



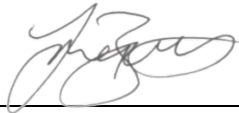
PUBLIC DISCLOSURE STATEMENT

AGL ENERGY LIMITED

PRODUCT CERTIFICATION
SOLAR SYSTEMS
CY2024

Australian Government
Climate Active
Public Disclosure Statement



NAME OF CERTIFIED ENTITY	AGL Energy Limited
REPORTING PERIOD	1 January 2024- 31 December 2024 (Arrears)
DECLARATION	<p><i>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.</i></p> <p>Signature here</p> 
	<p>Name of signatory Jane Butler Position of signatory General Manager, Electrification and Innovation Date 29.05.26</p>



Australian Government
**Department of Climate Change, Energy,
the Environment and Water**

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Version 9.1.



1. CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	4,645 tCO ₂ -e
CARBON OFFSETS USED	5% ACCUs, 95% VERs
RENEWABLE ELECTRICITY	N/A
CARBON ACCOUNT	Prepared by: Environmental Resources Management (ERM)
TECHNICAL ASSESSMENT	13/02/2026 (CY2024) Rob Rouwette, Environmental Resources Management (ERM) Next technical assessment due: CY2027

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2. CERTIFICATION INFORMATION

Description of product certification

This public disclosure statement supports the carbon neutral product certification for the supply and installation of solar systems provided by AGL Energy Services Pty Limited a subsidiary entity of AGL Energy Limited (AGL). This includes the Life Cycle Assessment of the solar installation and quantification of Scope 1, 2 and 3 emissions associated with the retail operations component.

The emissions reported here are for CY2024 which is the fourth year of certification.

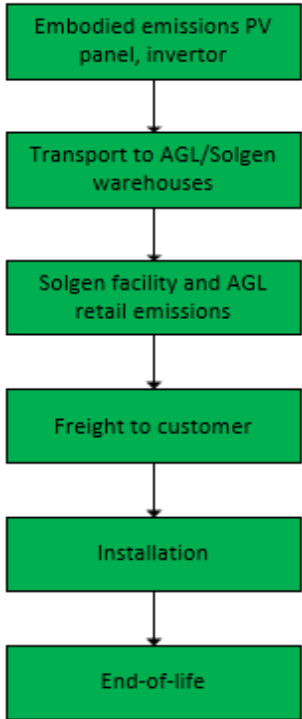
In June 2021, AGL launched a certified Carbon Neutral Solar product to all AGL residential. Solar systems are sold to residential customers as part of a solar and battery bundle.

'Solar product' includes all components and services associated with the supply and installation of solar systems sold by AGL Energy Limited's subsidiary businesses. Our certified Carbon Neutral Solar product is provided to all AGL residential customers. Solar systems are sold to residential customers as part of a solar and battery bundle.

- Functional unit: A functional unit of 'one kW of solar PV system installed' will be used as a quantifiable reference to the associated greenhouse gas emissions for the Solar product.
- Offered as: Opt-in for Commercial customers (C&I) and full coverage for residential customers (E&I).
- Life cycle: cradle-to-grave

The responsible entity for this product certification is AGL Energy Limited, ABN 74 115 061 375.

This Public Disclosure Statement includes information for CY2024 reporting period.



Process map for Solar photovoltaic systems



Description of business

AGL is a leading integrated essential service provider, with a proud history of innovation. AGL is committed to providing our customers simple, fair and accessible essential services as they decarbonise and electrify the way they live, move and work.

We deliver around 4.3 million customer services across energy and telecommunications to our residential, small and large business, and wholesale customers across Australia. We operate the largest electricity generation portfolio in Australia, with an operated generation capacity of 7,982 MW (as at 30 June 2024)¹. AGL's operated generation accounted for approximately 20% of the total generation within the National Electricity Market in FY24. AGL operates the largest electricity generation portfolio within the NEM of any ASX-listed company, as at 30 June 2024.

