



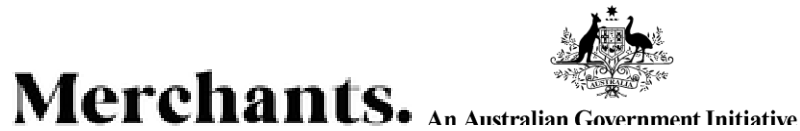
PUBLIC DISCLOSURE STATEMENT


MERCHANTS OF THE SUN

PRODUCT CERTIFICATION

FY2021-22

Australian Government
Climate Active
Public Disclosure Statement



NAME OF CERTIFIED ENTITY	Merchants of the Sun
REPORTING PERIOD	Financial year 1 July 2021 – 30 June 2022 Arrears report
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>Matthew Banks Founder / Director Merchants Label Pty Ltd 22nd November 2023.</p>



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

Public Disclosure Statement documents are prepared by the submitting organisation. The material in Public Disclosure Statement documents represents the views of the organisation and do not necessarily reflect the views of the Commonwealth. The Commonwealth does not guarantee the accuracy of the contents of the Public Disclosure Statement documents and disclaims liability for any loss arising from the use of the document for any purpose.

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



1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	290 tCO ₂ -e
THE OFFSETS BOUGHT	100% VCU's
RENEWABLE ELECTRICITY	Total renewables %: 18.59
TECHNICAL ASSESSMENT	26/10/2022 Deepali Dilip Ghadge Pangolin Associates Next technical assessment due: FY2025

Contents

1. Certification summary.....	3
2. Carbon neutral information	4
3. Emissions boundary	5
4. Emissions reductions.....	9
5. Emissions summary.....	11
6. Carbon offsets.....	15
6. 7. Renewable Energy Certificate (REC) summary	17
7. Appendix A: Additional information	18
8. Appendix B: Electricity summary	19
9. Appendix C: Inside emissions boundary	21
10. Appendix D: Outside emission boundary	22

2. CARBON NEUTRAL INFORMATION

Description of certification

This inventory has been prepared for the financial year 1 July 2021 – 30 June 2022 and covers the jewellery items sold by Merchants Label Pty Ltd (trading as Merchants of the Sun) in Australia and internationally (full coverage across the studied period).

This is a child certification that shares the same system boundaries as the organisation parent certification (Merchants of the Sun Organisation Certification).

Product/Service description

Considering the large variety of products sold to customers, it was not practical or cost effective to carry out separate Life Cycle Assessments (LCAs) for each type of product. The approach taken was to categorise Merchants of the Sun's product range into 1 product (one average piece of jewellery). Total emissions for each of the jewel were calculated from cradle to grave and the emissions per product item estimated based on the total number of units sold.

Most of the jewellery items are made from recycled silver (except chains for the pendants and a few gold jewelleries) in Indonesia. A conservative approach was followed and the use of raw silver was considered instead of the use of recycled silver.

Functional unit

The functional unit in the product LCA is one average jewellery item sold by Merchants of the Sun (in Australia and overseas) during FY2021/22.

“The objectives of Climate Active neatly reconcile our belief that we can create and sell fashion in balance with our surroundings.”

*Matt Banks
(Founder)*

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' that become the product, make the product and carry the product through its life cycle. These 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.

This boundary includes Merchants of the Sun's organisation, which is also certified carbon neutral under a separate Climate Active organisation certification.

Compared to FY2021 assessment, the following activities have been added to the boundary:

Miscellaneous manufactured items, photographic services, insurance services, equipment hire, cleaning services, building repair services, vehicle repair, clothing, staff training, entertainment and memberships.

Inside emissions boundary

Quantified

Organisation

Accommodation and facilities
Air Transport
Cleaning and Chemicals
Electricity
Food
ICT services and equipment
Land and Sea Transport
Machinery and vehicles
Office equipment & supplies
Postage, courier, and freight
Professional Services
Taxi
Refrigerants
Waste
Employee commute
Working from home

Emissions quantified as part of the Product Certification:

