Australian Government
Anti-Dumping Commission

# Application for the publication of

# dumping duty notices

# White Uncoated
# A4 and A3
# Cut Sheet Paper
# From China

**ANTI-DUMPING COMMISSION**
**Form B108**
July 2013

APPLICATION UNDER SECTION 269TB OF THE *CUSTOMS ACT 1901* FOR THE PUBLICATION OF DUMPING AND/OR COUNTERVAILING DUTY NOTICES

# DECLARATION

I request, in accordance with Section 269TB of the Customs Act 1901, that the Minister publish in respect of goods the subject of this application:

■ a dumping duty notice, or

☐ a countervailing duty notice, or

☐ a dumping and a countervailing duty notice

This application is made on behalf of the Australian industry producing like goods to the imported goods the subject of this application. The application is supported by Australian producers whose collective output comprises:

- 25% or more of the total Australian production of the like goods; and
- more than 50% of the total production of like goods by those Australian producers that have expressed either support for, or opposition to, this application.

I believe that the information contained in this application:

- provides reasonable grounds for the publication of the notice(s) requested; and
- is complete and correct.

| | |
|---|---|
| Signature: | |
| Name: | **Peter Williams** |
| Position: | **Chief Financial Officer** |
| Company: | **Ferntree Gully Road, Mt. Waverley, VIC 3149** |
| ABN: | **ABN 63 061 583 533** |
| Date: | |

# IMPORTANT INFORMATION

**Signature requirements**

Where the application is made:

*By a company* - the application must be signed by a director, servant or agent acting with the authority of the body corporate.

*By a joint venture* - a director, servant, agent of each joint venturer must sign the application. Where a joint venturer is not a company, the principal of that joint venturer must sign the application form.

*On behalf of a trust* - a trustee of the trust must sign the application.

*By a sole trader* - the sole trader must sign the application.

*In any other case* - contact the Commission's Client support section for advice.

**Assistance with the application**

The Anti-Dumping Commission has published guidelines to assist applicants with the completion of this application. Please refer to the following guidelines for additional information on completing this application:

- *Instructions and Guidelines for applicants: Application for the publication of dumping and or countervailing duty notices*
- *Instructions and Guidelines for applicants: Examination of a formally lodged application*

The Commission's client support section can provide information about dumping and countervailing procedures and the information required by the application form. Contact the team on:

**Phone**: 1300 884 159

**Fax**: 1300 882 506

**Email**: clientsupport@adcommission.gov.au

Other information is available from the Commission's website at www.adcommission.gov.au.

Small and medium enterprises (i.e., those with up to 200 employees) may obtain assistance, at no charge, from the International Trade Remedies Adviser, employed by Australian Industry Group and funded by the Australian government. To access this service, visit www.aigroup.com.au/traderemedies or telephone (03) 9867 0267.

**Important information**

To initiate an investigation into dumping and/or subsidisation, the Commission must comply with Australia's international obligations and statutory standards. This form provides an applicant industry with a framework to present its case and will be used by the Commission to establish whether there are reasonable grounds to initiate an investigation. To assist consideration of the application it is therefore important that:

- all relevant questions (particularly in Parts A and B) are answered; and
- information that is reasonably available be supplied.

The Commission does not require conclusive evidence to initiate an investigation, but any claims made should be reasonably based. An application will be improved by including supporting evidence and where the sources of evidence are identified. Simple assertion is inadequate to substantiate an application.

To facilitate compilation and analysis, the application form is structured in 3 parts:

1. **Part A** seeks information about the Australian industry. This data is used to assess claims of material injury due to dumping/subsidisation. Where an Australian industry comprises more than one company, each should separately prepare a response to Part A to protect commercial confidentiality.
2. **Part B** relates to evidence of dumping.
3. **Part C** is for supplementary information that may not be appropriate to all applications. However some questions in Part C may be essential for an application, for example, if action is sought against subsidisation.

All questions in Parts A and B must be answered, even if the answer is 'Not applicable' or 'None'. Where appropriate, applicants should provide a short explanation about why the requested data is not applicable. This will avoid the need for follow up questions by the Commission.

The application form requests data over several periods ($P^1$, $P^2$….$P^n$) to evaluate industry trends and to correlate injury with dumped imports. The labels $P^1$…$P^n$ are used for convenience in this application form. Lodged applications should identify the period relevant to the data. This form does not specify a minimum period for data provision. However, sufficient data must be provided to substantiate the claims made. If yearly data is provided, this would typically comprise a period of at least four years (for example the current financial year in addition to three prior years). Where information is supplied for a shorter period, applicants may consider the use of quarterly data. Data must also be sufficiently recent to demonstrate that the claims made are current.

When an investigation is initiated, the Commission will verify the claims made in the application. A verification visit to the Australian industry usually takes several days.

Applicant companies should be prepared to substantiate all Australian industry financial and commercial information submitted in the application. Any worksheets used in preparing the application should therefore be retained to facilitate verification.

During the verification visit, the Commission will examine company records and obtain copies of documents relating to the manufacture and sale of the goods.

## PUBLIC RECORD

**Appendices**

Some questions require attachments to be provided. The attachment numbering sequence should refer to the question answered. For example, question A2.2 requests a copy of an organisation chart. To facilitate reference, the chart should be labelled Attachment A2.2. If a second organisation chart is provided in response to the same question, it should be labelled Attachment A2.2.2 (the first would be labelled Attachment A2.2.1).

**Provision of data**

Industry financial data must, wherever possible, be submitted in an electronic format.

- The data should be submitted on a media format compatible with Microsoft Windows.
- Microsoft Excel, or an Excel compatible format, is required.
- If the data cannot be presented electronically please contact the Commission's client support section for advice.

**Lodgement of the application**

This application, together with the supporting evidence, should be lodged with:

The National Manager - Operations
Anti-Dumping Commission
Customs House
1010 Latrobe St
Docklands VIC 3008

or

Sent by facsimile to **1300 882 506**

**Public Record**

During an investigation all interested parties are given the opportunity to defend their interests, by making a submission. The Commission maintains a public record of these submissions. The public record is available on the Commission's website at www.adcommission.gov.au.

At the time of making the application both a confidential version (for official use only) and non-confidential version (public record) of the application must be submitted. Please ensure each page of the application is clearly marked "FOR OFFICIAL USE ONLY" or "PUBLIC RECORD". The non-confidential application should enable a reasonable understanding of the substance of the information submitted in confidence, clearly showing the reasons for seeking the conduct of a dumping and/or subsidy investigation, or, if those reasons cannot be summarised, a statement of reasons why summarisation is not possible. If you cannot provide a non-confidential version, contact the Commission's client support section for advice.

# PART A

# INJURY

# TO AN AUSTRALIAN INDUSTRY

**IMPORTANT**

All questions in Part A should be answered even if the answer is 'Not applicable' or 'None'. If an Australian industry comprises more than one company/entity, each should separately complete Part A.

For advice about completing this part please contact the Commission's client support section on:

**Phone**: 1300 884 159
**Fax:** 1300 882 506
**Email**: clientsupport@adcommission.gov.au

## A-1 Identity and communication.

Please nominate a person in your company for contact about the application:

| | |
|---|---|
| Contact Name: | [redacted] |
| Company and position: | [redacted] |
| Address: | **307 Ferntree Gully Road, Mt. Waverley, VIC 3149** |
| Telephone: | [redacted] |
| Facsimile: | [redacted] |
| E-mail address: | [redacted] |
| ABN: | **ABN 49 082 475 438** |

*Alternative contact*

| | |
|---|---|
| Name: | **Peter Williams** |
| Position in company: | **Chief Financial Officer** |
| Address: | **307 Ferntree Gully Road, Mt. Waverley, VIC 3149** |
| Telephone: | [redacted] |
| Facsimile: | [redacted] |
| E-mail address: | [redacted] |

If you have appointed a representative to assist with your application, provide the following details and complete Appendix A8 (Representation).

| | |
|---|---|
| Name: | |
| Business name: | |
| Address: | |
| Telephone: | |
| Facsimile: | |
| E-mail address: | |
| ABN: | |

## A-2 Company information.

1. State the legal name of your business and its type (e.g. company, partnership, sole trader, joint venture). Please provide details of any other business names you use to manufacture/produce/sell the goods that are the subject of your application.

Paper Australia Pty. Ltd. (ACN 061 583 533)
307 Ferntree Gully Road,
Mt. Waverley VIC 3149

Australian Paper Pty. Ltd. (ACN 082 475 438) is a wholly owned subsidiary company of Paper Australia Pty. Ltd. and is effectively dormant. The name 'Australian Paper' is used as a business name for Paper Australia Pty. Ltd. and is the usual way in which Paper Australia Pty. Ltd. is referred to in common use.