- AGL includes related bodies corporate covered by this certification, such as: Data and telecommunications provider Southern Phone Company Limited, which trades as AGL Telecommunications and as Southern Phone Company and sells telecommunications products under both brands.
 - Southern Phone Company is one of the largest providers of fixed line, mobile and Internet communications services in regional Australia. Formed in 2002 with a vision to provide regional communities with affordable telecommunications services, Southern Phone Company now serves a national customer base and operates out of its metropolitan and regional offices.
 - AGL Telecommunications launched its first telecommunications products, offering internet services, in November 2020. This was followed by its launch of mobile SIM plans in February 2021.
- New energy providers - AGL Energy Services Pty Ltd sells energy solutions to residential customers based in Queensland, New South Wales, Victoria and South Australia, including solar and battery bundles and battery storage solutions.
- Energy retailers – AGL Sales Pty Limited; AGL South Australia Pty Limited; AGL Retail Energy Limited (“AGL energy retail entities”) and Perth Energy Pty Ltd.
 - AGL energy retail entities provide gas and electricity services to residential and business customers across New South Wales, Victoria, South Australia, Queensland and Western Australia. Offering a range of energy plans to suit varying preferences, customers can sign up to our products and services via our digital channels (AGL website, AGL app, My Account) or by calling the AGL contact centre.
 - AGL | Perth Energy supplies contestable gas and electricity business customers connected to the Western Power and ATCO gas networks in Western Australia including regional areas such as Albany, Geraldton and Kalgoorlie for electricity, and Geraldton for gas.
 - The accelerating pace of the climate transition, along with the shaping forces of customers, the community and technology, has led to significant changes to the landscape in which AGL operates.

¹ Capacity as at 30 June 2023. <https://www.agl.com.au/content/dam/digital/agl/documents/about-agl/investors/2023/230810-agl-energy-limited-annual-report-2023-4-4-asx.pdf>

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 'attributable processes' of a product or service. These attributable processes are services, materials and energy flows that become the product or service, make the product or service and carry the product or service through its life cycle. These attributable emissions have been quantified in the carbon inventory.

Non-quantified emissions have been assessed as attributable 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

Non-attributable emissions have been assessed as not attributable to a product or service. They can be **optionally included** in the emissions boundary and therefore have been offset, or they can be listed as outside of the emissions boundary (and are therefore not part of the carbon neutral claim). Further detail is available at Appendix D.

Inside emissions boundary

Quantified Product

Embodied emissions of solar panels and inverter

Embodied emissions of parts used in installation (racking, bolts etc.)

Transportation from manufacturer to AGL Solgen warehouse

Solgen electricity, liquid fuel, waste and water

Vehicle transport to site for install

Installation and maintenance

End of life emissions in product disposal

Quantified Retail

Electricity incl. base building

Professional services

ICT services and equipment

Cleaning and chemicals

Office supplies and services

Postage, courier and logistics

Travel expenses

Machinery and vehicles

Construction materials and construction

Transport (air)

Transport (land and sea)