Raw materials
Manufacturing
Packaging
Freight
Disposal

Non-quantified

Water

Optionally included

N/A

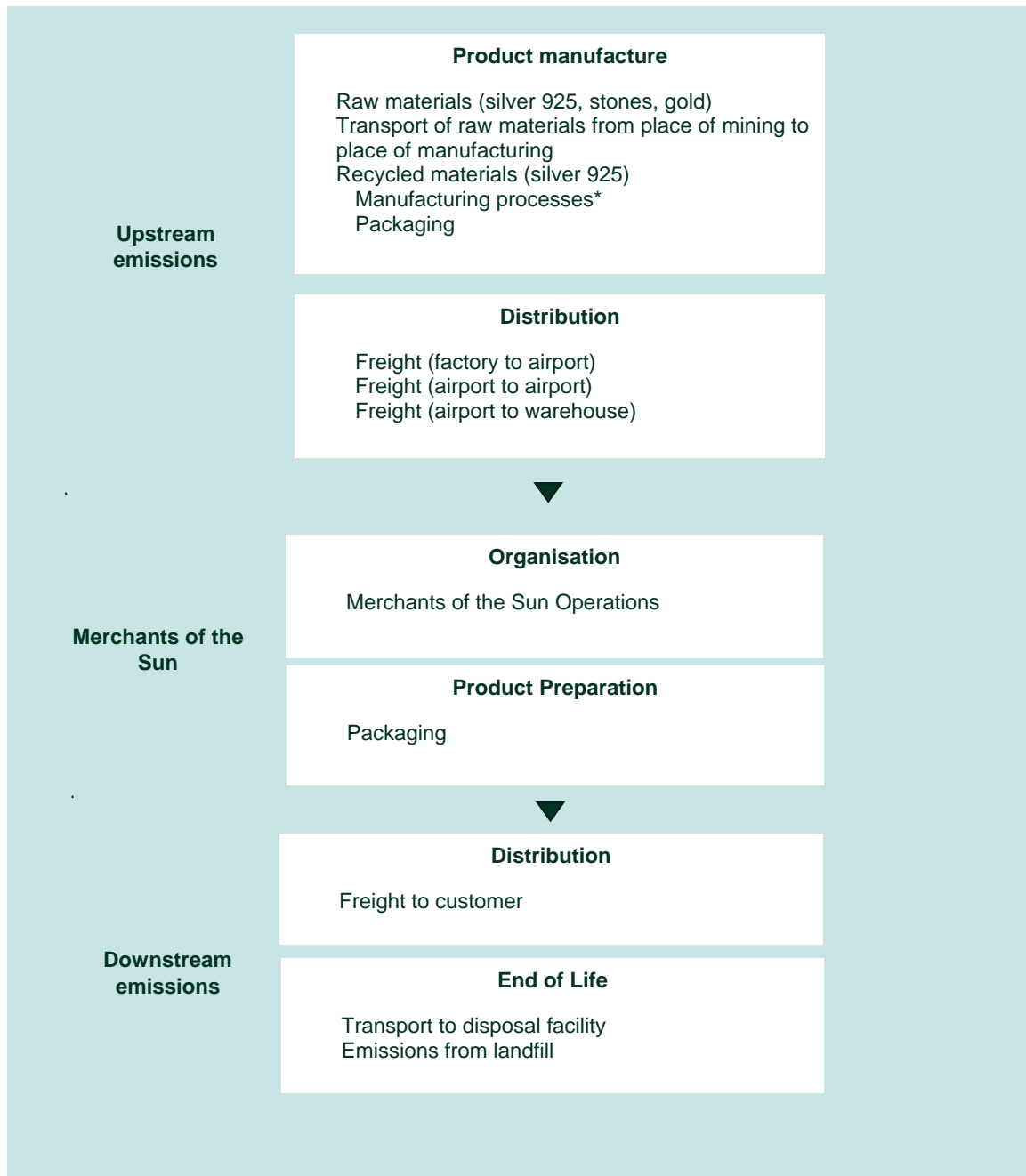
Outside emission boundary

Non-attributable

Products sold:
Accessories (sticker, keychain, gift box, Twin Fin, Leather keychain)

Product/service process diagram

The following assessment is cradle to grave.



*To quantify manufacturing activities and emissions in Bali, actual electricity and fuel consumption data were used (natural gas, fuel, oxygen and electricity), and region-specific emission factors were applied for Indonesia. To quantify manufacturing activity and emissions in China, the software SimaPro and Ecolnvent database were used. Hence, the manufacturing emissions exclude employee-related activities at the manufacturing sites (no operational control from Merchants of the Sun).

Data management plan for non-quantified sources

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

Water consumed in the organisation office was not quantified and is estimated to be immaterial.

Four of the seventeen ring categories have a gemstone. For this assessment, the emission factor allocated is for natural stone plate polished from a granite block due to a data gap in gemstone mining impact in the literature.

4. EMISSIONS REDUCTIONS

Emissions reduction strategy

Merchants of the Sun has achieved its first objective by certifying its organisation and most of its products as carbon neutral through the Climate Active Program. This study helped us understand the climate change impacts of our organisation before deciding on our next emissions reduction actions.

Our overarching goal is to reduce our emissions per product by 30% by 2027 compared to our 2021 base year.

Our next steps are:

2021 - 2022

- To source more than 75% of our products from recycled sterling silver of which we could trace.
- Continue offsetting our GHG emissions year on year through a recognised program such as Climate Active.

