Total gross emissions	666,835	N/A	N/A	N/A
Emissions reduced through	22,796	N/A	N/A	N/A
Total net emissions	644,039	520,075	-123,960	-19%

Emissions reduction actions

Council has made significant progress in the delivery of energy efficiency and emissions reduction projects, including:

- retrofitting more than 25,000 streetlights with energy efficient lamps and ensuring all new and replacement lamps in street and other public lighting applications are LEDs, where possible
- installing a total of 2.131 megawatts (MW) of solar photovoltaic (PV) systems across 38 sites since achieving carbon neutral status in 2016-17, bringing total installed capacity to 2.376 megawatts (MW) in 2020-21
- including electric vehicles in Council's passenger fleet, ensuring all new buses utilise new generation, high-efficiency Enhanced Environmentally-friendly Vehicle (EEV) diesel engine technology, and trialling four fully electric buses on the popular City Loop route
- piloting eco-driving training with 370 Council bus drivers
- diverting organic waste from landfill through a dedicated green waste collection service, the Love Food Hate Waste campaign and launch of community composting hubs at 23 locations across the city
- utilising recycled asphalt to reduce requirements for bitumen and aggregate in asphalt production
- upgrading the heating system and insulation in the storage bins at the Eagle Farm asphalt plant, reducing energy consumed in maintaining the temperature of asphalt produced prior to delivery.

In addition, over the 17 years from 2003 to June 2021, Council purchased more than 1,070,000 megawatt hours (MWh) of electricity from renewable energy sources, reducing its greenhouse gas emissions by more than 937,000 tCO_2-e[5], and purchased and cancelled around 3.9 million carbon offsets.

In 2020-21, Council implemented the following emissions reduction measures:

- purchased 50,201 MWh of electricity from renewable energy sources
- installed 385 kilowatts (kW) of solar PV systems at two bus depots, three libraries and four depots
- installed 525 kilowatts (kW) of solar PV systems on 32 community leased facilities
- LED lighting upgrades at four bus depots
- ongoing utilisation of recycled asphalt, reducing bitumen and aggregate used in asphalt production.

The table below provides a summary of the estimated annual emissions reductions achieved as a result of measures implemented in 2020-21.

[5] Includes full fuel cycle emissions, i.e. scope 2 emissions associated with grid electricity generation and scope 3 emissions associated with energy extraction, production and transportation (E,P&T).

Table 5: Emission reduction actions

Scope	Emissions source	Action undertaken	Annual emissions reduction (tCO_2-e)
2,3	Electricity – buildings and facilities	Purchased 2,420 MWh of GreenPower and purchased and voluntarily surrendered 47,781 Large-scale Generation Certificates (LGCs)	53,766
2,3	Electricity – buildings and facilities	Installed 99.6 kW solar PV system at Virginia bus depot	133
2,3	Electricity – buildings and facilities	Installed 99.6 kW solar PV system at Garden City bus depot	133
2,3	Electricity – buildings and facilities	Installed 27.6 kW solar PV system at Mt Gravatt cemetery depot	37
2,3	Electricity – buildings and facilities	Installed 18 kW solar PV system at Ashgrove library	24
2,3	Electricity – buildings and facilities	Installed 26.6 kW solar PV system at Holland Park library	35
2,3	Electricity – buildings and facilities	Installed 29.6 kW solar PV system at Mitchelton library	39
2,3	Electricity – buildings and facilities	Installed 39.9 kW solar PV system at Darra field services depot	53
2,3	Electricity – buildings and facilities	Installed 12.5 kW solar PV system at Newmarket SES depot	17
2,3	Electricity – buildings and facilities	Installed 31.4 kW solar PV system at Pinnaroo cemetery administration depot	42
2,3	Electricity – buildings and facilities	Installed 525 kW solar PV systems on 32 community leased facilities	698
2,3	Electricity – buildings and facilities	LED lighting upgrade at Garden City bus depot garage	55
2,3	Electricity – buildings and facilities	LED lighting upgrade at Carina bus depot	58
2,3	Electricity – buildings and facilities	LED lighting upgrade at Virginia bus depot	92
2,3	Electricity – buildings and facilities	LED lighting upgrade at Willawong bus depot	161
3	Asphalt production input materials	Utilisation of recycled asphalt in asphalt production	1,369
		Total annual emissions reduction	56,712

Emissions summary (inventory)

Council's carbon footprint is made up of emissions from landfill, fuel and electricity use as well as other indirect emissions sources, such as construction materials and services, third-party controlled streetlighting, municipal and green waste transportation and catering services.

