



PUBLIC DISCLOSURE STATEMENT

**ORIGIN ENERGY LIMITED
ELECTRICITY
PRODUCT CERTIFICATION
CY2021 (projected)**

Australian Government
Climate Active
Public Disclosure Statement



An Australian Government Initiative



NAME OF CERTIFIED ENTITY: Origin Energy Limited

REPORTING PERIOD: 1 January 2021 – 31 December 2021 (projected)

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.

Signature		Date	16.07.2021
Name of Signatory Duncan Permezel			
Position of Signatory General Manager, Retail Sales & Marketing			



Australian Government
Department of Industry, Science,
Energy and Resources

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Version number February 2021



1. CARBON NEUTRAL INFORMATION

Description of certification

This Public Disclosure Statement (PDS) relates to Origin Energy's application for carbon neutral certification of an Electricity Product under Climate Active. This product will be sold as "Origin Go Zero". Carbon neutral electricity will be offered as an opt-in product to electricity customers across all current and future market segments, including residential, small business, commercial and industrial customers, and consumers of electricity for electric vehicles.

Origin Go Zero will allow customers to offset the greenhouse gas emissions associated with the production, transmission, distribution, and consumption of electricity.

The emissions reported in this PDS are for CY2021, the base and first year of certification. CY2021 data is estimated using forecast sales from various market segments. Total emissions for Origin Go Zero are estimated to be 55,265 t CO₂-e in CY2021. This number may vary depending on take-up of the product.

The functional unit is Megawatt hours (MWh) of electricity consumed by opt-in customers, with emissions expressed as tonnes of CO₂-e per MWh.

"Carbon neutral certified products tackle a key component of Origin's scope 3 emissions and are the latest addition to our comprehensive climate change commitments."

Organisation description

Origin is an integrated energy company with a rich heritage in energy exploration, production, power generation and retailing. We are one of the leading providers of electricity, natural gas, LPG and solar to homes and businesses throughout Australia and the Pacific. As of June 2020, Origin had 4.2 million customer accounts. Origin is the upstream operator and 37.5 per cent shareholder of Australia Pacific LNG, which supplies natural gas to domestic markets and exports LNG.

Origin owns, operates and contracts an electricity generation portfolio of more than 7,400 MW across Australia, using a range of energy sources from traditional fuels like coal and natural gas, to renewables and storage such as solar, pumped hydro and wind.

Over the past three years, Origin has built a leading in-house data and analytics capability to enable integration of higher volumes of distributed capacity in the network. Origin's Virtual Power Plant connects more than 162 MW of distributed energy assets and IoT devices, using cutting-edge technology to remotely link small energy resources like solar batteries into a web-based network. In August 2020, Origin also launched Australia's first mass market demand response program Spike, where customers can reduce their energy usage by small amounts during peak periods for rewards. More than 50,000 customers have joined to date, earning than \$1 million in rewards.

Our purpose of 'getting energy right for our customers, community and planet' underpins everything we do, and we understand our responsibility to our stakeholders. We are committed to providing energy that is reliable, affordable, and sustainable for our customers and respect the rights and interests of the communities in which we operate and consult with them to understand and manage our impact.

We unequivocally support the United Nations Framework Convention on Climate Change and the Paris Agreement, and actions consistent with maintaining the average global temperature increase to well below 2°C compared with pre-industrial levels, and pursuing efforts to further limit this increase to 1.5°C.