"Australian Office' is the business name of the division of Paper Australia Pty. Ltd. which sells the goods in Australia and in New Zealand.

Exports of the goods (other than to New Zealand) are generally undertaken by 'Paper Products Marketing' (PPM), a collection of 5 subsidiary companies of Paper Australia Pty. Ltd. which undertake paper trading worldwide.

Throughout this application, 'Australian Paper' will refer to Paper Australia Pty Ltd., which includes Australian Paper, Australian Office and the 5 subsidiary companies which make up PPM.

2. Provide your company's internal organisation chart. Describe the functions performed by each group within the organisation.

*Attachment A-2.2* contains Australian Paper's internal organisation chart.

Within that chart, other than the functions which are self-evident, the key functions include:

- 'Australian Office', which manufactures, imports and sells envelopes & stationery and sells Australian Paper's cut sheet paper as well as a very small volume of imported cut sheet paper in Australia and New Zealand.
- 'Printing Papers', which sells Australian Papers printing and converting papers in Australia and New Zealand. Australian Paper's small specialty paper mill, Shoalhaven, reports to this business.
- 'Packaging', which sells Australian Paper's packaging and industrial papers;
- 'Maryvale mill' which manufactures Australian Paper's high volume papers including cut sheet paper, printing & converting papers and packaging & industrial papers.
- 'Paper Products Marketing' (PPM) undertakes the overseas sales & export (except to NZ) of Australian Paper's products including cut sheet paper and also trades papers manufactured by other companies internationally

3. List the major shareholders of your company. Provide the shareholding percentages for joint owners and/or major shareholders.

Paper Australia Pty. Ltd. is a wholly owned subsidiary of Nippon Paper Industries Co. Ltd. registered in Japan (Prior to 1 April 2013 Nippon Paper Group Inc.).

www.nipponpapergroup.com

4. If your company is a subsidiary of another company list the major shareholders of that company.

Paper Australia Pty. Ltd. Is a fully owned subsidiary of Nippon Paper Industries Co. Ltd.

Note that the Parent Company name changed from Nippon Paper Group to Nippon Paper Industries on 1 April 2013

No individual shareholders of Nippon Paper Industries Co. Ltd. had greater than 10% of shares as of April 1 2013.

5. If your parent company is a subsidiary of another company, list the major shareholders of that company.

Not Applicable

6. Provide an outline diagram showing major associated or affiliated companies and your company's place within that structure (include the ABNs of each company).

*Attachment A-2.6* contains a diagram of the associated or affiliated companies.

If further information on the companies associated of affiliated with Nippon Paper Industries Co. Ltd. is required, this is available from their website at:

http://www.nipponpapergroup.com/e/about/group.html

7. Are any management fees/corporate allocations charged to your company by your parent or related company?

[redacted]

*[AP internal accounting practices]*

8. Identify and provide details of any relationship you have with an exporter to Australia or Australian importer of the goods.

Australian Paper and its subsidiaries and associated companies are not exporters to Australia.

Some significant importers of the goods are also customers of Australian Paper.

The 'Australian Office' business imports small volumes of cut sheet paper from Europe as a compliment to its range where demand does not justify local production. In total, these imports are [redacted] tonnes annually.

9. Provide a copy of all annual reports applicable to the data supplied in appendix A3 (Sales Turnover). Any relevant brochures or pamphlets on your business activities should also be supplied.

Australian Paper changed from a July-June financial Year to a January-December financial year in 2009, with a half-year report July-December 2009 being produced, then annual reports for calendar years 2010-2012.

The audited half year report for July-December 2009 and audited annual reports for 2010 to 2012 are provided as *Confidential Attachment A-2.9.1 – A-2.9.4.*

The unaudited report for the half year to June 2013 is also provided as *Confidential Attachment A-2.9.5.*

Additional information on Australian Paper, Australian Office and the products is available from the following websites:

- www.australianpaper.com.au
- www.leadingbrands.com.au
- www.reflex.com.au
- www.tudor.net.au
- www.onpaper.com.au
- www.ethicalpaperthefacts.com.au
- www.queenslipper.com.au
- www.shoalhavenpapermill.com.au

10. Provide details of any relevant industry association.

Australian Forest Products Association
PO BOX 239 Deakin West
ACT 2600
Phone: (02) 6285 3833
Facsimile: (02) 6285 3855
enquiries@ausfpa.com.au
www.ausfpa.com.au

## A-3 The imported and locally produced goods.

1. Fully describe the imported product(s) the subject of your application:
   - Include physical, technical or other properties.
   - Where the application covers a range of products, list this information for each make and model in the range.
   - Supply technical documentation where appropriate.

   The imported products are uncoated white paper of a type used for writing, printing or other graphic purposes, in the nominal basis weight range of 70 to 100 gsm and cut to sheets of metric sizes A4 (210mm x 297mm) and A3 (297mm x 420mm) (also commonly referred to as cut sheet paper, copy paper, office paper or laser paper).

   The paper is not coated, watermarked or embossed and is subjectively white. It is made mainly from bleached chemical pulp and/or from pulp obtained by a mechanical or chemi-mechanical process and/or from recycled pulp.

2. What is the tariff classification and statistical code of the imported goods.

   The tariff classifications and statistical codes of the imported goods since 1 January 2012 are:

| | |
|---|---|
| 4802.56.10 | |
| 03 | 297mm x 210 mm (A4 paper) 40-89 gsm white |
| 09 | 297mm x 210 mm (A4 paper) 90-150 gsm |
| 4802.56.90 | |
| 19 | Other (predominantly white A3) 40-150gsm |

   Prior to January 2012 the classifications and statistical codes of the imported goods were:

| | |
|---|---|
| 4802.56.10 | |
| 03 | 297mm x 210 mm (A4 paper) 40-89 gsm white |
| 07 | 297mm x 210 mm (A4 paper) 90-150 gsm white |
| 4802.56.90 | |
| 30 | 297mm x 420mm (A3 paper) 40-150gsm |

   Each of these categories contain some goods which are not like goods, however code 03 is believed to be almost wholly 80gsm white A4 paper and will be used as the basis for comparison with the normal value derived from Chinese domestic prices for 80gsm white A4 paper and for calculation of the dumping amount and margin.

   Code 03 makes up all but 10 tonnes of A4 imports from China and 96% of all A4 & A3 white imports from China.

   Duty for imports from China is in all cases 5%

3. Fully describe your product(s) that are 'like' to the imported product:
   - Include physical, technical or other properties.
   - Where the application covers a range of products, list this information for each make and model in the range.
   - Supply technical documentation where appropriate.
   - Indicate which of your product types or models are comparable to each of the imported product types or models. If appropriate, the comparison can be done in a table.

   The goods produced by Australian Paper are uncoated white paper of a type used for writing, printing or other graphic purposes, in the nominal basis weight range of 70 to 100 gsm and cut to sheets of metric sizes A4 (210mm x 297mm) and A3 (297mm x 420mm) (also commonly referred to as cut sheet paper, copy paper, office paper or laser paper).

   The paper is not coated, watermarked or embossed and is subjectively white. It is made mainly from bleached chemical pulp and/or from recycled pulp.

   *Confidential Attachment A-3.3* contains technical documentation for Australian Paper's like goods.

   Additional information on Australian Paper, Australian Office and the products is available from the following websites:

   - www.leadingbrands.com.au
   - www.reflex.com.au
   - www.tudor.net.au

4. Describe the ways in which the essential characteristics of the imported goods are alike to the goods produced by the Australian industry.

   a. Physical Likeness:

   Both the imported goods and the goods produced by the Australian industry are white paper cut in rectangular sheets and generally wrapped in reams of 500 sheets, but also sold in packs containing different numbers of sheets. Both are what the Australian consumer would recognise as white copy paper. Unless placed side by side, the average consumer would be unlikely to notice any difference between them.

   In the Australian market, the predominant sheet size and basis weight is A4, 80 gsm but with some A3 and a very small quantity of US sizes. The old imperial sheet sizes have fallen out of use. As well as the 80gsm weight which dominates the Australian market, some 70gsm, 75 gsm, 90 gsm and 100gsm is used together with small amounts of heavier weights used for special purposes.

