

PUBLIC DISCLOSURE STATEMENT

MES SPV PTY LTD (MT ELLIOT SPRINGS)

PRODUCT CERTIFICATION CY2023

Australian Government

Climate Active Public Disclosure Statement



ventures investments community



An Australian Government Initiative



NAME OF CERTIFIED ENTITY	MES SPV Pty Ltd
REPORTING PERIOD	1 January 2023 – 31 December 2023 Arrears Report
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.
	Anthony Duggan Director 29 April 2024



Australian Government

Department of Climate Change, Energy, the Environment and Water

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: January 2024



1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	196.1 tCO ₂ -е
CARBON OFFSETS USED	54% VER 46% VCU
RENEWABLE ELECTRICITY	N/A
	Drenered by Deinenerk Cenitel
	Prepared by: Rainspark Capital
TECHNICAL ASSESSMENT	04/01/2021 Kyle O'Farrel Envisage Works Next technical assessment due: CY 2025

Contents

1.	Certification summary	. 3
2.	Certification information	4
3.	Emissions boundary	5
4.	Emissions reductions	. 9
5.	Emissions summary	11
6.	Carbon offsets	13
7. Re	newable Energy Certificate (REC) summary	17
Appe	ndix A: Additional information	18
Appe	ndix B: Electricity summary	19
Appe	ndix C: Inside emissions boundary	20
Appe	ndix D: Outside emission boundary	21



2. CERTIFICATION INFORMATION

Description of product certification

The certification is for the Mt Elliot Springs range of bottled spring water. The bottled water is produced in polyethylene terephthalate (PET) packaging in 600 mL, 1 L, 1.5 L and refillable 15 L sizes, with an LDPE film wrap around groups of 12 bottles. The PET bottle forming and filling is undertaken at Majors Creek QLD, prior to truck based distribution nationally.

- The functional unit is kgCO2-e per litre of water consumed and the reference unit is 1 litre of water consumed
- Offered as full coverage product
- This certification is cradle to grave

The responsible entity for this product certification is MES SPV Pty Ltd (Mt Elliot Springs), ABN 70 623 470 477.

This Public Disclosure Statement includes information for CY2023 reporting period.

Description of business

Mt Elliot Springs (MES) is the producer of the water and an aquifer arising from Mt Elliot in North Queensland, about 100 kilometres from Townsville.

The MES bottling facility is located on a 105 acre property at the foot of Mt Elliot and operates solely for the bottling of Mt Elliot Springs spring water.

The Mt Elliot Springs range of bottled spring water is available nationally.

The business is fully responsible for the production and distribution of the product throughout its life cycle.



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

Energy – electricity

Energy – gas – LPG Boiler

Energy – gas – forklift

Transport – sea

Transport – road – truck

Water - process water

Water – Springwater (product)

Material – packaging – plastic – PET – preforms

Material – packaging – plastic – HDPE – bottle caps

Material – packaging – plastic – LDPE – shrink wrap

Material – packaging – plastic – LDPE – pallet wrap

Material – packaging – fibre – corrugated cardboard – pallet slips

Material – packaging – fibre – paper – bottle label

Material – packaging – wood – pallet

End-of-life management

Transport – road – car (staff commuting)

Non-quantified

Transport – road – car travel by consumers

Energy – electricity – grid average – retail outlet operations

Pallet manufacturing and EoL management inputs

Outside emission boundary

Non-attributable



Product / Service process diagram

The following diagram shows a cradle to grave boundary









4.EMISSIONS REDUCTIONS

Emissions reduction strategy

MES commits to reduce all emissions in our value chain by 25% by 2030, from a 2020 base year. We endeavour to do this via undertaking the initiatives outlined below.

