



PUBLIC DISCLOSURE STATEMENT

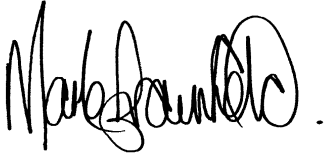
ENERGYAUSTRALIA PTY LTD

ELECTRICITY AND GAS PRODUCTS (OPT-IN)

CY2022

Australian Government
Climate Active
Public Disclosure Statement



NAME OF CERTIFIED ENTITY	EnergyAustralia Pty Ltd
REPORTING PERIOD	1 January 2022 – 31 December 2022 Arrears report
DECLARATION	<p><i>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.</i></p>  <p>Mark Brownfield Chief Customer Officer EnergyAustralia</p> <p>Date: 19 September 2023</p>



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

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



1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	1,625,308 tCO ₂ -e - 1,405,196 tCO ₂ -e (electricity product) - 220,112 tCO ₂ -e (gas product)
OFFSETS BOUGHT	98.8% CERs, 1.2% ACCUs
RENEWABLE ELECTRICITY	N/A
TECHNICAL ASSESSMENT	27 May 2022 PricewaterhouseCoopers (PwC) Next technical assessment due: CY2024 report

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2. CARBON NEUTRAL INFORMATION

Description of certification

EnergyAustralia Pty Ltd (ABN 99 086 014 968) offers product level Climate Active certified electricity and gas for customers that have explicitly opted in.

This means that we purchase eligible, quality carbon credits to offset the emissions associated with the production of the energy used by these customers in their homes and businesses.

EnergyAustralia does not use offsets to defer or diminish its efforts to decarbonise its own operations – this important work continues in parallel, noting however that our funding arrangements for the Tallawarra B power station in NSW require us to purchase ACCUs to offset its Scope 1 emissions. We recognise the positive contribution offsets make to atmospheric emissions while households and businesses electrify, increase their energy efficiency, and access more renewable electricity over time. To date, EnergyAustralia has carefully selected and bought offsets equal to over 5 million tonnes of greenhouse gas emissions.

“Carbon Neutral certification gives confidence to our customers that our program helps them make a positive difference to the environment.”

Product description

We currently offer Go Neutral Electricity and Go Neutral Gas at no extra cost to residential customers, and offer Business Carbon Neutral Electricity as part of a bundled cost offering.

For electricity supply emissions offsets, the relevant functional unit is megawatt hours (MWh), with consumption of the product by customers measured as MWh per year.

For gas supply emissions offsets, the relevant functional unit is gigajoules (GJ), with consumption of the product by customers measured in GJ per year. Emissions are calculated from the Australian National Greenhouse Accounts Factors which include all emissions relevant to the production, supply and use of the products.

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 '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 detail is available at Appendix D.

