



PUBLIC DISCLOSURE STATEMENT

HYDROFLUX INDUSTRIAL PTY LTD


**PRODUCT CERTIFICATION
FY2022-23 (PROJECTION)**

Australian Government
Climate Active
Public Disclosure Statement



An Australian Government Initiative



NAME OF CERTIFIED ENTITY	Hydroflux Industrial Pty Ltd
REPORTING PERIOD	Financial year 1 July 2022 – 30 June 2023 Projected 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>Adrian Minshull CEO, Hydroflux Industrial Pty Ltd 11th August 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	216 tCO2-e
THE OFFSETS BOUGHT	100% VERS
RENEWABLE ELECTRICITY	18.93%
TECHNICAL ASSESSMENT	29 July 2022 Joseph Gregorio 100% Renewables Next technical assessment due: FY 2026
THIRD PARTY VALIDATION	Type 3 14 th July 2022 Dr. Adina Cirtog, Deepali D Ghadge Pangolin Associates Pty Ltd

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2. CARBON NEUTRAL INFORMATION

Description of certification

This carbon neutral product certification covers a portfolio of Hydroflux Industrial Pty Ltd's, ABN 86 163 374 338, water and wastewater treatment equipment sold in Australia, New Zealand and the Pacific Islands. The portfolio includes HyDAF, HydraBLEND, HySEP and CakeMAX. The cradle to gate carbon inventory includes:

- Raw material extraction
- Material pre-processing
- Manufacturing
- Provision of equipment¹
- Transport (land and sea)
- Distribution
- Packaging

Product description

A functional unit of 'tonnes of CO₂-e per equipment unit' will be used as a quantifiable reference to the associated greenhouse gas (GHG) emissions. This carbon neutral product certification is full coverage. A cradle to gate boundary is used as Hydroflux Industrial does not have control over emissions for installation, usage and end of life. The partial life cycle includes all emissions from raw material extraction through to product delivery as stipulated by the contractual agreement.

“The Hydroflux Group of companies was created to deliver the highest level of engineering and scientific knowhow to issues of sustainability, climate adaption and environmental protection with a specific focus on water and wastewater.

Providing Climate Active certified products demonstrates that Hydroflux takes it's climate responsibility seriously.”

¹ Organisation emissions are offset in [Hydroflux Pty Ltd's Climate Active organisation certification](#)

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.

Inside emissions boundary

Quantified

Raw material extraction

Material pre-processing

Manufacturing

Hydroflux organisation for the design, project management and sales of products (offset in [Hydroflux Pty Ltd's Climate Active organisation certification](#))

Transport (land and sea)

Distribution to client

Packaging

Non-quantified

NA

Outside emission boundary

Non-attributable

Downstream life cycle stages:

