



# **PUBLIC DISCLOSURE STATEMENT**

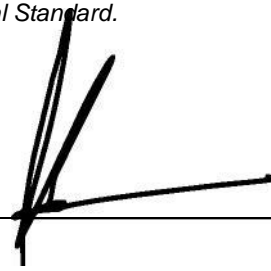
**E-SMART SOLAR**

**ORGANISATION CERTIFICATION**

**CY2021**

Australian Government  
**Climate Active**  
**Public Disclosure Statement**



NAME OF CERTIFIED ENTITY	E-Smart Solar
REPORTING PERIOD	1 January 2021 – 31 December 2021
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>Dean Edmonds          Founder &amp; Director          Date: 8 November 2023</p>



**Australian Government**  
**Department of Industry, Science,  
 Energy and Resources**

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Version March 2022. To be used for FY20/21/CY2021 reporting onwards.



# 1. CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	47.0 tCO <sub>2</sub> -e
OFFSETS BOUGHT	100% VERRA
RENEWABLE ELECTRICITY	100%
TECHNICAL ASSESSMENT	Not required

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## 2. CARBON NEUTRAL INFORMATION

### Description of certification

This inventory has been prepared for the financial year from 1 January 2021 to 31 December 2021 and covers the business operations of E-Smart Solar ABN 12 600 689 361.

The operational boundary has been defined based on an operational control test, in accordance with the principles of the National Greenhouse and Energy Reporting Act 2007. This includes all operations which are controlled by E-Smart Solar.

The methods used for collating data, performing calculations and presenting the carbon account are in accordance with the following standards:

- Climate Active Standard for organisations
- The GHG Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
- National Greenhouse and Energy Reporting (Measurement) Determination 2008

Where possible, the calculation methodologies and emission factors used in this inventory are derived from the National Greenhouse Accounts (NGA) Factors in accordance with “Method 1” from the National Greenhouse and Energy Reporting (Measurement) Determination 2008.

The greenhouse gases considered within the inventory are those that are commonly reported under the Kyoto Protocol; carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O) and synthetic gases - hydrofluorocarbons (HFCs). No perfluorocarbons (PFCs), and sulphur hexafluoride (SF<sub>6</sub>) or nitrogen trifluoride (NF<sub>3</sub>) were detected within the operational boundary. All emission sources have been expressed as carbon dioxide equivalents (CO<sub>2</sub>-e) using relative global warming potentials (GWPs).

*“We not only encourage our clients to think environmentally, but we also recognise the expectation of us to uphold sustainability measures that are held by our team, our clients and our community.”*

## Organisation description

E-Smart Solar was founded in 2011, and initially traded as E-Smart Electrical Services. However, with increasing demands for solar installations, this soon became the main focus of the business.

In 2011, E-Smart focused purely on solar solutions for E-Smart Solar customers and restructured to E-Smart Solar Pty Ltd.

E-Smart Solar are a team of qualified electricians and are Clean Energy Council Accredited installers and Network-level members; experienced and qualified in the design and installation of grid connect, hybrid (battery) and stand alone solar power systems.

E-Smart Solar provide solar solutions for both residential and commercial clients across Sydney, as well as everywhere in the Blue Mountains of NSW. This is from Mudgee to Bathurst, and from Penrith and surrounding suburbs.

## 3.EMISSIONS BOUNDARY

This is a small organisation certification, which uses the standard Climate Active small organisation emissions boundary. Emission sources can be excluded if they do not occur.

### 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 relevant and are quantified in the carbon inventory. This may include emissions that are not identified as arising due to the operations of the certified entity, however, are **optionally included**.

**Non-quantified emissions** have been assessed as relevant 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

**Excluded emissions** are those that have been assessed as not relevant to an organisation's or precinct's operations and are outside of its emissions boundary or are outside of the scope of the certification. These emissions are not part of the carbon neutral claim. Further detail is available at Appendix D.

