

National Carbon Offset Standard  
Carbon Neutral Program  
Public Disclosure Summary - 2015

Australian Paper

1<sup>st</sup> January 2015 – 31<sup>st</sup> December 2015



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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Australian Paper - Product Innovation Manager

Type of carbon neutral certification: *Product*

Date of most recent external verification/audit: 18<sup>th</sup> May 2016

Auditor: RSM

## 1. Carbon neutral information

### Introduction

Australian Paper (AP) is the leading producer of office, printing and packaging paper in Australia, manufacturing from its mill at Maryvale, Victoria. AP produces and markets thousands of non-CN paper products and around 500 Carbon Neutral 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. During 2015, AP made the decision to cease production from the Shoalhaven Mill in NSW.

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 over 250 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 2015*. 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.

### Use of Trademark

Australian Paper has applied the NCOS trademarks to the following Carbon Neutral products sold in the current reporting period:

Copy Papers, including Australian, Brilliant, Reflex, Staples and Tudor brands.

Printing Papers, including Envi, Onyx, Reflex, Revive, Roo Bond, Saxton, Stephen and Tablex brands.

Various Custom printed envelopes manufactured from Postspeed envelope papers

Additionally, Australian Paper uses the NCOS Certification Trademark on promotional material including: Product promotional banners; Promotional & product flyers; Australian Paper website; Reflex website; Customer presentations; Product fact sheets and Product specification sheets.

### 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.

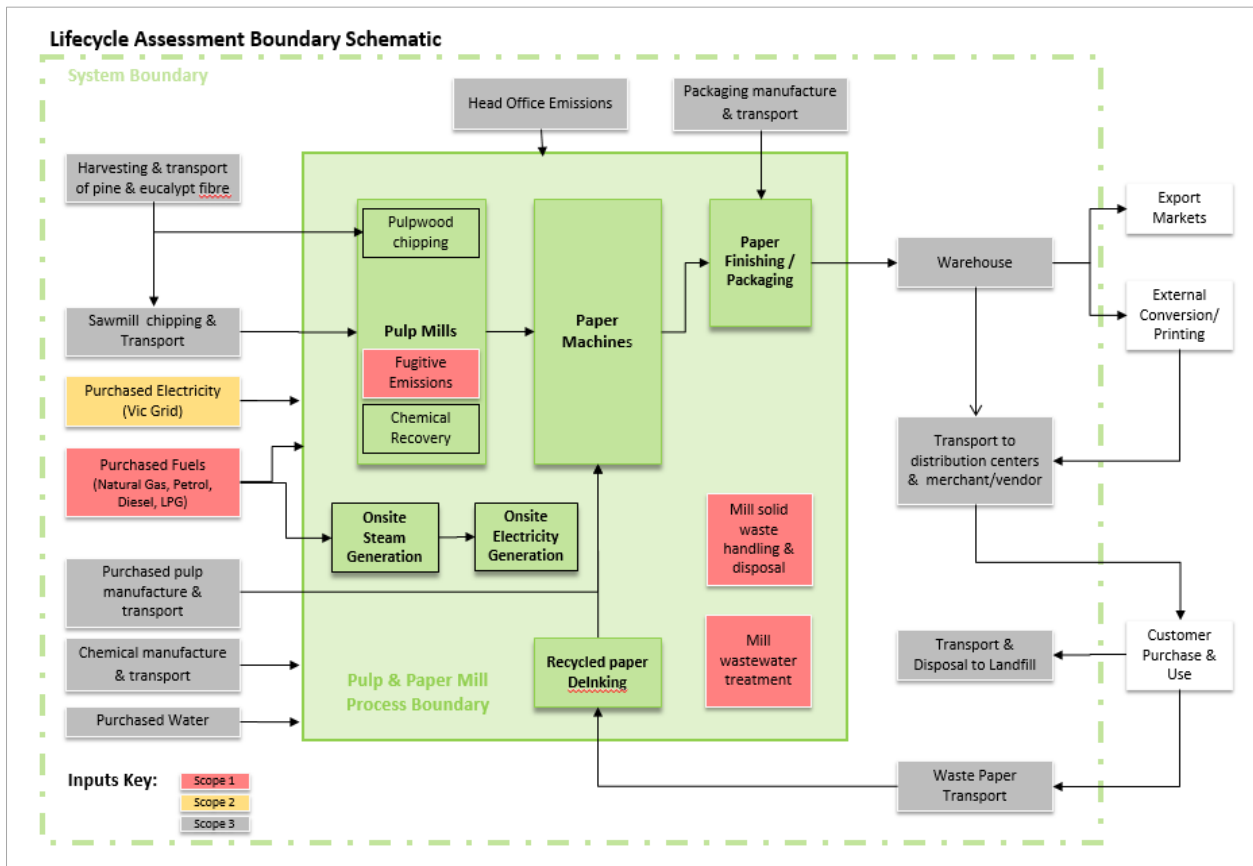
Paper machine consumables i.e. machine fabrics

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	
All CN Products	2015	2.67	<ul style="list-style-type: none"> <li>Lower proportion of biomass, across lower production output</li> <li>Slow startup of new recycling/DiP plant</li> <li>Increased proportion of recycled content and higher specific footprint papers</li> </ul>

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.