Distribution and storage after delivery

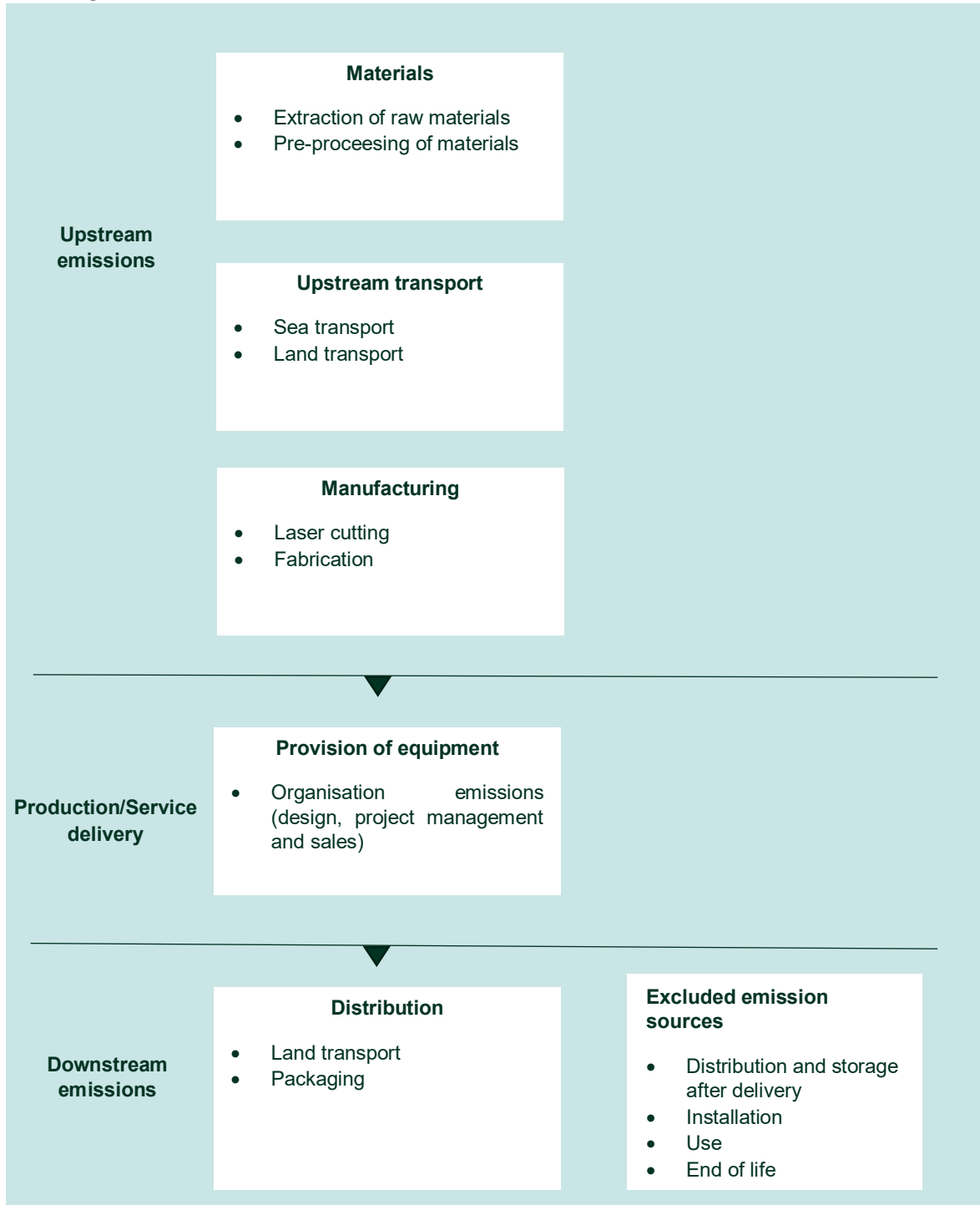
Installation

Use

End of life

Product process diagram

Cradle-to-gate²



² Organisation emissions are offset in [Hydroflux Pty Ltd's Climate Active organisation certification](#)

Data management plan for non-quantified sources

All relevant emission sources were included in the carbon inventory assessment, however, the following data management procedures will be in place to improve the accuracy of calculations in future assessment periods:

- Engaging manufacturers and equipment suppliers to obtain actual electricity consumption data.
- Engaging manufacturers to obtain actual paint consumption for relevant equipment.
- Engaging contracted logistics companies to obtain actual summary of t.km travelled.

This forms part of the continuous improvement processes in place at Hydroflux Industrial Pty Ltd.

4. EMISSIONS REDUCTIONS

Emissions reduction strategy

Hydroflux Industrial Pty Ltd takes its climate responsibility seriously, extending the Hydroflux Group's organisation certification to our products. Scope 1 and 2 emission reduction actions are outlined in the Hydroflux Group's organisation certification (which can be found in [Hydroflux Pty Ltd's Climate Active organisation certification](#)). Scope 3 emissions are targeted in this emissions reduction strategy.

