

PUBLIC DISCLOSURE STATEMENT

HYDROFLUX UTILITIES PTY LTD

PRODUCT CERTIFICATION FY2022–23 (TRUE-UP) FY2023–24 (PROJECTED)

Australian Government

Climate Active Public Disclosure Statement





Australian Government

Department of Climate Change, Energy, the Environment and Water

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Version: August 2023



1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	2,518 tCO ₂ -e
THE OFFSETS USED	100% Gold Standard VERs
RENEWABLE ELECTRICITY	34.16%
CARBON ACCOUNT	Prepared by: Cress Consulting Pty Ltd
TECHNICAL ASSESSMENT	FY2022-23 projected: 27th July 2022 Joseph Gregorio 100% Renewables Next technical assessment due: FY 2026
THIRD PARTY VALIDATION	FY2022-23 projected: Type 3 14th July 2022 Dr. Adina Cirtog, Deepali D Ghadge Pangolin Associates Pty Ltd

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2. CARBON NEUTRAL INFORMATION

Description of certification

The Hydroflux Group of companies are sustainability driven and were created to deliver unrivalled engineering and scientific knowhow to issues of sustainability, climate adaption and environmental protection with specific focus on water, wastewater, renewable energy, climate resilience and environmental protection. Climate Active certification demonstrates that Hydroflux is a mature company that takes its climate responsibility seriously.

This carbon neutral product certification covers a portfolio of Hydroflux Utilities Pty Ltd's, ABN 68 166 065 461, water and wastewater treatment chemicals sold in Australia. Product portfolio includes HydraPrime, HydraBase, HydraLite, HydraBond, HydraClean and HydraFoam. This Public Disclosure Summary is a true-up of FY2022-23 and includes the projected FY2023-24.

The cradle to gate carbon inventory includes:

- Raw material extraction
- Material pre-processing
- Provision of chemicals¹
- Transport (land and sea)
- Distribution
- Packaging

Product/Service description

A functional unit of 'kg of CO2-e per litre' 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 Utilities does not have control over emissions for 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.

¹ Organisation emissions are offset in <u>Hydroflux Pty Ltd's Climate Active organisation certification</u>



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		Outside emission boundary
<u>Quantified</u>	Non-quantified	Non-attributable
Raw material extraction	N/A	Downstream life cycle
Material pre-processing		stages:
Hydroflux organisation for the design, project		Distribution and storage after delivery
management and sales of products (offset in <u>Hydroflux</u>		Use
Pty Ltd's Climate Active organisation certification)		End of life
Transport (land and sea)		
Distribution to client		
Packaging (20L drum and IBC)		
IBC end of life recycling		
	Optionally included	
	N/A	



Product/service process diagram

Cradle-to-gate²



² Organisation emissions are offset in <u>Hydroflux Pty Ltd's Climate Active organisation certification</u>



4. EMISSIONS REDUCTIONS

Emissions reduction strategy

Hydroflux Utilities 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 <u>Hydroflux Pty Ltd's Climate Active organisation certification</u>). 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.

We recognise that meaningful emissions reduction action takes time, so actions will build on progress achieved in previous years into 2023 and onwards. We will continue to formally communicate our carbon neutral commitment to all employees, suppliers, contractors and peers within the industry to support our emissions reduction and consequently encourage the decarbonisation of the industry as a whole.

We will conduct a formal presentation to engage and educate 3 key suppliers in November 2023. We will also work with the Hydroflux Group of entities to define what sustainable procurement means to the business and determine how this definition will best guide a sustainable procurement strategy, policy and the way we conduct business by the end of December 2025.

Emissions reduction actions

In the 2022-23 reporting period, Hydroflux Utilities Pty Ltd:

- Continued to communicate our carbon neutral commitment in our project delivery.
- Continued to offer a take back and reuse option for IBC packaging to our customers, when it is a viable choice.
- Continued to optimise our transport processes on a project-by-project basis, showcasing our dedication to minimise transport emissions.
- Conducted a gap analysis against ISO20400 Sustainable Procurement to enhance the sustainability of Hydroflux procurement activities.



5. EMISSIONS SUMMARY

Use of Climate Active carbon neutral products and services

Certified brand name	Product or Service used
Paper Australia Pty Ltd	Reflex A3 and A4
Qantas Airways Limited	Opt-in carbon neutral passenger service
Virgin Australia Holdings	Opt-in carbon neutral passenger service
Jetstar Airways Pty Ltd	Opt-in carbon neutral passenger service
Telstra Corporation Limited	Mobile phone plans & mobile broadband plans inc. SIM kits



Emissions summary

This section represents a summary of emissions per lifecycle stage from cradle-to-gate.

