PUBLIC DISCLOSURE STATEMENT

PAPER AUSTRALIA PTY LTD
(TRADING AS OPAL AUSTRALIAN PAPER)

PRODUCT CERTIFICATION
CY2021

Australian Government

Climate Active
Public Disclosure Statement

An Australian Government Initiative

NAME OF CERTIFIED ENTITY	Paper Australia Pty Ltd (trading as Opal Australian Paper)
REPORTING PERIOD	1 January 2021 – 31 December 2021 (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.* 
	Craig Dunn General Manager, Public Relations & Sustainability 25/05/2023

Australian Government
Department of Industry, Science, Energy and Resources

Version March 2022. To be used for FY20/21/CY2021 reporting onwards.

1.CERTIFICATION SUMMARY

TOTAL EMISSIONS OFFSET	264,962 tCO2-e
THE OFFSETS BOUGHT	94% CERs, 6% VCUs
RENEWABLE ELECTRICITY	N/A
TECHNICAL ASSESSMENT	26/09/2022 Paul-Antoine Bontinck Life Cycle Strategies Pty Ltd Next technical assessment due: 26/09/2025

Contents

2. CARBON NEUTRAL INFORMATION

Description of certification

This certification covers all the activities undertaken to produce paper products that are carbon neutral at the Opal Australian Paper Maryvale Mill in the Latrobe Valley, Victoria. The inventory has been prepared for the calendar year 2021 and covers the raw materials, production, packaging, distribution, and disposal of the products.

Product description

Opal Australian Paper (Opal) is a leading producer of office, printing and packaging paper in Australia, which is manufactured from its mill at Maryvale, Victoria.

Opal produces many non-carbon neutral paper products and 247 Carbon Neutral certified paper products were sold during the reporting period. Products include office papers, bag papers, printing papers and recycled paper in both sheet and roll forms. Maryvale Mill is one of the largest integrated pulp and paper manufacturing sites in Australia, producing close to 600,000 tonnes of paper from facilities including a wood yard, three pulp mills, five paper machines, two recycling plants and converting facilities. The products manufactured and delivered by Opal consists of a range of paper products sold in Australia and overseas.

"Opal values our Climate Active certification as an effective and credible way to demonstrate sustainability leadership to our customers and consumers, through a comprehensive range of carbon neutral products all proudly made in Australia."

The functional unit is one tonne of certified paper product. The emissions provided in the report is related to carbon neutral products sold from Maryvale Mill only.

The product assessment is from cradle to grave.

The emissions included in the inventory include all greenhouse gases CO2, CH4, N2O, HCFs, PFCs, SF6, HCFCs and CFCs.

The table below lists the carbon neutral products that were manufactured and branded as Opal copy paper and printing papers as well as customer branded copy papers along with the type of trademark used on the products and for promotional purposes.

Description where trademark used	Logo type
Opal website	Climate Active Network Member Logo
Reflex website	Climate Active Network Member Logo
Presentation	Climate Active Network Member Logo
Fact sheets	Climate Active Carbon Neutral Product Logo
Product technical information sheet	Climate Active Carbon Neutral Product Logo
Product guide	Climate Active Carbon Neutral Product Logo
Opal branded copy paper includes: Australian Office, Australian 100%, Brilliant, Reflex 100% Recycled, Reflex 50% Recycled, Reflex Blue, Reflex Gold, Reflex Green, Reflex Pink, Reflex Sand, Reflex Yellow, Reflex Ultra White, Universal, Victory High	Climate Active Carbon Neutral Product Logo
Customer branded copy papers includes: Aspire, Bibbulmun, COS, Ebony, FujiFilm, Mandura, Nallawilli, Office Choice, Office National, OPD, Planet Ark Paper, Winc *The above brands are manufactured by Opal but are not owned by Opal*	Climate Active Carbon Neutral Product Logo