In 2020-21, the three largest emissions sources accounted for around 62% of Council's total carbon footprint. These were fuel combustion for stationary energy and transport (24%), fugitive emissions from the Rochedale landfill (23%) and construction materials and services (15%). Council buildings and facilities and controlled streetlights were 100% powered by renewable energy in 2020-21, reducing electricity related emissions to zero.

Council's operational divisions accounted for the majority (74%) of the organisation footprint. RRIA accounted for 24% of total emissions with the subsidiaries contributing the remaining two per cent.

The tables below summarise Council's 2020-21 emissions by source and responsible entity.

Table 6: Emissions by source

Scope[6]	Emission source category	Emissions (tCO_2-e)
1 and 3	Fuel combustion – stationary energy	16,704
1 and 3	Fuel combustion – transport	106,923
1 and 3	Fuel use – oils and greases	98
1	Fugitive emissions – landfill	118,163
1	Fugitive emissions – refrigerants	3,300
2 and 3	Electricity use – buildings and facilities	0
2 and 3	Electricity use – Council controlled streetlights	0
3	Asphalt production input materials	8,149
3	Business travel – accommodation	4
3	Business travel – flights	13
3	Business travel – rental cars	0
3	Business travel – taxis	4
3	Cleaning services	2,917
3	Community bike hire service	0
3	Construction materials and services[7]	79,228
3	Contracted bus services	1,885
3	Downstream leased assets	24,031
3	Employee commuting	8,509

[6] Scope 3 emissions from Energy E,P&T have been reported together with scope 1 and 2 emissions from fuel and electricity use in 2020-21. These emissions have been reported separately in previous years.
[7] Includes emissions from Building and facility maintenance services. These emissions have been reported separately in previous years.

Scope	Emission source category	Emissions (tCO_2-e)
3	Employee work from home	818
3	Ferries and boats	1,433
3	Ferry operations	5,252
3	Food and catering	303
3	Green waste processing and transportation	1,449
3	Hired vehicles and equipment	8,533
3	Horticultural services	2,069
3	ICT applications and services	11,859
3	ICT equipment	6,062
3	Machinery and equipment	3,009
3	Motor vehicles	7,198
3	Mowing and tree maintenance services	3,342
3	Municipal waste transportation	12,640
3	Office supplies	340
3	Paper use	130
3	Postage, courier and freight	1,565
3	Printing and publications	3,157
3	Professional services	15,293
3	Quarry services	1,028
3	Third party controlled streetlights	38,949
3	Transportation components and systems	5,251
3	Transportation repairs and maintenance	2,133
3	Upstream leased assets – base building	2,557
3	Venue hire	636
3	Waste	13,337
3	Water Use	1,804
	Total net emissions	520,075

Table 7: Emissions by responsible entity

Responsible entity	
Council operational divisions	386,962
Brisbane Economic Development Agency	1,379
Brisbane Powerhouse Pty Ltd	268
Brisbane Sustainability Agency Pty Ltd	1,230
CBIC Pty Ltd	2,068
City Parklands Services Pty Ltd	3,842
Museum of Brisbane Pty Ltd	108
RRIA	124,218
Oxley Creek Transformation Pty Ltd	0
TradeCoast Land Pty Ltd	0
Total net emissions	520,075

Uplift factors

Table 8: Uplift factors

Reason for uplift factor
N/A – no uplift factors have been applied

Total footprint to offset (uplift factors + net emissions)	

Carbon neutral products

Emissions associated with the operation of Council's community bike hire service (CItyCycle) are reported as zero as the service is operated by JCDecaux, another Climate Active carbon neutral certified organisation. Fuel and electricity used by JCDecaux in operating CityCycle are included and offset as part of JCDecaux's carbon inventory.