The previous report was a FY22-23 projection report using representative data to estimate the emissions for the reporting year. This table shows the projected emissions for each product and their trued-up value against each stage in FY2022-23 as it was shown in the original projection, and the difference between the two.

Stage	Hydra- Prime (tCO2-e) Proj	Hydra- Prime (tCO2-e) True-up	Hydra- Base (tCO2-e) Proj	Hydra- Base (tCO2-e) True-up	Hydra- Lite (tCO2-e) Proj	Hydra- Lite (tCO2-e) True-up	Hydra- Bond (tCO2-e) Proj	Hydra- Bond (tCO2-e) True-up	Hydra- Clean (tCO2-e) Proj	Hydra- Clean (tCO2-e) True-up	Total (tCO2-e) Proj	Total (tCO2-e) True-up
Material extraction and pre- processing	327.6	643.9	85.2	223.7	68.3	116.5	369.8	898.6	1.5	34.1	852.4	1,916.7
Provision of chemicals ³	22.7	31.4	4.5	7.0	2.1	2.3	8.3	13.8	0.2	3.2	37.8	57.7
Shipping	103.5	197.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	103.5	197.0
Road transport	29.2	95.6	11.0	24.3	2.0	3.0	30.5	64.4	0.2	4.1	72.9	191.5
Packaging	51.1	112.3	18.2	48.2	4.4	7.7	12.4	30.6	0.5	13.1	86.6	211.9
Total	534.1	1,048.8	118.9	296.2	76.8	127.1	421.0	993.7	2.4	51.3	1,153.2	2,517.1
Uplift											184.5	
Total emissions to be offset											1,337.7	2,517.1
Difference between projected and actual emissions										-1,179.4		

Changes of the actual emissions compared to projected emissions in FY2022-23 are related to changes in emission factors and sales projections.

Emissions intensity per functional unit	Confidential
Number of functional units to be offset	Confidential
Total emissions to be offset	2,517.1

³ Organisation emissions are offset in <u>Hydroflux Pty Ltd's Climate Active organisation certification</u>



The following table represents a summary of emissions for each product group over the lifecycle from cradle-to-gate for the projected (2023-24) reporting year. HydraFoam is an additional product for Hydroflux Utilities FY2023-24 projected emissions.

Stage	HydraPrime (tCO2-e)	HydraBase (tCO2-e)	HydraLite (tCO2-e)	HydraBond (tCO2-e)	HydraClean (tCO2-e)	HydraFoam (tCO2-e)	Total (t CO2-e)
Material extraction and pre-processing	559.3	151.0	111.6	978.5	40.8	32.2	1,873.4
Provision of chemicals ⁴	29.6	8.2	2.4	9.7	4.3	0.3	54.6
Sea transport	161.8	0.0	0.0	2.5	9.7	4.9	178.9
Road transport	73.1	17.9	2.9	68.4	5.0	2.5	169.7
Packaging	96.9	30.6	7.4	32.7	15.9	1.4	184.9
Total	891.0	199.6	121.9	1,082.0	71.4	40.9	2,406.7
Uplift							0.0
Total emissions to be offset							2,406.7

Emission offsets required for FY23-24 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.

Emissions intensity per functional unit	Confidential
Number of functional units to be offset	Confidential
Total emissions to be offset	2,406.7

⁴ Organisation emissions are offset in <u>Hydroflux Pty Ltd's Climate Active organisation certification</u>



6.CARBON OFFSETS

Offsets retirement approach

This certification has taken a forward offsetting approach and adjusted in the true-up process for the reporting year FY22-23. The total emission to offset is 2,518 CO₂-e. The total number of eligible offsets used in this report is 2,518 CO₂-e. Of the total eligible offsets used, 3,477 t CO₂-e were previously banked and 1,480 t CO₂-e were newly purchased and retired. 2,439 t CO₂-e are remaining and have been banked for future use.

Co-benefits

This section provides a brief description of the carbon offsets project purchased and retired for Hydroflux Utilities' 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:



Up Energy Efficiency Cookstove Programme, Uganda

This project involves the replacement of less efficient cooking stoves using woody biomass with improved cooking stoves (ICS). The project ICSs replace the low efficiency, traditional biomass fired stoves, used for meeting similar thermal energy needs. The project saves on consumption of woody biomass and generates emission reductions by distribution of the fuel-efficient wood / charcoal stoves.