Diagram of the certification boundary: ELECTRICITY PRODUCT

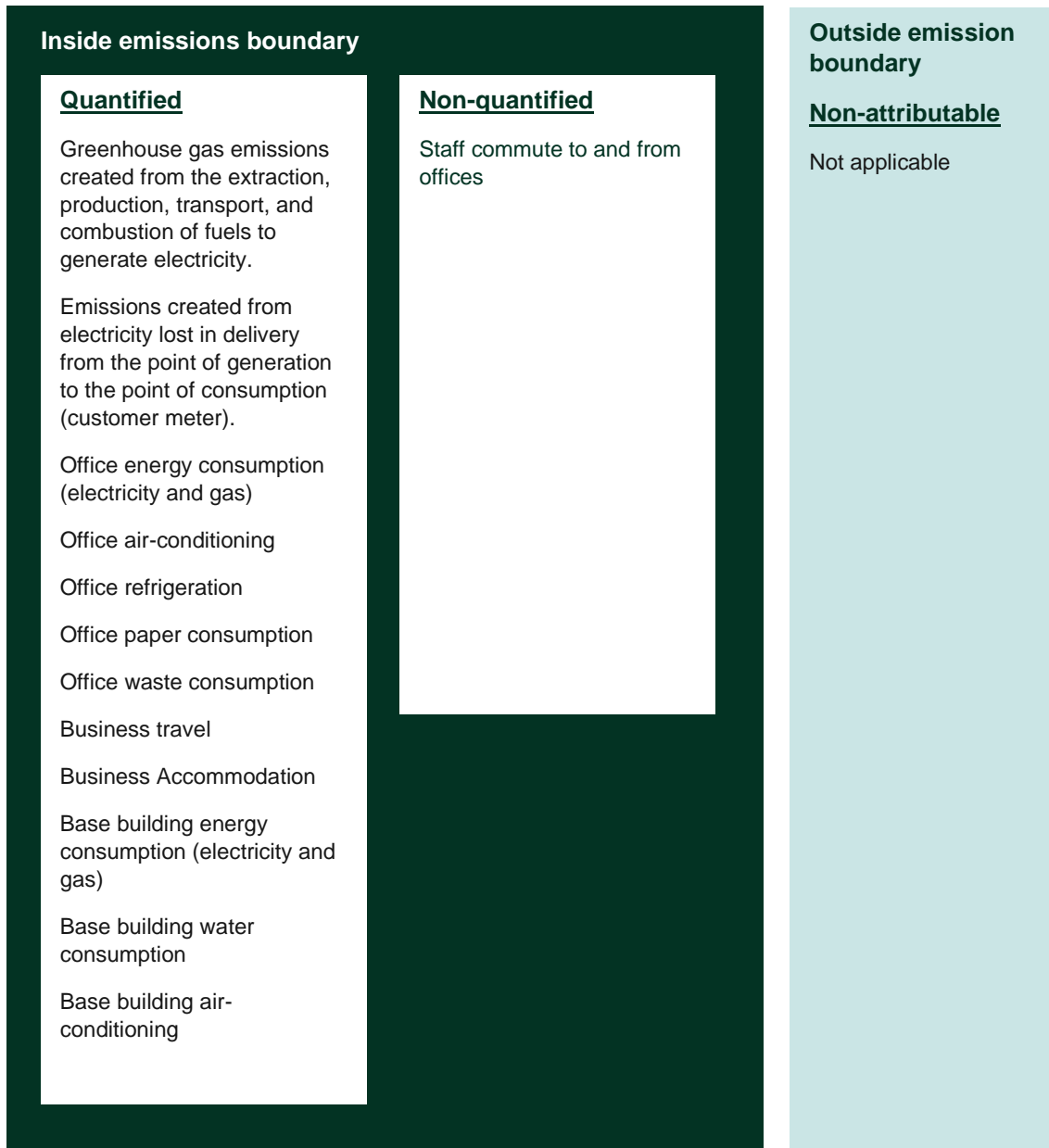
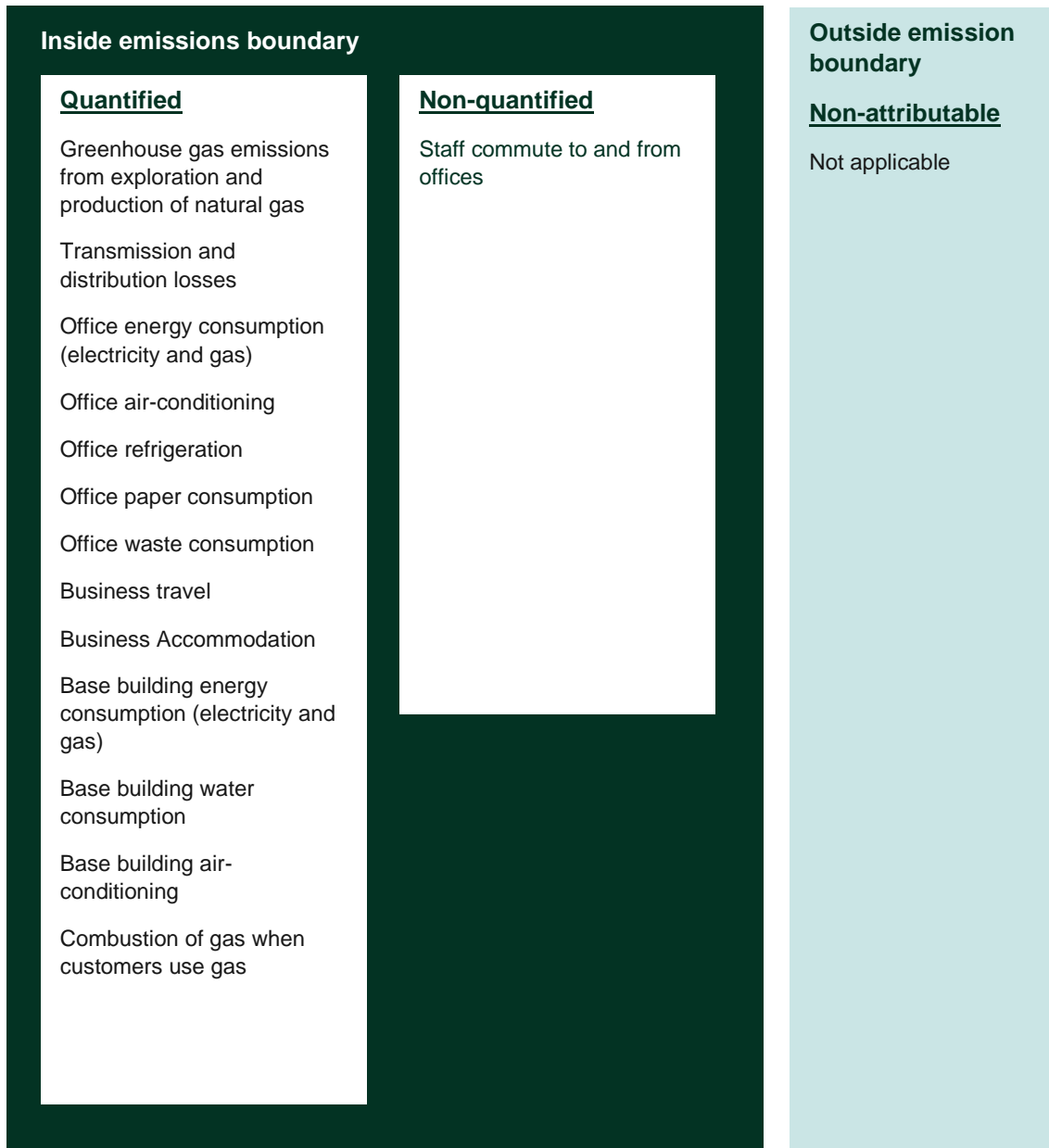