2022 - 2023

- Switch our office and warehouse electricity contract to 100% GreenPower and reduce our scope 2 emissions to 0 by the end of 2023.
- Assist our manufacturer in switching to 100% renewable electricity (on-site solar system) and in conducting an energy audit to find ways to reduce energy consumption (electricity and natural gas) in the factory.
- Introduce a close-the-loop program where we can buy back jewellery from our customers and provide credit so we can recycle our products through the market. This would considerably reduce our scope 3 emissions coming from raw material extraction.
- Create a sustainable and less environmentally impactful ring sizer to combat virgin plastic consumption. and reduce its use to less than 5% of the business output.
- Redesign packaging to ensure it minimises our GHG emissions impact and converting to 100% biodegradable packaging between our production house in Indonesia and warehouse in Australia. Retail packaging currently uses no plastic.
- Introduce TerraCycle to reduce our in-house office waste and plastic waste to ensure it is recycled properly by January 2023.
- Implement a clear ethical code with our manufacturers to ensure minimum wage, slave labour and all other ethical policies are complied with by 2023.
- Introduce Gold Alternatives for plating in our pieces.

Beyond:

- Becoming waste-free by 2024, across all areas of production, supply and retail.
- Continuing source reduction to ensure minimalist production, supply and retail.

Merchants of the Sun will define a scope 3 emissions reduction target from FY2023.

You can read more on our sustainability journey [here](#).

Emissions reduction actions

- We pay for carbon offsets on all freight expenditures inbound and outbound through DHL (not accounted in this submission).
- We have begun sampling the new mycelium mushroom packaging which is completely biodegradable and have paid for samples of this which is set to be released in November 2023.
- We have incorporated rewards in our loyalty program to promote our close-the-loop program to ensure repair + warranty over new creations.
- We are currently building a digital ring-sizing AR app to combat our plastic consumption with our free ring-sizer offer.
- We are also currently investigating changing our website to allow people to opt out of the ring sizer included in jewellery boxes so that we can reduce our consumption for people that don't require it to minimise our contribution to waste.
- We have reduced our current packaging box size by 50% in May 2023 to reduce our recycled cardboard consumption.
- We offset our consumption for 2021 by purchasing offsets through approved Climate Active Projects.

5. EMISSIONS SUMMARY

Emissions over time

Emissions since base year		Total tCO ₂ -e	Emissions intensity of the functional unit
Base year:	2020-2021	110	0.01665
Year 1:	2021-2022	290	0.01653

Significant changes in emissions

Emissions have increased since the first year of measurement, mostly due to an increase of number of jewellery items produced and sold and the inclusion of gold-based jewellery.

Emission source name	Current year (tCO ₂ -e and/ or activity data)	Previous year (tCO ₂ -e and/ or activity data)	Detailed reason for change
Product - Raw Materials	85.04	29.90	Quantity of sold items has increased resulting in an increase of all associated emissions (raw materials, manufacturing, freight, and advertising)
Product - Manufacturing	55.72	21.01	
Product - Distribution to Customers	29.20	25.51	
Advertising services	67.95	16.42	

Use of Climate Active carbon neutral products and services

N/A

Product/Service emissions summary

Stage	tCO2-e
Raw Materials	85.05
Manufacturing	55.72
Packaging	0.03
Freight	2.64
Organisation	1.00
Distribution to Customers	112.65
Disposal Emissions	29.20

Emissions intensity per functional unit (including any uplifts required)	0.01653
Number of functional units to be offset (certified)	17,510
Total emissions to be offset (certified)	290

The following table summarises the product emissions per type of jewel (excluding organisation emissions).

Merchants of the Sun Product Family	Product Name	kg CO ₂ -e/jewel
Chain	The Rover Chain	10.81
Chain	The Dusk Bracelet - Gold	18.93
Chain	The Dusk Chain ,Äi Bracelet	8.40
Chain	The Dusk Chain ,Äi Necklace	10.81
Chain	The Dusk Chain ,Äi Necklace Gold	10.66
Chain	The Liminal Chain	12.93
Chain	The Liminal Chain - Gold	23.57
Chain	The Nyx Chain	9.20
Chain	The Nyx Chain - Gold	22.29
Chain	The Nyx Necklace	12.02
Chain	The Rover Chain - Gold	21.45
Cuff	Coyote Cuff	13.62
Cuff	The Sungazer Cuff	13.62
Cuff	The Luna Cuff,ÄiA Corlett Exclusive	13.62
Cuff	The Sungazer Cuff - Gold	23.96
Pendant	Switch Pendant	6.83
Pendant	The Daisy Chain	8.53
Pendant	The Nomad Pendant	6.85
Pendant	Coco Loberg Pendant	8.53
Pendant	Lucky Pendant	8.53
Pendant	Switch Pendant - Gold	16.49
Pendant	The Hermes Pendant	8.04
Pendant	The Hermes Pendant - Gold	18.68
Pendant	The Lovers Pendant	6.69
Pendant	The Lovers Pendant - Gold	17.33
Pendant	The Memento Pendant	8.04
Ring	Azuli Trader	9.40
Ring	Cherry Bomb	9.43
Ring	Howlite Trader	9.40
Ring	Mr Modest	9.60
Ring	Poseidon's Mistress	9.60
Ring	Sunwalker	9.20
Ring	The Blank	9.60
Ring	The Envy	9.60
Ring	The Godfather	9.41
Ring	The Papillon	9.60
Ring	The Solywoda	9.60
Ring	Trust No One	9.60
Ring	Coco Loberg Ring	10.18
Ring	Coco Signet	10.18
Ring	Mr Modest - Gold	17.34
Ring	Sunwalker - Gold	18.82
Ring	The Albatross	9.60