The MES emissions reduction strategy consists of the following actions:

Initiative	Scope	Proposed Action(s)	Targeted Reduction	Timeframe	Measurable / Notes
Reduce Energy Consumption	2	 Reduce electricity consumption from the grid Install a 200–300kW solar PV system on site Upgrades to reduce energy use including heat recovery systems and reverse cycle heating and cooling Install solar hot water system 	~50% CO₂-e	Dec-2026	 Measured by comparing energy consumption year to year using data from electricity bills Compare consumption of new units to older used models in order to quantity reduction
Increase Efficiency of Packaging Materials	1/3	 Shift to 50% –100% recycled PET in bottles if possible Offer products in reusable / recyclable glass 	~25% CO ₂ -e	Dec-2025	• CO ₂ emissions reduce by 5%, for every 10% increase in recycled content
Reduce Freight Emissions	1, 2, 3	 Reduce transport and delivery carbon footprint Investigate freight options that will decrease emissions Acquire more efficient vehicles 	~25t CO2-e	Dec-2024	Measured by taking delivery on new truck and comparing fuel consumption stats with old truck
Reforestation and Biodiversity	n/a	 Reforest and contribute to biodiversity on 100 acre site 	n/a	Dec-2026	 Intended to be in line with Climate Active standards

MES has its emission reduction strategy in the Sustainability page if its website found here:

https://www.mtes.com.au/sustainability



Emissions reduction actions

In the reporting period, MES undertook the following measures to reduce its emissions:

- Became more efficient with use of packaging, reducing emissions from materials by an average of over 25% in key inputs including paper, HDPE, LDPE, and PET – Scope 1 and 3
- Improved operating and delivery efficiency to reduce emissions related to transport, reducing emissions by an average of 40% – Scope 1, 2 and 3

The business also investigated further areas of emissions reduction improvement as follows:

- Pending installation of the solar PV system, awaiting completion of new shed Emissions reduction target: reduce grid consumption by 50%
- Assess shifting to 50–100% recycled PET in bottles or offering products in reusable / recyclable glass bottles as well as implementing reuse program for glass bottles - Emissions reduction target: ~25% CO2-e
- Pending acquisition of new / more efficient delivery vehicle ordered new, more efficient 2023 truck to replace 2005 truck - Emissions reduction target: ~25t CO₂-e
- Investigated process upgrades to reduce energy use including heat recovery systems and reverse cycle heating and cooling to reduce the heating and cooling demands of our plant and increase overall efficiency. Investigations found that the heat recovery system did not have sufficient energy to cool water to the PV system will be more efficient - Emissions reduction target: ~50% CO2-e



5.EMISSIONS SUMMARY

Emissions over time

Emissions since base year							
Total tCO ₂ -e Emissions intensity of the functional unit							
Base year:	2020	240.8	0.000244				
Year 1:	2021	n/a	n/a				
Year 2:	2022	238.3	0.000244				
Year 3:	2023	196.10	0.000216				

Significant changes in emissions

There was no significant increases in emissions across emissions sources in CY2023.

Emissions summary

Emission Source	tCO2-e
Energy – electricity – grid average	-
Energy – electricity – MES average	55.29
Energy – electricity – renewable	-
Energy – gas	3.29
Material – packaging – fibre –	5.86
Material – packaging – fibre – paper	3.49
Material – packaging – glass – flint	-
Material – packaging – plastic – HDPE	4.39
Material – packaging – plastic – LDPE	2.02
Material – packaging – plastic – PET	36.24
Material – packaging – wood	-
Material – unspecified facility inputs	9.44
Transport – road – car	8.94
Transport – road – truck	52.06
Transport – sea	2.00
Water – process water	3.77
Water – Springwater (product)	-
Total Inventory Emissions	186.77



Reason for uplift factor	tonnes CO ₂ -e
5% to account for immaterial items not identified in the scope, for any reason.	9.34
Total uplift factors	9.34
Total to offset (Carbon footprint + total uplift factors)	196.1

Product / Service offset liability					
Emissions intensity per functional unit	0.000216				
Emissions intensity per functional unit including uplift factors	9.34				
Number of functional units covered by the certification	862,706				
Total emissions (tCO ₂ -e) to be offset	196.10				



6.CARBON OFFSETS

Eligible offsets retirement summary

This certification has taken an in-arrears approach. The total emission to offset is 197 t CO₂-e. The total number of eligible offsets used in this report is 197. Of the total eligible offsets used, 11 were previously banked and 186 were newly purchased and retired. 32 are remaining and have been banked for future use.