   The imported goods and the goods produced by the Australian industry are physically alike in all practical aspects.

b. Commercial Likeness:
The imported goods and the goods produced by the Australian industry compete for the same market. In particular, a significant portion of the Australian market is goods wrapped and sold as the purchaser's own brand e.g. *Fuji Xerox*. In this portion of the market, together with the 'plain wrap' and generic products, there is direct head-to-head competition between imported goods and the goods produced by the Australian industry. At different times in the past, Australian Paper has provided several of the purchaser's brand products now sourced from China, [redacted].

Where the goods are wrapped and sold in the manufacturer's brand and are heavily promoted, e.g. Australian Paper's *'REFLEX®'* brand, there is some short term decoupling of price, but ultimately the end consumer will switch based on the trade off between price, service and reputation.

c. Functional Likeness:
Both the imported goods and the goods produced by the Australian industry are used in the same range of applications, including high speed and low speed copying, printing (both on computer printers and small offset printers), and general use in business, education and home offices as well as in small offset printers.

The imported goods and the goods produced by the Australian industry are functionally alike in all practical aspects.

In the Chinese domestic market, as well as 'export grade' goods which are generally comparable with the goods sold in the Australian domestic market, there are also lower priced goods which have significantly inferior appearance (e.g. lower brightness, lower whiteness, poor surface finish, specks, inconsistency etc.) and, at times, functionality (e.g. unsuited to high speed duplex copying or printing) when compared with the 'export grade' goods.

d. Production Likeness:
The paper production and finishing processes are substantially identical across the large scale industry. Some mills, such as UPM-Kymmene China, use paper pulp purchased from bleached pulp mills located elsewhere while others, such as Australian Paper, have their own bleached pulp mills on site.

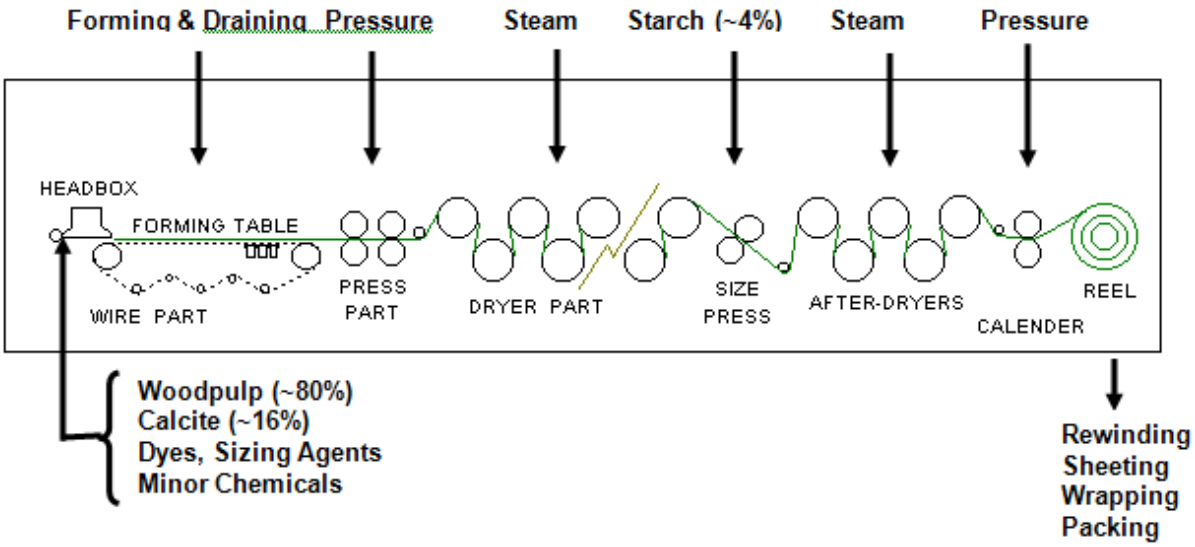
The imported goods and the goods produced by the Australian industry are manufactured using equipment and processes which are alike in all significant practical aspects and which are as described in A-3.6 below.

5. What is the Australian and New Zealand Standard Industrial Classification Code (ANZSIC) applicable to your product.

C 1510 Pulp, Paper and Paperboard Manufacturing

6. Provide a summary and a diagram of your production process.

Australian Paper's production process is as set out by the diagram below.




The major raw material used in papermaking is wood pulp, including recycled wood pulp. At the Australian Paper mill which makes the goods, Maryvale in Gippsland, Victoria, the majority of wood pulp used is produced on site and this is supplemented by about 5-10% imported pulps, while at most Chinese mills, all or most of the wood pulp is manufactured elsewhere and may be purchased on the international market or from related companies. The other two key materials used are Calcite and Starch, which for Australian Paper are both produced within Australia.

The papermaking process in all printing & writing paper mills starts by preparing and blending pulps, filler, starch, sizing agents, dyes and minor chemicals which are then, in very dilute form (less than 1% solids) pumped to a 'headbox' or horizontal nozzle which forms the paper sheet on a horizontal rapidly moving mesh belt or 'wire' from which some of the water is drained by gravity and by suction. At the end of the wire, the paper sheet is still only around 20% solids (80% water). The sheet then passes through a series of press rolls and more water is removed by pressure, leaving the sheet about 40% solids (60% water). The remainder of the water is removed by evaporation as the sheet passes around a series of steam heated drying cylinders.

The sheet then has a layer of starch applied to each surface at the 'size press' and is again dried using steam heated cylinders and calendared between smooth rolls at high pressures to give a smooth surface. The sheet is then rolled into parent rolls or 'Jumbos' several metres long and over 2 meters in diameter, weighing several tonnes.

The Jumbos are then rewound into smaller reels, generally 1.5 metres in diameter and around 2.5 metres long for use in the sheeting process. These smaller reels are cut directly into A4, A3 or other cut sheet sizes, usually but not always wrapped as reams (generally, but not exclusively of 500 sheets), packed into boxes and the boxes palletised on highly automated 'finishing' equipment (the 'Cut Size Lines').

At this point the cut sheet paper is ready for loading for shipment.

Note that other uncoated woodfree papers (not cut sheet paper and therefore not like goods) to be sold in rolls or large 'folio' sheets undergo the same process on the same equipment to the point of rewinding the jumbo reels, but is then 'finished' differently as rolls or sheets for use in the customers' manufacturing processes such as printing or paper stationery manufacture.

The PaperHelp Encyclopaedia, available on line at:

http://www.risiinfo.com/toolcontent?toolkit=paperhelp

provides further information on the pulp and paper making process.

7. If your product is manufactured from both Australian and imported inputs:
   - describe the use of the imported inputs; and
   - identify that at least one substantial process of manufacture occurs in Australia (for example by reference to the value added, complexity of process, or investment in capital).

Imported inputs are on average less than 10% of the domestic product and are limited to a long fibre wood pulp, recycled pulp (since the closure of Amcor's Fairfield deinking plant in mid-2012) and some dyes and other chemicals.

The entire manufacturing process from wood to wrapped, boxed and palletised cut sheet paper takes place in Australia (at the Maryvale mill of Australian Paper)

The paper manufacturing process is very capital intensive, with about A$2,000 of investment in the paper making machine alone for each annual tonne of paper production, with additional investment downstream in highly automated sheeting and packaging equipment, as well as upstream in pulp manufacture and in infrastructure such as steam boilers and chemical preparation equipment. As an example, Maryvale's M5 paper machine, used for cut sheet paper production, was installed in 1997 at a cost of $330 million for a capacity of 160,000 tonnes/year (now 195,000 tonnes/year) and the sheeting and packing equipment installed with that machine cost about $20 million for a capacity of 95,000 tonnes/yr. (a second line has been added for a sheeting capacity of 190-210,000 tonnes/year).

The entire Australian Paper Maryvale mill has a capital replacement value of greater than $3 Billion.

8. If your product is a processed agricultural good, you may need to complete Part C-3 (close processed agricultural goods).

Not Applicable

9. Supply a list of the names and contact details of all other Australian producers of the product.

When Australian paper was sold to Nippon paper in June 2009, the Tasmanian mills of Australian Paper were retained by Australian Paper's former owners, PaperlinX Ltd. and became Tas Paper Pty. Ltd. (no longer related to Australian Paper) which operated for a short time to allow orderly closure of the paper mills in Tasmania.

Australian Paper remained responsible for paper sales and marketing for Tas Paper Pty. Ltd. until its mills were closed in mid-2010.

Since mid-2010, there have been no other Australian producers of the product

When the Tas Paper Pty. Ltd. mills were closed in mid 2010, Australian Office purchased the remaining office papers stocks and continued to sell these stocks until sold out.