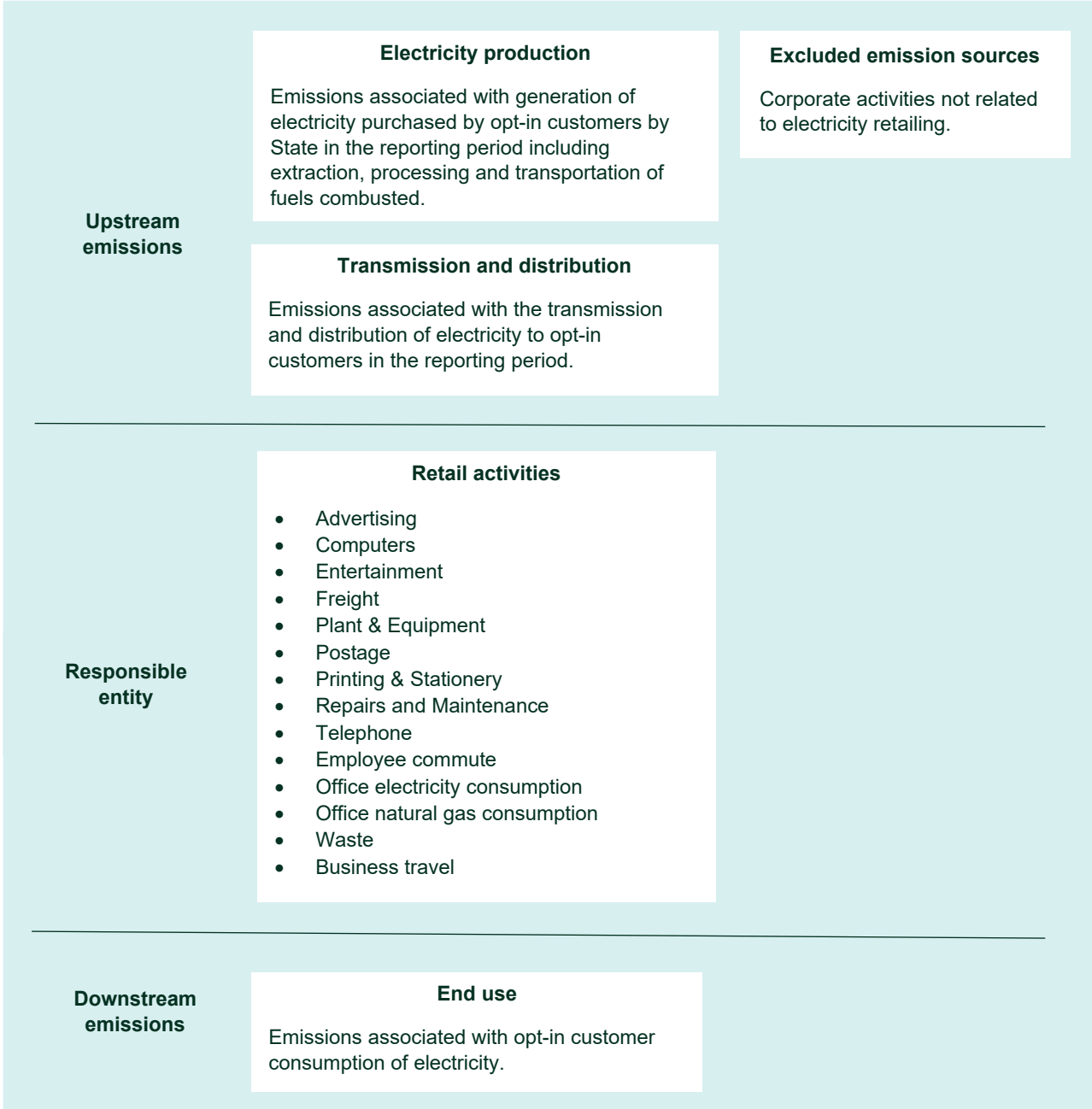
We believe Origin has a critical role in reducing emissions and delivering a clean energy future. Origin was the first company in Australia to set science-based emissions targets, independently approved by the Science Based Target initiative (SBTi).

We have developed a strategy to progressively decarbonise our business, and we are focused on empowering our customers with cleaner, smarter energy solutions.

This carbon neutral product certification will allow Origin's customers the option to opt-in and offset the greenhouse gas emissions associated with the supply and consumption of electricity.