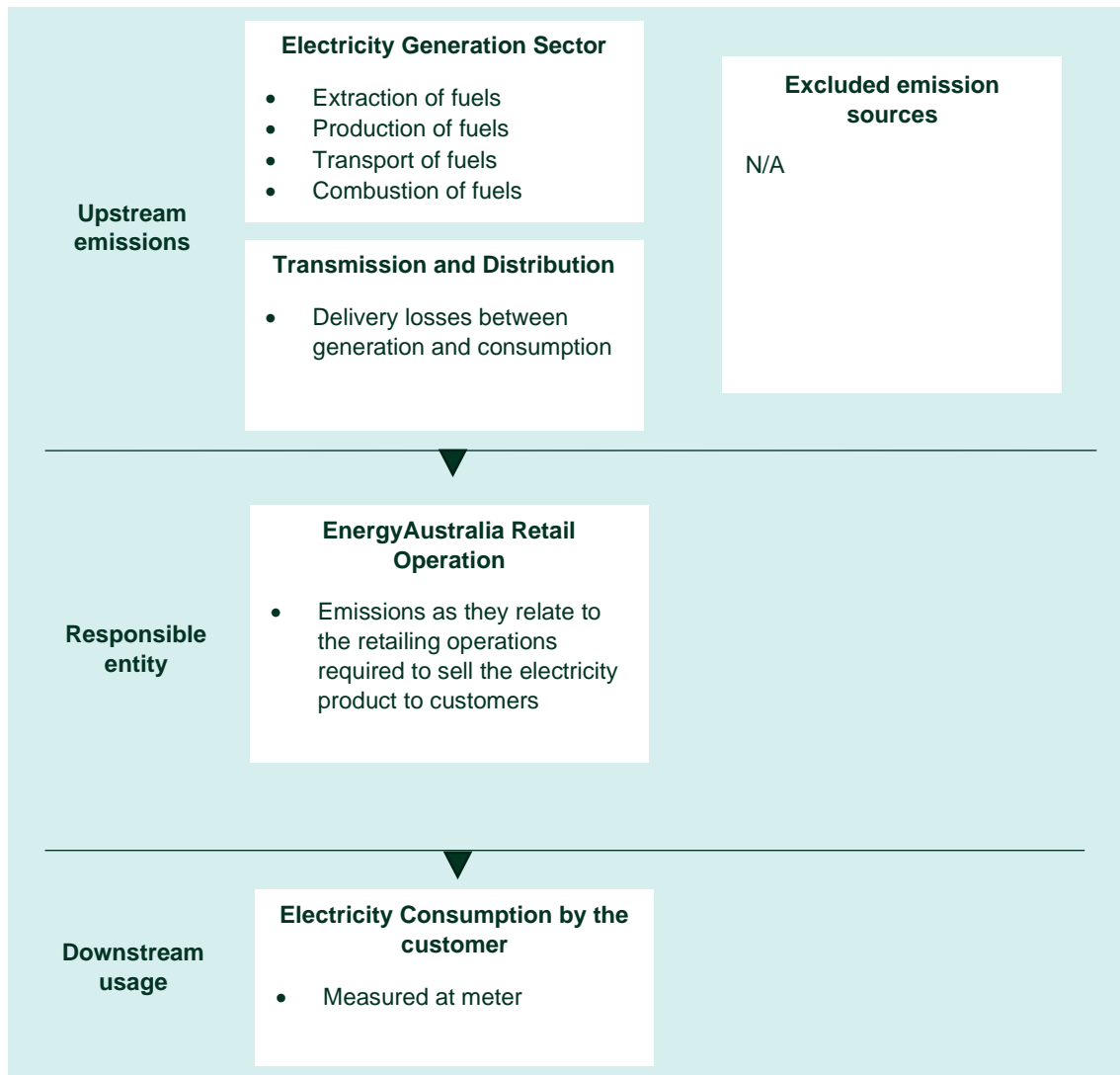