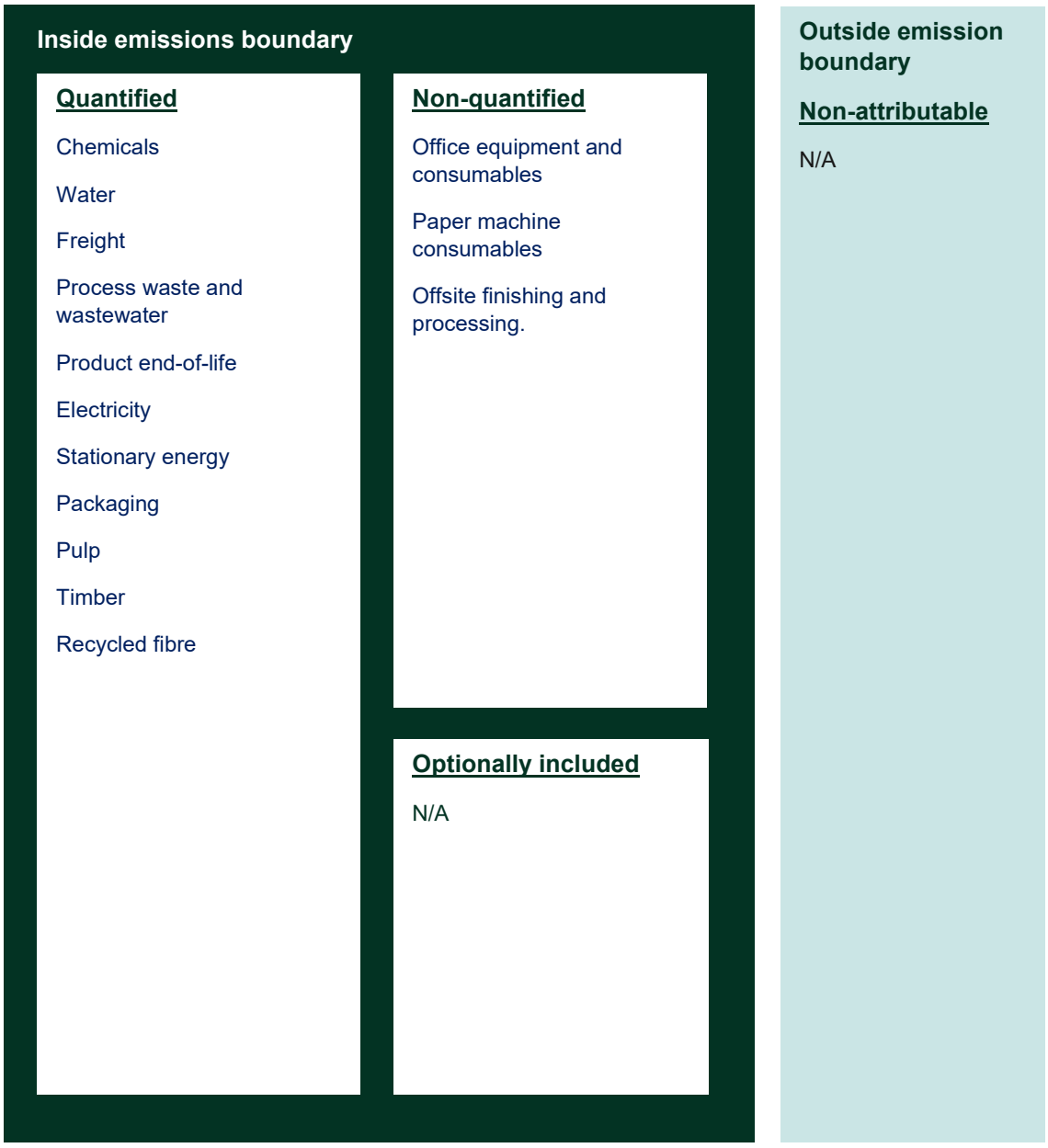
The Opal printing papers that were manufactured and sold without trademarks are: Australian Smooth, Census Jet, Data Right Plus, Jet Mail, New Inkjet Smooth, PBS Laser, Postspeed, Publish Offset, Recycled 100%, Reflex Laser White, Revive Laser, Sensi Jet, Sensi Scanright, Stikki Bond

3.EMISSIONS BOUNDARY

Inside the emissions boundary

Attributable processes are shown on the Emission Boundary diagram below. All emission sources listed in the emissions boundary are part of the carbon neutral claim. Emissions sources were identified through a detailed Life Cycle Assessment (LCA) of the production process.