Product/service process diagram

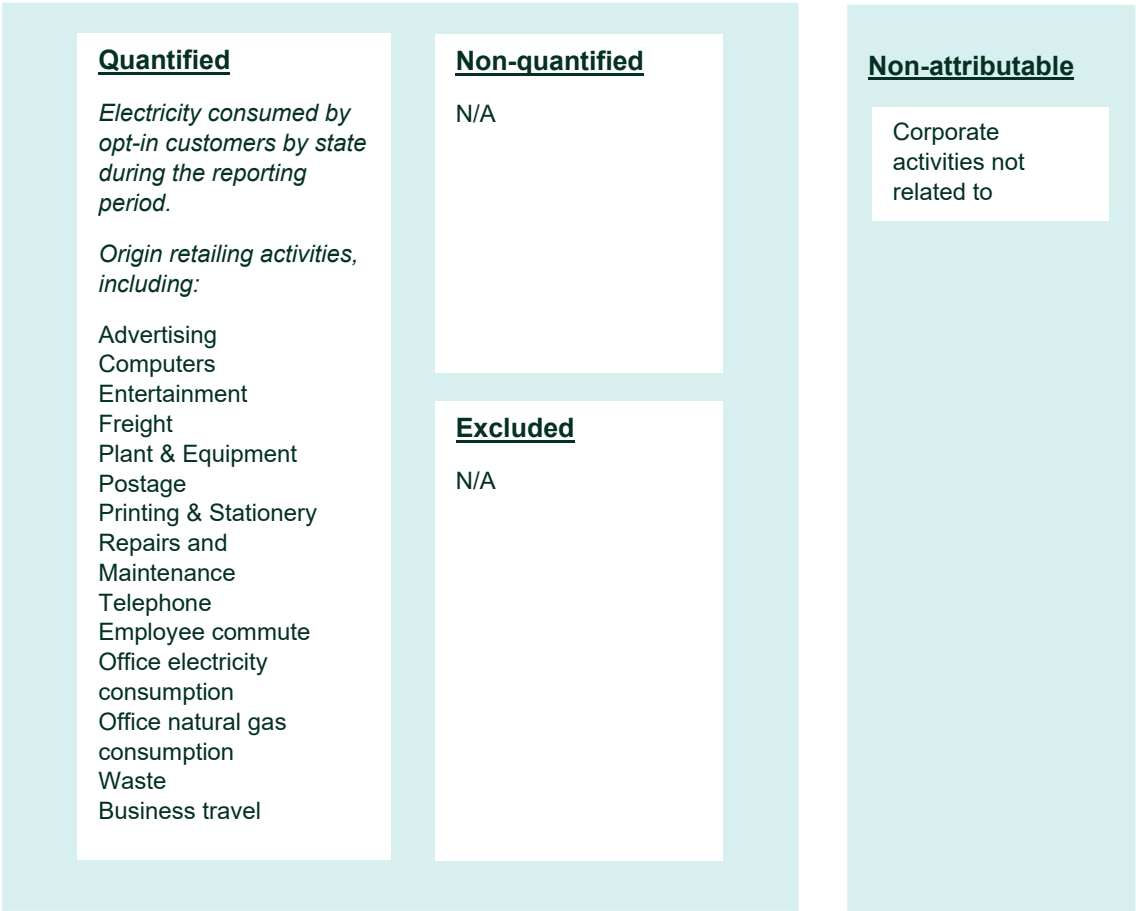
The following diagram is cradle to grave, noting that the emissions associated with purchased electricity is entirely as a result of upstream activities.



Excluded emission sources
Corporate activities not related to electricity retailing.

2. EMISSION BOUNDARY

Diagram of the certification boundary



Attributable non-quantified sources

There are no attributable emission sources that are non-quantified.

Data management plan

A data management plan is not required as there are no non-quantified emission sources.

Excluded sources (within certification boundary)

There are no emission sources that are excluded within the certification boundary.

Non attributable sources (outside certification boundary)

Corporate activities not related to electricity retailing have been deemed non-attributable as they do not relate to the development or passage of the product through its lifecycle.

3. EMISSIONS SUMMARY

Emissions reduction strategy

Climate change is one of the most significant challenges facing society today and managing the transition to a low-carbon economy is a strategic priority for Origin.

Origin is a proud member of the 'We Mean Business' coalition, which is dedicated to accelerating corporate action on climate change. In 2017, Origin was the first Australian company to set a science-based emissions reduction target independently validated and approved by the Science-Based Target initiative (SBTi). We have announced plans to update our emissions reduction targets in line with a 1.5°C pathway, with a longer term aim to achieve net-zero emissions by 2050.