Accommodation

Food & beverage

Waste

Water

Employee commute

Working from home

Non-quantified

N/A

Optionally included

N/A

Outside emission boundary

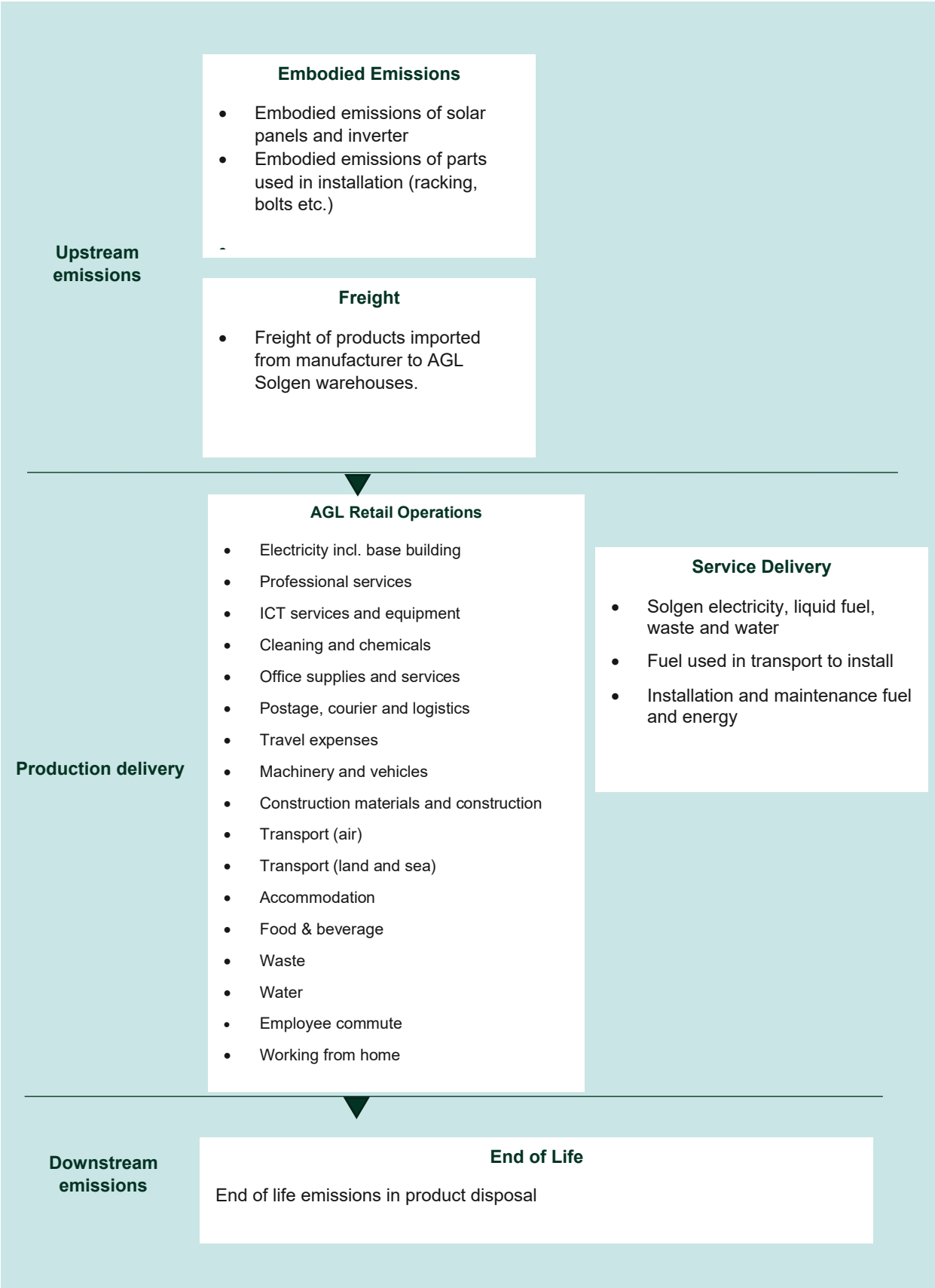
Non-attributable

Credits from electricity generated over the lifetime of the solar system

Cleaning of the panels

Product process diagram

The following diagram is cradle to grave.



4. EMISSIONS REDUCTIONS

Emissions reduction strategy

AGL has a strong track record of delivering action on climate change and the energy transition and provide a range of products and services to help our customers decarbonise their businesses and homes.