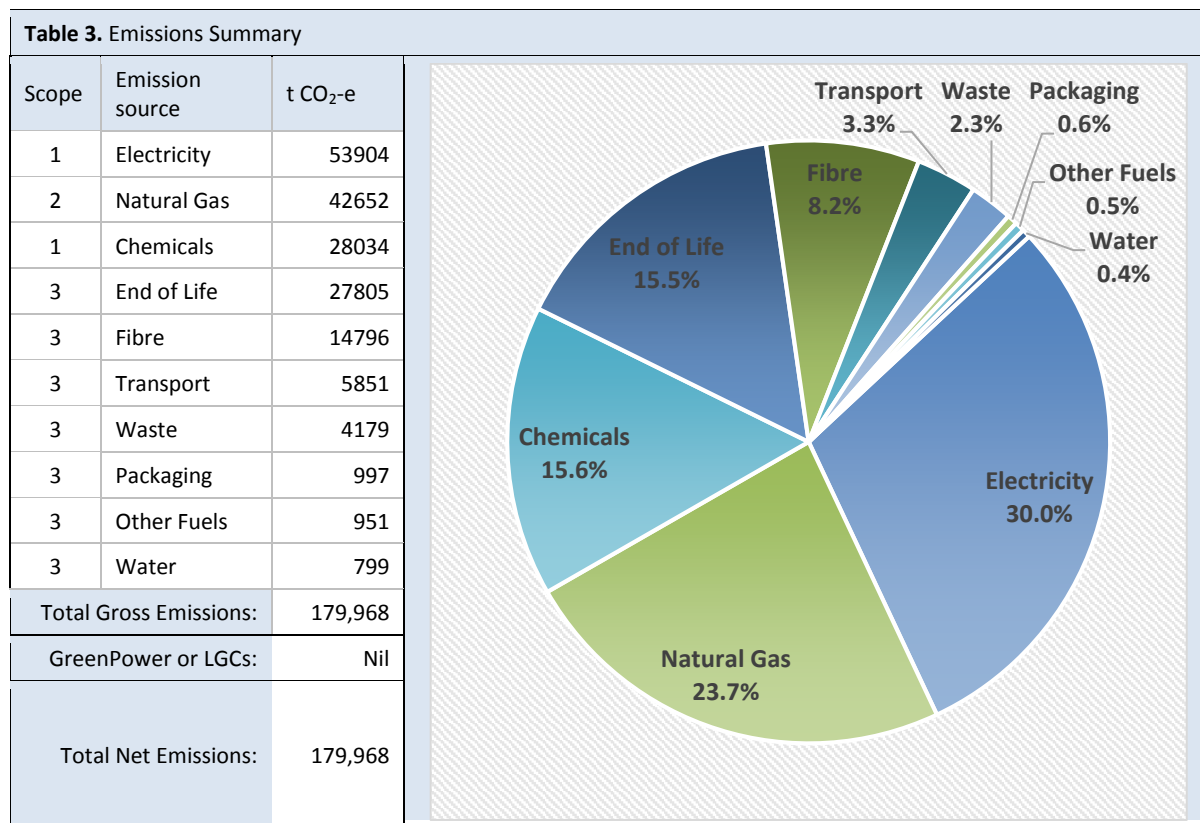
### Part B. Emissions reduction strategy

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 2015, 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

Table 2. Emissions reduction measures implemented in the current reporting period					
Year completed	Emission source	Reduction measure and calculation method	Scope	Status	Reduction t CO <sub>2</sub> -e
2015	Gas	Heated tank insulation	1	Completed	407.7
2015	Gas	Reduced steam losses from valve	1	Completed	10744.4
2015	Gas	Reduced steam use for water heating (reduced cooling tower use)	1	Completed	1223.1
2015	Gas	Reduced steam use in boiler air pre-heat (improved heat exchange)	1	Completed	5028.4
2015	Gas	Reduced steam use in pulping process (modified temperature control)	1	Completed	3864.3
2015	Gas	Reduced steam use in pumping process (improved steam recovery)	1	Completed	3737.4
2015	Electrical	Improved boiler water pumping efficiency	2	Completed	7777.0
2015	Electrical	Improved pulp pumping efficiency	2	Completed	268.2
2015	Electrical	Improved wash down pump efficiency	2	Completed	321.8
Total emission reductions implemented in this reporting period					33,372

### 3. Emissions summary



### 4. Carbon offsets

#### Part A. Offsets summary

**Table 4. Offsets Summary**

Offset type	Registry	Serial numbers	Quantity	Year retired
VCU	APX	1551-64971163-64973276-VCU-009-MER-IN-1-521-01042006-26052008-0	2,114	2016
VCU	APX	1014-45906964-45928408-VCU-001-CDC-IN-1-173-01102009-31032010-0	21,445	2016
CER	UNFCCC CDM	IN-5-128597383-1-1-0-390 to: IN-5-128625048-1-1-0-390	27,666	2016
VCU	APX	1954-79281451-79335005-VCU-001-CDC-IN-1-173-01042011-30092011-0	53,555	2016
CER	UNFCCC CDM	IN-5-177192725-1-1-0-1549 to: IN-5-177229516-1-1-0-1549	36,792	2016
CER	UNFCCC CDM	IN-5-143072512-1-1-0-391 to: IN-5-143092238-1-1-0-391	19,727	2016
CER	UNFCCC CDM	IN-5-168905894-1-1-0-347 to: IN-5-168926160-1-1-0-347	20,267	2016
Total retired offsets:			181,566	

### 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, offsets are invested in alternative energy generation developments, such as solar, wind or biomass.