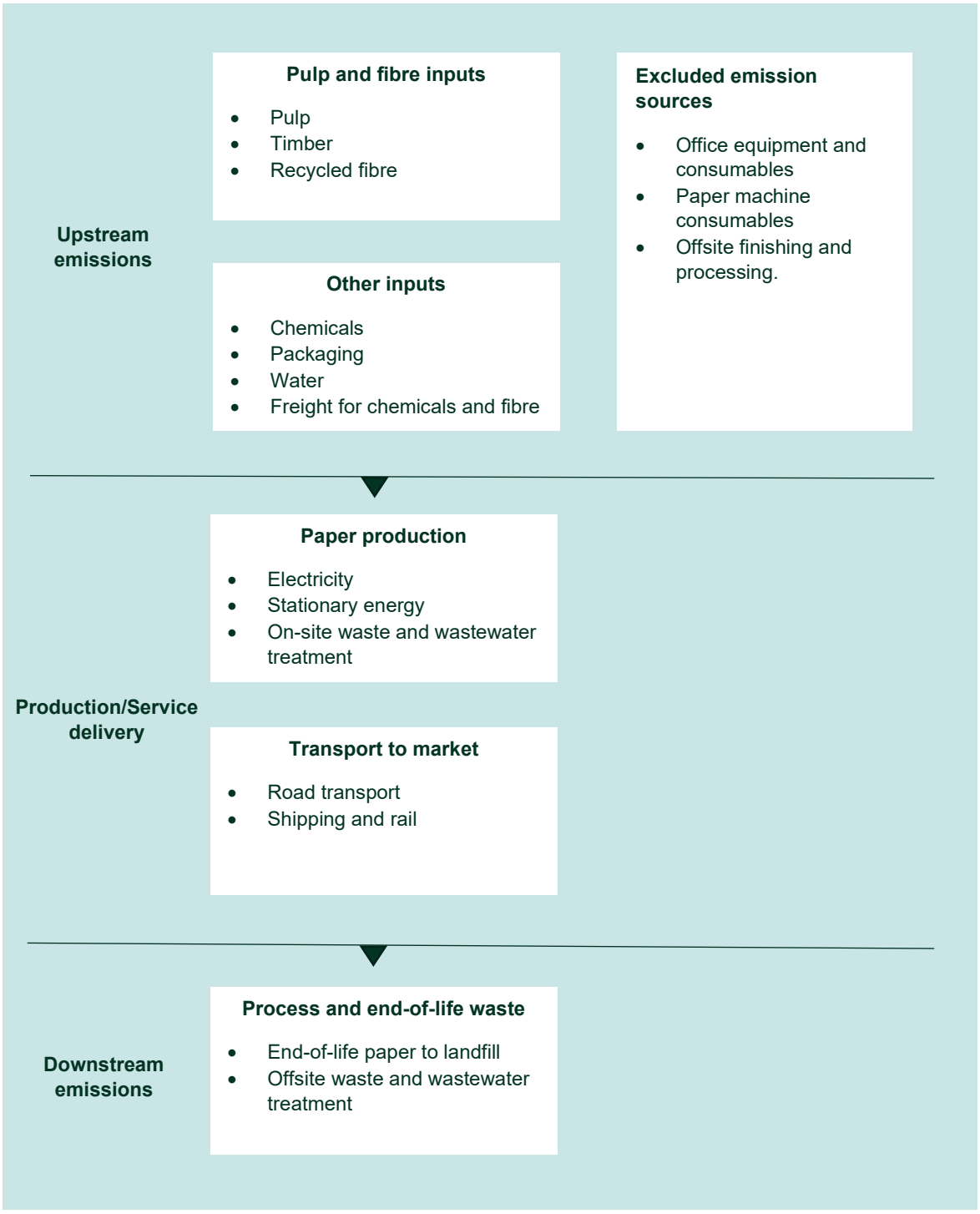
Quantified emissions have been assessed as 'attributable processes' that become the product, make the product and carry the product through its life cycle. These processes are shown in the Emission Boundary diagram below. Emissions sources were identified through a detailed Life Cycle Assessment (LCA) of the production process and have been quantified in the carbon inventory.