Inside emissions boundary		Outside emission boundary
<p><b><u>Quantified</u></b></p> <ul style="list-style-type: none"> <li>Electricity (Solar Behind the Metre)</li> <li>Water</li> <li>Waste (Landfill &amp; Recycling)</li> <li>Transport Fuel</li> <li>Freight</li> <li>Advertising &amp; Promotion</li> <li>Staff Clothing</li> <li>Food &amp; Catering</li> <li>Computer and Electrical Components</li> <li>Telecommunications</li> <li>Accommodation</li> <li>Cleaning and chemicals</li> <li>Refrigerants</li> </ul>	<p><b><u>Non-quantified</u></b></p> <p>N/A</p>	<p><b><u>Excluded</u></b></p> <p>Equipment and PV Systems installed for clients.</p>
	<p><b><u>Optionally included</u></b></p> <p>N/A</p>	

**Data management plan for non-quantified sources**

N/A.

## 4. EMISSIONS REDUCTIONS

### Emissions reduction strategy

As a company committed to the development of renewable energy technologies, including solar pv, E-Smart Solar is wholeheartedly committed to the environment and sustainability.

At E-Smart Solar, we not only encourage our clients to invest in clean technologies, but we also have developed an emission reduction strategy that sits in our sustainability reporting. The strategy includes the following key points:

We are reporting a decrease of our total footprint from 57 tCO<sub>2</sub>e to 47 tCO<sub>2</sub>e from last reporting period. We decreased our spending in advertising. Our waste footprint also remains similar to last year, but we have made progress with electricity usage and our Scope 2 is now Net Zero.

#### Transport:

Transport (at majority in Scope 1) represents 28.5 tCO<sub>2</sub>e and is our largest source of emissions. Our transport fuel has not really changed, but we are considering the purchase of an EV ute / company vehicle if available on the market within the next 3 years (by 2026). We try to optimize our client site visits and reduce unnecessary transport. For our Scope 3 transport emissions, we are exploring options with carbon neutral freight providers and Australia Post.

We have a target of reducing our Transport related emissions by 30% by 2028 from a CY2020 base year.

#### Professional Services:

Professional Services represent 7.8 tCO<sub>2</sub>e of GHG emissions and our second largest source of emissions. We are exploring ways to improve the sustainability of our procurement and select suppliers who are Climate Active certified for their products or services including telecommunications, IT and cloud services, freight and logistics, accounting services, office supplies including paper, food and catering... We can potentially save up to 10 tCO<sub>2</sub> by switching to Climate Active certified providers (under the Climate Change scheme methodology).

We have a target of reducing our Professional Services related emissions by 75% by 2028 from a CY2020 base year.

#### Waste & Water:

Waste & water represent over 5 tCO<sub>2</sub>e. We are continuously working with our suppliers, clients and service providers to reduce waste to landfill, increase our recycling rate and reduce our water usage.

#### Community Leadership and Advocacy:

We are committed to developing solutions that are environmentally friendly, such as moving from paper-based billing to more flexible payment processes. Working with our industry and our community, we not only support the development of climate-friendly practices, but also adopt them to deliver ongoing, positive change.

#### Continual Improvement:

We want to leave a legacy that goes beyond our business and that extends to our children, and their children. As such we're 100% committed to monitoring and measuring our business activities to ensure a constant reduction in the size of our environmental footprint.



## **Emissions reduction actions**

In CY2021 E-Smart Solar reduced their electricity consumption by installing on-site solar panels. Due to this, E-Smart consumed no grid-sourced electricity and produced their own renewable electricity for the entirety of the year.

We continued reporting our GHG emissions with Pangolin Associates and aiming at renewing our carbon neutral Climate Active certification.

We have developed an Emission Reduction Strategy.

We have purchased technology-based carbon credits (solar PV)

## 5. EMISSIONS SUMMARY

### Emissions over time

Emissions since base year		Total tCO <sub>2</sub> -e
Base year:	2020	54.789
Current Year:	2021	46.755

### Significant changes in emissions

Emission source name	Current year (kgCO <sub>2</sub> -e)	Previous year (kgCO <sub>2</sub> -e)	Detailed reason for change
Construction and demolition waste	2,851.20	2,534	This minor change in emissions is related to a general increase in operations
Electricity	0 (Market Based)	3,227 (Location Based)	Installation of on-site renewables.
Food and Catering	1,149.98	3,103.22	These emissions are based on expense data and in CY2021 there was a lower overall spend on Food % Catering