In September 2022 AGL released its inaugural Climate Transition Action Plan (**CTAP**), which outlines AGL's commitments to the following²:

- Close Loy Yang A Power Station by the end of FY35³.
- Reduce our annual greenhouse gas emissions by at least 17% compared to a FY19 baseline, from FY24 following the closure of Liddell Power Station in April 2023.^{4,5}
- Reduce our annual greenhouse gas emissions by at least 52% compared to a FY19 baseline, by FY35 following the closure of the Bayswater Power Station by 2033^{4,5}
- Be Net Zero for operated Scope 1 and 2 greenhouse gas emissions following the closure of all AGL's coal-fired power stations.
- Develop a decarbonisation pathway to achieve our ambition of being Net Zero for Scope 3 greenhouse gas emissions by 2050.
- Seek to supply our customer demand with ~12 GW of additional renewable and firming capacity by the end of 2035.

Our plan recognises that a balance needs to be struck between responsible transition and rapid decarbonisation, to keep Australia's electricity supply secure, reliable and affordable. We are committed to working constructively with our stakeholders, including government, our people and the communities in which we operate, to lead a responsible and orderly transition.

Emissions reduction actions

AGL's operational emissions reduction actions primarily relate to the closure of our coal-fired power stations as outlined in our CTAP released in September 2022.

In April 2023 AGL's Liddell Power Station ceased generation. Decommissioning commenced in FY23.

Additionally, as stated in our 2022 CTAP, AGL will develop a decarbonisation pathway to achieve our ambition of being Net Zero for Scope 3 greenhouse gas emissions by 2050.

² AGL released an updated Climate Transition Action Plan in August 2025. As this PDS applies to the 2024 period, it outlines commitments from the prior 2022 CTAP which was in effect during this period. 3. The ability for AGL to execute on this target will be subject to uncertainties and risks, as described on page 12 of AGL's Climate Transition Action Plan.

³ The ability for AGL to execute on this target will be subject to uncertainties and risks, as described on page 12 of AGL's 2022 Climate Transition Action Plan, September 2022.

⁴ Operated Scope 1 and 2 greenhouse gas emissions, as reported under the National Greenhouse and Energy Reporting Act 2007, against a FY19 baseline.

⁵ FY24 and FY35 represent the first full financial years where no emissions from Liddell and Bayswater power stations occur following the closure of these power stations in April 2023 (FY23) and CY33 (FY34) respectively.

5. EMISSIONS SUMMARY

Emissions over time

C&I Solar

Emissions since base year			
		Total tCO ₂ -e	Emissions intensity of the functional unit
Base year/Year 1:	CY2021	131.78	3.95
Year 2:	CY2022	469.22	1.76
Year 3:	CY2023*	0	2.79
Year 4:	CY2024*	0	2.92

* Please note that there were no carbon neutral sales for C&I solar systems in CY2024.

Residential Solar

Emissions since base year			
		Total tCO ₂ -e	Emissions intensity of the functional unit
Base year/Year 1:	CY2021	659.99	2.13
Year 2:	CY2022	1,769.36	1.74
Year 3:	CY2023	2,995.91	2.56
Year 4:	CY2024	4,644.95	2.7

Significant changes in emissions

C&I Solar Systems

Significant changes in emissions			
Attributable process	Previous year emissions (t CO ₂ -e)	Current year emissions (t CO ₂ -e)	Reason for change
Embodied emissions – PV*	140,992.60	97,587.36	Decrease in overall kWp solar systems installed for AGL C&I customers in CY2024

*C&I Solar Systems are an opt-in carbon neutral product. There were no carbon neutral sales for C&I Solar Systems in CY24, therefore, these emissions are not being certified as carbon neutral.

Residential Solar Systems

Significant changes in emissions			
Attributable process	Previous year emissions (t CO ₂ -e)	Current year emissions (t CO ₂ -e)	Reason for change
Embodied emissions - PV	2,564.64	3,973.63	Increase in overall kWp solar systems installed for AGL residential customers in CY2024

Use of Climate Active carbon neutral products, services, buildings or precincts

N/A

Emissions summary

C&I Solar

C&I is an opt-in carbon neutral product. The below summary represents entire product.

