

National Carbon Offset Standard  
Carbon Neutral Program  
Public Disclosure Summary - 2014

Australian Paper

1<sup>st</sup> January 2014 – 31<sup>st</sup> December 2014



An Australian Government Initiative

## Declaration

To the best of my knowledge, the information provided in this Public Disclosure Summary is true and correct and meets the requirements of the National Carbon Offset Standard Carbon Neutral Program.



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Product Innovation Manager

Type of carbon neutral certification: *Product*

Date of most recent external verification/audit: 14 April 2015

Auditor: EY

## 1. Carbon neutral information

### Introduction

Australian Paper (AP) is the leading producer of office, printing and packaging paper in Australia and manufactures at two sites; Maryvale, Victoria and Shoalhaven, NSW. AP produces and markets over 3500 non-CN paper products and 500 CN certified paper products. Products include coloured papers, security papers, bag papers and recycled paper in both sheet and roll forms.

Maryvale Mill is the largest integrated pulp and paper manufacturing site in Australia, producing over 500,000 tonnes of paper from facilities including a wood yard, three pulp mills, five paper machines, converting facilities, a waste paper processing plant and an integrated chemical recovery and energy plants. Shoalhaven Mill is a smaller mill, producing valuable specialty papers for the printing and communication paper market. Facilities include a single paper machine, paper converting plant and on-site boilers for heating steam generation.

The product delivered by AP consists of a range of branded paper products with a proportion sold under the carbon neutral logo throughout Australia and New Zealand.

The LCA undertaken covers the raw materials, production, packaging, distribution and disposal of all products produced at both Maryvale and Shoalhaven mills. The LCA model for paper manufacturing includes 257 raw material inputs flowing through approximately 600 intermediate processes across the

two sites. The functional unit is one tonne of certified paper product. This inventory has been prepared based on the standards of *NCOS Version 3* and *CNP Version 4* with data references from the *National Inventory Report 2013 Vol. 2* and *National Greenhouse Accounts Factors 2014*. The emissions included in the inventory include all greenhouse gases CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HCFs, PFCs, SF<sub>6</sub>, HCFCs and CFCs.

The system boundary begins with raw material production in the form of roundwood production in hardwood and softwood forestry operations and in collection of recycled fibre for inclusion in paper production. It includes all raw material transport, pulping of wood fibre, imports of external pulp, production and finishing of paper products and finally packaging and distribution from both Maryvale and Shoalhaven mills. While the use of the paper is considered outside the system boundary, the landfilling of the paper products after use is included in the LCA.

## Emission sources within certification boundary

### Quantified sources

The life cycle stages, inclusive of cradle-to-grave inputs and outflows are described below in the system boundary.

### Non-quantified sources

Office equipment and consumables i.e. staplers, stationary, printers etc.

Quantifying emissions is not cost effective due to the relative size of the emissions. Office equipment and consumables are estimated at less than 0.001% of overall emissions.