## A-4 The Australian market.

1. Describe the end uses of both your product and the imported goods.

The product, both locally produced and imported , is described variously as white 'cut sheet', 'cut ream', 'cut size', 'office paper', 'copy paper' or 'laser paper is used in both dry toner and ink jet copying, faxing and printing in offices and in instant printing outlets. It is also used in smaller quantities for offset printing and for general printing, business, educational and home office uses.

2. Generally describe the Australian market for the Australian and imported product and the conditions of competition within the overall market. Your description could include information about:
   - sources of product demand;
   - marketing and distribution arrangements;
   - typical customers/users/consumers of the product;
   - the presence of market segmentation, such as geographic or product segmentation;
   - causes of demand variability, such as seasonal fluctuations, factors contributing to overall market growth or decline, government regulation, and developments in technology affecting either demand or production;
   - the way in which the imported and Australian product compete; and
   - any other factors influencing the market.

In Australia, cut sheet paper (copy paper, office paper or laser paper) is predominantly A4 (210 x 297 mm) size and 80 gsm (401 A4 reams/tonne) with a much smaller quantity sold in A3 size and a miniscule quantity sold in A5, with the old imperial quarto and foolscap sizes having fallen out of use. As well as 80gsm, it is also sold in small quantities in other sheet weights of 70 gsm (458 A4 reams/tonne), 75 gsm (427 A4 reams/tonne), 90 gsm (356 A4 reams/tonne) and 100 gsm (320 A4 reams/tonne).

The Australian market for cut sheet paper has dynamics that can be characterised as follows:

- A high volume commodity market with little readily discernible differentiation other than price.
- "Brand recognition" effects relate primarily to Australian Paper's *REFLEX*® brand which has been regularly promoted on mass media since 1984;
- The cut sheet paper market in Australia is mature, with overall annual volumes remaining flat. Growth in population and in the Australian workforce has offset declining per capita use of cut sheet paper, keeping the overall market size fairly stable year on year.

- The lack of growth in this market creates a situation where competing for market share with competitors is the only way to increase sales volumes.
- Cut sheet paper in Australia is primarily sold through a handful of national key contract resellers and retailers. These include Fuji Xerox, Staples, Officemax, Lyreco, Wesfarmers, Woolworths, Australia Post and the BPGI (Business Product Group International) buying Group. This creates a highly concentrated procurement dynamic which places the balance of power firmly in the hands of the reseller. Cut sheet paper manufacturers seek to gain Australian market share by targeting direct supply contracts with these organisations.
- The Chinese cut sheet paper production is growing well ahead of anticipated increases in Chinese domestic demand, creating a great deal of over-capacity, not just in China but in the Asian region. This capacity growth is continuing, with APRIL starting up a new 450,000 tonnes/yr uncoated paper machine in late 2012, UPM-Kymmene scheduled to start up a major new paper machine with 450,000 tonnes/yr capacity in 2014 and Chenming converting a 200,000 tonne newsprint machine to uncoated woodfree including cut ream. APRIL, APP and others in China have also foreshadowed major capacity increases in this market.
- This over-capacity has created a situation where manufacturers in the region, particularly in China, are seeking markets outside their home market at almost any price required to sell the capacity, while attempting to protect prices in their home market to remain profitable overall. This effect, which is driven by the extreme capital intensity and the high fixed costs of the industry, serves to drive wholesale prices for office paper in Australia down to levels which are unsustainable for local Australian production;
- Lowering import prices are continuing to lead the market down, with resellers and buying groups applying pressure to all suppliers to match or better the low import prices available from alternative sources, without regard to whether these prices reflect dumping. Mills must, because of their need to service the huge capital base and high fixed costs inherent in their production processes, meet these demands to allow them to remain in operation, often selling down to their marginal cost to avoid down-time and lay-offs from which it is difficult to recover.
- For Australian Paper to maintain operations and to avoid extended down-time (which would increase fixed costs per tonne of paper) and lay-offs (which would result in permanent loss of the skilled workforce that is critical to continued operations), it must follow the price of the lower priced imports down to the low, severely dumped price levels of some imports. This price depression results in considerable material injury, which, in turn, affects Australian Paper's ability to invest in the equipment, facilities and research needed to remain abreast of market developments. The inevitable effect of this, in the long term, is that the Australian industry will be faced with a falling market share, increased imports and greatly reduced viability.
- The market is not prone to seasonal volume fluctuations, nor is the underlying end user volume very sensitive to changes in economic factors; being underpinned by the number of Australians in full time office-based employment. Volume growth as discussed is forecast to remain flat on an annualised basis.

There are three basic categories of end user:

- Home and home office/small office (serviced predominantly by retailers such as Officeworks, K-Mart, Big W, supermarkets, stationers, newsagents and Australia Post)
- Medium and large business, Government and education (serviced predominantly by contract resellers such as Staples and Fuji Xerox)

- Industrial users including instant print and in-plant printing operations (serviced predominantly by wholesale paper merchants such as Daltons, Spicers, Fuji Xerox, BJ Ball and contract resellers)

There are three categories of product (all interchangeable in a functional sense):

- Manufacturers brands (eg *REFLEX*®, *Australian*®, AA, Paper One)
- Private label products sold (eg Fuji Xerox, Officemax, Office National)
- Plain label copy papers or generic products (targeted largely at the industrial market)

Both private label and generic products can be and are sourced from alternative manufacturers on a contract basis.

Dumping occurs in all end use sectors and channels of the Australian market and is supported by the common practice of retailers to use office paper as a low priced item to draw in buyers and for businesses to issue tenders for stationery supply where the lowest office paper price has a large influence on the outcome.

The following summarises Australian and Chinese manufacturers brands identified in the Australian market:

- Current Australian Paper Brands include: Reflex, Australian, Brilliant, Olympic, Printright, Tudor, all made in Australia;
- Private label brands currently manufactured by Australian Paper for others include: [redacted], again all made in Australia;
- Private label brands believed imported from UPM-Kymmene China include: Fuji Xerox Performer, Fuji Xerox Business, Fuji Xerox Professional, COS Premium, Office Max Multi Purpose, Lyreco Premium, Lyreco, J. Burrows (Officeworks);
- Brands we have identified as being imported from China and believed to be by Other Chinese manufacturers include: Golden Ball, Woolworths Essentials;
- In addition, there are copy papers imported from Thailand, Indonesia, Brazil and other countries sold in the Australian market

3. Identify if there are any commercially significant market substitutes for the Australian and imported product.

While mechanical papers, tinted papers, embossed papers, watermarked papers, pre-printed papers and coated papers are on rare occasions substituted for plain white uncoated cut sheet papers, these constitute separate markets which sell generally at significantly higher prices. These products are rarely chosen as a substitute for white uncoated cut sheet paper unless there is an explicit requirement. In practice, there are no significant market substitutes.

4. Complete appendix A1 (Australian production). This data is used to support your declaration at the beginning of this application.

See *Confidential Appendix A1*

5. Complete appendix A2 (Australian market).

See *Confidential Appendix A2*

6. Use the data from appendix A2 (Australian market) to complete this table:

*Indexed table of sales quantities**

| | (a) AP Sales | (b) Other Australian Sales | (c ) Total Australian Sales (a+b) | (d) Dumped Imports | (e) Other Imports | (f) Total Imports (d+e) | Total Market (c+f) |
|---|---|---|---|---|---|---|---|
| **Mar-10** | 100 | - | 100 | 100 | 100 | 100 | 100 |
| **Jun-10** | 129 | - | 129 | 99 | 68 | 78 | 104 |
| **Sep-10** | 100 | - | 100 | 99 | 107 | 104 | 102 |
| **Dec-10** | 95 | - | 95 | 78 | 95 | 90 | 92 |
| **Mar-11** | 89 | - | 89 | 72 | 99 | 91 | 90 |
| **Jun-11** | 108 | - | 108 | 108 | 93 | 97 | 103 |
| **Sep-11** | 96 | - | 96 | 139 | 153 | 148 | 121 |
| **Dec-11** | 91 | - | 91 | 129 | 80 | 95 | 93 |
| **Mar-12** | 93 | - | 93 | 161 | 80 | 105 | 99 |
| **Jun-12** | 98 | - | 98 | 184 | 78 | 111 | 104 |
| **Sep-12** | 81 | - | 81 | 226 | 121 | 154 | 116 |
| **Dec-12** | 77 | - | 77 | 190 | 66 | 104 | 90 |
| **Mar-13** | 77 | - | 77 | 191 | 88 | 120 | 98 |
| **Jun-13** | 90 | - | 90 | 214 | 63 | 109 | 99 |