Our ability to influence carbon emissions in relation to this product portfolio is somewhat limited as the majority of attributable processes are outside our operational control. The emission sources that have some potential to be influenced include the raw materials used in our products as well as the manufacturing processes, transport and distribution within the supply chain.

We recognise that meaningful emissions reduction action takes time, so actions will be undertaken in 2022 and onwards. We will continue to formally communicate our carbon neutral commitment to all employees, suppliers, contractors, fabricators and peers within the industry to support our emissions reduction and consequently encourage the decarbonisation of the industry as a whole. As a start, Hydroflux Industrial will conduct a formal presentation to engage and educate three key suppliers by the end of December 2023. We aim to work with our main Australian fabricator to invest in renewable electricity by the end of December 2025, which is estimated to offer up to 2% absolute reduction of emissions from the 2022 base year. We are also focused on sustainable procurement action, particularly transport optimisation to uncover emissions reduction by the end of December 2023. This involves a detailed assessment of our current procurement activities, identifying opportunities aligned with ISO20400 and integrating findings into policy, strategy and the way we conduct business.

Our ongoing product development, improvement and innovation sees our equipment in a constant state of evolution, optimising material consumption and energy efficiency. As technological advancements are made in the production of green steel and other low carbon materials, we will investigate and commit to uptake of these materials.

Hydroflux Industrial will review and report on our emissions reduction strategy following the end of the financial year 2022-23.

5. EMISSIONS SUMMARY

Use of Climate Active carbon neutral products and services

None.

Product emissions summary

The following table represents a summary for each product group over the lifecycle from cradle-to-gate.

Stage	HyDAF (tCO ₂ -e)	HydraBLEND (tCO ₂ -e)	HySEP (tCO ₂ -e)	CakeMAX (tCO ₂ -e)
Material extraction and pre-processing	62.0	2.9	6.0	73.5
Manufacturing	4.5	0.2	0.4	6.8
Provision of equipment (offset in Hydroflux Pty Ltd's organisation certification) ³	14.3	3.6	0.9	3.7
Transport	4.2	0.2	0.4	8.2
Distribution	3.6	3.5	0.4	4.4

Emission offsets required for FY22-23 have been forward purchased based on emissions for projected sales. In accordance with Climate Active requirements, a 'true-up' will be conducted on actual sales after the end of the financial year reporting is completed. An uplift factor of 19% was applied to account for any changes in the true-up process.

Emissions intensity per functional unit	confidential
Number of functional units to be offset	confidential
Total emissions to be offset	216 t CO ₂ -e

³ Organisation emissions are offset in [Hydroflux Pty Ltd's Climate Active organisation certification](#)

6. CARBON OFFSETS

Offsets retirement approach

Forward purchasing

1. Total emissions footprint to offset for this report	216 t CO ₂ -e
2. Total eligible offsets purchased and retired for this report and future reports	605 t CO ₂ -e
3. Total eligible offsets retired and used for this report	216 t CO ₂ -e
4. Total eligible offsets forward purchased and banked to use toward next year's report	389 t CO ₂ -e

Co-benefits

This section provides a brief description of the carbon offsets project purchased and retired for Hydroflux Industrial's carbon neutral product claim.

Methane Gas Capture and Electricity Production at Kubratovo Wastewater Treatment Plant, Sofia, Bulgaria

The project is both a methane emissions reduction and energy production project. Methane produced in Kubratovo wastewater treatment plant is captured in common methane tanks serving as a buffer and then supplied to the newly installed CHP gas engines for electricity and heat production, which in turn will substitute both the plant's electricity purchases from the grid and diesel fuel usage. Excess electricity is supplied to the grid. This transformation has a major effect on the environment through dramatically reducing the existing methane gas emissions at the plant while also reducing the volume of sludge (to as much as 50%) that needs to be transported, hence reducing GHG emissions from transportation as well.

