PUBLIC DISCLOSURE STATEMENT

MERIDIAN ENERGY AUSTRALIA

ORGANISATION CERTIFICATION
CY2021

Australian Government

Climate Active
Public Disclosure Statement

An Australian Government Initiative

NAME OF CERTIFIED ENTITY	Meridian Energy Australia
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

Australian Government
Department of Industry, Science, Energy and Resources

1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	1,505 tCO_2-e
CARBON OFFSETS USED	12.8% CERs, 87.2% VCUs
RENEWABLE ELECTRICITY	25.96%
TECHNICAL ASSESSMENT	11 November 2021 (CY2020 report) Pangolin Associates Next technical assessment due: CY2023 report

Contents

2. CARBON NEUTRAL INFORMATION

Description of certification

This Public Disclosure Statement (PDS) supports Meridian Energy Australia and Powershop's (ABN 41 154 914 075) certification under the Climate Active Carbon Neutral Standard for Organisations in relation to Meridian Energy Australia's corporate operations for the period 1 January 2021 – 31 December 2021. This PDS describes:

- All emissions associated with the operation of the business, except for the electricity and gas product sold by Powershop 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 business operations.

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 and electricity products: https://www.climateactive.org.au/buy-climate-active/certified-members/powershop.

Organisation description

Powershop Australia Pty Ltd has prepared this inventory based on the Climate Active Standard and its associated guidance documents. Based on an operational consolidation approach, the entities and sites included are:

- Meridian Energy Australia Pty Ltd;
- GSP Energy Pty Ltd (owns and operates 3 hydro power stations);
- Mt Mercer Windfarm Pty Ltd;
- Mt Millar Wind Farm Pty Ltd; and
- Powershop Australia Pty Ltd.

The Powershop retail business is certified under the Climate Active program for the electricity and gas products retailed to customers. The two 'Product' certifications have separate PDSs.

We understand that the PDS only relates to calendar year 2021 and therefore the organisational structure listed in the PDS is unchanged for that period. On 1 February 2022, Meridian Energy Limited (NZ listed company) sold its 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). In light of this, this will be Meridian Energy Australia's last organisational PDS and in future reporting periods Shell will incorporate Powershop retail organisation emissions within the current Product PDSs.

3. EMISSIONS BOUNDARY

Inside the emissions boundary

All emission sources listed in the emissions boundary are part of the carbon neutral claim.

Quantified emissions have been assessed as relevant and are quantified in the carbon inventory. This may include emissions that are not identified as arising due to the operations of the certified entity, however are **optionally included**.

Non-quantified emissions have been assessed as relevant and are captured within the emissions boundary, but are not measured (quantified) in the carbon inventory. All material emissions are accounted for through an uplift factor. Further detail is available at Appendix C.

Outside the emissions boundary

Excluded emissions are those that have been assessed as not relevant to an organisation's operations and are outside of its emissions boundary or are outside of the scope of the certification. These emissions are not part of the carbon neutral claim. Further detail is available at Appendix D.

Inside emissions boundary

Quantified

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

Non-quantified

N/A

Outside emission boundary

Excluded

N/A

Data management plan for non-quantified sources

N/A

4. EMISSIONS REDUCTIONS

Emissions reduction strategy

Meridian Energy Australia is not in a position to meet Climate Active's emissions reduction strategy requirements because on 1 February 2022, Meridian Energy Limited sold its Australian business to Shell. This is the last organisational certification as Shell will not be continuing organisation certification in future reporting periods and will incorporate retail organisation emissions within the current product certifications from calendar year 2022 onwards.

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

[1] Meridian Energy's Greenhouse Gas Emissions Inventory Report – FY21
[2] FY21 Meridian Climate Change Disclosure Report

values, how we behave, our strategy, and our stance on sustainability.

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**) and only invested in renewable energy generation. As at 2021 MEA operated 3 Hydro assets, 2 Wind assets in Australia generating more renewable energy than we sold to our Powershop customer 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 organisation 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

[3] Powershop internal draft strategic sustainability framework – May 2021

5. EMISSIONS SUMMARY

Emissions over time

Emissions since base year		
		Total tCO_2-e
Base year:	2014–15	272
Year 1:	2015–16	299
Year 2:	2016–17	305
Year 3:	2017-18 (18-month report)	1,757
Year 4:	CY2019	2,245
Year 5:	CY2020	2,252
Year 6:	CY2021	1,505

Significant changes in emissions

Emission source	Current year (tCO_2-e)	Previous year (tCO_2-e)	Reason for change
Scope 3 - Post 2004 Gasoline	91.25	1.76	Change in methodology: better visibility on the vehicle ownership of cars, meaning a perceived increase in rental and personal cars (scope 3 transport fuels) as well as a perceived decrease in scope 1 transport fuel use.
Total net electricity emissions (Market based)	559.39	826.14	Reduced winter electricity usage at the generation assets in VIC and NSW.
Advertising services	462.92	880.40	Reduced advertising activity in lead up to sale process.

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.