The project meets the following Sustainable Development Goals:





Eligible offsets retirement summary

Offsets re	tired for Climate Active carb	on neutra	l certificatio	n								
Project des	scription	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 (FY2023-24)	Eligible quantity used for this reporting period (FY2022-23)	Percentage of total (%)
Methane Ga Production Treatment F	as Capture and Electricity at Kubratovo Wastewater Plant, Sofia, Bulgaria	VERs	GSR	18 Jul 2022	<u>GS1-1-BG-GS4238-6-2015-5862-</u> <u>12071-13407</u>	2015	-	1,337	0	0	1,337	53%
Methane Ga Production a Treatment F	as Capture and Electricity at Kubratovo Wastewater Plant, Sofia, Bulgaria	VERs	GSR	18 Jul 2022	<u>GS1-1-BG-GS4238-6-2015-5862-</u> <u>13408-14477</u>	2015	-	1,070	0	0	1,070	42%
Methane Ga Production Treatment F	as Capture and Electricity at Kubratovo Wastewater Plant, Sofia, Bulgaria	VERs	GSR	18 Jul 2022	<u>GS1-1-BG-GS4238-6-2015-5862-</u> <u>14478-15547</u>	2015	-	1,070	0	959	111	5%
Up Energy I Programme	Improved Cookstove , Uganda	VERs	GSR	18 Oct 2023	<u>GS1-1-UG-GS10918-16-2021-</u> 22968-1505-2984	2021	-	1,480	0	1,480	0	0%
						Tota	l offsets ret	tired this re	port and used	in this report	2,518	
					Total offsets re	tired this re	port and ba	anked for fu	iture reports	2,439		
	Type of offset units			Eligil	ole quantity (used for this report	ing period) Pe	ercentage	of total			
	Verified Emissions Reduction	ns (VERs)		2,518	}		10	00%				



7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) Summary

N/A



APPENDIX A: ADDITIONAL INFORMATION

Hydroflux Utilities 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

There are two international best-practice methods for calculating electricity emissions – the location-based method and the market-based method. Reporting electricity emissions under both methods is called dual reporting.

Dual reporting of electricity emissions is useful, as it provides different perspectives of the emissions associated with a business's electricity usage.

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.

For this certification, electricity emissions have been set by using the market-based approach.



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)	0	0	0%
GreenPower	1,566	0	15%
Climate Active precinct/building (voluntary renewables)	0	0	0%
Precinct/Building (LRET)	0	0	0%
Precinct/Building jurisdictional renewables (LGCS surrendered)	0	0	0%
Electricity products (voluntary renewables)	0	0	0%
Electricity products (LRET)	0	0	0%
Electricity products jurisdictional renewables (LGCs surrendered)	0	0	0%
Jurisdictional renewables (LGCs surrendered)	0	0	0%
Jurisdictional renewables (LRET) (applied to ACT grid electricity)	0	0	0%
Large Scale Renewable Energy Target (applied to grid electricity only)	1,917	0	19%
Residual Electricity	6,714	6,412	0%
Total renewable electricity (grid + non grid)	3,483	0	34%
Total grid electricity	10,197	6,412	34%
Total electricity (grid + non grid)	10,197	6,412	34%
Percentage of residual electricity consumption under operational control	100%		
Residual electricity consumption under operational	6 74 4	6.440	
	0,/14	0,412	
Scope 2	5,929	5,663	
Scope 3 (includes I &D emissions from consumption under operational control)	785	749	
Residual electricity consumption not under	,	110	
operational control	0	0	
Scope 3	0	0	

Total renewables (grid and non-grid)	34.16%
Mandatory	18.80%
Voluntary	15.36%
Behind the meter	0.00%
Residual scope 2 emissions (t CO ₂ -e)	5.66
Residual scope 3 emissions (t CO ₂ -e)	0.75
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO2-e)	5.66
Scope 3 emissions liability (adjusted for already offset carbon neutral electricity) (t CO2-e)	0.75
Total emissions liability (t CO ₂ -e)	6.41
Figures may not sum due to rounding. Penewahle percentage can be above 100%	