Electricity summary

Electricity emissions were calculated using the market-based approach.

Table 9: Market-based approach summary

Market-based approach
Behind the meter consumption of electricity generated
Total non-grid electricity
LGCs purchased and retired (kWh)
GreenPower
Jurisdictional renewables
Large Scale Renewable Energy Target
Residual electricity
Total grid electricity
Total electricity consumed (grid + non grid)
Electricity renewables
Residual electricity
Exported on-site generated electricity
Emission footprint ($kgCO_2$-e)

Emission footprint (tCO_2-e)
LRET renewables
Voluntary renewable electricity
Total renewables

Table 10: Location-based approach summary

Location-based approach
ACT
NSW
SA
Vic
Qld
NT
WA
Tas
Grid electricity (scope 2 and 3)
ACT
NSW
SA
Vic
Qld
NT
WA
Tas
Non-grid electricity (behind the meter)
Total electricity consumed
Emission footprint (tCO_2-e)

4. CARBON OFFSETS

Offset strategy

Table 11: Offset balance and requirements for this report

Offset purchasing strategy: forward purchasing	
1. Total offsets previously forward purchased and banked for this report	
2. Total emissions liability to offset for this report	520,075
3. Net offset balance for this reporting period	
4. Total offsets to be forward purchased to offset the next reporting period	570,147
5. Total offsets required for this report	

Offset purchasing and retirement strategy

Council forward purchases and cancels carbon offsets at the beginning of each reporting period. Forward purchases are based on the final carbon inventory for the previous year, with adjustments to account for any projected changes in the emissions profile in the reporting period.

A 'true-up' occurs following finalisation of the carbon inventory for the financial year, with any surplus offsets carried over for use in the subsequent reporting period. In the event that Council underestimates its emissions, additional offsets will be purchased and retired to cover the shortfall. Details of any carryover or shortfall will be included in the PDS for the subsequent reporting period.

Council takes delivery of carbon offset units in its own public registry accounts, wherever possible. In this case, units are retired as allocated for use in a given reporting period. Where Council does not have an account in the registry that holds the particular type of carbon offset units purchased, the units may be transferred into the supplier's registry account and retired by the supplier on Council's behalf. In these instances, retirement is to occur at the time of purchase. Council maintains an internal record of its carbon offset holdings, including status, registry accounts and the reporting period to which the units are allocated.

Council considers the following criteria when undertaking carbon offset purchases:

- Climate Active eligible – all purchased offsets must be eligible for use under the *Climate Active Carbon Neutral Standard for Organisations*
- cost – all purchased offsets are to represent value for money in line with Council's procurement principles, measured by price as well as merit against other criteria
- potential negative impacts – any offset projects with negative economic, social, or environmental outcomes are to be avoided
- location – it is desirable to purchase some offsets from local or Australian projects
- technology – consideration is to be given to the technology applied in the offset project with a view to broadening the offset portfolio to include a range of technologies and spread investment risk
- positive impacts – Council will favour offset projects that have a positive economic, social or environmental impact or provide co-benefits.

Council will only purchase offsets where it can be verified that the emissions reductions have occurred.

2020-21 offsets and forward purchase

Council forward purchased and banked 587,419 offset units to negate forecast 2020-21 emissions.

As Council's final 2020-21 carbon inventory resulted in a lower than forecast net carbon footprint of 520,075 tCO_2-e, 67,344 banked units have been carried over for use in 2021-22.

Council's carbon footprint is forecast to increase in 2021-22 to 570,147 tCO_2-e, net of expected renewable energy purchases. All units carried over from 2020-21 have been allocated to cover emissions in this period. An additional 502,803 units have been purchased and banked to cover remaining forecast emissions.

Offset units cancelled to negate Council's 2020-21 emissions and banked for use in 2020-21 are detailed in the offsets summary table below.

Further evidence of ACCU surrender is provided in Appendix 3.

Co-benefits

The following table provides a summary of the co-benefits provided by the offset projects support by Council in 2020-21.