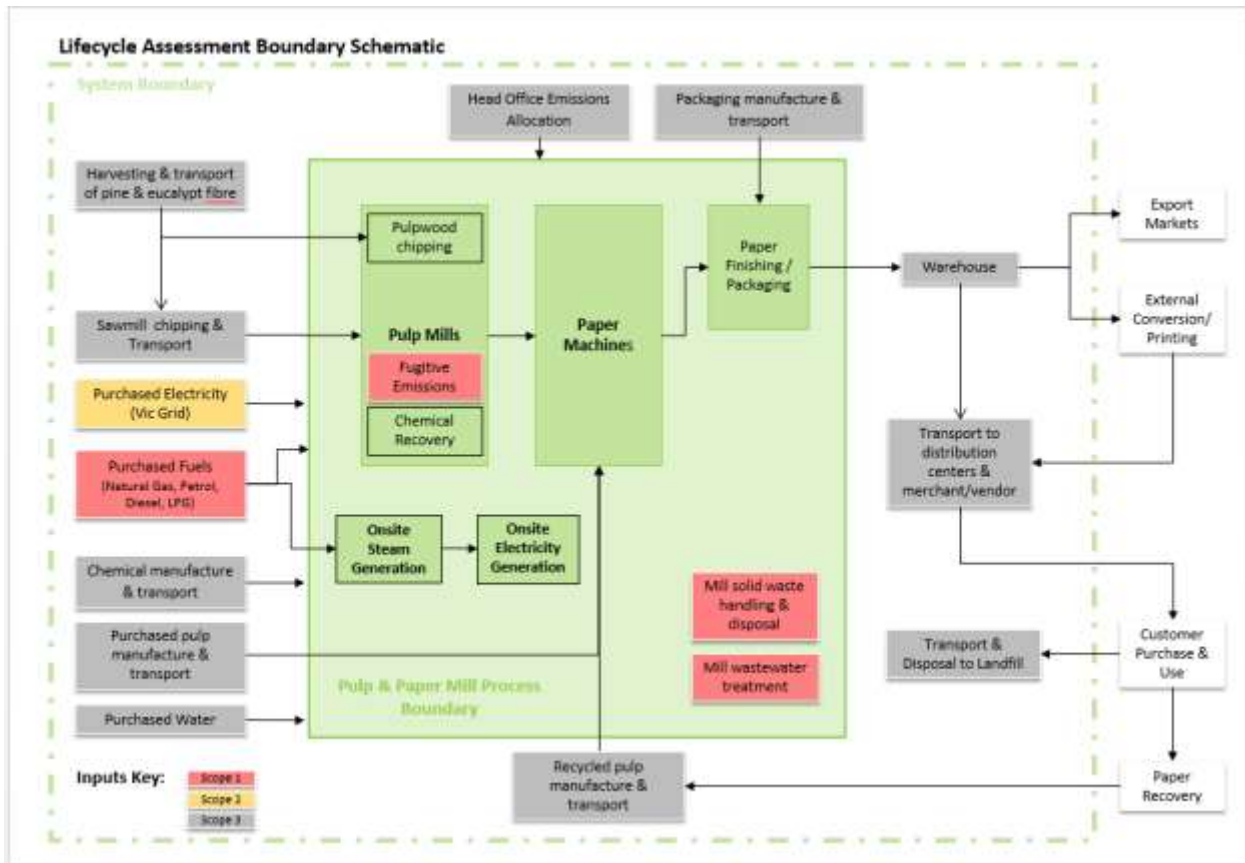
Paper machine consumables i.e. machine fabrics

Quantifying emissions is not practicable or cost effective due to the highly complex and specialised nature of the manufacture of these consumables, and their emissions have been previously estimated at less than 1% of overall emissions.

Offsite finishing and processing

Small quantities of some products are directed for offsite finishing prior to sale. This is done at the request of customers and is specific to their needs for the end use of the paper. External conversion is not included in the system boundary.

## Diagram of certification boundary



## 2. Emissions reduction measures

### Part A. Emissions over time and base year recalculation policy

Table 1. Emissions since base year			
Products	Year (Base Year: 2012)	Emissions Intensity [t CO <sub>2</sub> e per t paper]	Comments
All CN Products	2012	2.24	<ul style="list-style-type: none"> <li>• Highest proportion of biomass fuel since 2009.</li> <li>• High proportion of sales of lower emissions intensity papers.</li> <li>• Lower proportion of sales tonnes from Shoalhaven mill (with higher emissions intensity products).</li> </ul>
All CN Products	2013	2.57	Additional emissions factor added to chemicals footprint.
All CN Products	2014	2.60	

Australian Paper reports emissions on a product by product basis. AP makes no comparison of total emissions over time, other than the specific emission factor which might apply to an individual product – used as an indicator of the efficiency with which AP has produced the product.

Base year emissions and any historic data are not recalculated for organic growth or decline. Organic growth/decline refers to increases or decreases in production output, changes in product mix, changes in energy efficiency through capital upgrades, and closures and openings of operating units that are owned or controlled by the company. The rationale for this is that organic growth or decline results in a change of emissions to the atmosphere and therefore needs to be counted as an increase or decrease in the company's emissions profile over time.

Thus, Australian Paper will apply a base year recalculation, and recalculations to any subsequent year, on:

- a) changes in calculation methodology or improvements in the accuracy of emission factors or activity data that result in a significant impact on the base year emissions data
- b) or discovery of significant errors, or a number of cumulative errors, that are collectively significant.

The threshold for triggering a recalculation is when a retrospective change in the points above would be expected to result in a 5% change of a product's specific emissions intensity from that originally calculated in the baseline year.

