PUBLIC DISCLOSURE STATEMENT

XYPEX AUSTRALIA

PRODUCT CERTIFICATION – COATINGS
FY2023–24

Australian Government

Climate Active
Public Disclosure Statement

An Australian Government Initiative

NAME OF CERTIFIED ENTITY	Concrete Waterproofing Manufacturing P/L, trading as Xypex Australia
REPORTING PERIOD	1 July 2023 – 30 June 2024 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.* 
	Name of signatory: Rob James Position of signatory: Strategic National Business Development Manager Date: 16/12/24

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

Version 9.

1. CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	51 tCO_2-e
CARBON 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

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2.CERTIFICATION INFORMATION

Description of product 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.

- Functional unit: The declared unit for this certification is 1 kg of packaged Xypex Coatings (Concentrate and Modified) sold for the period of the submission..
- Offered as: The products are available as carbon neutral products to all customers (full coverage).
- Life cycle: 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 responsible entity for this product certification is Concrete Waterproofing Manufacturing P/L (Xypex Australia), ABN 96 093 161 963.

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.

This Public Disclosure Statement includes information for FY2023-24 reporting period.

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)

Description of business

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 it’s 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 FY2024.

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, base mix, polypropylene fibers)

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

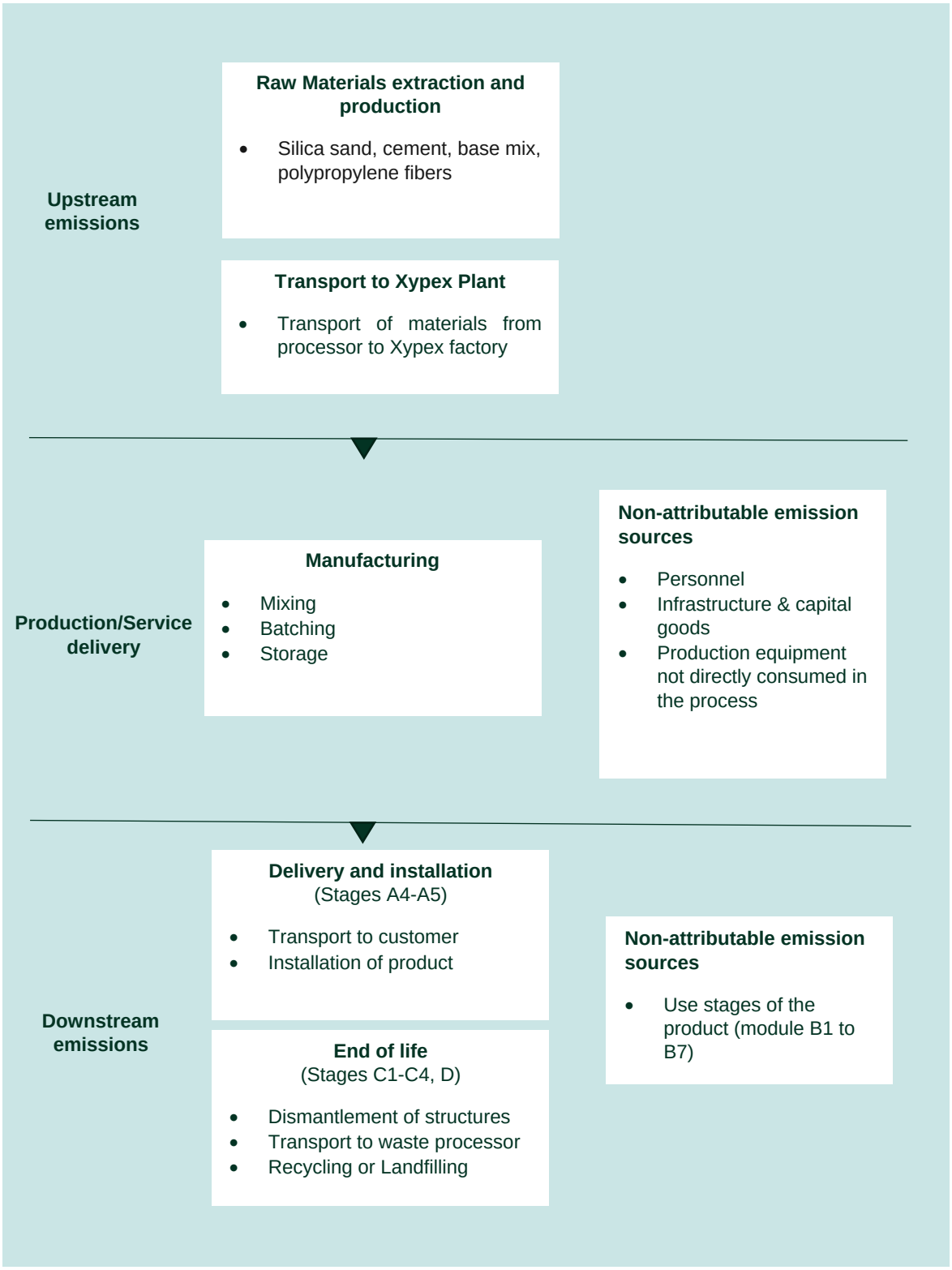
Outside emission boundary

Non-attributable

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

Product process diagram

Cradle-to-grave boundary



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 CO_2e 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 CO_2e 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 CO_2e 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 FY24, the additional solar panels provided a saving of 12.69 MWh versus the baseline year FY22, which would have previously been taken from the grid. This equates to a self-sufficiency improvement from 46 to 59% for this period. This reduction equates to a reduction of 10.0 tonnes of CO2e emissions versus the baseline of FY22.
- The total energy consumption of the Head Office and Manufacturing Facility increased in FY24 by 10.34 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 8.18 tonnes of CO2e Scope 2 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 and was in place throughout FY24 resulting in 23.27 MWh being sourced as GreenPower renewable energy. This saving in grid sourced electricity equates to an additional reduction of 18.42 tonnes of CO2e Scope 2 emissions.
- Xypex Australia introduced 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. As a result, in FY24, electricity consumption was reduced by 11%. This equates to a usage reduction of 2.35 MWh and an associated Scope 2 emissions reduction of 1.86 tonnes CO2e for FY24.
- Xypex Australia procured two electric Forklifts to replace two existing LPG powered Forklifts in their Manufacturing Facility. The two electric Forklifts were commissioned in late June 2023 and were in full operation throughout FY24. The savings in LPG usage compared to the previous year FY23 was 2760 L which equates to 4.16 tonnes of CO2e emissions. This contributed to a reduction of Scope 1 emissions.

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
Year 2:	2023-24	51 tCO_2-e	1.25 kg CO_2-e / kg Coatings

Significant changes in emissions

Significant changes in emissions			
