



PUBLIC DISCLOSURE STATEMENT

BUSINESS NAME: AGL ENERGY LIMITED

PRODUCT/SERVICE CERTIFICATION

GAS

CY2021

Australian Government
**Climate Active
Public Disclosure Statement**



An Australian Government Initiative



NAME OF CERTIFIED ENTITY	AGL ENERGY LIMITED
REPORTING PERIOD	1 January 2021 – 31 December 2021 (True-up)
DECLARATION	<p>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.</p> <p>Signature:</p> <p><i>tarl hart</i></p> <hr/> <p>Name of signatory: Tarl Hart Position of signatory: General Manager, Product & Portfolio Customer Markets</p>



Australian Government
**Department of Industry, Science,
Energy and Resources**

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Version March 2022. To be used for FY20/21/CY2021 reporting onwards.



1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	37,232.34 tCO ₂ -e
THE OFFSETS BOUGHT	5% ACCUs, 95% VERs
RENEWABLE ELECTRICITY	N/A
TECHNICAL ASSESSMENT	08/10/2020 Adina Cirtog Pangolin Associates Next technical assessment due: 2023

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2. CARBON NEUTRAL INFORMATION

Description of certification

This public disclosure statement supports the carbon neutral product certification for gas sold by energy retail entities within the AGL Group (of which AGL Energy Limited is the parent company). This includes the Life Cycle Assessment and quantification of Scope 1, 2 and 3 emissions boundaries.

The emissions reported here are for CY2021 which is the second year of certification.

AGL Energy first launched a certified Carbon Neutral gas product to our residential and small business customers, and large commercial and industrial customers, as an optional opt-in offering, starting from 25 November 2020.

On 31 December 2021, AGL Energy reached a milestone in its support of customers looking for carbon neutral options, with 110,478 services now on AGL's certified carbon neutral electricity and gas products, across Australia.

Scope

'Gas product' includes all gas sold by AGL and its subsidiaries, e.g. Perth Energy.

Functional unit

Kilograms of carbon emissions (kgCO₂-e) per year will be used as a quantifiable reference to the associated greenhouse gas emissions of a gas product.

Organisation description

AGL Energy Limited (AGL) operates Australia's largest electricity generation portfolio, with an operated generation capacity of 10,984MW² (as of 31 December 2021), which accounts for approximately 20% of the total generation capacity within Australia's National Electricity Market. We are also the country's largest publicly-listed operator of renewable generation and storage assets.

AGL has a proud 185-year history of innovation and a passionate belief in progress – human and technological.

We deliver around 4.2 million gas, electricity, and telecommunications services to our residential, small and large business, and wholesale customers across Australia.¹

AGL Energy Limited includes related bodies corporate such as:

“Climate Active certification makes it easier for consumers to make a conscious decision to identify and choose electricity, gas and telecommunications products that are making a difference.”

- Data and Telecommunications providers, including **Southern Phone Company Limited**, which trades as **AGL Telecommunications** and as **Southern Phone Company** and sells telecommunications products under both brands.
 - **Southern Phone Company** is one of the largest providers of fixed line, mobile and Internet communications services in regional Australia. Formed in 2002 with a vision to provide regional communities with affordable telecommunications services, SPC now serves a national customer base, and provides more than 250 jobs across its head office in Moruya, New South Wales, and its Bendigo office in regional Victoria.
 - **AGL Telecommunications** launched its first telecommunications products, offering Internet services in November 2020, followed by mobile SIM plans in February 2021.

