



PUBLIC DISCLOSURE STATEMENT


XYPEX AUSTRALIA

**PRODUCT CERTIFICATION – COATINGS
FY2022–23**

Australian Government

Climate Active Public Disclosure Statement



NAME OF CERTIFIED ENTITY	Concrete Waterproofing Manufacturing P/L, trading as Xypex Australia
REPORTING PERIOD	1 July 2022 – 30 June 2023 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>Name of signatory: Rob James Position of signatory: Strategic National Business Development Manager Date:</p>



Australian Government
Department of Climate Change, Energy,
the Environment and Water

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Version: August 2023



1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	48 tCO ₂ -e
THE OFFSETS USED	100% VCUs
RENEWABLE ELECTRICITY	N/A
CARBON ACCOUNT	Prepared by: Pangolin Associates
TECHNICAL ASSESSMENT	Date: 6/10/2023 Pangolin Associates Next technical assessment due: FY 2025

Contents

1. Certification summary	3
2. Carbon neutral information	4
3. Emissions boundary	7
4. Emissions reductions	9
5. Emissions summary	11
6. Carbon offsets	12
7. Renewable Energy Certificate (REC) summary	14
Appendix A: Additional information	15
Appendix B: Electricity summary	16
Appendix C: Inside emissions boundary	17
Appendix D: Outside emission boundary	18

2. CARBON NEUTRAL INFORMATION

Description of certification

This carbon neutral certification covers Xypex's Coatings product range (Concentrate and Modified).

Through the EPD pathway for carbon neutral certification, Xypex is assessing the global warming impact (GWP-GHG) of its coatings products as quantified in Xypex Coatings EPD.

Xypex Crystalline Technology has been established in Canada since 1969 and in Australia, with the one owner, Concrete Waterproofing Manufacturing P/L, who trade as Xypex Australia, since 1991.

As an industry leader, Xypex Australia embraces Corporate Social Responsibility very seriously and is conscious of all Social, Environmental and Economic factors that may impact on society. In recognition of this responsibility, Xypex Australia has adopted practices and research that supports the development of a "Whole of Life" sustainable construction philosophy to all Construction Industry Stakeholders. This philosophy is to advise the industry that by increasing the life and durability of Concrete Infrastructure, it will provide long term gains and benefits to not only the Building and Construction Industry, but also to the Environment and Society as a whole.

Our Vision is to support and drive Environmental Awareness in all that we do, ensuring that our business practices provide sustainable solutions for the world and its communities that leads and results in contribution to the delivery of creating durable and sustainable Concrete Infrastructure, for many generations to come.

We have long put sustainability and environment at the forefront of Xypex Australia's purpose. We understand the wider impacts to the client, environment and the industry by not placing environmental best practice at the forefront and how critical it is in determining the ultimate impact of construction.

Xypex Australia is an advocate for a Whole of Life Cycle approach to be considered for all concrete asset design. Our intention is to assist in increasing the life and structural integrity of our client's concrete assets, providing significant benefits, both environmentally and socially. These considerations are demonstrated through our adoption of practices and research to drive ecological resilience in the construction industry to benefit future generations.

The EPD and LCA methodology is in accordance with the international standards ISO 14025 and has been verified to be compliant with EN 15804:2012+A2:2019/AC:2021. As such, the carbon accounting within the EPD and carbon calculator closely aligns with those principles set out in the Climate Active Product and Services Standards. The streamlined EPD certification pathway with Climate Active has therefore been adopted to cover the scope of this carbon neutral certification for **Xypex Coatings** (Modified and Concentrate). The emissions reported in this document are for FY2022-23.

XYPEX CONCENTRATE

Xypex Concentrate is the most chemically active product within the Xypex Crystalline Waterproofing System. When mixed with water, this light grey powder is applied as a cementitious slurry coat to above

ground or below ground concrete, either as a single coat or as the first of a two-coat application.

Xypex prevents the penetration of water and other liquids from any direction, even under high hydrostatic pressure, by causing a catalytic reaction that produces a non-soluble crystalline formation within the pores and capillary tracts of concrete and cement-based materials. It is also mixed in Dry-Pac form for sealing strips at construction joints, or for the repairing of cracks, faulty construction joints and honeycombing. Xypex Concentrate complies with the requirements of AS 4020:2018 Standard for products for use in contact with drinking water.

XYPEX MODIFIED

Xypex Modified can be applied as a second coat to reinforce Xypex Concentrate or applied by itself to damp proof the exterior of foundation walls. Applied as a second coat, Xypex Modified chemically reinforces Xypex Concentrate where two coats are required and produces a harder finish. Where damp-proofing is required, a single coat of Modified may be used as an alternative to a spray/tar emulsion.