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



Location-based approach summary							
Location-based approach	Activity Data (kWh) total	Unde	er operational	control	operational control		
Percentage of grid electricity consumption under operational control	100%	(kWh)	Scope 2 Emissions (kg CO2- e)	Scope 3 Emissions (kg CO2- e)	(kWh)	Scope 3 Emissions (kg CO2- e)	
ACT	0	0	0	0	0	0	
NSW	7,388	7,388	5,393	443	0	0	
SA	0	0	0	0	0	0	
VIC	1,353	1,353	1,150	95	0	0	
QLD	1,353	1,353	987	203	0	0	
NT	0	0	0	0	0	0	
WA	104	104	53	4	0	0	
TAS	0	0	0	0	0	0	
Grid electricity (scope 2 and 3)	10,197	10,197	7,583	745	0	0	
ACT	0	0	0	0			
NSW	0	0	0	0			
SA	0	0	0	0			
VIC	0	0	0	0			
QLD	0	0	0	0			
NT	0	0	0	0			
WA	0	0	0	0			
TAS	0	0	0	0			
Non-grid electricity (benind the meter)	0	0	0	0			
Total electricity (grid + non grid)	10,197						
Residual scope 2 emissions (t CO ₂ -e)						7.58	
Residual scope 3 emissions (t CO ₂ -e)						0.75	
Scope 2 emissions liability (adjusted for already offset carbon neutral electricity) (t CO2-e)							
Scope 3 emissions liability (adjusted for already offset of	arbon neutra	l electricity	y) (t CO ₂ -e)			0.75	
Total emissions liability						8.33	

Operations in Climate Active buildings and precincts

Operations in Climate Active buildings and precincts	Electricity consumed in	Emissions
	Climate Active certified	(ka CO2-e)
	building/precinct (kWh)	(
N/A	0	0
Climate Active carbon neutral electricity is not renewable electricity. Thes Active member through their building or precinct certification. This electric location-based summary tables. Any electricity that has been sourced as market-based method is outlined as such in the market based summary t	e electricity emissions have been c ity consumption is also included in renewable electricity by the buildin able.	offset by another Climate the market based and g/precinct under the
Climate Active carbon neutral electricity products		

Climate Active carbon neutral product used	Electricity claimed from Climate Active electricity products (kWh)	Emissions (kg CO ₂ -e)
N/A	0	0
Climate Active carbon neutral electricity is not renewable electricity. T Active member through their electricity product certification. This elect location-based summary tables. Any electricity that has been sourced market-based method is outlined as such in the market based summar	hese electricity emissions have been c tricity consumption is also included in t l as renewable electricity by the electric ary table.	ffset by another Climate he market based and ity product under the



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. **Cost effective** 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).

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

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.
- 3. <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. <u>Outsourcing</u> 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
Distribution and storage after delivery	N	Ν	N	N	N	 Size: The emissions source is not likely to be large compared to other attributable emissions. Influence: Hydroflux does not have the potential to influence the emissions from this source because it is outside of our project's contractual agreement. Risk: The emission source does not contribute to Hydroflux's greenhouse gas risk exposure because it is outside of our project's contractual agreement. Stakeholders: Key stakeholders are unlikely to consider this a relevant source of emissions for our product under our operational control. Outsourcing: We have not previously undertaken this activity within our emissions boundary and comparable products do not typically undertake this activity within their boundary.
Use	Ν	Ν	Ν	Ν	N	 Size: The emissions source is not likely to be large compared to other attributable emissions. Influence: Hydroflux does not have the potential to influence the emissions from this source because it is outside of our project's contractual agreement. Risk: The emission source does not contribute to Hydroflux's greenhouse gas risk exposure because it is outside of our project's contractual agreement. Stakeholders: Key stakeholders are unlikely to consider this a relevant source of emissions for our product under our operational control. Outsourcing: We have not previously undertaken this activity within our emissions boundary and comparable products do not typically undertake this activity within their boundary.
End of life	Ν	Ν	Ν	Ν	N	 Size: The emissions source is not likely to be large compared to other attributable emissions. Influence: Hydroflux does not have the potential to influence the emissions from this source because it is outside of our project's contractual agreement. Risk: The emission source does not contribute to Hydroflux's greenhouse gas risk exposure because it is outside of our project's contractual agreement. Stakeholders: Key stakeholders are unlikely to consider this a relevant source of emissions for our product under our operational control. Outsourcing: We have not previously undertaken this activity within our emissions boundary and comparable products do not typically undertake this activity within their boundary.







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