



# National Carbon Offset Standard Carbon Neutral Program Public Disclosure Summary



Powershop Australia Pty Ltd

## **Public Disclosure Summary**

**Certification:** Gas Product

**Period:** 1 May 2018 – 31 December 2018

## Introduction

Powershop Australia Pty Ltd (**Powershop**) is an online retailer who has been supporting renewable energy and driving innovation in the energy market since we launched in 2014. We have proudly supported renewable energy and innovation through initiatives such as the:

- ‘Your Community Energy’ powerpack – this powerpack (available in the shop) supports community based projects by pooling together the premium component of the purchase cost and allocating that cash to a community project. As of April 2018 Powershop customers had contributed about \$305,000.<sup>1</sup>
- ‘Curb Your Power’ program – this is our demand response program designed to reward Powershop customers who reduce demand on the grid at peak times.<sup>2</sup>
- ‘Grid Impact’ – this is our Virtual Power Plant (VPP) program with Reposit Power<sup>3</sup> whereby Powershop registered customers are guaranteed GridCredits® payments for letting Powershop activate their solar batteries at certain times.<sup>4</sup>

Powershop is the retail arm of the Meridian Energy Australia group of companies (**MEA**). MEA owns and operates two wind farms and three hydro power stations in Australia:

- Mt Millar Wind Farm is located on the Eyre Peninsula in South;
- Mt Mercer Wind Farm is located 30km south of Ballarat in Victoria;
- Hume hydro is located about 20km upstream from Albury-Wodonga in New South Wales;
- Burrinjuck hydro is located in New South Wales about 100km from Canberra; and
- Keepit hydro is located in northern New South Wales about 60km from Tamworth.

This Public Disclosure Statement (**PDS**) supports Powershop’s retail gas product certification under the National Carbon Offset Standard (**NCOS**), Carbon Neutral Program. While this gas product certification is based on Victorian customers, Powershop may expand its retail gas operations into other states in the future. Any expansion will be captured in future reporting periods and certified as carbon neutral. This PDS is our base reporting period for retail gas and details:

- forecast gas volumes and emissions;
- how we define and measure these emissions; and
- how we purchase and surrender Carbon Emissions Reduction (**CER**) certificates to offset the impact of our customers gas usage.

<sup>1</sup> <https://www.powershop.com.au/your-community-energy/>

<sup>2</sup> <https://www.powershop.com.au/demand-response-curb-your-power/>

<sup>3</sup> <https://repositpower.com/>

<sup>4</sup> <https://www.powershop.com.au/join-grid-impact/>

\* Based on an average household usage of 5MWh p.a.

## 1. Organisation and Emission details

Table 1: Organisation and Product Information

<b>Organisation Name</b>	Powershop Australia Pty Ltd	
<b>Name of certification</b>	Powershop Carbon Neutral Gas	
<b>Type of certification (tick all applicable)</b>	<input type="checkbox"/> Organisation <input type="checkbox"/> Part of organisation	<input checked="" type="checkbox"/> Product/service <input type="checkbox"/> Event
<b>Reporting year period</b>	1 May 2018	31 December 2018
<b>Emissions in this reporting year<sup>5</sup></b>	Tonnes of CO <sub>2</sub> e Total Emissions: 10,323 Total Offsets: 10,423 Net Emissions: (100)	
<b>Certification</b>	This is the base reporting period for our gas product.	

<sup>5</sup> Base reporting period is based off forecast gas volumes. Reconciliation to be conducted 2019 reporting period.

## 1. Base Reporting Period

The purpose of this PDS is to set the base reporting period for Powershop's retail gas product. This PDS is:

- using forecast gas sales volume to estimate the tonnes of carbon dioxide equivalent ( $tCO_2-e$ ) per gigajoule ( $GJ$ ) of gas supplied to Powershop customers; and
- detailing the purchase and surrender of CER's used to bring the forecast emissions to zero for this base reporting period.

Following this reporting period, 1 May 2018 – 31 December 2018 Powershop will conduct a full reconciliation and true-up of forecast gas sales volume versus actual gas sales volume and make the necessary CER adjustments. Specifically, if Powershop underestimated gas sales volume Powershop will surrender additional CER's and conversely if Powershop overestimate's gas sales volume any surplus CER's will be used in the 2019 report or will be banked for future use. This base reporting period and subsequent reconciliation will be audited for transparency and accuracy.

To determine Powershop's gas load for this period Powershop forecast the:

- number of gas customer acquired for the period; and
- average gas consumption based on seasonal factors for the acquired customers.