Diagram of the certification boundary: GAS PRODUCT



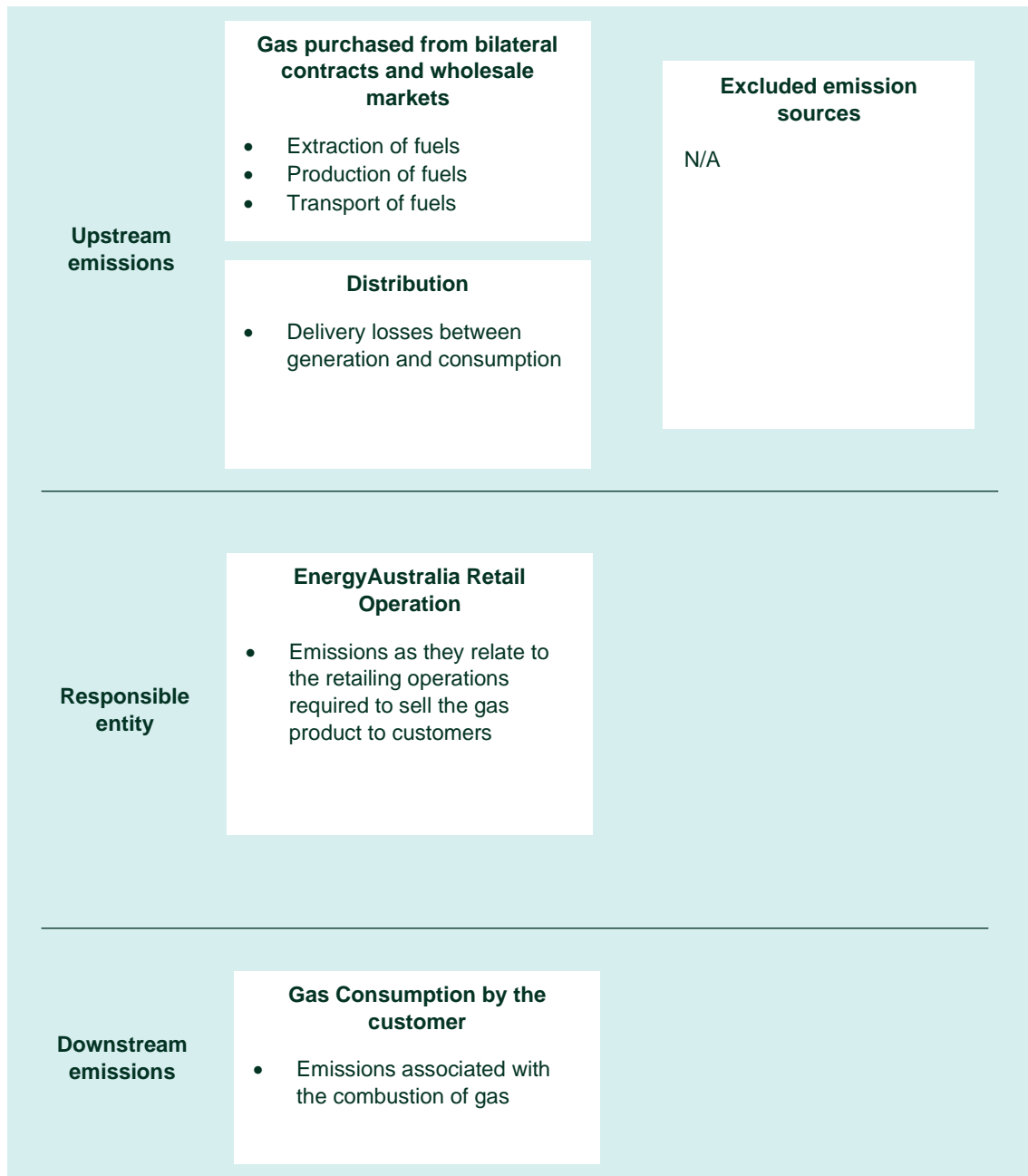
Product process diagram – ELECTRICITY PRODUCT

The following diagram represents the life cycle of the electricity product from cradle to grave.



Product process diagram: GAS PRODUCT

The following diagram represents the life cycle of the gas product from cradle to grave.



Data management plan for non-quantified sources

There are no non-quantified sources in the emission boundary that require a data management plan.

4. EMISSIONS REDUCTIONS

Emissions reduction strategy

At the start of 2020, EnergyAustralia announced its commitment to be Net Zero by 2050 across Scope 1, 2 and 3 emissions.

In March 2021, we announced a plan to close our Yallourn coal-fired power station in mid-2028. Yallourn's retirement will lower EnergyAustralia's Scope 1 greenhouse gas emissions by over 60% relative to 2019-20 levels, accelerating our transition to net zero emissions by 2050.

Our targets:

- To reach net zero greenhouse gas emissions across Scopes 1 and 2, and an ambition for this commitment to extend to Scope 3, across our business by 2050,
- To reduce our direct¹ greenhouse gas emissions by over 60% on 2019-20 levels in 2028-2029, and
- To transition out of coal assets by 2040.

These commitments are outlined in our Climate Change Statement, which can currently be found at [Climate change statement 2.pdf \(energyaustralia.com.au\)](#). EnergyAustralia published its [Climate Transition Action Plan](#) in August 2023, in which we make a commitment to share our Scope 3 customer emissions reduction pathway by the end of 2024. EnergyAustralia is a purpose-led business, working to lead and accelerate the clean energy transformation for all.

Emissions reduction actions

On the wholesale side of our business, EnergyAustralia has the rights to more than 850 MW of solar and wind farm power purchase agreements, along with ownership of half the Cathedral Rocks wind farm.

EnergyAustralia is committed to reducing its greenhouse gas emissions by progressively phasing out coal-fired power, as we work to integrate new supplies of dispatchable generation, without compromising the reliability and affordability of the energy system.

In March 2021, we announced a plan to close our Yallourn coal-fired power station in mid-2028. Yallourn's retirement will lower EnergyAustralia's Scope 1 greenhouse gas emissions by over 60% relative to 2019-20 levels, accelerating our transition to net zero emissions by 2050.