Our commitments include halving our Scope 1 and Scope 2 greenhouse gas emissions by 2032 and reducing our Scope 3 emissions by 25 per cent over the same period. In keeping with our commitment to progressively decarbonise our business, we have announced a short-term emissions target to reduce Scope 1 emissions over the three financial years to FY2023 by 10 per cent on average, compared to our FY2017 SBTi baseline.

We will continue to progressively review our targets and be informed by the science-based guidance as it evolves, while continuing our focus on providing customers with clean and sustainable energy solutions.

Further details on Origin's carbon commitments are available at the following link:

<https://www.originenergy.com.au/about/sustainability/carbon-commitments.html>

Functional units

Table 2: Functional units

	Number of functional units
<i>a) Number of functional units sold this period</i>	n/a
<i>b) Number of functional units to be forward offset demonstrating commitment to carbon neutrality (true-up to be conducted at the end of the reporting period)</i>	60,337 MWh

Emissions summary (inventory)

Table 3: Emissions summary

Emission source category	tonnes CO ₂ -e
Electricity - VIC Scope 2 combustion of fuels for electricity generation	32,209.32
Electricity - SA Scope 2 combustion of fuels for electricity generation	5,889.23
Electricity - NSW Scope 2 combustion of fuels for electricity generation	36,883.42
Electricity - QLD Scope 2 combustion of fuels for electricity generation	22,529.42
Electricity - ACT Scope 2 combustion of fuels for electricity generation	617.74
Electricity - VIC Scope 3 EPT + T&D	3,615.33
Electricity - SA Scope 3 EPT + T&D	1,232.63
Electricity - NSW Scope 3 EPT + T&D	4,098.16
Electricity - QLD Scope 3 EPT + T&D	3,337.69
Electricity - ACT Scope 3 EPT + T&D	68.64
Advertising	5.43
Business services	0.68
Computer equipment	3.60
Entertainment	0.03
Freight	0.002
Office equipment	0.08
Postage, mailing services	8.23
Printing & Stationary	17.89
Repairs and Maintenance	0.001
Telecommunications	1.33
Travel facilitation	0.01
Land and sea transport	2.27
WFH emissions	2.85
Waste	2.10
Air transport	1.46
Transport fuel	0.09
Office electricity use (market-based)	0.31
Office natural gas	1.21
1. Total inventory emissions	110,529 tCO₂-e
a. Number of functional units represented by the inventory emissions	120,674 MWh
2. Emissions per functional unit (based on the number of functional units represented by the inventory) <i>Total tCO₂-e divided by the number of functional units in 1a.</i>	0.9159 tCO₂-e per MWh
3. Carbon footprint <i>(Emissions per functional unit (2)* number of functional units (a or b from table 2))</i>	55,265 tCO₂-e

Uplift factors

No uplift factors were required.

Carbon neutral products

No carbon neutral products were used.

4. CARBON OFFSETS

Offsets strategy

Table 4: Offset purchasing strategy

Offset purchasing strategy: Forward purchasing on a quarterly basis	
1. Total offsets previously forward purchased and banked for this report	0
2. Total emissions liability to offset for this report	55,265 tCO ₂ -e. Offsets will be forward retired quarterly in transactions of 27,633 tCO ₂ -e in June 2021, and September 2021.
3. Net offset balance for this reporting period	55,265 tCO ₂ -e of which 27,633 tCO ₂ -e are retired in June 2021.
4. Total offsets to be forward purchased to offset the next reporting period	0
5. Total offsets required for this report	55,265 tCO ₂ -e

Co-benefits

Origin has purchased Australian offsets generated from the Emission Reduction Fund (ERF) from **Paroo River South** and the **Nulla Carbon regeneration projects** in Queensland.

These Human Induced Revegetation projects promote regeneration activities to parts of properties where vegetation has previously been suppressed. Regeneration activities include:

- Management of the timing and extent of grazing;
- Management of feral animals;
- Cessation of mechanical or chemical destruction of regrowth; and
- Exclusion of livestock.

Origin has also purchased offsets from international projects accredited under the VERRA Climate, Community and Biodiversity Standard (CCB Standard).

