National Carbon Offset Standard Carbon Neutral Program

Public Disclosure Summary



meridian

Meridian Energy Australia Group

Public Disclosure Summary

Certification: Organisation

Period: 1 July 2016 – 30 June 2017





Summary

Meridian Energy Australia Pty Ltd (*MEA*) has a proud heritage of harnessing our earth's energy in generating affordable electricity through the Mt Millar and Mt Mercer wind farms —enough to supply approximately 116,000 Australian households.¹ We are proud to say we are one of the largest companies in Australasia that is integrated to provide retail electricity and entirely renewable energy generation. Our company has made a conscious choice to invest in our children's future by not investing in polluting fossil fuel generation. We seek to drive community based investment in community based renewable energy products through Powershop's 'Your Neighbourhood Solar' and 'Your Community Energy' electricity products.

In Australia, MEA generates electricity from its own wind farms which is sold into the National Energy Market (**NEM**). We also retail electricity, bought from the NEM under the Powershop Australia Pty Ltd (**Powershop**) brand. This Public Disclosure Statement (**PDS**) supports MEA Group's Organisational accreditation under the National Carbon Offset Standard that covers Meridian's generation and corporate activities. It details for FY2017 the total of our existing emissions from this part of our business, how we define and measure those emissions and how we use our purchases of GreenPower and carbon offsets to reduce that impact.

The Powershop retail business is also accredited under the NCOS program for the electricity 'Product' retailed to customers - that is the electricity bought from the NEM and sold to retail customers. The Product accreditation has a separate PDS for the FY2017 period.

This accreditation at both an Organisational and Product level provides both MEA stakeholders and Powershop customer's assurance that they are supporting a better future through lower greenhouse gas emissions.

¹ Based on average household usage of 5 MWh per annum, Mt Mercer approx. 36,000 households and Mt Mercer approx. 80,000 households.



1. Organisation and Product Information

Table 1: Organisation and Product Information

Organisation Name	Meridian Energy Australia ²	
Name of the subject(s) of certification	Meridian Energy Australia Co	rporate Group
Type of certification (tick all applicable)	x Organisation □ Part of organisation	☐ Product/service ☐ Event
Reporting year period	1 st July 2016	30 th June 2017
Emissions in this reporting year	305 t CO₂-e (reduced to 0 t	CO ₂ -e by offsets)
Base year period	From 1 st July 2014	30 June 2015
Emissions in the previous year	299 t CO ₂ -e (reduced to 0 t	CO ₂ -e by offsets)

2. Description of Organisation Activities

The MEA group of companies undertakes Meridian Energy Limited's electricity generation, wholesale and retail activities in the Australian market.

There are four companies trading in this group that are sources of emissions:

- Meridian Energy Australia Pty Ltd;
- Mt Mercer Windfarm Pty Ltd;
- Mt Millar Wind Farm Pty Ltd; and
- Powershop Australia Pty Ltd.

The group also includes several special purpose and non-trading legal entities that do not generate emissions.

Further information about the MEA corporate structure can be found at appendices 1 & 2 and also at www.meridianenergy.com.au.

² Meridian Energy Australia comprises all companies incorporated in Australia which share a parent company with Meridian Energy Australia Pty Ltd.



3. Organisational & Geographic Boundary/ Scope & System Boundary

The organisational boundary determines the parameters for GHG reporting in the MEA Group GHG inventory. The boundaries were set with reference to the methodology described in the ISO14064-1 standard. The boundary encompasses the operations owned or controlled by MEA, its subsidiaries, and associate companies in the MEA Group.

3.1 Consolidation approach

MEA applies the operational control consolidation approach to the MEA Group emissions inventory. This consolidation approach allows us to focus on those emission sources over which we have control and can therefore implement management actions, consistent with MEA's corporate responsibility objectives.

Included in the consolidation are all the operational activities of Powershop, MEA's wholly owned electricity retailer. However, we have excluded from this organisational boundary the actual electricity bought and sold by Powershop to meet its customers' requirements as this is subject to its own NCOS Accreditation in the Product category.

The table in Appendix 1 sets out how each entity in the MEA Group is treated. Appendix 2 contains a diagram of the MEA Group corporate structure as at 30 June 2017, which is a subset of the broader Meridian Energy Limited (*MEL*) Corporate Group, our New Zealand based parent company.

For further information about the organisation please refer to the Meridian Energy Limited 2016 Annual Report which is available at www.meridianenergy.co.nz.

3.2 Defining MEA "facilities"

MEA's diverse activities and resulting emissions are categorised into "Facilities" in line with Annex A of ISO 14064-1 which requires that the data should be retained in its disaggregated form to aid transparency and to provide maximum flexibility in meeting a range of reporting requirements.