We will not build another coal-fired power plant.

During this reporting period, no relevant actions were undertaken by EnergyAustralia to reduce the emissions intensity of the gas product.

¹ Scope 1 emissions

5. EMISSIONS SUMMARY

Emissions over time

The tables below show the annual emissions attributable to the Electricity Product and Gas Product, demonstrating an incremental increase in emissions as the number of customers opting into the products has grown. The reduction in emissions intensity values represents the incremental decarbonisation of the National Electricity Market over this time period.

Emissions since base year (CY)		ELECTRICITY PRODUCT	
		Total tCO ₂ -e	Emissions intensity of the functional unit
Base year ² :	2015	22,311,266	
Year 1:	2016–17	173,006	1.04
Year 2:	2018	546,171	0.98
Year 3:	2019	879,081	0.96
Year 4:	2020	1,171,125	0.94
Year 5:	2021	1,260,579	0.89
Current year	2022	1,405,196	0.82

Emissions since base year		GAS PRODUCT	
		Total tCO ₂ -e	Emissions intensity of the functional unit
Base year ² :	2017	3,356,409	
Year 1:	2020	29,121	0.05686
Year 2:	2021	116,210	0.05845
Current year	2022	220,112	0.05875

² Base year includes greenhouse gas emissions in relation to the full electricity/gas base if all customers were to opt in.

Use of Climate Active carbon neutral products and services

N/A

Product emissions summary

Electricity product

Emission source category – ELECTRICITY PRODUCT	tCO₂-e
Electricity purchased from the wholesale market and sold to EA customers - ACT	12,304
Electricity purchased from the wholesale market and sold to EA customers - NSW	816,827
Electricity purchased from the wholesale market and sold to EA customers - QLD	111,626
Electricity purchased from the wholesale market and sold to EA customers - SA	14,707
Electricity purchased from the wholesale market and sold to EA customers - VIC	448,968
GHG emissions from retail operations (scope 1) ³	0.35
GHG emissions from retail operations (scope 2&3) ³	763.5

Emissions intensity per functional unit (<i>tCO₂-e/MWh</i>)	0.82
Number of functional units to be offset (<i>MWh</i>)	1,708,957
Total emissions to be offset (<i>tCO₂-e</i>)	1,405,196

³ Greenhouse gas emissions attributable to EnergyAustralia's retail operations in relation to Go Neutral electricity sales are estimated based on the analysis of greenhouse gas emissions for EnergyAustralia's retail operations only, undertaken in relation to the base year 2015. The emissions from these retail operations attributable to Go Neutral electricity sales have been estimated based on the total number of electricity and gas accounts and the amount of Go Neutral electricity sales as a proportion of total electricity sales to EnergyAustralia customers.

Gas product

Emission source category – GAS PRODUCT	tCO ₂ -e
Gas purchased from bilateral contract or wholesale market and sold to EA customers - ACT	2,365
Gas purchased from bilateral contract or wholesale market and sold to EA customers - NSW	70,912
Gas purchased from bilateral contract or wholesale market and sold to EA customers - QLD	-
Gas purchased from bilateral contract or wholesale market and sold to EA customers - SA	4,441
Gas purchased from bilateral contract or wholesale market and sold to EA customers - VIC	142,014
GHG emissions from retail operations (scope 1) ⁴	0.17
GHG emissions from retail operations (scope 2&3) ⁴	380.5

Emissions intensity per functional unit (tCO ₂ -e/GJ)	0.05874
Number of functional units to be offset (GJ)	3,747,007
Total emissions to be offset (tCO ₂ -e)	220,112

⁴ Greenhouse gas emissions attributable to EnergyAustralia's retail operations in relation to Go Neutral gas sales are estimated based on the analysis of greenhouse gas emissions for EnergyAustralia's retail operations only, undertaken in relation to the base year 2015. The emissions from these retail operations attributable to Go Neutral gas sales have been estimated based on the total number of electricity and gas accounts and the amount of Go Neutral gas sales as a proportion of total gas sales to EnergyAustralia customers.