## A-5 Applicant's sales.

1. Complete appendix A3 (sales turnover).

   See *Confidential Appendix A3*

2. Use the data from appendix A3 (sales turnover) to complete these tables.

*Indexed table of Applicant's sales quantities**

| Quantity | Mar-10 | Jun-10 | Sep-10 | Dec-10 | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **All products** | | | | | | | | | | | | | | |
| Australian market | 100 | 103 | 113 | 108 | 101 | 97 | 88 | 89 | 85 | 79 | 81 | 89 | 76 | 80 |
| Export market | 100 | 145 | 126 | 83 | 104 | 132 | 135 | 118 | 148 | 160 | 149 | 143 | 162 | 164 |
| **Total** | 100 | 119 | 118 | 99 | 102 | 110 | 106 | 100 | 109 | 110 | 107 | 109 | 109 | 112 |
| **Like goods** | | | | | | | | | | | | | | |
| Australian market | 100 | 129 | 100 | 95 | 89 | 108 | 96 | 91 | 93 | 98 | 81 | 77 | 77 | 90 |
| Export market | 100 | 134 | 129 | 62 | 86 | 89 | 92 | 73 | 93 | 103 | 59 | 80 | 127 | 139 |
| **Total** | 100 | 130 | 106 | 88 | 88 | 104 | 95 | 87 | 93 | 99 | 77 | 78 | 88 | 101 |

*Indexed table of Applicant's sales values**

| Value | Mar-10 | Jun-10 | Sep-10 | Dec-10 | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **All products** | | | | | | | | | | | | | | |
| Australian market | 100 | 106 | 105 | 101 | 91 | 90 | 86 | 87 | 82 | 79 | 78 | 82 | 70 | 74 |
| Export market | 100 | 159 | 142 | 93 | 115 | 129 | 136 | 115 | 133 | 139 | 129 | 125 | 139 | 151 |
| **Total** | 100 | 120 | 115 | 99 | 97 | 101 | 99 | 95 | 96 | 95 | 91 | 94 | 89 | 94 |
| **Like goods** | | | | | | | | | | | | | | |
| Australian market | 100 | 129 | 101 | 95 | 88 | 107 | 96 | 89 | 94 | 98 | 81 | 75 | 74 | 84 |
| Export market | 100 | 149 | 152 | 70 | 93 | 94 | 98 | 77 | 88 | 103 | 61 | 75 | 114 | 126 |
| **Total** | 100 | 132 | 108 | 91 | 89 | 105 | 96 | 87 | 93 | 99 | 78 | 75 | 80 | 90 |

Note that 'All Products' includes coated paper imported from NPI Japan after closure of Tas Paper. These imports ceased following the Tsunami which affected the NPI mills in Japan, reducing total AP sales to the Australian market.

Australian Paper has five paper machines at its Maryvale mill. Three of these are specialised packaging paper machines and two manufacture cut sheet papers as well as other uncoated printing, writing and conversion papers. Australian Paper also has a small paper machine in NSW manufacturing specialty printing and writing papers.

Cut sheet papers (like goods) are produced as rolls on paper machines which make a range of similar uncoated papers which include envelope papers, offset printing papers and scholastic papers. Because of the high level of investment and relatively high costs which do not vary in proportion to production levels, the total volume of production is, wherever possible, maintained to give high equipment utilisation, with any volume above the domestic cut sheet paper sales sold in other markets.

3. Complete appendix A5 (sales of other production) if you have made any:

   - internal transfers; or
   - domestic sales of like goods that you have not produced, for example if you have imported the product or on-sold purchases from another Australian manufacturer.

   The 'Australian Office' business imports small volumes of cut sheet paper from Europe as a compliment to its range where demand does not justify local production. In total, these imports are [redacted] tonnes annually and comprise specialist papers sold at premium prices.

   Australian Paper also makes its export sales (other than to New Zealand) through PPM, a group of subsidiary companies.

   *Confidential Appendix A5* contains details of these transfers and sales.

4. Complete appendix A4 (domestic sales).

   *Confidential Appendix A4* is supplied as a spreadsheet on disk only because of the volume of data it contains.

5. If any of the customers listed at appendix A4 (domestic sales) are associated with your business, provide details of the association. Describe the price effect of the association.

   Not Applicable

6. Attach a copy of distributor or agency agreements/contracts.

   Each distributor agreement is individually negotiated.

   *Confidential Attachment A-5.6* is a typical distributor agreement.

7. Provide copies of any price lists.

   Representative Price lists setting out list prices of Australian Paper office papers to various sizes of distributor are contained in *Confidential Attachment A-5.7* as follows:

   - *Confidential Attachment A-5.7.1* – Large Stationery Retailer price list
   - *Confidential Attachment A-5.7.2* – Buying Group price list
   - *Confidential Attachment A-5.7.3* – Independent Stationers price list

   [redacted]

   *[comment on discounts & rebates policy & price lists]*

8. If any price reductions (for example commissions, discounts, rebates, allowances and credit notes) have been made on your Australian sales of like goods provide a description and explain the terms and conditions that must be met by the customer to qualify.

    - Where the reduction is not identified on the sales invoice, explain how you calculated the amounts shown in appendix A4 (domestic sales).
    - If you have issued credit notes (directly or indirectly) provide details if the credited amount has **not** been reported appendix A4 (domestic sales) as a discount or rebate.

[redacted]

*[comment on discounts & rebates policy & price lists]*

9. Select two domestic sales in each quarter of the data supplied in appendix A4 (domestic sales). Provide a complete set of commercial documentation for these sales. Include, for example, purchase order, order acceptance, commercial invoice, discounts or rebates applicable, credit/debit notes, long or short term contract of sale, inland freight contract, and bank documentation showing proof of payment.

    *Confidential Attachment A-5.9* contains complete sets of commercial documentation for two domestic sales in each quarter over the 12 months to June 2013

## A-6 General accounting/administration information.

1. Specify your accounting period.

   January 1 to December 31

   Note that Paper Australia Pty. Ltd. changed from a July-June financial Year to a January-December (calendar year) financial year in July 2009.

2. Provide details of the address(es) where your financial records are held.

   *General Financial Records, Sales Records*
   Australian Paper
   307 Ferntree Gully Road,
   Mt. Waverley VIC 3149

   Australian Office
   50 Raglan Street,
   Preston VIC 3072

   *Production and Production Cost Records*
   Australian Paper
   Maryvale Mill,
   Morwell VIC 3840

3. To the extent relevant to the application, please provide the following financial documents for the two most recently completed financial years plus any subsequent statements:

   - chart of accounts;

     Australian Paper's chart of accounts is in *Confidential Attachment A-6.3.1*.

   - audited consolidated and unconsolidated financial statements (including all footnotes and the auditor's opinion);

     Annual Reports for 2009 to 2012 containing audited financial statements with footnotes and auditors opinion are provided as *Confidential Attachment A-2.9.*

   - internal financial statements, income statements (profit and loss reports), or management accounts, that are prepared and maintained in the normal course of business for the goods.

     *These documents should relate to:*

     1. the division or section/s of your business responsible for the production and sale of the goods covered by the application, and
     2. the company overall.

     *Confidential Attachment A-6.3.2* contains extracts from internal management accounts. These accounts are utilised by the auditors in preparing their opinion.

4. If your accounts are **not** audited, provide the unaudited financial statements for the two most recently completed financial years, together with your taxation returns. Any subsequent monthly, quarterly or half yearly statements should also be provided.

   Audited accounts for 2009 – 2012 are included at *Confidential Attachment A-2.9.1 to A-2.9.4.*

   The unaudited half-yearly statement for June 2013 is included as *Confidential Attachment A-2.9.5.*

5. If your accounting practices, or aspects of your practices, differ from Australian generally accepted accounting principles, provide details.

   Not Applicable

6. Describe your accounting methodology, where applicable, for:

   - The recognition/timing of income, and the impact of discounts, rebates, sales returns warranty claims and intercompany transfers;

     [redacted]

   - provisions for bad or doubtful debts;

     [redacted]

   - the accounting treatment of general expenses and/or interest and the extent to which these are allocated to the cost of goods;

     [redacted]

   - costing methods (eg by tonnes, units, revenue, activity, direct costs etc) and allocation of costs shared with other goods or processes

     [redacted]

   - the method of valuation for inventories of raw material, work-in-process, and finished goods (eg FIFO, weighted average cost);

     [redacted]

   - valuation methods for scrap, by-products, or joint products;

     [redacted]

   - valuation methods for damaged or sub-standard goods generated at the various stages of production;

[redacted]

- valuation and revaluation of fixed assets;

[redacted]

- average useful life for each class of production equipment, the depreciation method and depreciation rate used for each;

[redacted]

- treatment of foreign exchange gains and losses arising from transactions and from the translation of balance sheet items; and

[redacted]

- restructuring costs, costs of plant closure, expenses for idle equipment and/or plant shut-downs.

