

# EnergyAustralia

## Public Disclosure Summary Carbon Neutral Program

1 January 2018 – 31 December 2018



An Australian Government Initiative

**EnergyAustralia**

LIGHT THE WAY

# Overview

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## Declaration

To the best of my knowledge, the information provided in this Public Disclosure Summary is true and correct and meets the requirements of the National Carbon Offset Standard Carbon Neutral Program.



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Customer Executive, EnergyAustralia

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# Organisation and product details

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Name of certified entity	EnergyAustralia Pty Ltd
Name of certified product	Carbon neutral electricity product
Carbon neutral certification category	Product
Date of most recent external verification/audit	Reporting period 1 January 2018 – 31 December 2018
Auditor	PwC

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# 1. Carbon neutral information

## 1A. Introduction

EnergyAustralia is one of Australia's largest energy companies, providing gas and electricity to approximately 2.6 million household and business customer accounts in New South Wales, Victoria, Queensland, South Australia and the Australian Capital Territory. EnergyAustralia owns and operates a portfolio of energy generation across Australia, including coal, gas and wind assets with control of over 4,500MW of generation in the National Electricity Market (NEM).

EnergyAustralia is offsetting carbon emissions from its retail electricity product offering. This involves offsetting greenhouse gas emissions associated with the electricity sourced from the

National Electricity Market (NEM) and delivered to the point of consumption (or customer meter) for customers who opt-in.

The functional unit relevant to this product (or activity) is megawatt hours (MWh). Consumption of the product by customers is measured as MWh per year.

This inventory has been prepared based on the National Carbon Offset Standard.

The greenhouse gases considered within the inventory are carbon dioxide, nitrous oxide, methane and relevant refrigerants.



## 1B. Emission sources within certification boundary for the carbon neutral electricity product (Go Neutral Electricity Product)

### Quantified sources

The emission sources included within the boundary are outlined below in the system boundary (1C).

### Excluded sources

As a retailer of electricity products, EnergyAustralia purchases electricity from the national wholesale electricity market and sells it to customers in Victoria, New South Wales, the Australian Capital Territory, Queensland and South Australia. The greenhouse gas emissions being measured for the purposes of this application are those associated with EnergyAustralia's wholesale electricity purchases for sale to its customer base (the end-users in this case). Therefore EnergyAustralia's electricity generation activities (and associated greenhouse gas emissions) are not relevant to this application.

## 1C. Diagram of the certification boundary

Figure 1 represents a greenhouse gas emissions boundary consistent with the requisite life cycle assessment (LCA) approach for a final electricity product consumed by an end-user. The boundary for carbon neutral products and the boundary for all electricity products have been clearly delineated as follows:

- the solid green line — represents the boundary for the carbon neutral product; and
- the dashed green line - - - represents the boundary for all electricity products

The relevant stages of the final electricity product life cycle are:

