

PUBLIC DISCLOSURE STATEMENT

POWERSHOP AUSTRALIA (MERIDIAN ENERGY AUSTRALIA)

PRODUCT CERTIFICATION - ELECTRICITY CY2021

Climate Active Public Disclosure Statement







NAME OF CERTIFIED ENTITY	Meridian Energy Australia (Powershop)
REPORTING PERIOD	Calendar year 1 January 2021 – 31 December 2021 Arrears report
DECLARATION	To the best of my knowledge, the information provided in this public disclosure statement is true and correct and meets the requirements of the Climate Active Carbon Neutral Standard.
	Michael Benveniste GM Commercial & Future Energy B2C
	7 March 2024



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1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	560,850 tCO ₂ -e
CARBON OFFSETS USED	100% CERs
RENEWABLE ELECTRICITY	24.92%
TECHNICAL ASSESSMENT	Next technical assessment due: CY2023 report

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2. CARBON NEUTRAL INFORMATION

Description of certification

This Public Disclosure Statement (PDS) supports Powershop's (ABN 41 154 914 075) ongoing certification under the Climate Active Carbon Neutral Standard in relation to Powershop's Carbon Neutral Electricity Product certification for the period 1 January 2021 – 31 December 2021. This PDS describes:

- All emissions associated with retailer electricity products sold to customers;
- How we define and measure those emissions; and
- How we use Australian Carbon Credit Units, Verified Carbon Units and Carbon Emissions Reductions certificates to neutralise the impact made by retailer electricity.

Powershop has prepared this inventory based on the Climate Active standard and its associated guidance documents. Detailed in Meridian Energy Australia's (MEA) organisation accreditation PDS for calendar year 2021 are emissions attributable to organisational and operational activities of Powershop. Powershop also has a separate accreditation for its gas product: https://www.climateactive.org.au/buy-climateactive/certified-members/powershop.

On 1 February 2022, Meridian Energy Limited (NZ listed company) sold its Meridian Energy Australian business to the consortium of Shell Energy Operations Pty Ltd, a wholly owned subsidiary of Shell ("Shell") and Infrastructure Capital Group ("ICG"). Shell is now the owner of the retail business, Powershop Australia, while ICG was the owner of the infrastructure assets (Mt Mercer and Mt Millar wind farms, Hume, Burrinjuck and Keepit hydro power stations and development assets).

Product description

This PDS covers all emissions associated with the electricity consumed by Powershop customers on any of their products or offers. When a customer joins Powershop, their electricity and gas usage is 100% carbon offset at no additional fee, and customers do not need to opt-in to access this benefit. The assessment is from cradle to grave.

The functional unit for the Electricity product is megawatt hours (MWh) of electricity sold per customer per year.



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.



Inside emissions boundary Quantified Non-quantified Electricity sold Organisation: * Accommodation and facilities Cleaning and Chemicals Climate Active Carbon Neutral Products and Services Construction Materials and Services Electricity Food ICT services and equipment Office equipment & supplies Postage, courier and freight Professional Services Stationary Energy (gaseous fuels) Stationary Energy (liquid fuels) Transport (Air) Transport (Land and Sea) Waste Water Working from home **Taxis** Synthetic Gases

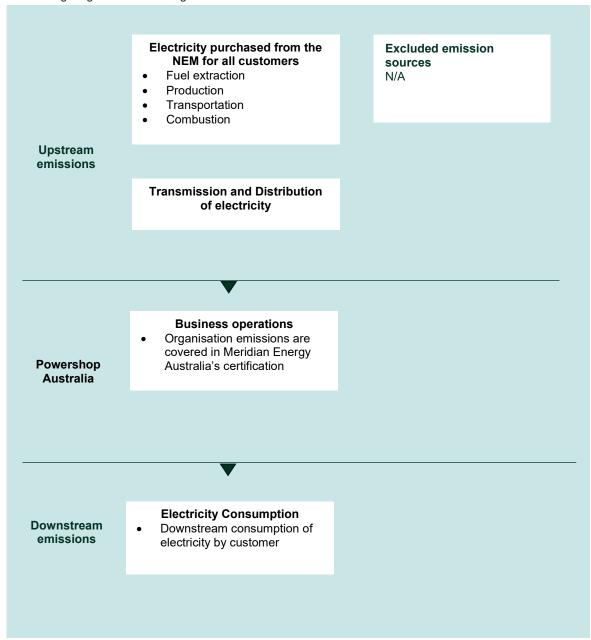
Outside emission boundary Non-attributable N/A



^{*} Note, attributable emissions from Meridian Energy Australia's business operations have been offset in their organisation certification.