### Use of Climate Active carbon neutral products and services

N/A

## Organisation emissions summary

Emission category	Sum of Scope 1 (tCO <sub>2</sub> -e)	Sum of Scope 2 (tCO <sub>2</sub> -e)	Sum of Scope 3 (tCO <sub>2</sub> -e)	Sum of total emissions (tCO <sub>2</sub> -e)
Accommodation	0	0	0	0
Air transport (km)	0	0	0	0
Cleaning and chemicals	0	0	0	0
Electricity	0	0	0	0
Food	0	0	1.150	1.150
ICT Services and Equipment	0	0	1.565	1.565
Land and sea transport (fuel)	27.110	0	1.386	28.496
Postage, courier and freight	0	0	0.411	0.411
Products	0	0	0.007	0.007
Professional services	0	0	7.791	7.791
Refrigerants	0	0	0	0
Waste	0	0	2.851	2.851
Water	0	0	2.257	2.257
<b>Total</b>	<b>27.110</b>	<b>0</b>	<b>17.419</b>	<b>44.529</b>

## Uplift factors

An uplift factor is an upwards adjustment to the total carbon inventory to account for relevant emissions, which can't be reasonably quantified or estimated. This conservative accounting approach helps ensure the integrity of the carbon neutral claim.

Reason for uplift factor	tCO <sub>2</sub> -e
Compulsory additional 5% of the total to be added for small organisations	2.226
Total of all uplift factors	2.226
<b>Total footprint to offset</b> <i>(Total net emissions from summary table + total uplifts)</i>	<b>46.755</b>

## 6. CARBON OFFSETS

### Offsets retirement approach

#### In arrears

1.	Total number of eligible offsets banked from last year's report	0
2.	Total emissions footprint to offset for this report	47
3.	Total eligible offsets required for this report	47
4.	Total eligible offsets purchased and retired for this report	47
5.	Total eligible offsets banked to use toward next year's report	0

### Co-benefits

Renewable Solar Power Project by Shapoorji Pallonji

Project Type: Energy industries (renewable/non-renewable sources)

Project Country/Area: IN

The main purpose of this project activity is to generate clean form of electricity through renewable solar energy source. The project is a bundled project activity which involves installation of 220 MW solar project in different states of India through SPVs. Over the 10 years of first crediting period, the project will replace anthropogenic emissions of greenhouse gases (GHG's) estimated to be approximately 361,077 tCO<sub>2</sub>e per year, thereon displacing 385,440 MWh/year amount of electricity from the generation-mix of power plants connected to the Indian grid, which is mainly dominated by thermal/fossil fuel based power plant.

## Eligible offsets retirement summary

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	Staple quantity	Eligible quantity (tCO <sub>2</sub> -e)	Eligible quantity used for previous reporting periods	Eligible quantity banked for future reporting periods	Eligible quantity used for this reporting period	Percentage of total (%)
Renewable Solar Power Project by Shapoorji Pallonji	VCU	VERRA	Jul 4 2023	<a href="#">13275-487311037-487311083-VCS-VCU-1491-VER-IN-1-1976-01012020-31122020-0</a>	2020		47	0	0	47	100%
<b>Total offsets retired this report and used in this report</b>										47	
<b>Total offsets retired this report and banked for future reports</b>									0		
Type of offset units		Quantity (used for this reporting period claim)				Percentage of total					
Verified Carbon Units (VCUs)		47				100%					

## 7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

### Renewable Energy Certificate (REC) summary

N/A

## APPENDIX A: ADDITIONAL INFORMATION

N/A

## APPENDIX B: ELECTRICITY SUMMARY

Electricity emissions are calculated using a market-based approach.

In CY2021 E-Smart Solar reduced their electricity consumption by installing on-site solar panels. Due to this, E-Smart consumed no grid-sourced electricity and produced their own renewable electricity for the entirety of the year.

### Location-based method

The location-based method provides a picture of a business's electricity emissions in the context of its location, and the emissions intensity of the electricity grid it relies on. It reflects the average emissions intensity of the electricity grid in the location (State) in which energy consumption occurs. The location-based method does not allow for any claims of renewable electricity from grid-imported electricity usage.