The project meets the following Sustainable Development Goals:



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 (%)
Methane Gas Capture and Electricity Production at Kubratovo Wastewater Treatment Plant, Sofia, Bulgaria	VERs	GSF	18 th July 2022	GS1-1-BG-GS4238-6-2015-5862-16741-16956 https://registry.goldstandard.org/credit-blocks/details/281669	2015		216	0	0	216	100%
Methane Gas Capture and Electricity Production at Kubratovo Wastewater Treatment Plant, Sofia, Bulgaria	VERs	GSF	18 th July 2022	GS1-1-BG-GS4238-6-2015-5862-16957-17172 https://registry.goldstandard.org/credit-blocks/details/281672	2015		216	0	216	0	0%
Methane Gas Capture and Electricity Production at Kubratovo Wastewater Treatment Plant, Sofia, Bulgaria	VERs	GSF	18 th July 2022	GS1-1-BG-GS4238-6-2015-5862-17173-17345 https://registry.goldstandard.org/credit-blocks/details/281673	2015		173	0	173	0	0%
Total offsets retired this report and used in this report										216	
Total offsets retired this report and banked for future reports									389		
Type of offset units		Quantity (used for this reporting period claim)				Percentage of total					
Verified Emissions Reductions (VERs)		216				100%					

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) Summary

N/A.

APPENDIX A: ADDITIONAL INFORMATION

Hydroflux Industrial Pty Ltd is committed to the following principles:

- Compliance with our ISO14001 Accredited Environmental Policy
- Compliance with our ISO 45001 & AS/NZS 4801 Accredited Safety Policy
- Compliance with our ISO 31000 Risk Management System
- Compliance with our Modern Slavery Statement
- Providing a safe and respectful workplace
- Encouraging a culture of continuous improvement
- Sustainable water management, specifically the principles of water stewardship
- Conserving natural resources by reusing and recycling where possible
- Ensuring the responsible use of energy

References:

- [H-Sustainability-Policy.pdf \(hydroflux.com.au\)](#)
- [Modern slavery statement reference](#)

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)	1,465	0	19%
Residual Electricity	6,276	6,734	0%
Total grid electricity	7,741	6,734	19%
Total Electricity Consumed (grid + non grid)	7,741	6,734	19%
Electricity renewables	1,465	0	
Residual Electricity	6,276	6,734	
Exported on-site generated electricity	0	0	
Emission Footprint (kgCO ₂ e)		6,734	
Total renewables (grid and non-grid)	18.93%		
Mandatory	18.93%		
Voluntary	0.00%		
Behind the meter	0.00%		
Residual Electricity Emission Footprint (TCO₂e)	7		
<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)	Emissions (kgCO ₂ e)
ACT	0	0
NSW	6,078	5,470
SA	0	0
Vic	685	746
Qld	978	910
NT	0	0
WA	0	0
Tas	0	0
Grid electricity (scope 2 and 3)	7,741	7,126
ACT	0	0
NSW	0	0
SA	0	0
Vic	0	0
Qld	0	0
NT	0	0
WA	0	0
Tas	0	0
Non-grid electricity (Behind the meter)	0	0
Total Electricity Consumed	7,741	7,126

Emission Footprint (TCO₂e)

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Climate Active Carbon Neutral Electricity summary

Carbon Neutral electricity offset by Climate Active Product	Activity Data (kWh)	Emissions (kgCO ₂ e)
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
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**.

	No actual data	No projected data	Immaterial
N/A	-	-	-

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.

Relevance test					
Non-attributable emission	<i>The emissions from a particular source are likely to be large relative to the organisation's electricity, stationary energy and fuel emissions</i>	<i>The emissions from a particular source contribute to the organisation's greenhouse gas risk exposure.</i>	<i>Key stakeholders deem the emissions from a particular source are relevant.</i>	<i>The responsible entity has the potential to influence the reduction of emissions from a particular source.</i>	<i>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.</i>
Distribution and storage after delivery	no	no	no	no	no
Installation	no	no	no	no	no
Use	yes	no	no	no	no
End of life	no	no	no	no	no



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