Following this base reporting period, Powershop's gas product reporting will be reset to calendar year reporting. The 1 January 2019 – 31 December 2019 reporting period will be the first reporting period where Powershop has a full years' worth of sales data available.

## 2. Description of Organisation Activities

Powershop's retail gas 'product' certification forms part of our continuing commitment to the Carbon Neutral Programs; National Carbon Offset Standard ( $NCOS$ ).<sup>6</sup> Powershop currently holds a certification for its electricity 'product' and MEA holds an 'organisation' certification - which covers our; head office, generation sites, flights and so forth.

This PDS relates specifically to Powershop's gas 'product' that is created by Powershop when it buys gas from the market and on-sells that gas to retail customers in Victoria under the Powershop brand.

Further information about Powershop can be found at [www.powershop.com.au](http://www.powershop.com.au)

Further information about MEA can be found at [www.meridianenergy.com.au](http://www.meridianenergy.com.au).

## 3. Scope and System Boundary

Powershop retail gas is bought from the Declared Wholesale Gas Market ( $DWGM$ ) and is then sold to residential and business customers in Victoria. In calculating the greenhouse gas ( $GHG$ ) emissions associated with retailing gas Powershop has applied Scope 1 and Scope 3 emission factors to the forecast gas load to determine the emissions for this base reporting period.

Powershop is applying Scope 1 and Scope 3 emission factors to cover the entire fuel cycle. Despite Powershop not producing gas, Powershop is applying Scope 1 emission factors in order to take responsibility for Powershop customers' onsite gas usage (i.e. the combustion

<sup>6</sup> <http://www.environment.gov.au/climate-change/government/carbon-neutral/ncos>

of gas at their home or business for heating or cooking). Powershop is also applying Scope 3 emissions factors in order to calculate the emissions associated with delivering gas to a customer's property. For the purposes of this report Scope 1 emissions will be referenced as Scope 3 emissions.

#### 4. Carbon Emission Reduction Certificates

Powershop has surrendered CER's upfront based on forecast gas volume to ensure its retail gas product is carbon neutral from day one. Each CER represents one tCO<sub>2</sub>-e. The details of the CER's surrendered are set out in the following tables.

##### Type 2: CERs Voluntarily Surrendered for Powershop Gas Product

Details of CERs voluntarily Surrendered		
Quantity	Serial number	Date of surrender
10,423	10,468,666 – 10,479,088	April 2018

Table 3: CER Surplus

Details of CER surplus		
Quantity	Serial numbers	Date of surrender
100	10,478,988 -10,479,088	2018 surplus

Table 4: Powershop Carbon Offset Summary – Gas Product

Carbon Neutral Summary FY2016-17			
Emissions	GJ	tCO <sub>2</sub> -e	Total tCO <sub>2</sub> -e
Scope 3	186,243	9,597	
Scope 3	186,243	726	
Emissions total			10,323
CER offsets total		10,423	
tCO <sub>2</sub> -e (Cr)/ Db			(100)

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

#### 5. Purchase of NCOS Carbon Neutral Products

The purchase of carbon neutral products is reported at the MEA group level as part of MEA's organisation certification.

#### 6. Total Carbon Footprint

The total gas sold is based on forecast customer gas usage.

The emissions from the gas purchased by Powershop and sold to customers is categorised as Scope 1 and Scope 3 emissions:

**Scope 1 emissions** include all direct greenhouse gas emissions from sources that are within the responsible entity's operational control.



**Scope 3 emissions:** are all indirect emissions that occur as a result of the attributable processes of the product or service, but occur from sources outside the responsible entity's operational control.<sup>7</sup>

The tCO<sub>2</sub>-e produced by the purchase and on-sale of gas is calculated by:

- 1) calculating the volume GJ of gas purchased by Powershop customers in Victoria as shown on AEMO invoices;
- 2) Scope 1 emissions are the calculated by multiplying the gas volume (GJ) by the relevant emission factor for Victoria as shown in the National Greenhouse Accounts Factors (2017) (the **NGA Factors**) at: Table 2: Emission factors for the consumption of natural gas; and
- 3) Scope 3 emissions are the calculated by multiplying the gas volume (GJ) by the relevant emission factor for Victoria as shown in the NGA Factors (2017) at: Table 38: Scope 3 emission factors – natural gas for a product that is not ethane (inclusive of coal seam gas); then
- 4) the total of step 2) and 3) multiplications is the total of tCO<sub>2</sub>-e for the Powershop gas product; finally
- 5) CERs are surrendered to offset the above total tCO<sub>2</sub> –e attributable to the sale of gas to Powershop customers.