Product process diagram

The following diagram is cradle-to-grave:



Data management plan for non-quantified sources

N/A



4.EMISSIONS REDUCTIONS

Emissions reduction strategy

For calendar year 2021, Powershop was part of the Meridian Energy Limited (Meridian) group, on 1 February 2022 Meridian Energy Limited sold its Australian business to Shell. Therefore, the emissions reduction strategy outlined below for Powershop is aligned with the Meridian climate action plan and sustainability goals during 2021.

Meridian Group

Meridian Energy's purpose is to provide "clean energy for a fairer and healthier world". Their key contributions (aligned to the United Nation's seventh and thirteenth Sustainable Development Goals) are reliable and affordable electricity, renewable energy, and climate action.¹

Meridian has an ambitious target to halve its operational emissions by 2030 from a 2019 baseline, which they describe as 'Half by 30'. As a 100% renewable energy generator with no fossil fuel combustion for electricity generation, they recognise that their biggest impact will come from the continued investment in further renewable energy generation to enable further decarbonisation, and having an operational GHG target that is focused on our supply chain (scope 3).

Meridian has a number of decarbonisation initiatives underway, aligning with the Meridian Group goal of halving operational GHG emissions by 2030. Within their business they have focused on:

- At least 50% air travel reduction. They got very close to achieving this target with a 46% reduction in air travel emissions compared to FY20. From an FY19 baseline, their emissions are 63% lower
- Energy efficiency audits at their hydro asset sites and a wind site were completed in FY21. Identified findings have been entered into the asset management plan for consideration and prioritisation.
- Full electrification of the vehicle fleet. An interim milestone of 100% conversion of the light passenger fleet was achieved in early 2021. Active investigation is underway to complete the conversion of the remaining light commercial fleet by the end of 2025
- Developing a business case for the electrification of Meridian's boat at Manapōuri, New Zealand.
- They continue to support their staff to work remotely, including offering financial assistance for home office furniture if needed. Remote working/working from home enables the avoidance of some emissions from employee commuting. In FY22 they will investigate options to further support their staff in taking climate action.2

Powershop and Meridian Energy Australia (Powershop)

Powershop's purpose of "clean energy for a fairer and healthier world" is aligned to the Meridian group purpose. As such, we believe that by doing the right thing by people and the planet, we're working to build a better future for our customers, communities, and environment. It underpins everything we do: our values, how we behave, our strategy, and our stance on sustainability.



¹ Meridian Energy's Greenhouse Gas Emissions Inventory Report – FY21

² FY21 Meridian Climate Change Disclosure Report

Powershop Australia's Electricity Product has been certified with Climate Active since 2014, Powershop is committed to helping Australia get to Net - Zero Emissions by 2050, but really we think it's possible by 2030.3 Powershop had three strategic focus areas:

- Renewable Energy Generation: Since starting operations Meridian Energy Australia (MEA) only invested in renewable energy generation. As at 2021 MEA operated 3 Hydro assets, 2 Wind assets in Australia generating more renewable energy than Powershop sold to itscustomer base.
- Customer and Community decarbonisation: Powershop has a growing book of residential solar customers and strategic partnerships in place to assist residential home owners and investors maximize the long term benefits of installing solar panels, through residential solar installer referral program and new build solar product. In addition, we are investing in systems and technology to help consumers unlocked the growing opportunity with residential battery storage via a Virtual Power Plant (VPP) - providing flexible and storage firming solutions to ensure energy supply and affordable energy prices.
- Emissions reduction & carbon neutrality: since 2014 Powershop Australia's electricity product has been certified 100% carbon neutral and in 2015 we achieved Climate Active accreditation for both an organization and all our products. For our corporate office and satellite offices we used 100% Green Power. Even with renewable energy generation assets and corporate office using Green Power, we still create scope 1,2 and 3 emissions. We are committed to reducing these even further by 25% by 2025, our target reduction areas are:
 - Transitioning to an electric fleet where possible
 - Recycling and waste management strategies
 - Reduce air travel emissions per full time employee

Emissions reduction actions

Some of Powershop emissions reduction actions include:

- 100% GreenPower electricity at Powershop HQ.
- Continued to offer carbon neutral at no additional fee energy plans
- Continued to carbon offset organisational scope 1, 2 and 3 emissions
- Limited business travel (driven by COVID restrictions