- New energy providers - **AGL Energy Services Pty Ltd** sells energy solutions to residential and business customers including solar, battery storage, stand-alone power systems, energy efficient lighting and Power Factor Correction. AGL Energy Services Pty Ltd operates in all Australian states and territories and offers an end-to-end design, project management and installation service for all energy solutions sold. Energy retailers – **AGL Sales Pty Limited; AGL South Australia Pty Limited; AGL Retail Energy Limited (“AGL energy retail entities”), Powerdirect Pty Ltd, Perth Energy Pty Ltd.**
 - **AGL energy retail entities** provide gas and electricity services to residential and business customers across New South Wales, Victoria, South Australia, Queensland and Western Australia. Offering a range of energy plans to suit varying preferences, customers can sign up to our products and services via our digital channels (AGL Website, AGL App, My Account) or by calling the AGL Contact Centre.
 - **Powerdirect Pty Ltd** provides electricity services in South Australia, New South Wales, South East Queensland, and Victoria.
 - **Perth Energy** services contestable gas and electricity customers connected to the Western Power and ATCO gas networks in Western Australia including regional areas such as Albany, Geraldton and Kalgoorlie.

During 2021, AGL acquired two of Australia’s largest commercial solar businesses, Eppo and Solgen Energy Group (from Anchorage Capital Partners), both market leading commercial and industrial solar businesses.

The accelerating pace of the climate transition, along with the shaping forces of customers, the community and technology, has led to significant changes to the landscape in which AGL Energy operates.

1. Services to customers number is as at 31 December 2021 and includes ex-Click Energy customers and 100% of approximately 300,000 services to customers of ActewAGL, in which AGL owns a 50% equity stake of the retail operations.
 2. Operated generation capacity sourced from AGL Energy Limited Annual Report, 2021

Product description

Gas product includes all gas sold by AGL and Perth Energy to customers who have opted-in to carbon neutral. A cradle to grave approach was taken for the life cycle assessment of the gas product.

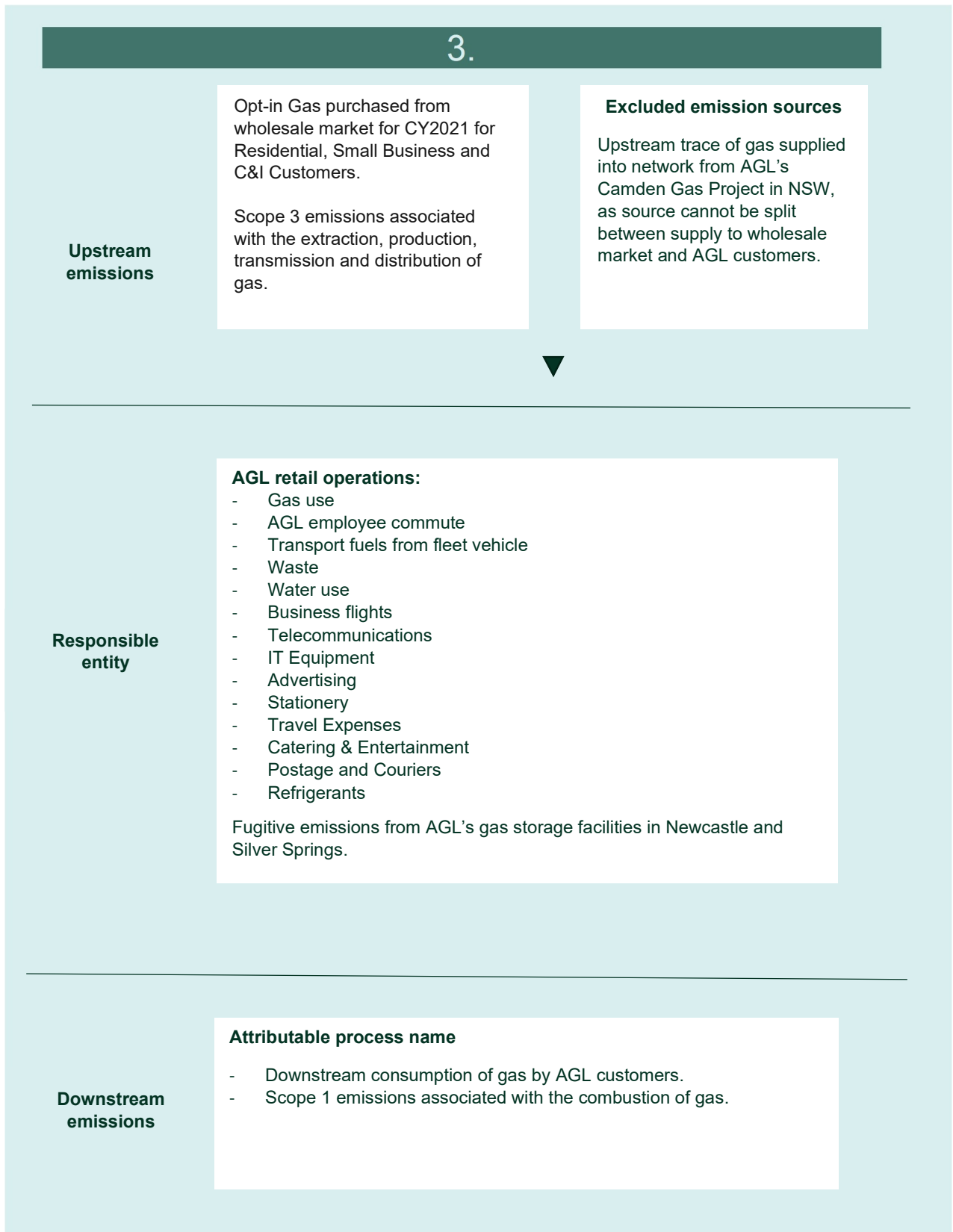
Residential customers can choose to add certified Carbon Neutral to their electricity plans for \$1 per week and to gas plans for \$0.50 per week*. Small business customers can add Carbon Neutral to their electricity plans for \$4 per week and to gas plans from \$7 per week*.