The **Kariba Redd+ project** has reduced deforestation in the project area and has added the following community benefits:

- Farmers trained for conservation agriculture;
- Establishment of community gardens which have improved nutritional outcomes;
- Promotion of beekeeping as an alternative and environmentally friendly source of income;
- Decrease in poaching pressure on wildlife.

The **Rimba Raya Biodiversity Reserve project** preserves more than 15,000 Ha of tropical forest. This project has added the following benefits:

- Stopped the conversion of the project area being converted to palm oil plantation, including associated activities such as logging and burning felled trees and forest.
- Created local employment to protect the area, including patrolling illegal logging and wildlife poaching in the area.
- Implementation of training programs such as agroforestry plantations, community firefighting, chicken farms, shrimp paste production, environmental education, forest patrols, solar power electrification operation, and water purification construction to enable local community members to expand skills and increase their climate resilience.
- Provision of water filtration systems in the project area to local communities to increase access to clean water.
- Provision of small-scale solar lighting to the local community to increase access to basic services.

Offsets summary

Proof of cancellation of offset units

Offsets cancelled for Climate Active Carbon Neutral Certification										
Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Eligible Quantity (TCO2-e)	Quantity used for previous reporting periods	Quantity banked for future reporting periods	Quantity used for this reporting period claim	Percentage of total (%)
Paroo River South Environmental Project	ACCUs	ANREU	02 June 2021	<u>3,792,533,208 – 3,792,533,272</u>	2019-20	65	0	0	65	0.2%
Paroo River South Environmental Project	ACCUs	ANREU	02 June 2021	<u>3,779,577,408 – 3,779,577,573</u>	2018-19	166	0	0	166	0.6%
Nulla Carbon regeneration projects	ACCUs	ANREU	02 June 2021	<u>3,792,020,723 – 3,792,026,018</u>	2019-20	5,296	0	0	5,296	19.2%
Rimba Raya Biodiversity Reserve Project	VCUs	VERRA	11 June 2021	<u>9900-157724745-157746808-VCS-VCU-263-VER-ID-14-674-01012018-31122018-1</u>	2018	22,064	0	0	22,064	79.8%
KARIBA REDD+ PROJECT	VCUs	VERRA	11 June 2021	<u>8259-5514620-5514661-VCS-VCU-352-VER-ZW-14-902-01012019-30062019-1</u>	2019	42	0	0	42	0.2%
Total offsets retired this report and used in this report									27,633	100%
Total offsets retired this report and banked for future reports									0	0%

Additional offsets cancelled for purposes other than Climate Active Carbon Neutral certification							
Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Eligible Quantity (TCO2-e)	Purpose of cancellation
n/a							
n/a							

Type of offset units	Quantity (used for this reporting period claim)	Percentage of Total
Australian Carbon Credit Units (ACCUUs)	5,527	20%
Verified Carbon Units (VCUs)	22,106	80%

5. USE OF TRADE MARK

Table 7

Description where trademark used	Logo type
Sustainability report	Certified product
Website	Certified product
Social media and PR	Certified product
Marketing materials (print and digital)	Certified product

6. ADDITIONAL INFORMATION

N/A

APPENDIX 1

Non-attributable emissions for products and services

To be deemed attributable an emission must meet two of the five relevance criteria. Non-attributable emissions are detailed below against each of the five criteria.

Table 8

Relevance test					
Non-attributable emission	<i>The emissions from a particular source are likely to be large relative to the organisation's electricity, stationary energy and fuel emissions</i>	<i>The emissions from a particular source contribute to the organisation's greenhouse gas risk exposure.</i>	<i>Key stakeholders deem the emissions from a particular source are relevant.</i>	<i>The responsible entity has the potential to influence the reduction of emissions from a particular source.</i>	<i>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.</i>
Corporate activities not related to electricity retailing	No	No	No	No	No

APPENDIX 2

Non-quantified emissions for products/services

Table 9

Non-quantification test				
Relevant-non-quantified emission sources	<i>Immaterial <1% for individual items and no more than 5% collectively</i>	<i>Quantification is not cost effective relative to the size of the emission but uplift applied.</i>	<i>Data unavailable but uplift applied. A data management plan must be put in place to provide data within 5 years.</i>	<i>Initial emissions non-quantified but repairs and replacements quantified</i>
-	-	-	-	-