Xypex prevents the penetration of water and other liquids from any direction, even under high hydrostatic pressure, by causing a catalytic reaction that produces a non-soluble crystalline formation within the pores and capillary tracts of concrete and cement-based materials. Xypex Modified complies with the requirements of AS 4020:2018 Standard for products for use in contact with drinking water.

Product description

- The declared unit for this certification is 1 kg of packaged Xypex Coatings (Concentrate and Modified) sold for the period of the submission.
- The products are available as carbon neutral products to all customers (full coverage).
- The assessment covers the cradle-to-grave life cycle stages of the product: extraction of raw materials, transport, manufacturing, installation, and disposal and/or recycling at the end-of-life. It excludes the use stage due to the inability to predict how the material will be used following its installation (different application scenarios for each product).

The table below summarises the life cycle stages included and excluded from the boundary, as per the EPD:

Module	Life Cycle Sub-stage	Life Cycle Main Stage	Module Declared
A1	Raw material supply	Product stage	X
A2	Transport		X
A3	Manufacturing		X
A4	Transport	Installation process stage	X
A5	Construction/Installation		X
B1	Use	Use stage	ND
B2	Maintenance		ND

B3	Repair		ND
B4	Replacement		ND
B5	Refurbishment		ND
B6	Operational energy use		ND
B7	Operational water use		ND
C1	Deconstruction/Demolition	End-of-life	X
C2	Transport		X
C3	Waste processing		X
C4	Waste disposal		X

*X = included in the EPD, ND = module is not declared in the study (such a declaration should not be regarded as an indicator result of zero)

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

Raw material supply (silica sand, cement, hydrated lime, base mix)

Transport of raw materials from factories (Australia and Canada) to Xypex factory (Albury, NSW, Australia)

Production and packaging of materials

Transport to customer (road freight)