*Prices effective as of 31 December 2021. All prices include GST.

Functional unit

Kilograms of carbon emissions (kgCO₂-e) per year will be used as a quantifiable reference to the associated greenhouse gas emissions of a gas product.

Product/service process diagram



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 'attributable processes' that become the product, make the product and carry the product through its life cycle. These have been quantified in the carbon inventory.

Non-quantified emissions have been assessed as attributable 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

Non-attributable emissions have been assessed as not attributable to a product or service. They can be **optionally included** in the emissions boundary and therefore have been offset, or they can be listed as outside of the emissions boundary (and are therefore not part of the carbon neutral claim). Further details are available at Appendix D.

Data management plan for non-quantified sources

Not applicable.

Inside emissions boundary

Quantified

Gas purchased from the wholesale market,
Combustion of gas by the customer,
and AGL Retail Operations:

- Electricity use
- AGL Employee commute
- Transport fuels from fleet vehicles
- Waste
- Water use
- Business flights
- Telecommunications
- IT Equipment
- Advertising
- Stationery
- Travel Expenses
- Catering & Entertainment
- Postage and Couriers
- Refrigerants

Fugitive emissions from AGL's gas storage facilities in Newcastle and Silver Springs

Non-quantified

N/A

Optionally included

N/A

Outside emission boundary

Excluded

Third party sales channels

Upstream trace of gas supplied into network from AGL's Camden Gas Project in NSW, as source cannot be split between supply to wholesale market and AGL customers.

4. EMISSIONS REDUCTIONS

Emissions reduction strategy

Proudly Australian for 185 years, AGL supplies energy and other essential services to residential, small and large businesses and wholesale customers. We operate Australia's largest private electricity generation portfolio with a total installed capacity of 10,984MW¹, which accounts for approximately 20% of the total generation capacity within Australia's National Electricity Market (NEM). We are also the operator of the largest portfolio of renewable generation and storage assets of any ASX-listed company.

We have a strong track record in delivering action on climate change and the energy transition and provide a range of products and services to help our customers decarbonise their businesses and homes.