Product process diagram

The system boundary describes the life cycle stages and unit processes included in the carbon account. The system boundary includes all raw material transport, pulping of wood fibre, collection of recycled fibre, imports of external pulp, production and finishing of paper products and finally packaging and distribution from the Maryvale mill. While the use of the paper is considered outside the system boundary, the disposal of the paper products after use is included in the carbon account.

The following diagram is cradle-to-grave.



Data management plan for non-quantified sources

There are no non-quantified sources in the emission boundary that require a data management plan. The emission sources listed under non-quantified sources in the emissions boundary diagram are excluded emission sources.

4. EMISSIONS REDUCTIONS

Emissions reduction strategy

Opal is committed to environmental sustainability and ongoing improvements in our operations. Opal's Sustainability and Environment Policy commits to

- develop, implement, and monitor objectives and measurable targets to address environmental issues and promote positive outcomes,
- continue our transition to a low carbon energy supply by exploring sustainable energy alternatives,
- pursue energy efficiency gains to drive a reduction in emissions, and
- ensure the responsible use of natural resources throughout our business, including the conservation of biodiversity and efficient use of energy, water, and materials.

On 1 May 2020 Paper Australia Pty Ltd finalised the acquisition of a number of fibre packaging manufacturing facilities to form the larger "Opal" group and the Maryvale Mill operations sit within the Opal Australian Paper (OAP) division. Since then, Opal has developed a company-wide Energy and Greenhouse Gas Emissions Management Strategy which defines Opal's overall objective, greenhouse gas emission reduction goals and a high-level summary of the supporting strategies to achieve these goals.

Opal's overall objective is to "support Opal's profitable growth, create sustainable value for our customers and become the supplier of choice". Our goals are aligned with our parent company Nippon Paper Industry's targets and commits to:

- Reduce Greenhouse Gas Emissions
    - 45% reduction in greenhouse gas emissions (scope 1 and 2) by 2030 compared to FY21 baseline
    - Net zero greenhouse gas emissions by 2050
- Improve Energy Intensity
    - Reduce energy intensity on average by 1% each year over a rolling 5-year period

The strategy forms the backbone for the development of detailed strategies and execution plans around energy efficiency, carbon reductions, energy management, etc. which when finalised will be reported in our 2022 Carbon Neutral Product Disclosure Statement.

Emissions reduction actions

Opal Australian Paper's Maryvale Mill seeks to reduce its energy use year on year and has experienced mill-based engineering personnel who analyse, assess, and implement new projects across the site to ensure, to the extent practicable, those projects achieve reductions in the operational use of steam, gas and / or electricity.

Renewable energy sources: Approximately 60% of the electricity consumption at Maryvale is generated onsite by our renewable biomass boilers (40%) or very low emission sources (20%).

Energy from Process Waste: Recovery boilers provide over 50% of Maryvale's thermal demand through the combustion of black liquor and will continue to play a large role in providing low carbon process heat to

Maryvale. Approximately 60% of Maryvale's thermal demand is supplied by renewable biomass sources with the remaining 40% supplied by natural gas.

Improving energy efficiency: Improvement projects are undertaken as part of our day-to-day operations, which are centred around upgrading equipment and improving energy efficiency. These projects contribute to our long-term objective of achieving continuous energy efficiency improvements and Maryvale Mill emission reductions of 1% per annum.

During the 2021 reporting period, the emissions per functional unit increased by less than 1% when compared to 2020 data but absolute emissions related to our carbon neutral products reduced by 6%. This reduction was primarily due to the impact of COVID-19 pandemic on carbon neutral product sales and supply chain issues in 2021.

5.EMISSIONS SUMMARY

Emissions over time

The table below compares emissions over time between the base year and current year, as well as comparing the current year emissions with the previous year for carbon neutral products only.