Installation at customer

Dismantlement and transport to waste process at end of life

Recycling or landfilling

Non-quantified

n/a

Excluded

n/a

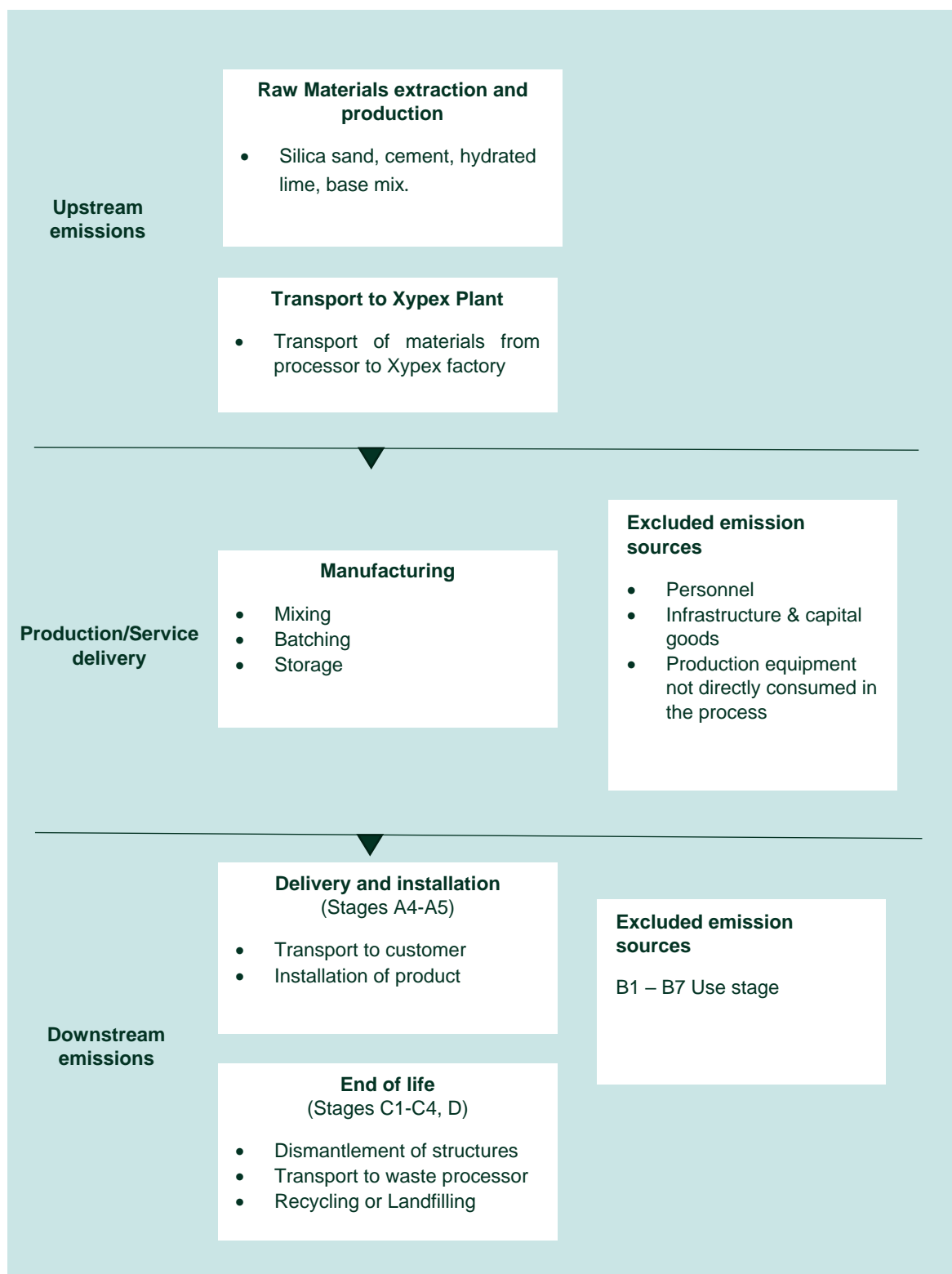
Outside emission boundary

Non-attributable

- Use stages of the product (module B1 to B7)
- Personnel
- Infrastructure & capital goods
- Production equipment not directly consumed in the process

Product/service process diagram

The assessment covers the cradle-to-grave life cycle stages of the product: extraction of raw materials, transport, manufacturing, installation, and disposal and/or recycling at the end-of-life. It excludes the use stage due to the inability to predict how the material will be used following its installation (different application scenarios for each product).



4.EMISSIONS REDUCTIONS

Emissions reduction strategy

The following emissions reduction strategy outlines the measures that Xypex Australia are taking to reduce the emissions of our activities.

Xypex Australia commits to reduce scope 2 emissions by 40% by 2030, compared to a FY2022 base year. We also commit to reduce scope 1 emissions by 10% within the same timeframe, relative to the same baseline.

The emissions reductions strategy:

- Xypex Australia will add an additional 68 No. 480W solar panels to our manufacturing facility roof to provide renewable energy to power our operations and reduce Scope 2 emissions.
 - The additional solar panels are estimated to reduce the required annual usage from the grid for FY23 and beyond to approximately 54 MWh per annum. This reduction represents a reduction of grid electricity of 12 MWh per annum versus the baseline of FY22. This reduction in grid electricity equates to an estimated annual reduction of 9.5 tonnes of Scope 2 CO₂e emissions versus the baseline of FY22.
- Xypex Australia will source 50% GreenPower Renewable Energy for our Head Office and Manufacturing Facility to reduce Scope 2 emissions.
 - At 50% GreenPower replacement level, 27 MWh per year will be from renewable sources equating to a 21 tonne CO₂e reduction per annum.
- Xypex Australia will replace two current LPG powered Forklifts with electric Forklifts in their Manufacturing Facility and implement battery charging practices to maximise the use of solar and Green Power energy and reduce Scope 1 emissions from LPG.
- Xypex Australia will introduce energy efficient Luminaire LED lights in the Sydney warehouse as well as LED strip lighting in the Warehouse office to replace existing MH High Bay light fittings. It is anticipated that the change will reduce the electricity consumption by approximately 15%. This equates to a predicted usage reduction of 3 MWh and an associated emissions reduction of 2.36 tonne CO₂e per annum.
- Further emissions reduction actions will be identified and implemented to reduce Scope 1 and 2 emissions.

Emissions reduction actions

- Xypex Australia installed an additional 68 No. 480W solar panels onto our manufacturing facility roof during August 2022 to provide renewable energy to power our operations and reduce Scope 2 emissions.
 - During the remaining 10 months of FY23, the additional solar panels provided a saving of 8.34 MWh, which would have previously been taken from the grid, which equated to a self-sufficiency improvement from 46 to 54% for this period. This reduction equates to a reduction of 6.6 tonnes of CO₂e emissions versus the baseline of FY22.

- The total energy consumption of the Head Office and Manufacturing Facility increased in FY23 by 4.08 MWh compared to FY22 due to a higher manufacturing demand. This energy increase was fully sourced from the solar panel energy generation as an alternative to grid supply. This saving in grid sourced electricity equates to an additional reduction of 3.23 tonnes of CO₂e emissions.
- Xypex Australia has sourced 50% GreenPower Renewable Energy for our Head Office and Manufacturing Facility to reduce Scope 2 emissions. This reduction initiative commenced in June 2023 resulting in 4.03 MWh being sourced as GreenPower renewable energy in the final month of FY23. This saving in grid sourced electricity equates to an additional reduction of 3.19 tonnes of CO₂e emissions.
- Xypex Australia procured two electric Forklifts to replace two existing LPG powered Forklifts in their Manufacturing Facility. The delivery of the two electric Forklifts was delayed from early 2023 and were eventually delivered and commissioned in late June 2023 so will assist in reducing future Scope 1 emissions from LPG.