**Stage 1: Electricity generation sector** – which includes scope 2 and 3 greenhouse gas emissions created from:

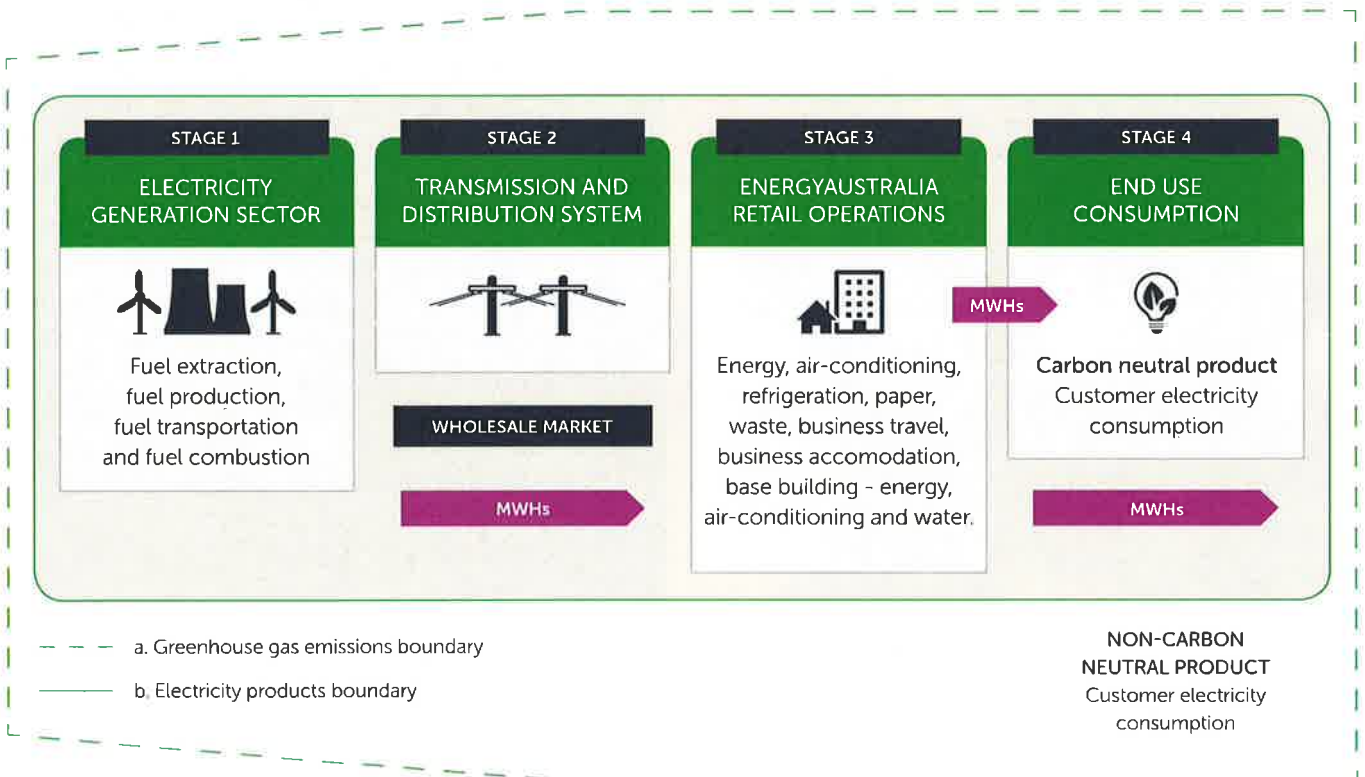
- extraction of fuels to generate electricity;
- production of fuels to generate electricity;
- transport of fuels to generate electricity; and
- combustion of fuels to generate electricity.

**Stage 2: Transmission and distribution system** – which includes scope 3 greenhouse gas emissions created from electricity lost in delivery from the point of generation to the point of consumption (customer meter).

**Stage 3: EA retail operation** – which includes 'organisation' scope 1, 2 & 3 greenhouse gas emissions as they relate to the retailing operations required to sell electricity products to customers:

- office energy consumption (electricity & gas);
- office air conditioning;
- office refrigeration;
- office paper consumption;
- office waste consumption;
- business travel;
- business accommodation;
- base building energy consumption (electricity & gas);
- base building water consumption; and
- base building air conditioning.

Figure 1. Life cycle assessment (LCA) approach for a final electricity product consumed by an end-user.