A facility is an operation which, by the nature of its processes or geography, can be separately accounted for. ISO 14064-1 defines a *Facility* as:

"a single installation, set of installations or production processes (stationary or mobile), which can be defined within a single geographical boundary, organizational unit or production process". ³

3.3 Defining the Individual components of the Facility

There are four trading entities which are sources of emissions in the MEA Group Facility. The MEA Group undertakes renewable electricity generation, wholesale and retail activities in Australia and employed an average of 57 full time employees (*FTE*) at end of FY2017. A summary of the activities of each of these entities is provided in Table 2. There are also a number of non-trading and special purpose entities in the MEA Group as described in Appendix 1.

³ ISO 14064-1, section 2.21 pg. 3



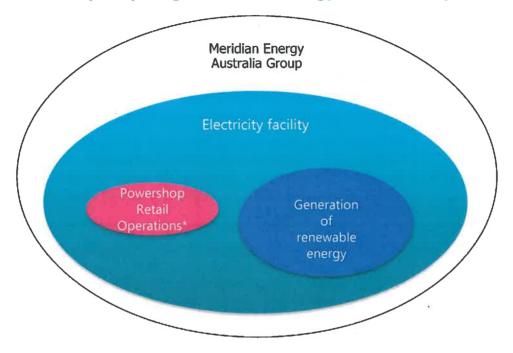
Table 2 - Meridian Energy Australia Facility — Operational Companies

Facility	Description
Meridian Energy Australia Pty Ltd	Meridian Energy Australia Pty Ltd provides corporate and wholesale market services to the MEA Group.
Mt Mercer Windfarm Pty Ltd	Mt Mercer Wind Farm Pty Ltd owns and operates the Mt Mercer Wind Farm which is located approximately 30kms south of Ballarat in Victoria. The wind farm can generate up to 400 GWh of renewable energy which is sufficient to meet the needs of about 80,000 typical households.
Mt Millar Wind Farm Pty Ltd	Mt Millar Wind Farm Pty Ltd owns and operates the Mt Millar Wind Farm which is located approximately 100kms southwest of Whyalla in South Australia. The wind farm can generate up to 180 GWh of renewable energy which is sufficient to meet the needs of about 36,000 typical households.
Powershop Australia Pty Ltd	Powershop Australia Pty Ltd operates the Powershop retail electricity business in Victoria, NSW and Queensland which has grown to include approximately 100,000 customers. Further information about Powershop can be found at www.powershop.com.au .



4. Diagram of the Boundary of the Subject of Certification

Figure 1: Facility comprising the Meridian Energy Australia Group



^{*}Excludes the purchase and sale of electricity for Powershop's customers' requirements which is the subject of a separate Product Accreditation application.



5. Purchase of GreenPower and Retirement of GreenPower Eligible Large-Scale Generation Certificates (LGCS)

MEL is an entirely renewable Australasian electricity generator which owns and operates renewable electricity assets (wind farms) in Australia which generate GreenPower accredited LGCs.

MEA purchased GreenPower from its retailer Powershop and surrendered Certified Emissions Reduction Certificates (*CER*). In future years MEA may continue to purchase GreenPower, voluntarily surrender eligible LGCs, surrender CERs, or a combination of each to offset its own emissions.

Table 3: GreenPower

Corporate office GreenPower electricity usage: 70 MWh.

Туре	Volume	Unit	t CO2-e	Status
GreenPower	70	MWh	64.4	Purchased

To calculate the emissions associated with distributing the electricity Powershop used the Australian grid emission factor 0.92.4

6. Purchase of NCOS Carbon Neutral Products

In the FY2017 reporting period Powershop purchased NCOS accredited Planet Ark paper for the office when at the time of ordering NCOS accredited paper was available.

In addition to the office paper, MEA / Powershop purchased 100% GreenPower electricity from the Powershop brand which is NCOS accredited for their electricity Product.

7. Total Carbon Footprint

Table 4 - Emissions in FY2017

Scope	Category	Emissions (t CO ₂ -e)
Direct Emissions	Stationary Combustion	3
(Scope 1)	Mobile combustion	144
Indirect Emissions (Scope 2)	Electricity consumption Net of GreenPower purchases	0

⁴ Table 41: Scope 2 and 3 emissions factors - consumption of purchased electricity by end users



	Fuel & energy related purchases or activities	54
Indirect Emissions (Scope 3)	Upstream transportation & distribution	0
	Business Travel and accommodation	103
Total Emissions (Scope 1, 2 & 3)		305
Surrender of CERs		398
Balance (Cr) or Db		(93)

8. Carbon Offset Purchases and Retirement for this Reporting Period

MEA will utilise NCOS eligible carbon offsets for off-setting all included Scope 1, Scope 2 and Scope 3 emissions constituting our group corporate emissions.