Organisation emissions summary

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

Emission category	Sum of Scope 1 (tCO_2-e)	Sum of Scope 2 (tCO_2-e)	Sum of Scope 3 (tCO_2-e)	Sum of total emissions (tCO_2-e)
Accommodation and facilities	0.00	0.00	2.27	2.27
Cleaning and Chemicals	0.00	0.00	14.96	14.96
Climate Active Carbon Neutral Products and Services	0.00	0.00	0.00	0.00
Construction Materials and Services	0.00	0.00	2.79	2.79
Electricity	0.00	559.39	0.00	559.39
Food	0.00	0.00	10.10	10.10
ICT services and equipment	0.00	0.00	41.08	41.08
Office equipment & supplies	0.00	0.00	0.22	0.22
Postage, courier and freight	0.00	0.00	4.59	4.59
Professional Services	0.00	0.00	511.54	511.54
Stationary Energy (gaseous fuels)	2.33	0.00	0.18	2.51
Stationary Energy (liquid fuels)	14.07	0.00	2.30	16.37
Synthetic Gases	0.00	0.00	52.81	52.81
Taxis	0.00	0.00	0.00	0.00
Transport (Air)	0.00	0.00	11.95	11.95
Transport (Land and Sea)	0.00	0.00	194.47	194.47
Waste	0.00	0.00	64.15	64.15
Water	0.00	0.00	0.48	0.48
Working from home	0.00	0.00	14.32	14.32
Total	**16.40**	**559.39**	**928.21**	**1504.003**

Uplift factors

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

No uplifts have been applied to the carbon inventory for this certification in this reporting period.

6. CARBON OFFSETS

Offsets retirement approach

In arrears		
1.	Total number of eligible offsets banked from last year's report	193
2.	Total emissions footprint to offset for this report (tCO_2-e)	1,505
3.	Total eligible offsets required for this report	1,312
4.	Total eligible offsets purchased and retired for this report	1,312
5.	Total eligible offsets banked to use toward next year's report	0

Co-benefits

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 capacity-building 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.

BAESA Project

The project activity reduces the emission of greenhouse gases (GHGs) through the use of renewable sources of energy and making use of clean technology, avoiding the generation of electricity via sources of fossils fuels with consequent emissions of CO_2, that would be generated if the project did not exist. The Project generates electricity through clean and renewable source and it contributes to attend the growing demand for electricity in Brazil, due to the country's economical and population growth, contributing, thus, to the environmental, social and economical sustainability, by increasing the participation of clean and renewable energy in relation to the country's total consumption of electricity. The installation of HPP Barra Grande provides the generation of enough electricity to the supply of 30% of the energetic demand of the state of Santa Catarina or 20% of the total energy consumed in the state of Rio Grande do Sul.

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 (%)
Central de Resíduos do Recreio Landfill Gas Project (CRRLGP)	CER	ANREU	24 April 2020	98,054,632 - 98,056,976	CP2	-	2,345	2,152	0	193	12.8%
BAESA Project	VCU	Verra	5 Oct 21	10448-216930887-217035888-VCS-VCU-1491-VER-BR-1-10-01012013-31122013-0	2013	-	105,002	38,743*	0[4]	1,312	87.2%
									Total offsets retired this report and used in this report	**1,505**	
									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
Certified Emissions Reductions (CERs)	193	12.8%
Verified Carbon Units (VCUs)	1,312	87.2%

** 38,743 offsets from the BAESA Project have been used in Meridian Energy's CY2021 gas certification.*

[4] The 64,937 remaining units from this project have been assigned as 'banked for future reporting periods' in the Powershop CY2021 gas product PDS.

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 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 location-based method does not allow for any claims of renewable electricity from grid-imported electricity usage.

Market-based method

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

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	56,392	0	7%
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)	140,873	0	19%
Residual Electricity	562,569	559,392	0%
Total grid electricity	**759,834**	**559,392**	**26%**
Total electricity consumed (grid + non grid)	**759,834**	**559,392**	**26%**
Electricity renewables	197,265	0	
Residual electricity	562,569	559,392	
Exported on-site generated electricity	**0**	**0**	
Emissions ($kgCO_2$-e)		559,392	

Total renewables (grid and non-grid)	**25.96%**
Mandatory	**18.54%**
Voluntary	**7.42%**
Behind the meter	**0.00%**
Residual electricity emissions footprint (tCO_2-e)	**559**

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

Location Based Approach Summary

Location Based Approach	Activity Data (kWh)	Scope 2 Emissions ($kgCO_2$-e)	Scope 3 Emissions ($kgCO_2$-e)
ACT	0	0	0
NSW	302,448	235,909	21,171
SA	75,693	22,708	5,299
VIC	381,694	347,341	38,169
QLD	0	0	0
NT	0	0	0
WA	0	0	0
TAS	0	0	0
Grid electricity (scope 2 and 3)	**759,834**	**605,958**	**64,639**
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	**759,834**	**605,958**	**64,639**

Emissions footprint (tCO_2-e)	**671**
Scope 2 emissions (tCO_2-e)	606
Scope 3 emissions (tCO_2-e)	65

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 relevant, 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 organisation 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

APPENDIX D: OUTSIDE EMISSIONS BOUNDARY

Excluded emission sources

The below emission sources have been assessed as not relevant to an organisation's or precinct's operations and are outside of its emissions boundary. These emissions are not part of the carbon neutral claim. Emission sources considered for relevance must be included within the certification boundary if they meet two of the five relevance criteria. Those which only meet one condition of the relevance test can be excluded from the certification boundary.

Emissions tested for relevance are detailed below against each of the following criteria:

1. **Size** The emissions from a particular source are likely to be large relative to the organisation's electricity, stationary energy and fuel emissions

2. **Influence** The responsible entity has the potential to influence the reduction of emissions from a particular source.

3. **Risk** The emissions from a particular source contribute to the organisation's greenhouse gas risk exposure.

4. **Stakeholders** Key stakeholders deem the emissions from a particular source are relevant.

5. **Outsourcing** The emissions are from outsourced activities previously undertaken within the organisation's boundary, or from outsourced activities typically undertaken within the boundary for comparable organisations.

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

Emission sources tested for relevance	(1) Size	(2) Influence	(3) Risk	(4) Stakeholders	(5) Outsourcing	Included in boundary?
N/A	N/A	N/A	N/A	N/A	N/A	N/A

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