[redacted]

*[internal Australian Paper Accounting policies and practices]*

7. If the accounting methods used by your company have changed over the period covered by your application please provide an explanation of the changes, the date of change, and the reasons.

[redacted]

*[internal Australian Paper Accounting policies and practices]*

## A-7 Cost information

1. Complete appendices A6.1 and A6.2 (cost to make and sell) for domestic and export sales.

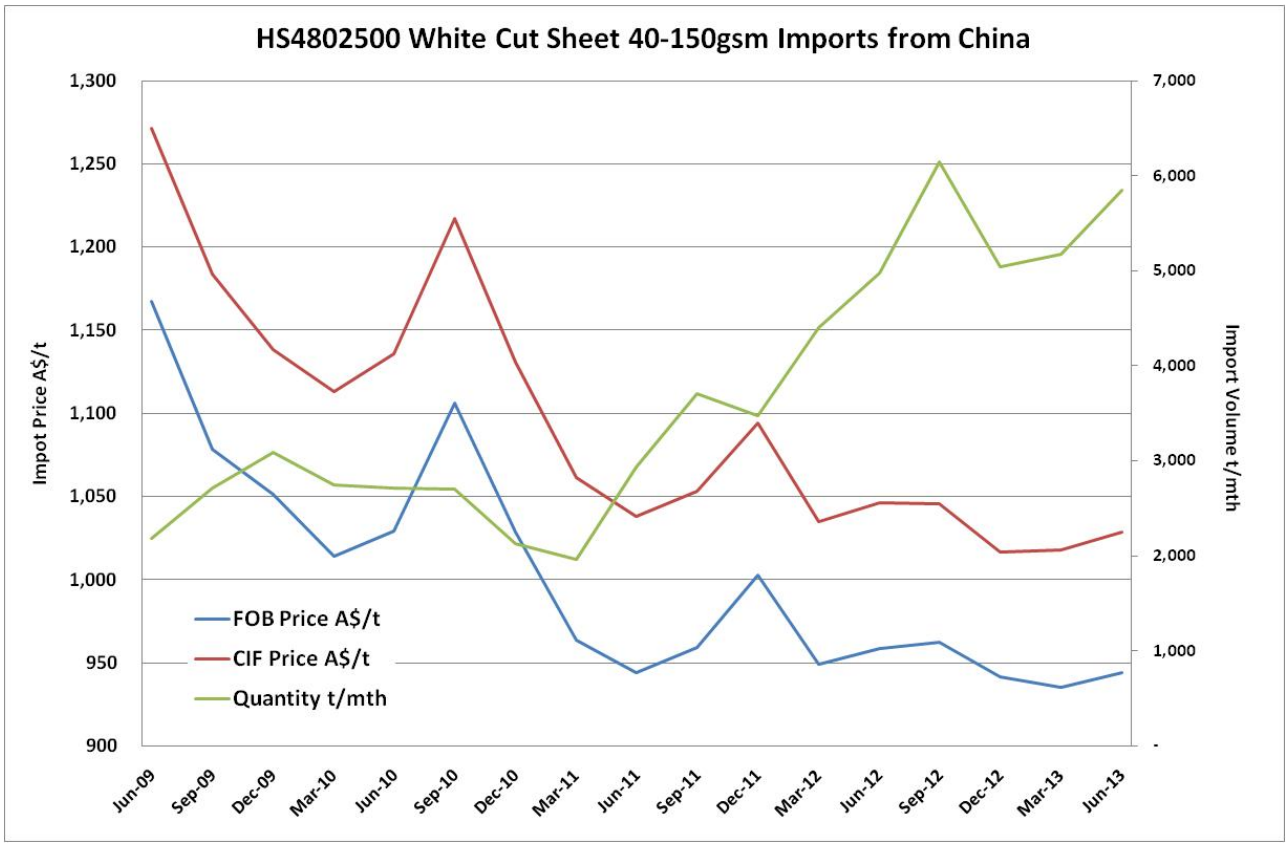
See *Confidential Appendices A6.1* and *A6.1*

## A-8 Injury

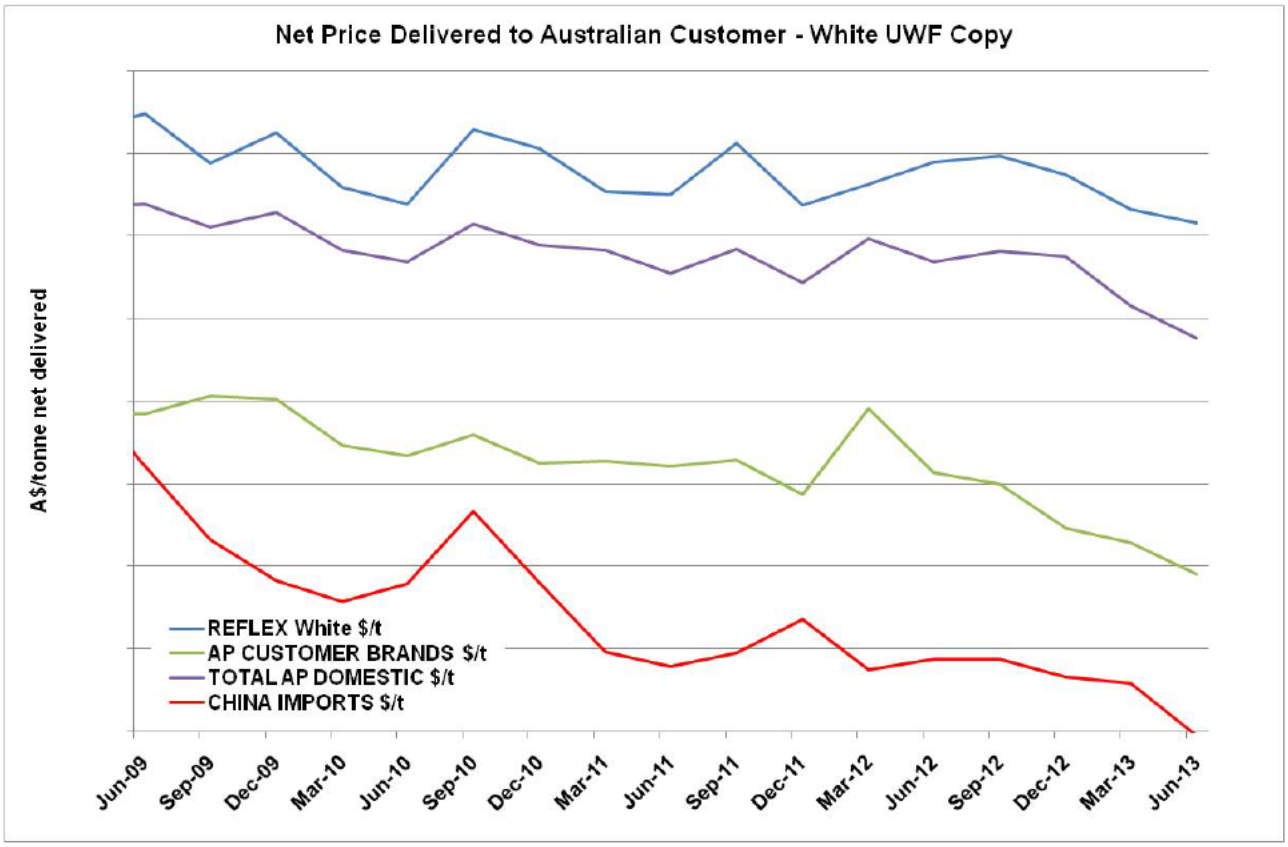
The principal indicators of injury are prices, volumes and profit effects – although not all of these must be evident. For this application, profit refers to amounts earned. Profitability is the ratio of profit to sales revenue. Where injury is threatened, but has not yet occurred, refer to question C.2.

1. Estimate the date when the material injury from dumped imports commenced.

Chinese import prices have been steadily declining from 2009, but it was not until early 2011 that volumes from China began to rapidly escalate. On this basis, we estimate that the material injury from Chinese dumped imports commenced in mid-2011.



On a different measure, the effect on Australian Paper domestic prices, customer brand product prices began to be significant from early 2012, with the effect on the net price of Australian Paper's market leading *REFLEX*© brand becoming significant from the final quarter of 2012.