MEA has forward purchased carbon offsets prior to the end of the next reporting period and will true up prior to the end of each reporting period. Excess offsets will be banked for future use.

Offsets will also be purchased for use in all of our Australian electricity sales under the Powershop brand, which is separately described in our Powershop Carbon Neutral Electricity Product Public Disclosure Statement.

Only NCOS eligible carbon offsets will be utilised in this activity.

8.1 Offset Cancellation

Offsets surrendered for the FY2017 period were:

Table 5: CERs Voluntarily Surrendered for MEA 'Organisation'

Details of CERs Vo	oluntarily Surrendered	
Quantity	Serial numbers	Date of surrender
94	4,282,495 - 4,282,589	(FY16 surplus)
304	22,601,671 - 22,601,974	August 2017

Registry: Australian National Registry of Emissions Units (ANREU).



8.2 Surplus Cancelled Offsets

Surplus offsets from the 2017 period are to be carried forward into the next reporting period for future use.

Table 6: Surplus Offset Cancellations from FY2017 - banked for future use

Details of CERs Vo	luntarily Surrendered	
Quantity	Serial numbers	Date of surrender
93	4,282,496 - 4,282,589	Surplus from MEA offset FY16

Registry: Australian National Registry of Emissions Units (ANREU).

9. Emission Reduction Results

MEA set the following emission reduction targets in FY2016 for FY2017.

Target: Reduce air travel emissions per FTE to 1.8 tonnes of CO₂-e.

Result: Air travel emissions per FTE decreased to 1.31 tonnes of CO_2 -e per FTE – therefore exceeding emission reduction targets. Target: Reduce car travel (owned vehicles, contractors and taxi) related emissions to 2.7 tonnes of CO_2 -e per FTE – therefore exceeding emission reduction targets.

<u>Result</u>: Car travel emissions per FTE decreased to 2.5 tonnes of CO_2 -e – therefore exceeding emission reduction targets.

10. Emission Reduction Measures

On a year to year controllable basis, key targets for improved management are; business travel, car travel and electricity consumed in premises.

Air travel target: MEA is seeking to reduce air travel emissions per FTE to 1.28 tonnes of CO_2 -e.

<u>Car travel target:</u> MEA is seeking to reduce car travel emissions per FTE to 2.4 tonnes of CO_2 -e.

The MEA business will continue to surrender LGCs to comply with RET obligations and will continue to purchase 100% accredited GreenPower for the office. Both of the measures aim to reduce the emissions associated with operations.

In addition to offsetting all emissions associated with this organisational boundary, the Powershop retail arm encourages emission reductions through the following measures:

- Powershop's smartphone application and online portal is available free of charge for all Powershop customers. These tools allow customers to easily track their electricity usage and make informed decisions to reduce their electricity usage and therefore reduce emissions.
- Hepburn Wind is a partnership between Powershop and Hepburn Wind
 Community Project. The partnership began in late 2016 and the partnership



- means that MEA will assist in the management of the day-to-day operations of Hepburn Wind's two wind turbines. Powershop will also facilitate Hepburn Wind's interaction with the NEM enabling Hepburn Wind to sell electricity and Renewable Energy Certificates, delivering value to community shareholders.
- Your Neighbourhood Solar electricity product is a power pack available in Powershop's online store. This initiative gives Powershop customers the opportunity to support other Powershop customers with solar panels. When customers choose to purchase this pack they pay a small premium. The amounts raised as a result of customers paying the premium are pooled and redistributed to Powershop customers with solar systems. This is Powershop's first step toward peer-to-peer electricity trading.
- Your Community Energy electricity product is a power pack available in Powershop's online store. This initiative gives Powershop customers the chance to help raise funds for community renewable energy projects. When customers choose to purchase this pack they pay a small premium. The amounts raised as a result of customers paying the premium are pooled and distributed to community renewable energy projects.

11. Exclusions of emissions relating to the MEA Group Facility

The emission sources below have been identified and excluded from the GHG emissions inventory as they are considered not material to stakeholders, not material in the context of the inventory, and/or neither technically feasible nor cost effective to be quantified at the present time. The detailed work done by MEA in previous years to assess emissions impact in each category has determined the estimated % of each excluded category as a % of the total inventory.