Offsets retired for Climate Active certification

Type of offset units	Eligible quantity (used for this reporting period)	Percentage of total
Verified Emissions Reductions (VERs)	117	54%
Verified Carbon Units (VCUs)	80	46%

Project description	Type of offset units	Registry	Date retired	Serial number (and hyperlink to registry transaction record)	Vintage	Stapled quantity	Eligible quantity retired (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 (%)
Safe Water and/or Cookstoves – Rwanda DelAgua Public Health Program in Eastern Africa	VCU	Verra Registry	26 Feb 2024	<u>12018-375414607-</u> <u>375414709-VCS-VCU-259-</u> <u>VER-RW-3-2400-15092015-</u> <u>31122018-0</u>	2015 - 2018		103	0	23	80	41%
Safe Water - Thiès, Senegal GS5658 VPA 3: Borehole project "Antonio Giaffreda", Senegal	VER	Gold Standard	26 Feb 2024	<u>GS1-1-SN-GS6443-16-</u> 2019-21078-1155-1254	2019		100	0	0	100	51%



Safe Water - Lifestraw, Kenya Sustainable Deployment of the LifeStraw Family in Rural Kenya	VER	Gold Standard	26 Feb 2024	<u>GS1-1-KE-GS886-16-2013-</u> <u>3495-1281-1297</u>	2013		17	0	9	6	3%
Protecting tropical rainforests in Papua New Guinea NIHT Topaiyo REDD+	VCU	Verra Registry	25 Nov 2021	<u>10074-177021182-</u> <u>177021231-VCS-VCU-466-</u> <u>VER-PG-14-2293-</u> <u>01062017-31122019-0</u>	2017 - 2019		50	39	0	11	5%
Total offsets retired this report and used in this report 197											
Total offsets retired this report and banked for future reports 32											



Co-benefits

MES has considered co-benefits of the carbon offsets it has purchased. We have chosen to support projects with specific social or environmental outcomes that align with our corporate goals and values as well as being relevant to our manufacturing process.

Safe Water and/or Cookstoves - Rwanda

Zero-energy LifeStraw® Family water filter units and/or Dura high-efficiency cookstoves were distributed directly to 295,794 households across 16 districts in 3 provinces of Rwanda.

In 2014, 100,567 households across 7 districts received both the water filters and cookstoves. In 2016 another 195,227 households across all 16 districts received cookstoves only. Each household has on average 4 people.

The LifeStraw® Family is a point-of-use water filter that helps people access safe drinking water. It is an instant microbiological purifier that delivers at least 18,000 litres of USEPA-quality drinking water. It reduces the use and demand for firewood for water treatment by boiling, leading to reduced emissions.

The Dura is a high-efficiency, family-sized cook stove based on the 'rocket stove' concept of operation. These stoves are considerably more efficient than the standard three-stone-fire and reduce the use of nonrenewable biomass for cooking. These stoves can achieve a complete burn of combustible materials resulting in little to no smoke, greatly improving indoor air quality. Households with existing running water in their homes only receive cookstoves, but not water filters.

Cookstoves and safe water projects reduce the use of unsustainably harvested fuel, which:

- reduces the considerable time, effort and risk of injury or violence while collecting fuel
- provides increased time for other tasks, education, employment and economic activity
- decreases the degradation of local forests and the associated impacts on biodiversity
- improves indoor air quality and drinking water supplies
- helps improve health and safety, especially for women and children

<u>Safe Water – Thiès, Senegal</u>

The rural areas of the Western part of Senegal are characterized by poor access to clean drinking water. Many of the water sources used (boreholes, wells etc.) suffer micro-biological contamination and are polluted by salt.

This micro-scale project involves the installation of two solar powered water supply and purification systems in the villages of Ndiass and Toucouleur and two solar powered water purification systems on pre-existing boreholes in the villages of Louckouk Ndiaye and Dalakh 2. Each system can supply over 17,000 per day on average.

