



PUBLIC DISCLOSURE STATEMENT

MERCHANTS OF THE SUN

ORGANISATION CERTIFICATION
FY2020-21



Australian Government
Climate Active
Public Disclosure Statement

Merchants.



An Australian Government Initiative



NAME OF CERTIFIED ENTITY	Merchants of the Sun
REPORTING PERIOD	1 July 2020 – 30 June 2021 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><i>M.Banks</i></p> <p>Rhyland Horthy-Banks Director 20/12/2022</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	110 tCO ₂ -e
OFFSETS BOUGHT	100% VCUs
RENEWABLE ELECTRICITY	18.93%
TECHNICAL ASSESSMENT	21/9/2022 Mylene Turban Pangolin Associates Next technical assessment due: FY2023/24
THIRD PARTY VALIDATION	Type 3 26/9/2022 Tim Grant Lifecycles

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2. CARBON NEUTRAL INFORMATION

Description of certification

This inventory has been prepared for the financial year 1 July 2020 – 30 June 2021 and covers the business operations of Merchants Label Pty Ltd (trading as Merchants of the Sun), ABN: 62 645 535 673.

Most of the products sold by Merchants of the Sun (in Australia and internationally) are included in this certification boundary and are certified as carbon neutral products under a separate Climate Active product certification (child certification). Excluded products are specified in section 2 of the PDS.

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

Matt Banks

(Founder)



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 the following location:

- Shop 4, 2 Dawn Parade, Miami 4220 QLD.
- Manufacturing operations in Indonesia.

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

- Climate Active Standards
- The Greenhouse Gas 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 (CO₂), methane (CH₄), nitrous oxide (N₂O) and synthetic gases - hydrofluorocarbons (HFCs), perfluorocarbons (PFCs) sulphur hexafluoride (SF₆) and nitrogen trifluoride (NF₃). These have been expressed as carbon dioxide equivalents (CO₂-e) using relative global warming potentials (GWPs).

Organisation description

Merchants of the Sun is a slow jewellery label based in the Gold Coast, Queensland. Founded in April 2020 by Matthew Banks, the brand continues to fashion a balance between expression and ethical creation.

Each collection includes a considered selection of rings, cuffs, chains and pendants, all handcrafted using 100% recycled 925 sterling silver and occasionally 18k gold vermeil. Pieces that go unsold are recycled and melted down for use in succeeding product launches.

Articulating a connection to the environment, Merchants of the Sun acts according to a vision of a zero-waste world. All operations are fortified by the community it has created via consumer education and transparency.

7 employees are based in the brand's Miami studio, while all production occurs in Bali, Indonesia. Creativity is the heart of all operations - a notion that is consciously upheld by the team on a daily basis.

Merchants Label Pty Ltd T/A Merchants of the Sun

ABN: 62 645 535 673

ACN: 645 535 673

Office/Warehouse: 2 Dawn Parade, Miami QLD 4220

House of Merchants: Shop 1/2086 Gold Coast Highway, Miami, Queensland 4220

“Motivated by the vision of a zero-waste world, Merchants of the Sun brings to life handcrafted jewellery that inspires their culture to mindfully consume and consciously create.” 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 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.

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

Inside emissions boundary		Outside emission boundary
<p><u>Quantified</u></p> <p>Organisation</p> <p><i>Accommodation and facilities</i></p> <p><i>Air Transport</i></p> <p><i>Cleaning and Chemicals</i></p> <p><i>Electricity</i></p> <p><i>Food</i></p> <p><i>ICT services and equipment</i></p> <p><i>Land and Sea Transport</i></p> <p><i>Machinery and vehicles</i></p> <p><i>Office equipment & supplies</i></p> <p><i>Postage, courier, and freight</i></p> <p><i>Professional Services</i></p> <p><i>Taxi</i></p> <p><i>Refrigerants</i></p> <p><i>Office Plants</i></p> <p><i>Waste</i></p> <p><i>Employee commute</i></p> <p><i>Working from home</i></p> <p>Product</p> <p><i>Materials</i></p> <p><i>Manufacturing*</i></p> <p><i>Packaging</i></p> <p><i>Freight</i></p> <p><i>Disposal</i></p>	<p><u>Non-quantified</u></p> <p>Organisation</p> <p><i>Water</i></p> <p><u>Optionally included</u></p> <p>N/A</p>	<p><u>Excluded</u></p> <p><i>Products sold: 1 Gold Vermeil Ring and the Accessories (sticker, keychain, gift box, Twin Fin, Leather keychain)</i></p>

*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 EcoInvent 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 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](#).

5. EMISSIONS SUMMARY

Use of Climate Active carbon neutral products and services

None.

Organisation emissions summary

The electricity summary is available in the Appendix B. Electricity emissions were calculated using a market-based approach.