### Market-based method

The market-based method provides a picture of a business's electricity emissions in the context of its renewable energy investments. It reflects the emissions intensity of different electricity products, markets and investments. It uses a residual mix factor (RMF) to allow for unique claims on the zero emissions attribute of renewables without double-counting.

Market Based Approach Summary			
Market Based Approach	Activity Data (kWh)	Emissions (kgCO2e)	Renewable Percentage of total
Behind the meter consumption of electricity generated	6,568	0	100%
<b>Total non-grid electricity</b>	<b>6,568</b>	<b>0</b>	<b>100%</b>
LGC Purchased and retired (kWh) (including PPAs & Precinct LGCs)	0	0	0
GreenPower	0	0	0
Jurisdictional renewables (LGCs retired)	0	0	0
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	0	0	0
Large Scale Renewable Energy Target (applied to grid electricity only)	0	0	0
Residual Electricity	0	0	0
<b>Total grid electricity</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total Electricity Consumed (grid + non grid)</b>	<b>6,568</b>	<b>0</b>	<b>100%</b>
Electricity renewables	6,568	0	
Residual Electricity	0	0	
<b>Exported on-site generated electricity</b>	<b>0</b>	<b>0</b>	
Emissions (kgCO2e)		0	
<b>Total renewables (grid and non-grid)</b>	<b>100%</b>		
<b>Mandatory</b>	<b>0</b>		
<b>Voluntary</b>	<b>0</b>		
<b>Behind the meter</b>	<b>100%</b>		



**Residual Electricity Emission Footprint (TCO2e)** **0**

*Figures may not sum due to rounding. Renewable percentage can be above 100%*

### Location Based Approach Summary

Location Based Approach	Activity Data (kWh)	Scope 2 Emissions (kgCO2e)	Scope 3 Emissions (kgCO2e)
ACT	0	0	0
NSW	0	0	0
SA	0	0	0
Vic	0	0	0
Qld	0	0	0
NT	0	0	0
WA	0	0	0
Tas	0	0	0
<b>Grid electricity (scope 2 and 3)</b>	<b>0</b>	<b>0</b>	<b>0</b>
ACT	0	0	0
NSW	6,568	0	0
SA	0	0	0
Vic	0	0	0
Qld	0	0	0
NT	0	0	0
WA	0	0	0
Tas	0	0	0
<b>Non-grid electricity (Behind the meter)</b>	<b>6,568</b>	<b>0</b>	<b>0</b>
<b>Total Electricity Consumed</b>	<b>6,568</b>	<b>0</b>	<b>0</b>
<b>Emission Footprint (TCO2e)</b>	<b>0</b>		
<i>Scope 2 Emissions (TCO2e)</i>	0		
<i>Scope 3 Emissions (TCO2e)</i>	0		

## APPENDIX C: INSIDE EMISSIONS BOUNDARY

### Non-quantified emission sources

The following sources emissions have been assessed as relevant, 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	(1) Immaterial	(2) Cost effective (but uplift applied)	(3) Data unavailable (but uplift applied & data plan in place)	(4) Maintenance
N/A				

## APPENDIX D: OUTSIDE EMISSIONS BOUNDARY

### Excluded emission sources

The below emission sources have been assessed as not relevant to an organisation's or precinct's operations and are outside of its emissions boundary. These emissions are not part of the carbon neutral claim. Emission sources considered for relevance must be included within the certification boundary if they meet two of the five relevance criteria. Those which only meet one condition of the relevance test can be excluded from the certification boundary.

Emissions tested for relevance are detailed below against each of the following criteria:

1. **Size** The emissions from a particular source are likely to be large relative to the organisation's electricity, stationary energy and fuel emissions
2. **Influence** The responsible entity has the potential to influence the reduction of emissions from a particular source.
3. **Risk** The emissions from a particular source contribute to the organisation's greenhouse gas risk exposure.
4. **Stakeholders** Key stakeholders deem the emissions from a particular source are relevant.
5. **Outsourcing** 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.

<b>Emission sources tested for relevance</b>	<b>(1) Size</b>	<b>(2) Influence</b>	<b>(3) Risk</b>	<b>(4) Stakeholders</b>	<b>(5) Outsourcing</b>	<b>Included in boundary?</b>
Purchased goods and services	Yes	No	No	No	No	No



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