Emissions since base year			
		Total tCO_2-e	**Emissions intensity of the functional unit**
Year 2/Base year	2012	109,137	2.24
Year 3	2013	169,600	2.57
Year 4	2014	158,944	2.60
Year 5	2015	179,968	2.67
Year 6	2016	230,186	2.38
Year 7	2017	300,985	2.35
Year 8	2018	331,631	2.50
Year 9	2019	294,881	2.51
Year 10	2020	281,670	2.39
Year 11	2021	264.962	2.41

Significant changes in emissions

Emission source name	Current year (tCO_2-e)	Previous year (tCO_2-e)	Detailed reason for change
Paper to landfill at end of life	36,169	44,309	Change in the fraction of material going to landfill decreased from 12% to 10.6% based on the improved data source in National Inventory Report Volume 2, Australian Government Department of Industry, Science, Energy and Resources, April 2021.
Electricity consumption	75,404	83,218	Emissions due to consumption of electricity reduced by 9% due to the changes in emission factors as well as decreased electricity use due to COVID-19 pandemic.

Use of Climate Active carbon neutral products and services

Not applicable

Product emissions summary

The emissions corresponding to each life cycle stage included in the LCA of the carbon neutral products is provided in the table below.

Stage	tCO2-e
Chemicals	33,857
Other (e.g. black liquor, stationary energy use, packaging)	5,516
Electricity	75,404
Natural gas	79,886
Fibre	13,035
Waste treatment	11,275
Transport	9,819
Final disposal	36,170
Total inventory emissions	264,962

Emissions intensity per functional unit t CO_2e/t paper	2.41
Number of functional units to be offset t	110,147
Total emissions to be offset t CO_2e ***discrepancy due to rounding in the emissions intensity per functional unit**	264,962

6.CARBON OFFSETS

Offsets retirement approach

Upon completion of the annual report, Opal Australian Paper utilises the banked offsets from the previous reporting period and finalizses procurement of remaining offsets to cancel/retire the final total as required for the annual report. If Opal Australian Paper retires more offsets during a reporting period in excess of those required, these are applied to future offset requirements covering carbon neutral product sales in subsequent reporting periods.

In arrears	
1. Total number of eligible offsets banked from last year's report	68,683
2. Total emissions footprint to offset for this report	268,962
3. Total eligible offsets required for this report	195,357
4. Total eligible offsets purchased and retired for this report	200,088
5. Total eligible offsets banked to use toward next year's report	3,809*

*In line with our offsets strategy above, Opal Australian Paper retired more offsets than necessary for the 2021 reporting period. These will be applied to future offset requirements covering carbon neutral product sales in subsequent reporting periods.

Co-benefits

Acknowledging the high proportion of renewable energy that Opal Australian Paper already produces from biomass fuel as a by-product from the pulping process, offsets are invested in alternative energy generation developments, such as solar, wind, biomass or small hydro electric system.

In 2022, Opal Australian Paper retired 185,000t CERs from two small-scale hydel projects (CDM0923 and CDM3568) in Karnataka, India. The projects generate electricity from the kinetic energy of flowing water which is a renewable source of energy. The capacity of the projects is below the qualifying limit of 15MW as per AMS-I.D. for small-scale grid connected renewable electricity generation. The schemes being small hydro electrical projects will result in long-term reduction of greenhouse gas emissions.

13 MW Grid Connected Dandela Mini Hydel Scheme, Karnataka State, India

The project optimizes the use of a renewable source of energy and generates electricity in order to contribute to the local power demand leading to social, economic, environmental, and technological well-being in the region. The Sagar Power (Dandela) Private Limited generates electrical energy by utilising the water discharge of Dandela falls in Netravathi River of Karnataka, India. The project has an installed capacity of 13 MW and the generated electricity is exported to Mangalore Electric Supply Company

Limited a under Power Purchase Agreement. This results in diversification of state grid, which is otherwise largely dependent on fossil fuels and will reduce voltage fluctuations in the region by improving power quality. The project will lead to an annual reduction in greenhouse gas emissions which is estimated at 32,160 tCO2e. The project will increase the availability of electricity in the area and contribute to employment opportunities and increased economic activities.