We are committed through our Climate Transition Action Plan to do the following:

- The targeted closure of Loy Yang A Power Station by the end of FY35². This targeted exit from coal-fired generation, up to a decade earlier than previously announced, would avoid up to 200 MtCO₂e³ of greenhouse gases being emitted compared to previous Loy Yang A Power Station closure date.
- Annual greenhouse gas emissions reduction⁴ by at least 17% by FY24⁵ following the closure of Liddell Power Station in April 2023.
- Greenhouse gas emissions reduction⁴ by at least 52% by FY35⁵ following the closure of the Bayswater Power Station by 2033.
- Net Zero for operated Scope 1 and 2 greenhouse gas emissions following the closure of all AGL's coal-fired power stations.
- Decarbonisation pathway development to achieve our ambition of being Net Zero for Scope 3 greenhouse gas emissions by 2050.
- Seek to supply our customer demand with ~12 GW of additional renewable and firming capacity, requiring a total investment of up to \$20 billion⁶ before 2036. Our initial target is to have up to 5 GW of new renewables and firming capacity in place by 2030, funded from a combination of assets on our balance sheet, offtakes and via partnerships.

Together with our ambition to invest in new renewable and firming capacity, we have brought forward the targeted closure dates for AGL's coal-fired power stations to support the transition to a lower carbon world aligned with the Paris Agreement⁷ goals.

Our plan recognises that a balance needs to be struck between responsible transition and rapid decarbonisation to keep Australia's electricity supply secure, reliable and affordable. We are committed to working constructively with our stakeholders, including government, our people and the communities in which we operate, to lead a responsible and orderly transition.

1. Operated generation capacity sourced from AGL Energy Limited Annual Report, 2021.

2. Asset management plans will be structured to support the targeted closure of Loy Yang A Power Station by the end of FY35, and AGL will notify AEMO that the Expected Closure Year (per the National Electricity Rules (NER) 2.2.1(e)(2A)) for Loy Yang A Power Station is the end of FY35. Further, the carrying value of AGL's 'Generation' cash generating unit property, plant and equipment has been reduced as a result of the targeted closure of Loy Yang A Power Station by the end of FY35, as reflected in the impairment announced to the market on 29 September 2022. The ability for AGL to execute on this target will be subject to uncertainties and risks, as described on page 12.

3. Maximum emissions avoidance estimated based on maximum annual output from Loy Yang A Power Station over the FY36 - FY46 period.

4. Operated Scope 1 and 2 greenhouse gas emissions, as reported under the National Greenhouse and Energy Reporting Act 2007, against a FY19 baseline.

5. FY24 and FY35 represent the first full financial years where no emissions from Liddell and Bayswater power stations occur following the closure of these power stations in April 2023 (FY23) and CY33 (FY34) respectively.

6. Based on capital cost estimates from AEMO Inputs, Assumptions and Scenarios Workbook, June 2022, adjusted for AGL views where considered appropriate.

7. Based on scenario modelling of the National Electricity Market (NEM) undertaken by ACIL Allen (as outlined in Appendix A) utilising a carbon budget for the NEM which is consistent with limiting global temperature increases to well below two degrees Celsius above pre-industrial levels.

The ability for AGL to execute on this target will be subject to uncertainties and risks, as described on page 12 of AGL's Climate Transition Action Plan.

5. EMISSIONS SUMMARY

Emissions over time

Emissions since base year		Total tCO ₂ -e	Emissions intensity of the functional unit
Year 1:	CY2020	65.7	65.06
Year 2:	CY2021	37,232.34	66.04

Significant changes in emissions

Emission source name	Current year (tCO ₂ -e)	Previous year (tCO ₂ -e)	Detailed reason for change
Overall emissions	37,232.34	65.7	Increase of CN product intake in second year. Also, in the first year of certification, the product was launched 37 days before the end of reporting period.

Use of Climate Active carbon neutral products and services

N/A

Product/Service emissions summary

Stage	tCO ₂ -e
Overall product emissions	32,562.3
Organisation component	4670

Emissions intensity per functional unit (kg CO ₂ e/GJ)	66.04
Number of functional units to be offset (GJ)	560,747.27
Total emissions to be offset (tCO ₂ e)	37,232.34

6. CARBON OFFSETS

Offsets retirement approach

In arrears	
1. Total number of eligible offsets banked from last year's report	635
2. Total emissions footprint to offset for this report	37,233
3. Total eligible offsets required for this report	32,563
4. Total eligible offsets purchased and retired for this report	36,598
5. Total eligible offsets banked to use toward next year's report	0

Co-benefits

Not all carbon offset units are created equal. There's a wide range of carbon offsets that differ in source, methodology, and price. AGL undertakes a rigorous selection process when it comes to the carbon offsets we purchase. The eligible carbon offsets we buy meet the Carbon Neutral Standard integrity requirements set by Climate Active.