³ Powershop internal draft strategic sustainability framework – May 2021

Other actions include:

Strategy	Action	Target	Timing
Education and insights	Seasonal energy savings	>85% of customers	2025
Our energy app allows customers to track and manage their energy to help reduce their carbon footprint and their bill.	Seasonal energy management campaign completed. E.g. "Download the app to keep on top of your winter usage". App download incentives Powerpack promotions and other communications to encourage and incentives to download the app. Smart meter opt in program Powershop has a smart meter program to enable customers to access a smart meter installation to provide further data and insights on their usage.	accessing usage management tools.	
Uptake of GreenPower	GreenPower for the People	>30% of customers procuring	2026
GreenPower is available to all our customers. Allowing customers to access GreenPower flexibly without locking them in means it's easy to opt in when it suits them.	We brought our GreenPower premium down from 3.74c/kWh to 0.4c/kWh for a limited time, customer's could purchase two days worth of usage covered by cheaper GreenPower to encourage engagement.	GreenPower for all or part of their bill	



Strategy	Action	Target	Timing
Support residential rooftop solar	Super Solar plan	>35% of customers have rooftop solar	2026
Offering new plans and offers exclusively designed to reward customers for the renewable energy they generate from their rooftop solar, with high feed-in tariffs and technology so customers get the most out of their solar.	Tailored offer for customers with solar panels. This product is in development stage with launch date 1 January 2022. SolarPay/Sunyield plan Tailored solar offer available through builder channel focused on incentivising home owner builders to install solar panels (and EV charges) during home build.	panels installed	
Technology and innovation Focus on energy innovations and optimisation via technology to support Australian's through the energy transition.	Virtual Power Plant (VPP) Planning for execution of a VPP POC. Launch will occur in 2022.	Launch VPP trial to test POC in 2022	2022



5.EMISSIONS SUMMARY

Emissions over time

Emissions since base year							
		Total tCO₂-e	Emissions intensity of the functional unit (tCO ₂ -e / mWh / customer)				
Base year:	2014–15	189,835	33,177.63				
Year 1:	2015–16	356,728	63,340.25				
Year 2:	2016–17	474,485	85,952.44				
Year 3:	2017-18 (18-month report)	808,081	102,678.26				
Year 4:	CY2019	556,430	112,519.73				
Year 5:	CY2020	577,953	111,292.89				
Year 6:	CY2021	560,850	109,444.62				

Significant changes in emissions

N/A

Use of Climate Active carbon neutral products and services

This assessment and Climate Active submission was prepared with the assistance of Pangolin Associates and these services are carbon neutral.



Product emissions summary

Stage *	tCO ₂ -e
Electricity	560,850

No uplift factors were included in the emissions total.

^{*} Note, attributable emissions from Meridian Energy Australia's business operations have been offset in their organisation certification.

Emissions intensity per functional unit (tCO2-e/MWh/customer)	109,444.62
Number of functional units to be offset (MWh /customer)	5.12
Total emissions to be offset (tCO ₂ -e)	560,850



6.CARBON OFFSETS

Offsets retirement approach

In arrears	
Total number of eligible offsets banked from last year's report	98,402
2. Total emissions footprint to offset for this report (tCO ₂ -e)	560,850
3. Total eligible offsets required for this report	462,448
4. Total eligible offsets purchased and retired for this report	928,556
5. Total eligible offsets banked to use toward next year's report	367,706

Co-benefits

Egypt Catalytic N₂O destruction project in the tail gas of the Nitric Acid Plant of Abu Qir Fertilizer Co

The project's aim is to reduce N2O emissions at the nitric acid plan ABU QIR II, with potential additional environmental and secure social benefits. The catalytic N2O destruction project activity is expected to reduce 98% of the N₂O emissions that would be emitted without the project activity.

India Grid connected electricity generation using natural gas by Lanco Kondapalli Power Private Limited

The project contributes towards the sustainable development as per the four indicators prescribed below:

- 1. Social well being:
- The project activity has generated employment for the local population during the construction as well as operational phases of the project activity, both direct and indirect.
- It has also provided an opportunity for secondary small scale entrepreneurs' development near the project site, such as small shops, etc. Overall, there has been employment creation as project activity.
- 2. Economic well being:
- By creating employment in the area, as described above, the project activity has brought in economic improvement for the local population.
- 3. Environmental well being:
- The project activity avoids use of any other fossil fuels such as coal, lignite, naphtha, diesel, etc.,



and thus reduces emissions of GHGs, oxides of sulphur and nitrogen, particulate matters and unburned carbon, fly ash (in case of coal and lignite), etc.