6.25 MW grid connected, Sattegala Mini Hydel Scheme at SLS Power Industries Ltd., in Chamarajanagar District, Karnataka

The project involves implementation and operation of a 6.25 MW small hydro electric grid connected renewable energy project which utilises the kinetic energy of water resources in the Cauvery River in Chamarajanagar, Karnataka. The generated electricity is exported to the grid through the state-owned power utility company Karnataka Power Transmission Corporation Ltd. The project leads to sustainable development in the region. It reduces greenhouse gas emissions by replacing the use of fossil-based grid electricity and diesel generators. It is estimated that the project will result in an annual emission reduction of 24,408 tCO2e. The project has led to alleviation of poverty by providing direct and indirect employment for the local population and has encouraged more rural industries set up resulting in rural development. The project will bring in additional investments to the regions and may promote eco-tourism in future.

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 (%)**
Cerro De Hula Wind Project, Honduras	CDM-CER	ANREU	27 May 2021	Serial Range: 1,688,471-1,798,128	2013+	0	109,658	40,975	0	68,683	28%
13 MW Grid Connected Dandela Mini Hydel Scheme, Karnataka State, India	CER	CDM	8 Jun 2022	IN52760345642203568 - IN52760695632203568	CP-2 2013+	0	35,000	0	0	35,000	13%
13 MW Grid Connected Dandela Mini Hydel Scheme, Karnataka State, India	CER	CDM	8 Jun 2022	IN52759995642203568 - IN52760345632203568	CP-2 2013+	0	35,000	0	0	35,000	13%
13 MW Grid Connected Dandela Mini Hydel Scheme, Karnataka State, India	CER	CDM	8 Jun 2022	IN52759895642203568 - IN52759995632203568	CP-2 2013+	0	10,000	0	0	10,000	4%
6.25 MW gridconnected Sattegala Mini Hydel Scheme at SLS Power Industries Ltd., in	CER	CDM	8 Jun 2022	IN52769458132220923 - IN52769808122220923	CP-2 2013+	0	35,000	0	0	35,000	13%

Chamarajanagar District, Karnataka											
6.25 MW gridconnected Sattegala Mini Hydel Scheme at SLS Power Industries Ltd., in Chamarajanagar District, Karnataka	CER	CDM	8 Jun 2022	IN5276980813220923 - IN5277015812220923	CP-2 2013+	0	35,000	0	0	35,000	13%
6.25 MW gridconnected Sattegala Mini Hydel Scheme at SLS Power Industries Ltd., in Chamarajanagar District, Karnataka	CER	CDM	8 Jun 2022	IN5277015813220923 - IN5277050812220923	CP-2 2013+	0	35,000	0	3,809	31,191	12%
Hyundai Waste Energy Recovery CO-Generation Project Phase II, in Chungchongnam-do District, South Korea	VCU	Verra	20 April 2023	14697-621526132-621541219-VCS-VCU-260-VER-KR-1-1146-01012017-30062017-0	2017	0	15,088	0	0	15,088	6%
									Total offsets retired this report and used in this report	264,962	
									Total offsets retired this report and banked for future reports	3,809	

Type of offset units	Quantity (used for this reporting period claim)	Percentage of total
Certified Emissions Reductions (CERs)	249,874	94%
Verified Carbon Units (VCUs)	15,088	6%

7. RENEWABLE ENERGY CERTIFICATE (REC) SUMMARY

Currently, Opal does not surrender Renewable Energy Certificates to reduce emissions by market based reporting. Therefore, this section is not applicable.

APPENDIX A: ADDITIONAL INFORMATION

No additional offsets were cancelled for purposes other than Climate Active certification. Therefore, this section is not applicable.

APPENDIX B: ELECTRICITY SUMMARY

Electricity emissions are calculated using a location-based approach only. This section is not applicable.

APPENDIX C: INSIDE EMISSIONS BOUNDARY

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 has not been 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
Office equipment and consumables	Yes	Yes	Yes
Paper machine consumables	Yes	Yes	Yes
Offsite finishing and processing.	Yes	Yes	Yes

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