6. CARBON OFFSETS

Offsets retirement approach

In arrears	
Total number of eligible offsets banked from last year's report	838,172
Total emissions footprint to offset for this report (tCO ₂ -e)	1,625,308
Total eligible offsets required for this report	787,136
Total eligible offsets purchased and retired for this report	845,347
Total eligible offsets banked to use toward next year's report	58,211

Co-benefits

EnergyAustralia has purchased offset certificates from both Australian and International projects (the majority). Examples of projects and associated co-benefits include:

Geothermal, Indonesia: Located on the island of Java in Indonesia, the Darajat Unit III project taps into Indonesia's geothermal resources to generate power for the local Jawa-Madura-Bali (JAMALI) grid, avoiding greenhouse gas emissions associated with electricity generation from fossil fuels. This project supports Indonesia's transition to renewable energy and helps improve infrastructure and the local community with jobs and education opportunities.

Located on the volcanic island of Java, 150km from Jakarta, this project avoids greenhouse gas emissions associated with electricity generation from fossil fuels by tapping into Indonesia's vast geothermal resources to generate electricity for the JAMALI grid. Recognised as one of the most efficient geothermal plants in the world, Darajat Unit III is helping to displace coal and oil in Indonesia's electricity infrastructure and supporting the Nation's transition to renewable energy. Sitting within an area known for its biodiversity, Darajat Unit III has helped improve infrastructure in the region, and supports the local community through job creation and investment in schools, helping to address high illiteracy rates in the area.

Landfill Gas, Brazil: ESTRE's Paulínia Landfill Gas Project (EPLGP) - Contribution of the Project Activity to Sustainable Development: Firstly, while it is reducing methane emissions that would enhance climate change, it is also minimizing the risk that any explosions happen in the site – even though ESTRE's landfills count on the best engineering and design to avoid accidents. Second, at the time of project implementation this sort of initiative has been incipient in Brazil, which means technology transfer has been needed to be in place for project's implementation and operation. Third, specialized operators are needed for project operation, which means a positive impact in employment and capacity-building.

Wind Farms, India: Contribution of the Project Activity to Sustainable Development - The project leads to generation of business opportunities and employment in the region thereby contributing towards social upliftment through direct and indirect benefits. - The project activity in its execution lead to development of infrastructure in the region and at the same time promote business in the region through the improvement in electricity generation capacity of the grid.

Wunambal Gaambera, Wildfire management : Wunambal Gaambera's primary tool for keeping country healthy, is the Right Way Fire Operation. Right Way Fire is focused on a combination of burning country according to traditional principles and utilising available technologies to avoid major wild fires. Wunambal Gaambera's Unguu Rangers and Traditional Owners Healthy Country activities look after animal and plant habitats and cultural sites with fire.

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 (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 (%)
Wind Energy Project in Saundatti, Karnataka	CER	ANREU	12/10/2022	227.293.623-227.393.622	CP2	-	100,000	0	0	100,000	6.15%
Wind Energy Project in Saundatti, Karnataka	CER	ANREU	12/10/2022	227.393.638-227.493.637	CP2	-	60,783	0	0	60,783	3.74%
Punta Palmeras Wind Power Project	CER	ANREU	12/10/2022	32.736.564-32.936.563	CP2	-	79,969	0	58,211	21,758	1.34%
Darajat Unit III Geothermal Project	CER	ANREU	12/10/2022	31.375.677-31.525.676	CP2	-	150,000	0	0	150,000	9.23%
Darajat Unit III Geothermal Project	CER	ANREU	30/06/2022	19.953.459 - 20.203.458	CP2	-	250,000	0	0	250,000	15.38%
Darajat Unit III Geothermal Project	CER	ANREU	30/06/2022	20.203.459 - 20.388.458	CP2	-	185,000	0	0	185,000	11.38%
Wunambal Gaambera Uunguu Fire Project	ACCU	ANREU	23/03/2023	8.323.883.481 - 8.323.893.480	2020-21	-	10,000	0	0	10,000	0.62%
Wunambal Gaambera Uunguu Fire Project	ACCU	ANREU	23/03/2023	8.323.901.288 - 8.323.901.482	2020-21	-	195	0	0	195	0.01%
North Kimberley Pastoral Lease Carbon Abatement	ACCU	ANREU	23/03/2023	8.329.772.818 - 8.329.782.172	2021-22	-	9,355	0	0	9,355	0.58%
Tallering Station Human Induced Regeneration Project	ACCU	ANREU	23/03/2023	8.332.317.362-8.332.317.406	2021-22	-	45	0	0	45	0.003%