Table 12: Offset co-benefits

Project name and location		
Heqing Solar Cooker Project I, Gansu, China	7%	• Provides a reliable and convenient electricity supply for households in low-income communities. • Improves respiratory health by reducing exposure to smoke. • Supports local economic development outcomes including creating 100 jobs. • Provides community education on the benefits of solar energy technology and environmental protection.
Various savanna burning projects, Northern Territory and Queensland, Australia	7.2%	• Protects local environment, cultural sites, infrastructure and communities from devastating bushfires. • Supports local economic development including job creation within remote aboriginal communities.
Revegetation and Human		• Support improved local environmental outcomes, including increased biodiversity and habitat value and mitigation of soil erosion and salinity risk.

Offsets summary

Proof of cancellation of offset units

Table 13: Offsets cancelled for Climate Active carbon neutral certification

Project description and location	Type of offset units	Registry	Date retired	Serial number range	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 (%)
CECIC HKC Gansu Changma Wind Power project, China	VCUs	Verra	19 Sep 2019	6132-280860898-280873335-VCU-034-APX-CN-1-717-01012016-31122016-08	2016	12,438	0	0	12,438	2%
1.6 MW Bundled Rice Husk Based Cogeneration Plant by M/s Milk food Limited (MFL), Patiala (Punjab) and Moradabad (U.P.) Districts, India	VCUs	Verra	28 Oct 2020	6202-285827019-285890594-VCU-034-APX-IN-1-784-01012017-31122017-0	2017	63,576	0	0	63,576	12%

[8] Units 6132-280823336-280873335-VCU-034-APX-CN-1-717-01012016-31122016-0 were forward allocated and cancelled to cover 2019-20 emissions. As the final 2019-20 carbon account was lower than forecast, units 6132-280860898-280873335-VCU-034-APX-CN-1-717-01012016-31122016-0 were carried over and allocated to cover 2020-21 emissions. Note that these units were surrendered in the APX registry which was taken over by Verra in 2020.

Project description and location	Type of offset units	Registry	Date retired	Serial number range	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 (%)
1.6 MW Bundled Rice Husk Based Cogeneration Plant by M/s Milk food Limited (MFL), Patiala (Punjab) and Moradabad (U.P.) Districts, India	VCUs	Verra	28 Oct 2020	6201-285794096-285827018-VCU-034-APX-IN-1-784-01012016-31122016-0	2016	32,923	0	0	32,923	6%
CECIC HKC Gansu Changma Wind Power project, China	VCUs	Verra	28 Oct 2020	6133-280883336-280923335-VCU-034-APX-CN-1-717-01012017-31122017-0	2017	40,000	0	0	40,000	8%
CECIC HKC Gansu Changma Wind Power project, China	VCUs	Verra	28 Oct 2020	6134-280923336-280973335-VCU-034-APX-CN-1-717-01012018-23092018-0	2018	50,000	0	0	50,000	10%

Project description and location	Type of offset units	Registry	Date retired	Serial number range	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 (%)
Arnhem Land Savannah Fire Management Projects, Northern Territory, Australia	ACCUs	ANREU	28 Oct 2020	3,769,395,837 - 3,769,400,836	2017-18	5,000	0	0	5,000	1%
QLD Savanna Burning - EOP100968, Queensland, Australia	ACCUs	ANREU	28 Oct 2020	3,772,352,970 - 3,772,362,969	2018-19	10,000	0	0	10,000	2%
QLD Savanna Burning - EOP100968, Queensland, Australia	ACCUs	ANREU	28 Oct 2020	3,772,362,970 - 3,772,368,969	2018-19	6,000	0	0	6,000	1%
QLD Savanna Burning - EOP100772, Queensland, Australia	ACCUs	ANREU	28 Oct 2020	3,772,369,065 - 3,772,371,564	2018-19	2,500	0	0	2,500	0.5%