### *Part B. Emissions reduction strategy*

Australian Paper supports an energy reduction team comprising experienced mill-based engineering personnel who analyse, assess and implement new projects across the site which will deliver reductions in usage of steam, gas and electricity. Table 2 contains internally verified reduction measures implemented during 2014, intended to deliver permanent ongoing savings. In addition there are a number of other minor improvement projects being conducted as part of everyday operations, all of which are contributing to AP's long term objective of permanent compounding energy efficiency improvements and reductions of 1% per annum.

### Part C. Emissions reduction actions

<b>Table 2. Emissions reduction actions</b>				
Year completed	Emission source	Action	Status	Reduction t CO <sub>2</sub> -e
2014	Gas	Heating efficiency improvement	Completed	10
2014	Electricity	Equipment efficiency improvement	Completed	10
2014	Gas	Equipment efficiency improvement	Completed	4,060
2014	Gas	Heating efficiency improvement	Completed	24,230
2014	Gas	Insulation improvement	Completed	400
2014	Electricity	Equipment efficiency improvement	Completed	240
2014	Electricity	Equipment efficiency improvement	Completed	960
2014	Electricity	Equipment efficiency improvement	Completed	160
Total emission reductions implemented in this reporting period				30,070

### 3. Emissions summary

<b>Table 3. Emissions Summary</b>		
Scope	Emission source	t CO <sub>2</sub> -e
1	Natural Gas	40352
2	Electricity	38061
1	End of Life	24841
3	Chemicals	21516
3	Fibre	18189
3	Waste	8750
3	Transport	4459
3	Packaging	1231
3	Other Fuels	797
3	Water	747
Total Gross Emissions:		158,944
GreenPower or LGCs:		Nil
Total Net Emissions:		158,944

Source	Percentage
Natural Gas	25.4%
Electricity	23.9%
End of Life	15.6%
Chemicals	13.5%
Fibre	11.4%
Waste	5.5%
Transport	2.8%
Other Fuels	0.5%
Water	0.5%
Packaging	0.8%

## 4. Carbon offsets

### Part A. Offsets summary

Table 4. Offsets Summary				
Offset type	Registry	Serial numbers	Quantity	Year retired
VCU	Markit	3222-145524085-145544084-VCU-030-MER-IN-1-1109-25012012-31122012-0	20,000	Jun 14
VCU	APX	1061-47536602-47537192-VCU-015-APX-IN-1-495-01012009-01072009-0	591	Jun 14
VCU	Markit	3747-164243812-164350111-VCU-41-APX-IN-1-1163-11072011-30012013-0	106,300	Mar 15
VCU	APX	3756-164394941-164399779-VCU-009-APX-IN-1-733-01012010-31032010-0	4,839	Mar 15
VCU	Markit	3739-164165812-164166811-VCU-41-APX-IN-1-1163-11072011-30012013-0	1,000	Mar 15
VCU	APX	3748-164352978-164352979-VCU-009-APX-IN-1-733-01012012-31122012-0	2	Mar 15
VCU	APX	3757-164399780-164399781-VCU-009-APX-IN-1-733-01012012-31122012-0	2	Mar 15
CER	UNFCCC	IN-5-155458754-1-1-0-3568 to: IN-5-155481881-1-1-0-3568	23128	Mar 16
CER	UNFCCC	IN-5-172635603-1-1-0-921 to: IN-5-172637601-1-1-0-921	1999	Mar 16
VCU	APX	2247-93806879-93808461-VCU-009-APX-IN-1-766-01042008-30092009-	1583	Mar 16
Total retired offsets:			159,444	

### Part B. Offsets purchasing and retirement strategy

AP makes quarterly forward estimates of offset requirements based on combining the preceding reporting period's emissions intensity values and the sales forecast for paper products. During the quarter, AP then procures offsets that comply with a standard recognised by the NCOS, and retires them.

Upon completion of the annual report; and in the case of a reporting period requiring verification by audit – prior to the final verification, AP will finalise procurement of offsets and cancel/retire at least the final total required volume of offsets as identified in the annual report.

If AP retires more offsets during a reporting period in excess of those reported in Table 4, these are to be applied to future offset requirements covering carbon neutral product sales in subsequent reporting periods.

*Part C. Offset projects (Co-benefits)*

Acknowledging the high proportion of renewable energy that Australian Paper already produces from biomass as a byproduct from the pulping process, all of the above offsets are invested in alternative energy generation developments, comprising solar, wind and biomass.