Wind Energy Project in Saundatti, Karnataka	CER	ANREU	24/12/2021	227.493.638 - 227.593.637	CP2	-	100,000	0	0	100,000	6.15%
Wind Energy Project in Saundatti, Karnataka	CER	ANREU	24/12/2021	227.593.638 - 227.743.637	CP2	-	150,000	0	0	150,000	9.23%
CFL lighting scheme – “Bachat Lamp Yojana”	CER	ANREU	24/12/2021	238.987.272 - 239.030.199	CP2	-	42,928	0	0	42,928	2.64%
Darajat Unit III Geothermal Project	CER	ANREU	24/12/2021	18.517.105 - 18.667.104	CP2	-	150,000	56,717	0	93,283	5.74%
Darajat Unit III Geothermal Project	CER	ANREU	19/10/2021	19.901.498 - 19.953.458	CP2	-	51,961	0	0	51,961	3.20%
ESTRE's Paulinia Landfill Gas Project (EPLGP)	CER	CDM	25/03/2022	179.131.342 - 179.331.341	CP2	-	200,000	0	0	200,000	12.31%
ESTRE's Paulinia Landfill Gas Project (EPLGP)	CER	CDM	25/03/2022	178.931.342 - 179.131.341	CP2		200,000	0	0	200,000	12.31%
Total offsets retired this report and used in this report										1,625,308	
Total offsets retired this report and banked for future reports										58,211	

Type of offset units	Quantity (used for this reporting period claim)	Percentage of total
Australian Carbon Credit Units (ACCUs)	19,595	1.2%
Certified Emissions Reductions (CERs)	1,605,713	98.8

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) Summary

N/A

APPENDIX A: ADDITIONAL INFORMATION

N/A.

APPENDIX B: ELECTRICITY SUMMARY

N/A. These products use the location-based method only; dual reporting does not apply.

APPENDIX C: INSIDE EMISSIONS BOUNDARY

Non-quantified emission sources

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

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

Relevant-non-quantified emission sources	(1) Immaterial	(2) Cost effective (but uplift applied)	(3) Data unavailable (but uplift applied & data plan in place)	(4) Maintenance
Staff commute	Yes			

Excluded emission sources

Attributable emissions sources can be excluded from the carbon inventory, but still considered as part of the emissions boundary if they meet **all three of the below criteria**. An uplift factor may not necessarily be applied.

1. A data gap exists because primary or secondary data cannot be collected (**no actual data**).
2. Extrapolated and proxy data cannot be determined to fill the data gap (**no projected data**).
3. An estimation determines the emissions from the process to be **immaterial**.

Not applicable – no attributable (excluded) processes in these product certifications.

APPENDIX D: OUTSIDE EMISSION BOUNDARY

Non-attributable emissions have been assessed as not attributable to a product or service (do not carry, make or become the product/service) and are therefore not part of the carbon neutral claim. To be deemed attributable, an emission must meet two of the five relevance criteria. Emissions which only meet one condition of the relevance test can be assessed as non-attributable and therefore are outside the carbon neutral claim. Non-attributable emissions are detailed below.

1. **Size** The emissions from a particular source are likely to be large relative to other attributable emissions.
2. **Influence** The responsible entity could influence emissions reduction from a particular source.
3. **Risk** The emissions from a particular source contribute to the responsible entity's greenhouse gas risk exposure.
4. **Stakeholders** The emissions from a particular source are deemed relevant by key stakeholders.
5. **Outsourcing** The emissions are from outsourced activities that were previously undertaken by the responsible entity or from outsourced activities that are typically undertaken within the boundary for comparable products or services.

Not applicable – there were no non-attributable processes identified for EnergyAustralia's opt-in electricity and gas products for this reporting period.



An Australian Government Initiative