Project description and location	Type of offset units	Registry	Date retired	Serial number range	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 (%)
NSW Revegetation - EOP101115, New South Wales, Australia	ACCUs	ANREU	28 Oct 2020	3,775,745,442 - 3,775,745,442	2018-19	1	0	0	1	0.0002%
NSW Revegetation - EOP101115, New South Wales, Australia	ACCUs	ANREU	28 Oct 2020	3,775,745,443 - 3,775,755,441	2018-19	9,999	0	0	9,999	2%
Queensland Savannah Burning project (ERF104944), Queensland, Australia	ACCUs	ANREU	28 Oct 2020	3,786,643,386 - 3,786,658,367	2019-20	14,982	0	3,367	11,615	2021-22: 0.6% 2020-21: 2%
Ningxia Xiangshan Wind Farm Project, China	VCUs	Verra	28 Oct 2020	7296-383883645-383933644-VCU-034-APX-CN-1-1867-01012019-28022019-0	2019	50,000	0	0	50,000	10%

Project description and location	Type of offset units	Registry	Date retired	Serial number range	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 (%)
Ningxia Xiangshan Wind Farm Project, China	VCUs	Verra	28 Oct 2020	7300-384033645-384083644-VCU-034-APX-CN-1-1867-01012018-31122018-0	2018	50,000	0	0	50,000	10%
Liucheng Biomass Power Generation Project, China	VCUs	Verra	28 Oct 2020	7294-383763645-383843644-VCU-034-APX-CN-1-1824-01012015-31122015-0	2015	80,000	0	0	80,000	15%
Liucheng Biomass Power Generation Project, China	VCUs	Verra	28 Oct 2020	7295-383863645-383873644-VCU-034-APX-CN-1-1824-01012016-31122016-0	2016	10,000	0	0	10,000	2%
Liucheng Biomass Power Generation Project, China	VCUs	Verra	28 Oct 2020	7294-383843645-383853644-VCU-034-APX-CN-1-1824-01012015-31122015-0	2015	10,000	0	0	10,000	2%

Project description and location	Type of offset units	Registry	Date retired	Serial number range	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 (%)
Heqing Solar Cooker Project I, China	VCUs	Verra	28 Oct 2020	7299-384026216-384033644-VCU-046-APX-CN-1-1860-01122016-31122016-0	2016	7,429	0	0	7,429	1%
Heqing Solar Cooker Project I, China	VCUs	Verra	28 Oct 2020	7298-383993645-384026215-VCU-046-APX-CN-1-1860-01012017-30112017-0	2017	32,571	0	0	32,571	6%
Energising India using Solar Energy Projects, India	VCUs	Verra	28 Oct 2020	7387-391257725-391357724-VCU-034-APX-IN-1-1931-01012019-30062019-0	2019	100,000	0	63,977	36,023	2021-22: 11% 2020-21: 7%
Solar PV Power Project by Prayatna Developers Pvt Ltd, India	VCUs	Verra	22 Sep 2021	8257-5502353-5503161-VCS-VCU-997-VER-IN-1-1782-17092016-31122016-0	2016	809		809	0	0.14%

Project description and location	Type of offset units	Registry	Date retired	Serial number range	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 (%)
Solar PV Power Project by Prayatna Developers Pvt Ltd, India	VCUs	Verra	22 Sep 2021	8255-5501194-5502018-VCS-VCU-997-VER-IN-1-1782-01012018-03072018-0	2018	825		825	0	0.14%
Solar PV Power Project by Prayatna Developers Pvt Ltd, India	VCUs	Verra	22 Sep 2021	8256-5502019-5502352-VCS-VCU-997-VER-IN-1-1782-01012017-31122017-0	2017	334		334	0	0.06%
Shandong Laiwu Landfill Gas Recovery and Power Generation Project, China	VCUs	Verra	22 Sep 2021	9147-70821264-70859900-VCS-VCU-997-VER-CN-13-2260-01012016-31122016-0	2016	38,637		38,637	0	6.8%
Mersin Wind Farm, Turkey	GSVERs	Gold Standard	22 Sep 2021	GS1-1-TR-GS753-12-2017-7210-962-48055	2017	47,094		47,094	0	8.26%