Life cycle stage / Attributable process / Emission source	tCO ₂ -e*
Embodied emissions (panel, inverter, mounting)	110,564.66
Freight (land and sea)	512.26
Installation and maintenance	2,568.98
Solgen warehouse (energy, fuel, waste and water)	668.54
AGL retail emissions	313.07
Attributable emissions (tCO₂-e)	114,627.51

Product offset liability	
Emissions intensity per functional unit (tCO ₂ -e/kWp installed)	2.92
Emissions intensity per functional unit including uplift factors	N/A
Number of functional units covered by the certification (kWp installed)	0
Total emissions (tCO₂-e) to be offset	0.00

*C&I Solar Systems are an opt-in carbon neutral product. There were no carbon neutral sales for C&I Solar Systems in CY24, therefore, these emissions are not being certified as carbon neutral.

Residential Solar

Residential is a completely carbon neutral product. The below summary represents the entire product.

Life cycle stage / Attributable process / Emission source	tCO ₂ -e
Embodied emissions (panel, inverter, mounting)	4,465.96
Freight (land and sea)	22.76
Installation and maintenance	112.40
Solgen warehouse (energy, fuel, waste and water)	29.25
AGL retail emissions	14.58
Attributable emissions (tCO₂-e)	4,644.95

Product offset liability	
Emissions intensity per functional unit (tCO ₂ -e/kWp installed)	2.70
Emissions intensity per functional unit including uplift factors	N/A
Number of functional units covered by the certification (kWp installed)	1,720
Total emissions (tCO₂-e) to be offset	4,645

6. CARBON OFFSETS

Eligible offsets retirement summary

This certification has taken an in-arrears offsetting approach. The total greenhouse gas emissions to offset is 4,645 tCO₂e.

The total number of eligible offsets used in this report is 4,645. Of the total eligible offsets used, zero were previously banked and 4,645 were newly purchased and retired. Zero are remaining and have been banked for future use.

Offsets retired for Climate Active certification

Type of offset unit	Quantity used for this reporting period	Percentage of total units used
Australian Carbon Credit Units (ACCU)s	233	5%
Verified Emissions Reductions (VERs)	4,412	95%

Project name	Type of offset unit	Registry	Date retired	Serial number	Vintage	Total quantity retired	Quantity used in previous reporting periods	Quantity banked for future reporting periods	Quantity used for this reporting period	Percentage of total used this reporting period
TASC Clean Cooking PoA – VPA 1 (Zambia)	VERs	GSF Registry	17/06/2025	<u>GS1-1-ZM-GS11145-16-2023-25994-9988-14399</u>	2023	4,412	0	0	4,412	95%
Byzantium Induced Regeneration of Native Forest Project	ACCUs	ANREU	17/06/2025	8,409,886,770 – 8,409,887,002 (Appendix A for transaction record)	2023-24	233	0	0	233	5%
Offset Totals:						4,645	0	0	4,645	100%

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) Summary

N/A

APPENDIX A: ADDITIONAL INFORMATION

Transaction ID	AU42115
Current Status	Completed (4)
Status Date	17/06/2023 15:00:08 (AEST) 17/06/2023 05:00:08 (GMT)
Transaction Type	Cancellation (4)
Transaction Initiator	Lin, Li Kheng
Transaction Approver	Chen, Siu
Comment	Retired on behalf of AGL CY2024 Solar Carbon Neutral Certification under Climate Active

Transferring Account		Acquiring Account	
Account Number	AU-2050	Account Number	AU-1059
Account Name	AGL Hydro Partnership	Account Name	Australia Voluntary Cancellation Account
Account Holder	AGL NPI Pty Limited	Account Holder	Commonwealth of Australia

Transaction Blocks													
Party	Type	Transaction Type	Original CP	Current CP	EBF Project ID	NGER Facility ID	NGER Facility Name	Safeguard	Kyoto Project #	Volume	Expiry Date	Serial Range	Quantity
AGL	NACCU	Voluntary ACCU Cancellation			EBF13305					2023-24		6-493,886,770 - 6-493,887,002	223