- 4. Technological well being:
- The project activity is a natural gas based combined cycle power plant and would result in improved power generation efficiency as compared to an open cycle CCGT or coal or lignite based thermal power plant of similar capacity.

UG 4217 Uganda Bujagali Hydropower Project, Grid connected renewable generation

The electricity produced by the Bujagali Hydropower Project displaces the electricity produced in the baseline, which to a large extent is based on diesel and heavy fuel oil generators that emit considerable volumes of CO₂. It will also avoid the need for future oil fired generation. The project also provides access to electricity from renewable energy sources. Since the Project stabilises or lowers the power tariff in Uganda and helps eliminate the need to load shed, it also stimulates sustainable economic development of the country, creating new jobs both directly and indirectly.

The Project also benefits the residents and economies of local communities near the Project site. New jobs, primarily unskilled and semi-skilled, creates employment opportunities for Ugandan workers. In addition to improving the local economy, the Project sponsors are committed to preserving the heritage and cultures of nearby villages. Meetings with representatives from the Kingdoms of Buganda and Busoga are helping identify actions needed to fulfil that commitment.

BR 648 - Brazil Gas landfill project

The project activity promotes a significant positive impact towards sustainable development in Brazil. First, while reducing methane emissions, it also minimises the risk of explosions in the landfill site (although the Central de Resíduos do Recreio Landfill's engineering and design specifically aims to avoid these types of accidents). Secondly, given the fact that at the time of the project design initial conceptualisation, initiatives of this type were relatively new in Brazil, at that time it was assumed that the implementation and operation of the project activity would represent a significant technology transfer. Thirdly, while specialised operators are needed for the project operation, that represents positive impact in terms of employment and capacitybuilding in the region. The aforementioned elements concur in making the project extremely vital in the context of sustainable development.

While the project activity also encompasses generation of electricity from a non-conventional renewable energy source, the installation and operation of the project's electricity generation facility also represents promotion of additional local job opportunities (for building and operating the project's electricity generation facility). The project's electricity generation facility fuelled by LFG is expected to be used as a relevant technological demonstration initiative in the Southern region of Brazil for the promotion of electricity generation using non-conventional renewable energy source. The use of LFG as fuel for electricity generation is still not common practice in Brazil. It is the intention of the project participant to establish cooperation agreements with local NGOs, academia and community in order to demonstrate and promote this type of initiative.



10040* India - Large scale grid connected Wind generation

The project activity has the following sustainable development aspects:

Social well being:

- The project activity helps in providing job opportunities to the local population during installation and operation of the WEGs. Employment generation helps poverty alleviation in the local community and helps bring about reduction in the disparity of income.
- The project activity supports the development of infrastructure like construction of roads and expansion of telecommunication networks. These factors give a boost to the social amelioration of the community and also help in improving the living standards of the local community.

Environmental well being:

- The project activity produces electricity with the help of renewable energy. In the absence of project activity, power would have been generated using fossil fuels, leading to GHG emissions.
- The project activity not only helps in reducing GHG emissions but also help towards conservation of fossil fuels. Therefore, the project activity is contributing towards mitigation of impacts of climate change and hence environmental well being.

Economic well being:

- The electricity generated as a result of project activity is fed to the regional grid, thereby improving the availability of electricity to local consumers.
- This provides opportunities for industries and economic activities to be set up in the area resulting in greater local employment.

Technological well being:

WEGs deployed in the project activity are from a well-known international manufacturer; the technology is proven and ensures efficient and safe operation of the project activity.

In addition, the project proponent invests 2% of the CER revenues every year in sustainable development activities in local communities of Andhra Pradesh.