Project description and location	Type of offset units	Registry	Date retired	Serial number range	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 (%)
Mersin Wind Farm, Turkey	GSVERs	Gold Standard	22 Sep 2021	GS1-1-TR-GS753-12-2016-7211-1666-18922	2016	17,257		17,257	0	3%
Mersin Wind Farm, Turkey	GSVERs	Gold Standard	22 Sep 2021	GS1-1-TR-GS753-12-2016-7211-18923-83272	2016	64,350		64,350	0	11%
Hyundai Project, South Korea	VCUs	Verra	22 Sep 2021	9032-62332762-62494949-VCS-VCU-260-VER-KR-1-786-01012017-30062017-0	2017	162,188		162,188	0	28.5%
Shandong Laiwu Landfill Gas Recovery and Power Generation Project, China	VCUs	Verra	22 Sep 2021	9150-70954631-71021263-VCS-VCU-997-VER-CN-13-2260-01012017-31122017-0	2017	66,633		66,633	0	11.7%

Project description and location	Type of offset units	Registry	Date retired	Serial number range	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 (%)
CECIC Gansu Yumen Changma No.3 Wind Farm Project, China	VCUs	Verra	22 Sep 2021	8898-52689947-52689951-VCS-VCU-997-VER-CN-1-728-01012017-31122017-0	2017	5		5	0	0.0009%
CECIC Gansu Yumen Changma No.3 Wind Farm Project, China	VCUs	Verra	22 Sep 2021	8898-52689952-52739946-VCS-VCU-997-VER-CN-1-728-01012017-31122017-0	2017	49,995		49,995	0	8.7%
Shandong Laiwu Landfill Gas Recovery and Power Generation Project, China	VCUs	Verra	22 Sep 2021	9149-70890187-70919718-VCS-VCU-997-VER-CN-13-2260-01012018-31122018-0	2018	29,532		29,532	0	5.2%
Shandong Laiwu Landfill Gas Recovery and Power Generation Project, China	VCUs	Verra	27 Sep 2021	9149-70919719-70919722-VCS-VCU-997-VER-CN-13-2260-01012018-31122018-0	2018	4		4	0	0.001%

Project description and location	Type of offset units	Registry	Date retired	Serial number range	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 (%)
Queensland Savannah Burning project (ERF104944), Queensland, Australia	ACCUs	ANREU	22 Sep 2021	3,786,658,386 - 3,786,659,645	2019-20	1,260		1,260	0	0.2%
Queensland Savannah Burning project (ERF104944), Queensland, Australia	ACCUs	ANREU	22 Sep 2021	3,786,658,368 - 3,786,658,385	2019-20	18		18	0	0.003%
Queensland Savannah Burning project (ERF104944), Queensland, Australia	ACCUs	ANREU	22 Sep 2021	3,786,669,685 - 3,786,672,324	2019-20	2,640		2,640	0	0.5%

Project description and location	Type of offset units	Registry	Date retired	Serial number range	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 (%)
Yarronvale Human-Induced Regeneration Project (ERF118295), Queensland, Australia	ACCUs	ANREU	22 Sep 2021	3,789,856,421 - 3,789,866,420	2019-20	10,000		10,000	0	1.8%
Norley Regeneration project, Queensland, Australia	ACCUs	ANREU	22 Sep 2021	3,792,800,957 - 3,792,802,090	2019-20	1,134		1,134	0	0.2%
Norley Regeneration project, Queensland, Australia	ACCUs	ANREU	22 Sep 2021	3,792,800,889 - 3,792,800,956	2019-20	68		68	0	0.01%
Wiralla Regeneration Project, Queensland, Australia	ACCUs	ANREU	22 Sep 2021	3,799,095,019 - 3,799,096,400	2019-20	1,382		1,382	0	0.24%

Project description and location	Type of offset units	Registry	Date retired	Serial number range	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 (%)
Wiralla Regeneration Project, Queensland, Australia	ACCUs	ANREU	22 Sep 2021	3,799,096,401 - 3,799,105,038	2019-20	8,638		8,638	0	1.5%
Total offsets retired this report and used in this report									**520,075**	
Total offsets retired this report and banked for future reports								**570,147**		

Type of offset units	Quantity (used for this reporting period claim)	Percentage of Total
Australian Carbon Credit Units (ACCUs)	45,115	8.7%
Verified Carbon Units (VCUs)	474,960	91.3%

5. USE OF TRADEMARK

Table 14: Use of trademark

Description of where trademark was used	
Brisbane City Council website – Carbon Neutral Council page	Climate Active carbon neutral organisation
Mandatory back panel template appearing on all Brisbane City Council publications in A4 and DL sizes – ensures the Climate Active carbon neutral logo is featured on all publications	Climate Active carbon neutral organisation

APPENDIX 1: EXCLUDED EMISSIONS

Excluded emissions

To be deemed relevant an emission must meet two of the five relevance criteria. Excluded emissions are detailed below against each of the five criteria.