## 2. Emissions reduction measures

### 2A. Emissions over time

Table 1. Emissions since base year (tonnes CO2-e)

Scope	Base Year: 2015 <sup>1</sup>	Year 1: 2016-2017 <sup>2</sup>	Current year Year 2: 2018 <sup>2</sup>
1	5	0	0
2	4,639	23	87
3	22,306,619	172,983	546,084
<b>Total</b>	<b>22,311,266</b>	<b>173,006</b>	<b>546,171</b>

### 2B. Emissions reduction strategy

EnergyAustralia believes all Australians should have access to reliable, affordable and clean energy. The decisions we make every day reflect this goal and our Climate Strategy defines our responsibilities, and ways to measure and manage the impact of our operations on the climate. In 2017 our parent company China Light and Power (CLP) re-launched its Climate Vision to 2050 setting a goal to reduce its emission intensity by 82% by 2050 on 2007 levels, equivalent to 0.15kgCO<sub>2</sub>/kWh. As one of CLP's subsidiary companies, EnergyAustralia contributes to this goal by striving to reduce our emissions intensity by enabling our customers to offset their carbon emissions, improving the efficiency of our coal and gas-fired power stations, investing in renewable energy and energy management products for homes and businesses.

### 2C. Emissions reduction actions

EnergyAustralia has proudly invested more than \$1 billion in renewable energy and underpin over 12 per cent of the large-scale wind farms in the NEM. EnergyAustralia has the rights to 460 MW of wind farm electricity capacity, which is enough energy to power 280,000 homes<sup>3</sup>. We have also invested in a 60 MW solar farm at Gannawarra. We also give consumers the opportunity to support renewable energy through the

purchase of GreenPower or installing solar PV on their homes or businesses. At the beginning of 2018 EnergyAustralia had over 32,000 GreenPower customers and over 180,000 electricity customers with solar.

EnergyAustralia offers all of its customers energy efficiency advice via the use of its Energy Tracker template (available on-line) and sells, installs, repairs solar power and battery storage systems for its residential and commercial customers in selected areas of Victoria, New South Wales, South Australia and Queensland.

<sup>1</sup> Includes greenhouse gas emissions in relation to full electricity customer base for 2015.

<sup>2</sup> Includes greenhouse gas emissions attributable to electricity consumed by customers who have voluntarily opted in to the Go Neutral Electricity Product or automatically opted in to the Go Neutral Electricity Product by virtue of the electricity product or plan the customer is provided electricity under.

<sup>3</sup> Based on typical household consumption of 5 MWh per year.

### 3. Emissions summary

Table 2 represents a summary of EnergyAustralia's emissions by source based on the 2015 base year calculations.

**Table 2. Go Neutral electricity product emissions summary**

Scope	Emission source	t CO <sub>2</sub> -e
Greenhouse gas emissions attributable to Stage 3, EnergyAustralia retail operations <sup>1</sup>		
1	Refrigeration	<0.1
1	Air conditioning	5
2	Electricity (Australia)	3,271
2	Electricity (Manila)	405
2	Electricity (India)	963
2	Electricity (New Zealand)	4
3	Paper	9
3	Waste	1,247
3	Electricity (Australia)	2,172
3	Electricity (Manila)	225
3	Electricity (India)	535
3	Electricity (New Zealand)	2
3	Gas	235
3	Water	314
3	Air conditioning	40
3	Motor Vehicle	60
3	Taxi	12
3	Overseas air travel	1,161
3	Trans-Tasman air travel	1
3	Domestic air travel	321
3	Overseas accommodation	161
3	Domestic accommodation	115
Total Retail emissions <sup>1</sup>		11,257

<sup>1</sup> Greenhouse gas emissions attributable to Stage 3, EnergyAustralia retail operations are estimated based on the analysis of greenhouse gas emissions undertaken in relation to the base year 2015.

Retail emissions attributable to the Go Neutral electricity product <sup>2</sup>	209
3 Stage 1 and 2 greenhouse gas emissions attributable to Go Neutral electricity product <sup>3</sup>	545,962
<b>Total Gross Emissions attributable to Go Neutral electricity product</b>	<b>546,171</b>
<b>Total Net Emissions attributable to Go Neutral electricity product</b>	<b>546,171</b>

## 4. Carbon offsets

### 4A. Offsets summary

EnergyAustralia utilise offset units to offset the Total Net Emissions attributable to the Go Neutral electricity product.