The NGA Factors are an appropriate source for emissions calculation because:

- NGA is listed as an appropriate source of calculations under the National Carbon Offset Standard;
- NGA is published by the Department of Environment and Energy;
- the emissions analysis within the NGA covers both electricity and gas; production, distribution, use and then the end of life activities associated with decommissioning, dismantling and recycling at the facility; and
- the methods used to generate the default factors are consistent with international guidelines and are subject to international expert review each year.

Below is a copy of the relevant tables from the NGA Factors document that sets out the calculations for determining Scope 1 and Scope 3 emissions:

**Table 5: Emission factors for the consumption of natural gas<sup>8</sup>**

Powershop has used the following factors to determine its scope 1 emissions.

Fuel combusted	Emission factor kg CO <sub>2</sub> -e/GJ		
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O
Natural gas distributed in a pipeline	51.4	0.1	0.03

**Table 6: Scope 3 emission factors – natural gas for a product that is not ethane (inclusive of coal seam gas)<sup>9</sup>**

State	Metro emission factor: kg CO <sub>2</sub> -e /GJ
Victoria	3.9

<sup>7</sup> National Carbon Offset Standard for Products and Services.

<sup>8</sup> NGA Factors: Table 2: Emission factors for the consumption of natural gas

<sup>9</sup> NGA Factor: Table 38: Scope 3 emission factors – natural gas for a product that is not ethane (inclusive of coal seam gas)



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Table 7: Emissions to be offset by CERs from the Powershop Retail Gas Product (Quantification)

Scope	Emission source	Source of activity data	Methodology reference	Emission factor (kg CO <sub>2</sub> -e/GJ)	Activity data	Unit	t CO <sub>2</sub> -e	
3	Gas purchased from the DWGM and on-sold to Powershop's Victorian customers. These emissions are attributable to Powershop customer's gas usage.	Powershop forecast gas sales volume	<p>NGA Factors – July 2017 Table 2: Emission factors for the consumption of natural gas - Victoria.</p> <p>Powershop has forecast the purchase of a total of 186,243 GJ's of gas from the DWGM to sell to Victorian customers in the 1 May 2018 – 31 December 2018 certification period.</p>	<p>CO<sub>2</sub>: 51.4 CH<sub>4</sub>: 0.1 N<sub>2</sub>O: 0.03</p>	186,243	GJ	9,597	
3	Gas purchased from the DWGM and sold to Powershop's Victorian customers. These emissions are attributable to the creation and distribution of gas to Powershop customers.	Powershop forecast gas sales volume	<p>NGA Factors – July 2017 Table 38: Scope 3 emission factors – natural gas for a product that is not ethane (inclusive of coal seam gas)</p> <p>Powershop has forecast the purchase of a total of 186,243 GJ's of gas from the DWGM to sell to Victorian customers in the 1 May 2018 – 31 December 2018 certification period.</p>	<p>Metro Victoria: 3.9</p>	186,243	GJ	726	
<b>Total Carbon footprint</b>								<b>10,323</b>

## 8. Emission Reduction Measures

The MEA group will continue to surrender large-scale generation certificates to comply with its Renewable Energy Target obligations and will continue to purchase 100% accredited GreenPower for the Powershop/ MEA head office in Melbourne.

Powershop 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.
- Powershop and community organisation Hepburn Wind have been working together since 2016. MEA assists in the management of the day-to-day operations of Hepburn Wind's two wind turbines. MEA also facilitate Hepburn Wind's interaction with the National Electricity Market which enables Hepburn Wind to sell electricity and Renewable Energy Certificates which delivers value to community shareholders.
- 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 the premium are pooled and distributed to community renewable energy projects.
- Curb Your Power is our demand response program designed to reward Powershop customers who reduce demand on the grid at peak times.<sup>10</sup>
- Grid Impact is our Virtual Power Plant (VPP) program with Reposit Power<sup>11</sup> whereby Powershop registered customers are guaranteed GridCredits® payments for letting Powershop activate their solar batteries at certain times.<sup>12</sup>

## 9. Marketing and Communication of Carbon Neutral Certification

As this PDS relates to Powershop's base reporting period where we have offset emissions upfront, Powershop is yet to use the NCOS trademark in communications in relation to gas.

Use of the NCOS trademark will continue to be captured in a register as it is for our existing electricity and organisation certifications. This register is maintained by Powershop's marketing team.