There are many different offset methodologies. Some include reforestation, renewable energy, or energy efficiency projects that generate eligible carbon offsets; projects that involve the destruction of certain industrial gases; and projects that involve the capture and destruction of methane from landfills and certain agricultural activities. Many of these projects also provide additional positive environmental and social benefits.

We believe that the projects we've chosen will make a real difference. Listed below are some representative examples of projects that we have purchased carbon offsets from.

BURN Stoves Project in Kenya

AGL has pre-purchased and retired Gold Standard Verified Emissions Reductions (GSVERs) from the BURN Stoves Project, developed by ClimateCare Limited, who have pioneered carbon finance for community development projects and delivered some of the largest carbon offsetting programs in the world.

The project directly addresses several certified Sustainable Development Goal (SDG) impacts: 1, No Poverty; 3, Good Health and Wellbeing; 8, Decent Work and Economic Growth; and 13, Climate Action. The BURN Stoves Project provides communities with an efficient cookstove that benefits the environment, creates employment opportunities, promotes business and infrastructure development, and provides cleaner, more efficient cooking options.

Carbon Conscious Capture Project 2 in Western Australia

AGL has pre-purchased and retired Australian Carbon Credit Units (ACCUs) from the Carbon Conscious

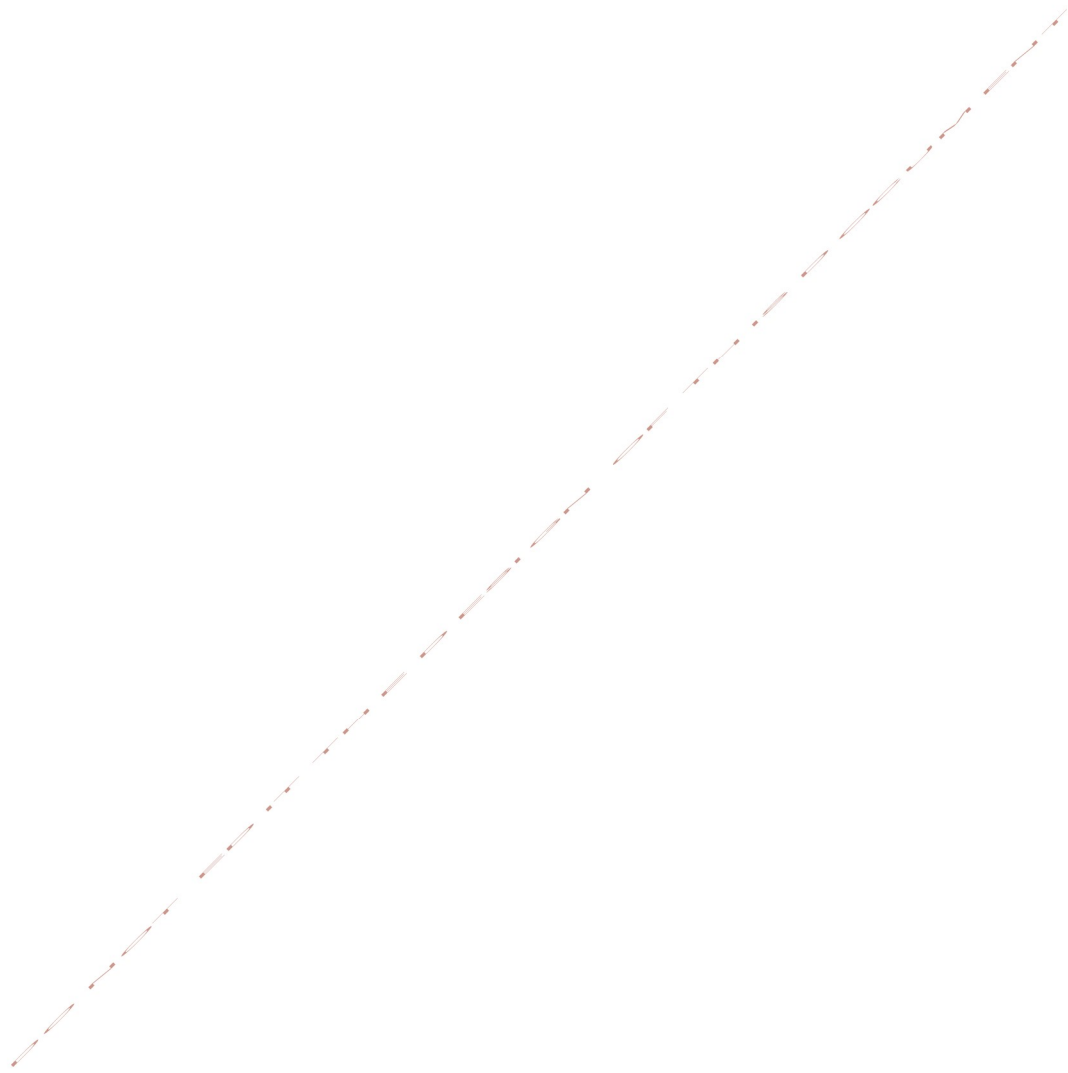
Capture Project 2, developed by Carbon Conscious Investments Ltd (Carbon Conscious), a member of the Carbon Market Institute and a foundation signatory of the Australian Carbon Industry Code of Conduct.