Table 7: Meridian Energy Australia Exclusions

Scope	Category	GHG emissions	Reason for exclusion	% of category excluded	% of total est. inventory
1	Fugitive emissions	Fugitive emissions from fridges, air- conditioning systems and vehicle AC systems	Estimated to be <i>de minims</i> due to small number of domestic refrigeration appliances owned their relatively recent model and there being no recharges required in the reporting period. As for airconditioning, building management at our corporate office at 357 Collins street, Melbourne advised that they have not added any R410A to the base building plant during the reporting period.	100%	>0.01%
3	Downstream transportation and distribution	Electricity Transmission and Distribution Networks	Losses that produce GHG emissions in electricity Transmission and Distribution Networks are factored into the NGA emission factors used here to calculate GHG emissions from electricity sold, purchased and consumed.	Not applicable	Not applicable
3	Upstream transportation and distribution	Freight – courier packages and minor materials	As an online retailer of electricity Meridian Energy rarely has need to send material via courier and almost all postage is in electronic form estimated to be <i>de minims</i> .	100%	>0.1%
3	Purchased goods and services	Professional services, IT services and maintenance services.	Current service arrangements do not require the disclosure of the GHG emissions created by the service providers in providing service to our organisation, as such the data is unavailable. This will be reviewed for future reports.	Not applicable	Not applicable
3	Employee commuting	Employee commuting	Meridian does not provide parking at our corporate offices so almost all employees travel to work	Not applicable	Not applicable



	ES .		on public transport. The data for travel is not captured as it would be impractical and would not be cost effective compared to emissions which are estimated to be <i>de minimums</i> .		
3	Processing of sold products	Processing of sold products	No physical products sold.	Not applicable	Not applicable
3	Use of sold products	Use of sold products	No physical products sold.	Not applicable	Not applicable
3	Forklift	Gas to fuel forklift	The emissions associated with gas bottle replacement is minimal (0.01008 tCO ₂ -e)	100%	>0.01%
3	Office paper	Office supplies	The emissions associated with the use of office paper is immaterial to the overall emissions (0.43472 tCO ₂ -e)	100%	0.11%
3	Taxi	Emissions as a result of taxi trips.	The emissions associated with employee taxi travel is immaterial to overall emissions (0.00907 tCO ₂ -e)	100%	>0.01%
		Total %	excluded		0.14%

12. Declaration

To the best of my knowledge and having implemented the quality controls and standards required under the NCOS Carbon Neutral Program and made all appropriate inquiries, the information provided in this Public Disclosure Summary is true and correct.

Name:	Lynne Sutton
Signature:	Dotton.
Position:	General Counsel
Date:	15 March 2018



Appendix 1 – Corporate Group

Table 4 - Meridian Energy Australia Corporate Group

Company Name	Emissions Source	Legal structure	Economic Interest Held	Country	Operational Control	Comment
Three Rivers Holdings (No 2) Ltd	No (holding company)	Group company	NZ parent to Meridian Energy Australia Corporate Group	NZ	Yes	No activity, no emissions
Meridian Energy Australia Pty Ltd	Yes	Group company	100% via Three River Holdings (No2) Ltd	AUS	Yes	Included
Meridian Finco Pty Ltd	No	Group company	100% via Meridian Energy Australia Pty Ltd	AUS	Yes	No employees, no physical assets, no emissions. Trading counterparty only.
Meridian Energy Markets Pty Ltd	No (AFSL licensee company only)	Group company	100% via Meridian Energy Australia Pty Ltd	AUS	Yes	No activity, no emissions
Meridian Wind Monaro Range Holdings Pty Ltd	No (holding company)	Group company	100% via Three River Holdings (No2) Ltd	AUS	Yes	No activity, no emissions
Meridian Wind Monaro Range Pty Ltd	No(non- trading entity)	Group company	100% via Meridian Wind Monaro Range Holdings Pty Ltd	AUS	Yes	No activity, no emissions

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Company Name	Emissions Source	Legal structure	Economic Interest Held	Country	Operational Control	Comment
Mt Millar Wind Farm Pty Yes	Yes	Group company	100% via Meridian Wind Monaro Range Pty Ltd	AUS	Yes	Included
Meridian Australia Holdings Pty Ltd	No (holding company)	Group company	100% via Three River Holdings (No2) Ltd	AUS	Yes	No activity, no emissions
Meridian Wind Australia Holdings Pty Ltd	No(non- trading entity)	Group company	100% via Meridian Australia Holdings Pty Ltd	AUS	Yes	No activity, no emissions
Mt Mercer Windfarm Pty Ltd	Yes	Group company	100% via Meridian Wind Australia Holdings Pty Ltd	AUS	Yes	Included
Powershop Australia Pty Ltd	Yes	Group company	100% via Three River Holdings (No2) Ltd	AUS	Yes	Included