<sup>10</sup> <https://www.powershop.com.au/demand-response-curb-your-power/>

<sup>11</sup> <https://repositpower.com/>

<sup>12</sup> <https://www.powershop.com.au/join-grid-impact/>

\* Based on an average household usage of 5MWh p.a.



For completeness we have detailed our use of the NCOS trademark for our electricity product:

Powershop customers Account Review (electricity bill):

**Carbon emissions offset**

Powershop has fully offset all the electricity we supply at no extra cost to you. Because the increase in CO2 levels (greenhouse gasses) in the atmosphere is a global problem, Powershop has chosen to use Certified Emissions Reduction units to achieve carbon neutrality.

More information can be found here: [The What, Why and How of carbon offsetting at Powershop](#)



0.28829 tonnes\*  
For the period 19 Jul – 20 Aug



Your energy usage is certified 100% carbon neutral under the Australian Government's Carbon Neutral Program.

\* In addition, if you purchase our 100% GreenPower product, you are also supporting the development and promotion of renewable energy in Australia. Your mum would be proud.

Powershop website – Environment & Community page:

## Powershop and Renewable Energy

Ranked Australia's greenest power company by Greenpeace for two years running and backed by Meridian Energy, Australasia's largest 100% renewable generator, Powershop is a modern electricity provider passionate about the future of renewable energy in Australia.

- Renewable Generation
- Community Energy
- GreenPower
- Energy Efficiency
- Carbon Neutral**

**Carbon Neutral**



As a Powershop customer, all of your energy usage is certified carbon neutral at no extra cost.

Meridian Energy Australia, one of our group companies, has been certified carbon neutral against the requirements of the National Carbon Offset Standard (NCOS) by the Australian Government. Although it's a bit of a mouthful, as the first power company to be accredited in Australia, we're chuffed.

Meridian Energy Australia, Powershop, and all of our operations are certified carbon offset under the NCOS benchmark. But importantly for our customers, the NCOS accreditation applies to the electricity we sell as well.

Use in digital marketing:

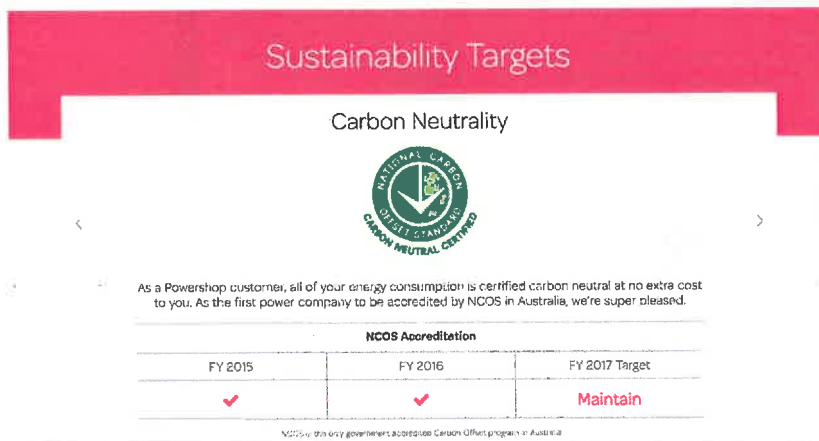
Referenced in our pricing statements:



**Carbon Neutrality**

We offset all of the carbon associated with our own operations and our customers' electricity usage drawn from the National Electricity Market (NEM), and we have been certified carbon neutral under the Australian Government's National Carbon Offset Standard (NCOS) program. So if you're a Powershop customer all your energy usage is certified 100% carbon neutral – at no extra cost.

Powershop website – Sustainability page:



**Sustainability Targets**

**Carbon Neutrality**

As a Powershop customer, all of your energy consumption is certified carbon neutral at no extra cost to you. As the first power company to be accredited by NCOS in Australia, we're super pleased.

NCOS Accreditation		
FY 2015	FY 2016	FY 2017 Target
✓	✓	Maintain

NCOS is the only government-backed Carbon Offset program in Australia.

Use in website footer banner:

We're an electricity company, but one you'll like.



100% carbon neutral at no extra cost to our customers  
[Learn more >](#)



We love our customers and they love us  
[Learn more >](#)




Greenpeace Green Electricity Guide, 2014 & 2015  
[Learn more >](#)



## 10. 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.

<b>Name of Signatory</b>	Lynne Sutton
<b>Signature:</b>	
<b>Position:</b>	General Counsel & Company Secretary
<b>Date</b>	17 May 2018