Ceramic Water Purifiers Project in Cambodia

AGL has pre-purchased and retired Gold Standard Verified Emissions Reductions (GSVERs) from the Ceramic Water Purifiers Project, developed by Hydrologic Social Enterprise Company Ltd, a social enterprise which has a mission to ensure all families in rural Cambodia have access to safe, clean drinking water. The use of water purifiers eliminates the need for wood fuel, therefore reducing the depletion of Cambodia's forest resources, reducing greenhouse gas emissions and improving indoor air pollution.

Eligible offsets retirement summary

Offsets cancelled for Climate Active Carbon Neutral Certification											
Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Stapled quantity	Eligible quantity (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 (%)
Carbon Conscious Carbon Capture Project 1	ACCUs	ANREU	1 October 2020	3,791,540,724 – 3,791,540,973	2019-20	0	250	25	0	225	1%
Burn Stoves Project in Kenya (GS5642)	VERs	GSF Registry	1 October 2020	GS1-1-KE-GS5642-16-2017-19155-28481-28931	2017	0	451	41	0	410	1%
Carbon Conscious Carbon Capture Project 2	ACCUs	ANREU	8 July 2022	3,753,708,501 - 3,753,710,189	2017	0	1,689	0	0	1,689	4%
Peru Cook Stoves Project VPA 2	VERs	GSF Registry	8 July 2022	GS1-1-PE-GS1049-16-2013-5308-84009-110472	2013	0	26,464	0	0	26,464	81%
Peru Cook Stoves Project VPA 2	GSVERs	GSF Registry	08/07/22	GS1-1-PE-GS1049-16-2016-7264-69832-232635	2016	0	8,445	0	0	8,445	12%
Total offsets retired this report and used in this report										37,233	
Total offsets retired this report and banked for future reports									0		
Type of offset units		Quantity (used for this reporting period claim)					Percentage of total				
Australian Carbon Credit Units (ACCUs)							5%				
Verified Emissions Reductions (VERs)							95%				



7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) Summary

N/A

APPENDIX A: ADDITIONAL INFORMATION

ACCUs screenshot provided

APPENDIX B: ELECTRICITY SUMMARY

N/A

APPENDIX C: INSIDE EMISSIONS BOUNDARY

N/A

Excluded emission sources

APPENDIX D: OUTSIDE EMISSION BOUNDARY

Excluded emission sources

Relevance test					
Non-attributable emission	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.
Third Party Sales Channels	No	No	No	No	No
Upstream trace of gas supplied into network from AGL's Camden Gas Project in NSW	No	No	No	No	No





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