Attributable process	**Previous year emissions** (t CO_2-e)	**Current year emissions** (t CO_2-e)	**Reason for change**
Stages A1-A3 / Raw materials, transport and manufacturing	43.14	45.18	Product volumes increased by 4.7% year on year

Use of Climate Active carbon neutral products, services, buildings or precincts

Certified brand name	Product/Service/Building/Precinct used
Pangolin Associates	Consulting Services

Emissions summary

Life cycle stage / Attributable process / Emission source	Concentrate (kg CO_2-e)	Modified (kg CO_2-e)	Total (kg CO_2-e)
Stages A1-A3 / Raw materials, transport and manufacturing	43,911.80	1,268.80	45,180.60
Stage A4 / Transport to customer	3,924.86	120.66	4,045.52
Stage A5 / Installation	2.85	6.84	9.69
Stage C1 / Demolition	140.67	4.42	145.09
Stage C2 / Transport to waste processor	497.41	15.62	513.02
Stage C3 / Waste Processing	132.51	4.16	136.67
Stage C4 / Disposal	17.56	1.84	19.41
Attributable emissions (tCO_2-e)	**48.63**	**1.42**	**50.05**

Product offset liability	
Emissions intensity per functional unit	1.25 kg CO2-e
Emissions intensity per functional unit including uplift factors	1.25 kg CO2-e
Number of functional units covered by the certification	40,080
Total emissions (tCO_2-e) to be offset	**51**

6. CARBON OFFSETS

Eligible offsets retirement summary

Offsets retired for Climate Active certification

Type of offset unit	Quantity used for this reporting period	Percentage of total units used
Verified Carbon Units (VCUs)	51	100%

Project name	Type of offset unit	Registry	Date retired	Serial number	Vintage	Total quantity retired	Quantity used in previous reporting periods	Quantity banked for future reporting periods	Quantity used for this reporting period	Percentage of total used this reporting period
Katingan Peatland Restoration and Conservation Project	VCU	Verra Registry	30/09/2024	10364-207282648-207283395-VCS-VCU-263-VER-ID-14-1477-01012019-31122019-1	2019	748*	0	0	51	100%

* Offset units were retired in bulk for Xypex Admixtures (444 tCO_2-e), Coatings (51 tCO_2-e) and Megamix II (253 tCO_2-e).

Co-benefits

Katingan Peatland Restoration and Conservation Project

The largest program of its kind, the Katingan Mentaya Project protects vital peatland in Central Kalimantan, Indonesia. Located squarely within a state designated production forest, the project area was planned to be cleared and converted to an industrial acacia plantation.

The project is rich in biodiversity, being home to large populations of many high conservation value species, including some of the world's most endangered; such as the Bornean Orangutan (Pongo pygmaeus) and Proboscis Monkey (Nasalis larvatus). It is surrounded by villages for which it supports traditional livelihoods including farming, fishing, and non-timber forest products harvesting.

The Katingan Peatland Restoration and Conservation Project ('The Katingan Project') seeks to protect and restore 149,800 hectares of peatland ecosystems, to offer local people sustainable sources of income, and to tackle global climate change.

The area stores vast amounts of CO2, and plays a vital role in stabilizing water flows, preventing devastating peat fires, enriching soil nutrients and providing clean water.

The project meets the following United Nations Sustainable Development Goals:

1. No Poverty
2. Zero Hunger
3. Good Health and Well-being
4. Quality Education
5. Gender Equality
6. Clean Water and Sanitation
8. Decent Work and Economic Growth
13. Climate Action
15. Life on Land
16. Peace, Justice, and Strong Institutions
17. Partnerships for the Goals

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Renewable Energy Certificate (REC) Summary

N/A

APPENDIX A: ADDITIONAL INFORMATION

N/A

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**).

Emissions Source	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 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

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