5.EMISSIONS SUMMARY

Emissions over time

Emissions since base year		Total tCO ₂ -e	Emissions intensity of the functional unit
Base year:	2021–22	66 tCO ₂ -e	1.25 kg CO ₂ -e / kg Coatings
Year 1:	2022–23	48 tCO ₂ -e	1.25 kg CO ₂ -e / kg Coatings

Emissions reduced in FY2022-23 due to lower product sales. Emission sources are the same as FY2021-22 and are extracted from the EPD for coatings.

Significant changes in emissions

Emission source name	Previous year emissions (t CO ₂ -e)	Current year emissions (t CO ₂ -e)	Detailed reason for change
N/A			

Use of Climate Active carbon neutral products and services

N/A

Emissions summary

Stage / Attributable Process / Source	Concentrate (kg CO ₂ -e)	Modified (kg CO ₂ -e)	Total (kg CO ₂ -e)
Stages A1-A3 / Raw materials, transport and manufacturing	41,640.50	1,497.60	43,138.10
Stage A4 / Transport to customer	3,721.85	142.42	3,864.27
Stage A5 / Installation	2.70	8.08	10.78
Stage C1 / Demolition	133.40	5.21	138.61
Stage C2 / Transport to waste processor	471.68	18.43	490.11
Stage C3 / Waste Processing	125.66	4.91	130.57
Stage C4 / Disposal	16.66	2.17	18.83

Emissions intensity per functional unit	1.25 kg CO ₂ -e
Number of functional units to be offset	38,290 kg Coatings
Total emissions to be offset	47,791 kg CO ₂ -e

6. CARBON OFFSETS

Offsets retirement approach

This certification has taken in-arrears offsetting approach. The total emission to offset is 48 t CO₂-e. The total number of eligible offsets used in this report is 48. Of the total eligible offsets used, 0 were previously banked and 48 were newly purchased and retired. 0 are remaining and have been banked for future use.

Eligible offsets retirement summary

Offsets retired 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 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 (%)
210 MW Musi Hydro Power Plant, Bengkulu Stapled to : Orana Park NCU	VCU	Verra	25 Jan 2023	10374-208447332-208448036-VCS-VCU-262-VER-ID-1-487-01012016-31122016-0	2016	48	48 ¹	0	0	48	100%
Total offsets retired this report and used in this report										48	
Total offsets retired this report and banked for future reports									0		
Type of offset units		Eligible quantity (used for this reporting period)					Percentage of total				
Verified Carbon Units (VCUs)		48					100%				

¹ 705 Musi Hydro VCU's were retired of which 48 were used for Xypex Coatings, 146 for Xypex Megamix and 511 for Xypex Admixes

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) Summary

N/A

APPENDIX A: ADDITIONAL INFORMATION

EPD: https://epd-australasia.com/wp-content/uploads/2023/09/SP10224-Xypex-EPD_coatings_Sep23.pdf



Our reference: VLQ- VC_CFL-3071_01 VOL001- NCU-035

1 December 2022

Rob James
Xypex Australia
190 Toongabbie Rd,
Girraween VIC 2145

Natural Capital Units issued

Dear Rob,

I can confirm that the following units have been recorded and allocated from the Orana Natural Capital Project:

Date	Project Reference	Serial Numbers	Amount
01.12.2022	Retired on behalf of Xypex Australia for the period of FY2022 for the purpose of achieving both Climate Active carbon neutral certification and Global Green Tag carbon neutral certification	22723-23427	705

One Natural Capital Unit represents the permanent protection of one square metre of very high conservation significance native habitat in Serpentine, Victoria.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mel Pritchard'.

Mel Pritchard
Registrar

Vegetation Link Pty Ltd
ABN: 92 169 702 032
www.vegetationlink.com.au

1300 VEG LINK [1300 834 546] | offsets@vegetationlink.com.au | PO Box 10 Castlemaine VIC 3450

APPENDIX B: ELECTRICITY SUMMARY

N/A

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 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	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. **Size** 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. **Risk** The emissions from a particular source contribute to the responsible entity's greenhouse gas risk exposure.
4. **Stakeholders** 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 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. The exclusions align with the requirements of the Product Category Rules (Product Category Rules - Construction Products - PCR 2019:14 VERSION 1.2.5).

Non-attributable emissions sources summary

Emission sources tested for relevance	Size	Influence	Risk	Stakeholders	Outsourcing	Justification
Use stages of the product (module B1 to B7)	N	N	N	N	N	Inability to predict how the material will be used following its installation (different application scenarios for each product) and deemed immaterial.
Personnel	N	N	N	N	N	aligning with PCR requirements
Infrastructure & capital goods	N	N	N	N	N	aligning with PCR requirements
Production equipment not directly consumed in the process	N	N	N	N	N	aligning with PCR requirements



An Australian Government Initiative