Ring	The Blank - Gold	19.67
Ring	The Circadian - Gold	18.24
Ring	The Circadian Ring	8.08
Ring	The Dusk Ring	6.89
Ring	The Dusk Ring - Gold	17.53
Ring	The Envy - Gold	18.33
Ring	The Godfather - Gold	20.57
Ring	The Liminal Ring	6.89
Ring	The Papillon - Gold	19.14
Ring	The Sempre Eye, A Corlett Exclusive	9.60

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	290
3. Total eligible offsets required for this report	290
4. Total eligible offsets purchased and retired for this report	290
5. Total eligible offsets banked to use toward next year's report	0

The details of offsets relating to this certification are the same as those found in the Merchants of the Sun's Organisation PDS, available on the Climate Active website at <https://www.climateactive.org.au/>.

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	Stapled quantity	Eligible quantity (tCO ₂ -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 (%)
Rimba Raya Biodiversity Reserve Project	VCU	Verra	31/07/2023	9380-92407676-92407775-VCS-VCU-263-VER-ID-14-674-01072014-31122014-1	2014	0	100	0	0	100	34%
Rimba Raya Biodiversity Reserve Project	VCU	Verra	31/07/2023	9380-92408215-92408404-VCS-VCU-263-VER-ID-14-674-01072014-31122014-1	2014	0	190	0	0	190	66%
Total offsets retired this report and used in this report										290	
Total offsets retired this report and banked for future reports									0		

Type of offset units	Quantity (used for this reporting period claim)	Percentage of total
Verified Carbon Units (VCUs)	290	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

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	0	0	0%
Total non-grid electricity	0	0	0%
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)	1,030	0	19%
Residual Electricity	4,512	4,489	0%
Total grid electricity	5,542	4,489	19%
Total Electricity Consumed (grid + non grid)	5,542	4,489	19%
Electricity renewables	1,030	0	
Residual Electricity	4,512	4,489	
Exported on-site generated electricity	0	0	
Emissions (kgCO2e)		4,489	
Total renewables (grid and non-grid)	18.59%		
Mandatory	18.59%		
Voluntary	0.00%		
Behind the meter	0.00%		
Residual Electricity Emission Footprint (TCO2e)	4		
<i>Figures may not sum due to rounding. Renewable percentage can be above 100%</i>			

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	5,542	4,434	665
NT	0	0	0
WA	0	0	0
Tas	0	0	0
Grid electricity (scope 2 and 3)	5,542	4,434	665
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
Non-grid electricity (Behind the meter)	0	0	0
Total Electricity Consumed	5,542	4,434	665

Emission Footprint (TCO2e)	5
<i>Scope 2 Emissions (TCO2e)</i>	4
<i>Scope 3 Emissions (TCO2e)</i>	1

Climate Active Carbon Neutral Electricity summary

Carbon Neutral electricity offset by Climate Active Product	Activity Data (kWh)	Emissions (kgCO2e)
N/A	0	0

Climate Active carbon neutral electricity is not renewable electricity. The emissions have been offset by another Climate Active member through their Product certification.

APPENDIX C: INSIDE EMISSIONS BOUNDARY

Non-quantified emission sources

The following sources emissions 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	(1) Immaterial	(2) Cost effective (but uplift applied)	(3) Data unavailable (but uplift applied & data plan in place)	(4) Maintenance plan in place
Water – organisation	Yes	No	No	No

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.

Accessories sold during FY2021/22 have been excluded from this assessment as they did not form part of the carbon neutrality plan for this year of assessment. The accessories represented a minimal part of the products sold during FY2021/22 and are too different from the other jewelries to be combined under the same submission.

Emission sources tested for relevance	(1) Size	(2) Influence	(3) Risk	(4) Stakeholders	(5) Outsourcing	Included in boundary?
Accessories	No	No	No	Yes	No	No



An Australian Government Initiative