Transaction Status History	
Status Date	Status Code
17/06/2023 15:00:08 (AEST)	Completed (4)
17/06/2023 05:00:08 (GMT)	Completed (4)
17/06/2023 15:00:08 (AEST)	Proposed (1)
17/06/2023 05:00:08 (GMT)	Proposed (1)
17/06/2023 15:00:08 (AEST)	Account Holder Approved (37)
17/06/2023 05:00:08 (GMT)	Account Holder Approved (37)
17/06/2023 14:19:37 (AEST)	Awaiting Account Holder Approval (95)
17/06/2023 04:19:37 (GMT)	Awaiting Account Holder Approval (95)

APPENDIX B: ELECTRICITY SUMMARY

N/A

APPENDIX C: INSIDE EMISSIONS BOUNDARY

Non-quantified emission sources

The following emissions sources have been assessed as attributable, 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.

Relevant non-quantified emission sources	Justification reason
N/A	

Excluded emission sources

Attributable emissions sources can be excluded from the carbon inventory, but still considered as part of the emissions boundary if they meet **all three of the below criteria**. An uplift factor may not necessarily be applied.

1. A data gap exists because primary or secondary data cannot be collected (**no actual data**).
2. Extrapolated and proxy data cannot be determined to fill the data gap (**no projected data**).
3. An estimation determines the emissions from the process to be **immaterial**).

Emissions Source	No actual data	No projected data	Immaterial
N/A			

Data management plan for non-quantified sources

There are no non-quantified sources in the emission boundary that require a data management plan.

APPENDIX D: OUTSIDE EMISSION BOUNDARY

Non-attributable emissions have been assessed as not attributable to a product or service (do not carry, make or become the product/service) and are therefore not part of the carbon neutral claim. To be deemed attributable, an emission must meet two of the five relevance criteria. Emissions which only meet one condition of the relevance test can be assessed as non-attributable and therefore are outside the carbon neutral claim. Non-attributable emissions are detailed below.

1. **Size** The emissions from a particular source are likely to be large relative to other attributable emissions.
2. **Influence** The responsible entity could influence emissions reduction from a particular source.
3. **Risk** The emissions from a particular source contribute to the responsible entity's greenhouse gas risk exposure.
4. **Stakeholders** The emissions from a particular source are deemed relevant by key stakeholders.
5. **Outsourcing** The emissions are from outsourced activities that were previously undertaken by the responsible entity or from outsourced activities that are typically undertaken within the boundary for comparable products or services.

Non-attributable emissions sources summary

Emission sources tested for relevance	Size	Influence	Risk	Stakeholders	Outsourcing	Justification
Credits from electricity generated over the lifetime of the solar system	N	N	N	N	N	<p>Size: This emissions source would not have any increase on the emissions, and there is a risk in double-counting credits if it were to be included.</p> <p>Influence: We do not have the potential to influence the emissions from this source, as this activity is carried out by the customer at their Discretion</p> <p>Risk: Key stakeholders, including the public, are unlikely to consider this a relevant source of emissions for our product</p> <p>Stakeholders: We have not previously undertaken this activity within our emissions boundary and comparable products do not typically undertake this activity within their boundary.</p> <p>Outsourcing: We do not have the potential to influence the emissions from this source, as this activity is carried out by the customer at their discretion.</p>
Cleaning of panels	N	N	N	N	N	<p>Size: The emissions source is immaterial and is not likely to be large compared to other attributable emissions.</p> <p>Influence: We do not have the potential to influence the emissions from this source, as this activity is carried out by the customer at their discretion.</p> <p>Risk: There are no relevant laws or regulations that apply to limit emissions specifically from this source, the source does not create supply chain risks, and it is unlikely to be of significant public interest.</p> <p>Stakeholders: Key stakeholders, including the public, are unlikely to consider this a relevant source of emissions for our product.</p> <p>Outsourcing: We do not have the potential to influence the emissions from this source, as this activity is carried out by the customer at their discretion.</p>



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