Emission category	Sum of total emissions (tCO ₂ -e)
Accommodation and facilities	0.000
Electricity	1.561
Food	0.082
Horticulture and Agriculture	0.285
ICT services and equipment	2.276
Machinery and vehicles	0.000
Office equipment & supplies	2.105
Product - Disposal Emissions	1.261
Product - Distribution to Customers	25.513
Product - Manufacturing	21.014
Product - Packaging	1.008
Product - Packaging upstream	0.011
Product - Raw Materials	29.902
Product - Upstream Freight	0.444
Professional Services	19.090
Refrigerants	0.050
Transport (Air)	0.000
Transport (Land and Sea)	1.584
Waste	3.713
Working from home	0.039
Total	109.938

Uplift factors

No uplift factors were applied.

6. CARBON OFFSETS

Offsets retirement approach

In arrears	
1. Total emissions footprint to offset for this report	110
2. Total eligible offsets purchased and retired for this report	110
3. Total eligible offsets banked to use toward next year's report	0

Co-benefits

Merchants of the Sun has invested into the following projects:

Rimba Raya Biodiversity Reserve Project, Borneo

Rimba Raya is situated in Central Kalimantan in Indonesian Borneo. Covering land approximately the same size as Singapore, it is known as one of the largest Orangutan sanctuaries in the world. Offering a viable alternative to deforestation, a practice very common in the area, the project has a wealth of benefits to the biodiversity of the region and the surrounding communities. Rimba Raya is home to over 300 species of birds, 122 species of mammals and 180 species of trees and plants. The project has strong community-based initiatives including increased employment for communities, greater access to medical and health services, and assistance with education.

210 MW Musi Hydro Power Plant, Bengkulu

The project is a new run-of river hydro power plant in Bengkulu Province in Indonesia.

The key purpose of the project is to utilise the hydrological resources of the Musi River, which is a renewable source of energy, to generate zero emission electricity to be transmitted to the Sumatra grid.

It will displace fossil fuel-based power and reduce the emissions associated with fossil fuel-based power plants on the Grid.

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, Borneo	VCU	Verra	18/10/2022	6979-362263429-362263471-VCU-016-MER-ID-14-674-01012014-30062014-1	2014	0	43	0	0	43	39%
Rimba Raya Biodiversity Reserve Project, Borneo	VCU	Verra	18/10/2022	6112-279848453-279848464-VCU-016-MER-ID-14-674-01012014-30062014-1	2014	0	12	0	0	12	11%
210 MW Musi Hydro Power Plant, Bengkulu	VCU	Verra	18/10/2022	10374-208447104-208447158-VCS-VCU-262-VER-ID-1-487-01012016-31122016-0	2016	0	55	0	0	55	50%
Total offsets retired this report and used in this report										110	
Total offsets retired this report and banked for future reports									0		

The offsets retired also covered the emissions of the products sold by Merchants of the Sun in FY2020/21 (see the Product certification for more details).

Type of offset units	Quantity (used for this reporting period claim)	Percentage of total
Verified Carbon Units (VCUs)	110	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 (kgCO ₂ -e)	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)	340	0	19%
Residual Electricity	1,454	1,561	0%
Total grid electricity	1,794	1,561	19%
Total Electricity Consumed (grid + non grid)	1,794	1,561	19%
Electricity renewables	340	0	
Residual Electricity	1,454	1,561	
Exported on-site generated electricity	0	0	
Emissions (kgCO ₂ -e)		1,561	
Total renewables (grid and non-grid)	18.93%		
Mandatory	18.93%		
Voluntary	0.00%		
Behind the meter	0.00%		
Residual Electricity Emission Footprint (tCO₂-e)	2		

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 (kgCO ₂ -e)	Scope 3 Emissions (kgCO ₂ -e)
ACT	0	0	0
NSW	0	0	0
SA	0	0	0
VIC	0	0	0
QLD	1,794	1,453	215
NT	0	0	0
WA	0	0	0
TAS	0	0	0
Grid electricity (scope 2 and 3)	1,794	1,453	215
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	1,794	1,453	215
Emission Footprint (tCO₂-e)	1.67		
<i>Scope 2 Emissions (tCO₂-e)</i>	1.45		
<i>Scope 3 Emissions (tCO₂-e)</i>	0.22		

Climate Active carbon neutral electricity summary

Carbon Neutral electricity offset by Climate Active Product	Activity Data (kWh)	Emissions (kgCO ₂ -e)
None	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 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
Water - organisation	Yes	No	No	No

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.

One Gold Vermeil Ring and accessories sold during FY2020/21 have been excluded from this assessment as they did not form part of the carbon neutrality plan for this first year of assessment. The accessories represented a minimal part of the products sold during FY2021/21 and are too different from the other jewelries to be combined under the same submission. The gold vermeil ring started to be produced and sold after this assessment's period.

Emission sources tested for relevance	(1) Size	(2) Influence	(3) Risk	(4) Stakeholders	(5) Outsourcing	Included in boundary?
1 Gold Vermeil Ring and accessories	No	No	No	Yes	No	No



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