A summary of the offsets purchased and surrendered during the period is included below:

**Table 3. Offsets Summary**

Offset type and registry	Year retired	Quantity	Serial numbers
<b>Australia Revegetation:</b> Non-Kyoto Australian Carbon Credit Units (NKACCUs) in EA's account in the Australian National Registry of Emission Units (ANREU)..	2019	6,270	3,655,177,717-3,655,180,966 3,655,180,967-3,655,183,986
<b>Australia Savanna Burning:</b> Australian Carbon Credit Units (ACCUs) in EA's account in the ANREU.	2019	14,860	3,769,405,120-3,769,419,979 116,836,771-116,844,419
<b>Brazil Solid Waste Management:</b> Certified Emission Reductions (CERs) in EA's account in the ANREU.	2019	88,271	116,885,010-116,886,781 116,869,931-116,884,430 125,891,172-125,955,521
<b>China Wind:</b> Certified Emission Reductions (CERs) in EA's account in the ANREU.	2019	297,923	1,057,900,874-1,057,948,796 1,057,535,048-1,057,785,047
<b>India Wind:</b> Certified Emission Reductions (CERs) in EA's account with the ANREU.	2019	114,504	251,030,597-251,145,100
<b>India Lighting:</b> Certified Emission Reductions (CERs) in EA's account with the ANREU.	2019	24,343	205,269,378-205,278,720 210,661,499-210,676,498
<b>Total offset units retired</b>			546,171
<b>Net emissions after offsetting</b>			0
<b>Total offsets banked for use future years</b>			0

<sup>2</sup> The proportion of greenhouse gas emissions in relation to Stage 3, EnergyAustralia retail operations attributable to the Go Neutral electricity product for the period is calculated utilising electricity sales as a percentage of total gas and electricity sales by Energy Australia during the period, then multiplied by the percentage of total electricity purchased (MWh) attributable to customers opted in for the Go Neutral product from the date of the opt in up until the date of the opt out or termination as an EnergyAustralia customer.

<sup>3</sup> Greenhouse gas emissions attributable to electricity consumed by customers who have voluntarily opted in to the Go Neutral Electricity Product and have been customer for greater than 6 months or are automatically opted in to the Go Neutral Electricity Product by virtue of the electricity product or plan the customer is provided electricity under.

## 4B. Offsets purchasing and retirement strategy

Offsets are purchased periodically and retired upon completion of NCOS reporting on an annual basis.

## 4C. Offset projects (Co-benefits)

EnergyAustralia has purchased certificates for projects from both Australian and International projects. These include Daan Laifu Wind Farm Phase IV Project, Caixa Econonimca Federal Solid Waste Management and Carbon Finance Project, CFL lighting scheme – Bachat Lamp Yojana, Urisino Regenerative Ecosystem Project and the ALFA (NT) Savanna Fire Management Project.

The ALFA (NT) Savanna Fire Management Project involves the application of strategic, lower intensity early dry season fire management to reduce the risk and extent of higher intensity fires that occur mostly in the late dry season. The Indigenous Ranger groups formed the entity Arnhem Land Fire Abatement (NT) Ltd. ALFA (NT) Ltd is a company owned exclusively by Aboriginal people with custodial responsibility for those parts of Arnhem Land under active bushfire management.

The co-benefits of this project include Aboriginal people being supported in returning to and remaining on their country. Formal ranger programs are providing crucial skills and training, applicable also outside the project. Bio-diversity in the areas covered, some of it critically endangered, is protected. The knowledge of old people is preserved and transferred to younger generations. Aboriginal languages are maintained and participants in land management activity enjoy higher standards of mental and physical health.

# 5. Use of trade mark

Table 4. Trade mark register

Where used	Logo type
<a href="https://www.energyaustralia.com.au/home/bills-and-accounts/go-carbon-neutral#/existing-customer">https://www.energyaustralia.com.au/home/bills-and-accounts/go-carbon-neutral#/existing-customer</a>	Certified product