Eligible offsets retirement summary

Offsets retired for Climate Active 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 (%)
Grid connected electricity generation using natural gas by Lanco Kondapalli Power Private Limited	CER	ANREU	24 Apr 2021	250,042,002 - 250,483,806	CP2	-	441,805	343,406	0	98,399	17.54%
Egypt Catalytic N2O destruction project in the tail gas of the Nitric Acid Plant of Abu Qir Fertilizer Co	CER	ANREU	24 Apr 2021	11,581,048 - 11,619,387 11,528,048 - 11,538,232 11,538,233 - 11,578,047 11,981,052 - 12,032,672	CP2	-	139,964	139,961	0	3	0.001%
Central de Resíduos do Recreio Landfill Gas Project (CRRLGP)	CER	ANREU	29 October 2021	98,056,977 -98,188,072- BR648	CP2	-	131,096	0	0	131,096	23.38%
Bujagali Hydropower Project	CER	ANREU	29 October	6,780,289–6,824,588–UG- 4217 5,578,873 -5,643,126–UG-	CP2		44,300 64,254	0	0	44,300 64,254	43.63%
Dajagan Hydropower Froject	OLIX	ANNEO	2021	4217 6,644,139 -6,780,288– UG4217	CP2		136,150	0	0	136,150	40.0070



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 (%)
Bujagali Hydropower Project	CER	ANREU	15 November 2021	4,928,873–5,228,872-UG- 4217	CP2	0	300,000	0	300,000	0	0.00%
Wind energy project by KWEPL – 3	CER	ANREU	18 November 2021	271,768,215– 271,922,568-IN-10040	CP2	0	154,354	0	67,706	86,648	15.45%
Total offsets retired this report and							sed in this report	560,850			
Total offsets retired this report and banked for future reports							367,706				

Type of offset units	Quantity (used for this reporting period claim)	Percentage of total
Certified Emission Reductions (CERs)	560,850	100%



7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) Summary

N/A

APPENDIX A: ADDITIONAL INFORMATION

N/A



APPENDIX B: ELECTRICITY SUMMARY

Electricity emissions for this product certification are calculated using a market-based approach.

Location-based method

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

Market-based method

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

Market Based Approach Summary			
Market Based Approach	Activity data (kWh)	Emissions (kgCO ₂ -e)	Renewable percentage of total
Behind the meter consumption of electricity generated	0	0	0%
Total non-grid electricity	0	0	0%
LGC Purchased and retired (kWh) (including PPAs & Precinct LGCs)	0	0	0%
GreenPower	47,931,780	0	6%
Jurisdictional renewables (LGCs retired)	0	0	0%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	0	0	0%
Large Scale Renewable Energy Target (applied to grid electricity only)	139,281,346	0	19%
Residual Electricity	564,034,694	560,849,622	0%
Total grid electricity	751,247,820	560,849,622	25%
Total electricity consumed (grid + non grid)	751,247,820	560,849,622	25%
Electricity renewables	187,213,126	0	
Residual Electricity	564,034,694	560,849,622	
Exported on-site generated electricity	0	0	
Emissions (kgCO ₂ -e)		560,849,622	

Total renewables (grid and non-grid)	24.92%
Mandatory	18.54%
Voluntary	6.38%
Behind the meter	0.00%
Residual electricity emissions footprint (tCO ₂ -e)	560,850
Figures may not sum due to rounding. Renewable percentage can be above 100%	



Location Based Approach	Activity data (kWh)	Scope 2 Emissions (kgCO ₂ -e)	Scope 3 Emissions (kgCO ₂ -e)
ACT	0	0	0
NSW	275,332,260	214,759,163	19,273,258
SA	12,191,850	3,657,555	853,430
VIC	396,786,800	361,075,988	39,678,680
QLD	66,936,910	53,549,528	8,032,429
NT	0	0	0
WA	0	0	0
TAS	0	0	0
Grid electricity (scope 2 and 3)	751,247,820	633,042,234	67,837,797
ACT	0	0	0
NSW	0	0	0
SA	0	0	0
VIC	0	0	0
QLD	0	0	0
NT	0	0	0
WA	0	0	0
TAS	0	0	0
Non-grid electricity (Behind the meter)	0	0	0
Total electricity consumed	751,247,820	633,042,234	67,837,797

Emissions footprint (tCO ₂ -e)	700,880
Scope 2 emissions (tCO ₂ -e)	633,042
Scope 3 emissions (tCO ₂ -e)	67,838

Climate Active carbon neutral electricity product summary

Carbon neutral electricity offset by Climate Active product	Activity Data (kWh)	Emissions (kgCO ₂ -e)
N/A	0	0

Climate Active carbon neutral electricity is not renewable electricity. The emissions have been offset by another Climate Active member through their product certification.



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.

No emission sources in Meridian Energy's electricity product boundary were non-quantified in CY2021.

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
N/A	N/A	N/A	N/A	N/A

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).

No emission sources in Meridian Energy's electricity product boundary were excluded in CY2021.

	No actual data	No projected data	Immaterial
N/A	N/A	N/A	N/A



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.