Table 15: Excluded emissions relevance test

Excluded emissions source	*The emissions from a particular source are likely to be large relative to the organisation's electricity, stationary energy and fuel emissions*	*The emissions from a particular source contribute to the organisation's greenhouse gas risk exposure.*	*Key stakeholders deem the emissions from a particular source are relevant.*	*The responsible entity has the potential to influence the reduction of emissions from a particular source.*	*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.*
Fugitive emissions – landfill gas management	Yes	No	No	No	No
Fugitive emissions – landfill (closed prior to 2016)	Yes	No	No	No	No
Investments	Yes	No	No	No	No
Office equipment	No	No	No	Yes	No
Municipal waste disposal at third party facilities	Yes	No	No	No	No
Other purchased goods and services	No	No	No	Yes	No

APPENDIX 2: NON-QUANTIFIED EMISSIONS

Non-quantified emissions for organisations

Table 16: Non-quantification test

Non-quantification test				
Relevant-non-quantified emission sources	*Immaterial <1% for individual items and no more than 5% collectively*	*Quantification is not cost effective relative to the size of the emission but uplift applied*	*Data unavailable but data management plan is in place (see Section 2 Emissions Boundary)*	*Initial emissions non-quantified but repairs and replacements quantified*
Downstream leased assets (partially quantified)		No	Yes	No
Upstream leased assets – base building services (partially quantified)		No	Yes	No

APPENDIX 3: EVIDENCE OF ACCU SURRENDER

Transferring Account

Account Number	AU-1216
Account Name	Brisbane City Council
Account Holder	BRISBANE CITY COUNCIL

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			EOP100772					2018-19		3,772,369,065 - 3,772,371,564	2,500
AU	KACCU	Voluntary ACCU Cancellation			EOP100968					2018-19		3,772,352,970 - 3,772,362,969	10,000
AU	KACCU	Voluntary ACCU Cancellation			EOP100968					2018-19		3,772,362,970 - 3,772,368,969	6,000
AU	KACCU	Voluntary ACCU Cancellation			EOP101115					2018-19		3,775,745,442 - 3,775,745,442	1
AU	KACCU	Voluntary ACCU Cancellation			EOP100945					2017-18		3,769,395,837 - 3,769,400,836	5,000
AU	KACCU	Voluntary ACCU Cancellation			EOP101115					2018-19		3,775,745,443 - 3,775,755,441	9,999
AU	KACCU	Voluntary ACCU Cancellation			ERF104944					2019-20		3,786,643,386 - 3,786,658,367	14,982

Transferring Account

Account Number	AU-1216
Account Name	Brisbane City Council
Account Holder	BRISBANE CITY COUNCIL

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			ERF104944					2019-20		3,786,658,386 - 3,786,659,645	1,260
AU	KACCU	Voluntary ACCU Cancellation			ERF104944					2019-20		3,786,658,368 - 3,786,658,385	18
AU	KACCU	Voluntary ACCU Cancellation			ERF104944					2019-20		3,786,669,685 - 3,786,672,324	2,640
AU	KACCU	Voluntary ACCU Cancellation			ERF118295					2019-20		3,789,856,421 - 3,789,866,420	10,000
AU	KACCU	Voluntary ACCU Cancellation			ERF119548					2019-20		3,792,800,957 - 3,792,802,090	1,134
AU	KACCU	Voluntary ACCU Cancellation			ERF119548					2019-20		3,792,800,889 - 3,792,800,956	68
AU	KACCU	Voluntary ACCU Cancellation			ERF116713					2019-20		3,799,095,019 - 3,799,096,400	1,382
AU	KACCU	Voluntary ACCU Cancellation			ERF116713					2019-20		3,799,096,401 - 3,799,105,038	8,638

An Australian Government Initiative

Climate Active