The water purification systems have a proportional chlorine doser pump which is powered by the solar panels. A solar pump is installed in each of the boreholes and the extracted water is transferred into elevated tanks and then piped into drinking water "fountains".

The construction of the first system started in March 2018 and all systems were operational by the end of April 2018. 3,269 people live within the project's area and now have access to safe water. Safe drinking water is provided to the communities reducing local use of boiling for water purification. As the fuel sources used to boil water are sourced unsustainably from surrounding forests, reducing the need to boil



water reduces the amount of biomass removed from the forests helping maintain carbon stocks in the environment. The reduction in fuel use helps to maintain biodiversity in forested areas.

Having access to safe and clean drinking water helps:

- improve the hygiene, social, economic and environmental issues related to the water cycle in rural areas
- reduce indoor air pollution from boiling water
- avoid many health problems linked to the use of unsafe drinking water like diarrhoea, intestinal infections and parasites

The project helps raise awareness among the local population about hygiene and a campaign on water, sanitation and health related issues is undertaken once a year

<u>Safe Water – Lifestraw, Kenya</u>

The project distributed in rural Kenya over one million LifeStraw® Family units. These units are an instant microbiological purifier that delivers at least 18,000 litres of EPA-quality drinking water, enough to supply a family of five with microbiologically clean drinking water for three years.

These point-of-use water filters treat contaminated drinking water, reducing the demand for conventional water treatment through boiling water with non-renewable biomass. The system requires no electricity or additional consumables beyond the unit itself. With the assistance of carbon finance, this project is economically sustainable and provides a significant improvement in public health.

First programme directly linking carbon credits with safe drinking water. 100,000's of small household interventions create one of the world's largest carbon reduction projects. Saves 1.5 million tonnes of wood from being burned each year, slowing deforestation among Kenya's dwindling woodland. 1.35 million tonnes of CO2 avoided in first 6 months. By reducing pressure on the forests, it helps to maintain Kenya's biodiversity.

LifeStraw offers a point-of-use water treatment solution, widely seen as an effective means of delivering safe drinking water. It empowers Kenyans who can now filter their own drinking water. It was planned to deliver an estimated 4.8 billion litres of safe drinking water annually to 4.5 million people.

Reduces incidence of waterborne diseases achieving a statistically significant reduction in the odds of diarrhoea, dysentery and severe dehydration among under-5's using it exclusively. Women and children spend less time gathering and carrying firewood and it reduces their exposure to poor air quality from burning firewood to heat water.

It addresses four UN Millennium Development Goals: reducing child mortality; improving maternal health; combating diseases; and ensuring environmental sustainability. Thousands of jobs have been created locally to distribute filters and monitor usage during twice-yearly campaigns. User training is provided upon installation. Regular visits continue every 6 months to ensure that the filters are in working condition and that each householder is happy using their filter.

Protecting tropical rainforests in Papua New Guinea

This project protects local forests and biodiversity from logging in New Ireland, PNG. In addition, it contributes to 12 UN Sustainable Development Goals, creates employment (forest patrols, monitoring and inventory activities) and facilitates community engagement.



7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) Summary



APPENDIX A: ADDITIONAL INFORMATION



APPENDIX B: ELECTRICITY SUMMARY



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 <u>one</u> of the following reasons:

- 1. Immaterial <1% for individual items and no more than 5% collectively
- 2. <u>Cost effective</u> Quantification is not cost effective relative to the size of the emission but uplift applied.
- 3. <u>Data unavailable</u> 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
Transport – Road – car travel by consumers	No	No	Yes
Energy – electricity – grid average – retail outlet operations	No	No	Yes
Pallet manufacturing and EoL management inputs	No	No	Yes

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. <u>Size</u> 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.
- <u>Risk</u> The emissions from a particular source contribute to the responsible entity's greenhouse gas risk exposure.
- 4. **<u>Stakeholders</u>** 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
N/A						n/a

There are non-attributable emissions sources





An Australian Government Initiative