2. Using the data from appendix A6 (cost to make and sell), complete the following tables for each model and grade of your production.

**Index of Production Variations (A)**

| | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|
| A4 size 0% - 20% Recycled | 100 | 109 | 62 | 79 | 77 | 100 | 75 | [redacted] | [redacted] | [redacted] |
| A4 size 21% - 79% Recycled | 100 | 76 | 123 | 112 | 81 | 122 | 64 | 84 | 51 | 80 |
| A4 size 80% - 100% Recycled | 100 | 141 | 73 | 136 | 82 | 173 | 69 | 57 | 120 | 62 |
| A3 size 0% - 20% Recycled | 100 | 108 | 59 | 75 | 70 | 89 | 65 | [redacted] | 73 | 61 |
| A3 size 21% - 79% Recycled | 100 | 66 | 48 | 118 | 86 | 101 | 94 | [redacted] | 5 | 47 |
| A3 size 80% - 100% Recycled | 100 | 144 | 66 | 146 | 93 | 194 | 73 | 40 | 128 | 60 |
| **TOTAL** | 100 | 108 | 67 | 85 | 77 | 105 | 74 | 84 | 74 | 64 |

**Index of Cost Variations (J)**

| | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|
| A4 size 0% - 20% Recycled | 100 | 100 | 103 | 101 | 100 | 97 | 102 | 101 | [redacted] | [redacted] |
| A4 size 21% - 79% Recycled | 100 | 84 | 83 | 86 | 108 | 102 | 107 | 109 | 110 | 105 |
| A4 size 80% - 100% Recycled | 100 | 92 | 103 | 92 | 93 | 90 | 93 | 92 | 91 | 96 |
| A3 size 0% - 20% Recycled | 100 | 100 | 103 | 101 | 100 | 97 | 102 | 101 | 99 | 92 |
| A3 size 21% - 79% Recycled | 100 | 87 | 67 | 90 | 88 | 88 | 89 | 86 | 83 | 86 |
| A3 size 80% - 100% Recycled | 100 | 91 | 104 | 91 | 93 | 90 | 93 | 90 | 90 | 96 |
| **TOTAL** | 100 | 99 | 101 | 100 | 100 | 98 | 102 | 100 | 99 | 94 |

**Index of Price Variations (L)**

| | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|
| A4 size 0% - 20% Recycled | 100 | 99 | 100 | 97 | 102 | 100 | 100 | 98 | 97 | 94 |
| A4 size 21% - 79% Recycled | 100 | 100 | 101 | 101 | 100 | 102 | 102 | 100 | 95 | 95 |
| A4 size 80% - 100% Recycled | 100 | 98 | 98 | 99 | 99 | 99 | 98 | 96 | 92 | 94 |
| A3 size 0% - 20% Recycled | 100 | 98 | 97 | 98 | 99 | 103 | 98 | 102 | 95 | 96 |
| A3 size 21% - 79% Recycled | 100 | 105 | 105 | 107 | 107 | 105 | 105 | 108 | 103 | 104 |
| A3 size 80% - 100% Recycled | 100 | 101 | 101 | 100 | 100 | 102 | 102 | 101 | 99 | 101 |
| **TOTAL** | 100 | 99 | 100 | 98 | 101 | 100 | 100 | 98 | 96 | 94 |

**Index of Profit Variations (M)**

| | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|
| A4 size 0% - 20% Recycled | 100 | 99 | 71 | 44 | 136 | 166 | 63 | 58 | 69 | 120 |
| A4 size 21% - 79% Recycled | 100 | 230 | 235 | 192 | 48 | 102 | 49 | 25 | 2 | 26 |
| A4 size 80% - 100% Recycled | -100 | 157 | - 282 | 146 | 106 | 199 | 67 | 38 | - 30 | - 160 |
| A3 size 0% - 20% Recycled | 100 | 123 | 108 | 107 | 102 | 115 | 102 | 84 | 83 | 109 |
| A3 size 21% - 79% Recycled | 100 | 189 | 417 | 214 | 268 | 241 | 263 | 40 | 235 | 140 |
| A3 size 80% - 100% Recycled | 100 | 166 | 102 | 168 | 170 | 156 | 160 | 112 | 150 | 144 |
| **TOTAL** | 100 | 119 | 105 | 78 | 118 | 140 | 76 | 62 | 57 | 97 |

**Index of Profit Variations (N)**

| | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|
| A4 size 0% - 20% Recycled | 100 | 81 | 67 | 43 | 128 | 147 | 69 | 64 | 77 | 115 |
| A4 size 21% - 79% Recycled | 100 | 204 | 213 | 196 | 52 | 100 | 65 | 44 | 3 | 32 |
| A4 size 80% - 100% Recycled | -100 | 130 | - 252 | 136 | 108 | 185 | 67 | 42 | - 36 | - 163 |
| A3 size 0% - 20% Recycled | 100 | 91 | 84 | 89 | 97 | 119 | 86 | 102 | 87 | 104 |
| A3 size 21% - 79% Recycled | 100 | 218 | 347 | 214 | 227 | 216 | 209 | 253 | 231 | 217 |
| A3 size 80% - 100% Recycled | 100 | 133 | 93 | 126 | 122 | 139 | 130 | 136 | 129 | 115 |
| **TOTAL** | 100 | 98 | 97 | 76 | 113 | 126 | 82 | 71 | 66 | 95 |

**Index of Profitability Variations (O)**

| | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|
| A4 size 0% - 20% Recycled | 100 | 81 | 66 | 44 | 125 | 146 | 69 | 65 | 80 | 122 |
| A4 size 21% - 79% Recycled | 100 | 93 | 102 | 96 | 88 | 92 | 82 | 65 | 81 | 81 |
| A4 size 80% - 100% Recycled | -100 | 132 | - 256 | 138 | 109 | 187 | 68 | 44 | - 39 | - 174 |
| A3 size 0% - 20% Recycled | 100 | 93 | 86 | 91 | 98 | 115 | 88 | 101 | 91 | 109 |
| A3 size 21% - 79% Recycled | 100 | 208 | 330 | 200 | 212 | 206 | 198 | 234 | 224 | 209 |
| A3 size 80% - 100% Recycled | 100 | 132 | 92 | 127 | 123 | 137 | 127 | 135 | 130 | 115 |
| **TOTAL** | 100 | 99 | 97 | 77 | 112 | 126 | 82 | 73 | 68 | 101 |

3. Complete appendix A7 (other injury factors).

See *Confidential Appendix A7*.

Revenue from like goods declined by [redacted] from [redacted] in YE Dec-11 to [redacted] in YE Jun-13, with a flow-on to the revenue for the entire Australian Paper business, which declined by [redacted] from [redacted] in YE Dec-11 to [redacted] in YE Jun-13.

Index of Factors:

| | | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Revenue** | $ | 100 | 104 | 102 | 98 | 99 | 97 | 94 | 96 | 91 | 97 |
| like goods | $ | 100 | 118 | 108 | 98 | 104 | 111 | 88 | 85 | 90 | 101 |
| other production | $ | 100 | 99 | 100 | 98 | 97 | 93 | 96 | 100 | 92 | 96 |

Return on investment for like goods has declined over the period from Mar-11 to Jun-13, with the 12 months ended Dec-11 averaging a low [redacted] and for the most recent 12 months to June 2013, [redacted]. Return on investment from other production increased from [redacted] to [redacted] over the same period. [redacted]

Index of Factors:

| **Return on investment** | | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| like goods | % | 100 | 153 | 53 | 59 | - 175 | 25 | - 212 | 3 | - 554 | - 202 |
| other production | % | - 100 | - 380 | - 11 | 46 | - 730 | - 865 | 72 | 1,582 | - 333 | - 17 |

In an attempt to restore profitability in the face of depressed and falling domestic prices and volumes, Employment has been reduced, [redacted]

*[comment on employment reduction strategy]*

Index of Factors:

| | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|
| **Employment** | 100 | 98 | 102 | 104 | 103 | 101 | 97 | 97 | 101 | 100 |
| like goods persons | 100 | 97 | 73 | 80 | 87 | 92 | 69 | 85 | 84 | 74 |
| other production persons | 100 | 98 | 111 | 111 | 108 | 104 | 105 | 100 | 106 | 108 |

In respect of other potential injury factors, no significant indicators of additional injury have been identified from the data:

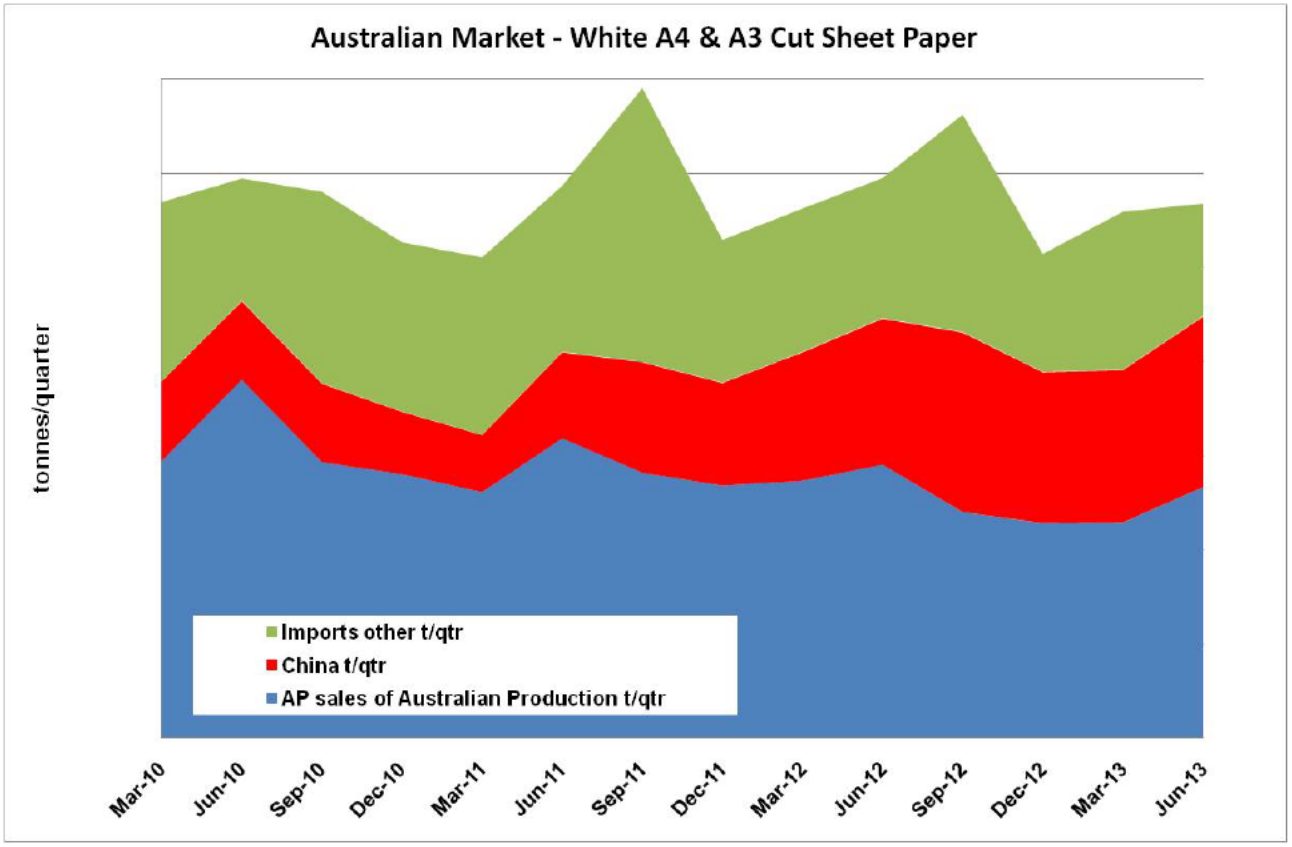
- Assets: There was little change in assets. Since the paper machine assets are used both in production of like goods and of other goods (printing & writing papers other than cut sheet A4 & A3 papers) any change in assets for like goods reflects only the changing product mix on the paper machines;
- Capital Investment: The only capital investment since Jan-11 has been of a general minimal nature and is not specifically allocated to like goods. This does not include expenditure on the $90m deinked pulp plant which is under way and which will, we commissioned, support manufacture of recycled cut sheet papers;
- R&D Expense levels have generally been down because of lack of profits to invest in this area.
- Capacity & Capacity Utilisation: Capacity has been taken as the capacity of the cut size sheeting and packing equipment, which is dedicated to like goods and other cut sheet paper [redacted];
- Stocks: Stock levels are managed in a range through varying the amount of product sold to other markets as domestic like goods demand varies. Goods for export are rarely made to stock, unlike domestic like goods.
- Cash Flow Measures: managed within an authorised range.
- Wages The overall wage bill for like goods fluctuates in line with the volume of like goods and the reduction in employment.

There has also been some drop in stationery sales made through 'bundling' with copy paper; however, these are difficult to quantify.

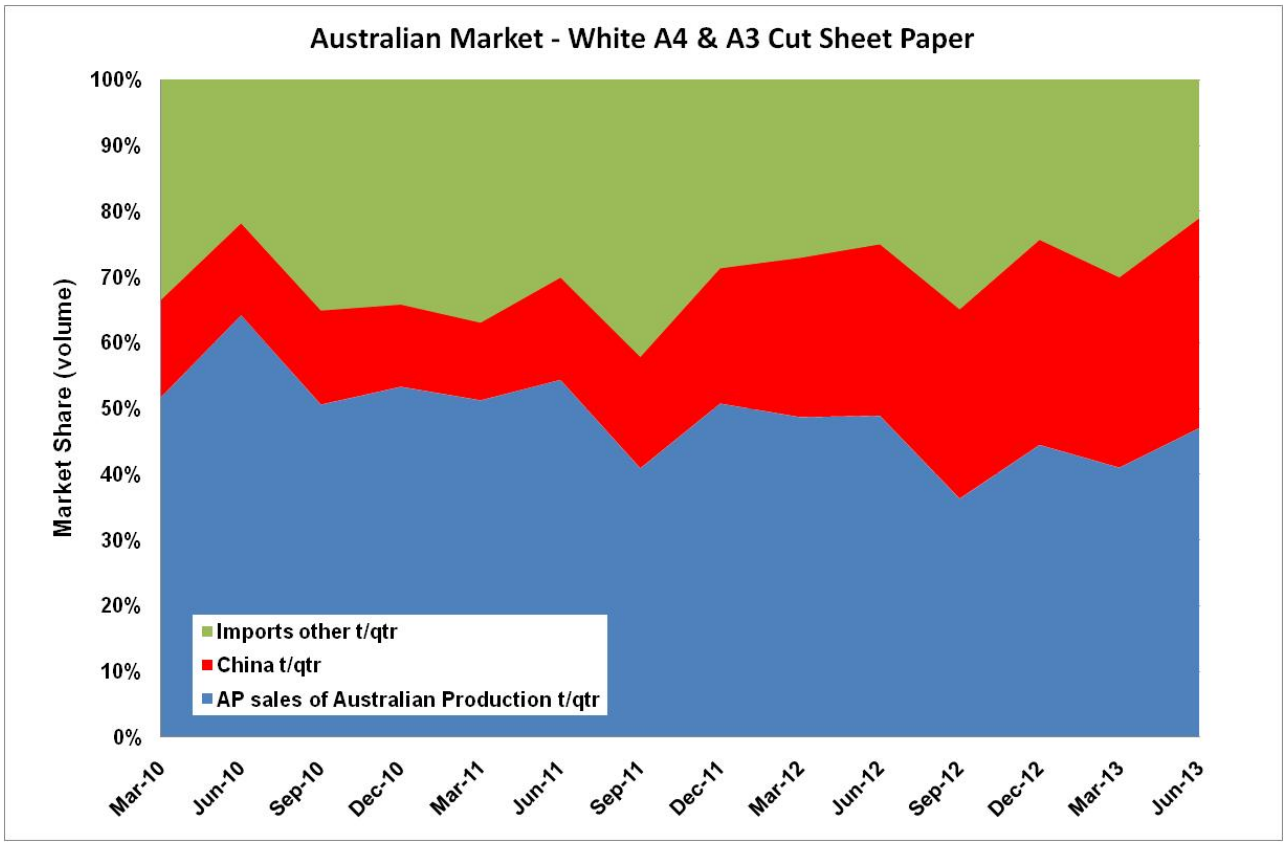
## A-9 Link between injury and dumped imports.

To establish grounds to initiate an investigation there must be evidence of a relationship between the injury and the alleged dumping. This section provides for an applicant to analyse the data provided in the application to establish this link. It is not necessary that injury be shown for each economic indicator.

1. Identify from the data at appendix A2 (Australian market) the influence of the volume of dumped imports on your quarterly sales volume and market share.




From 2011, the volume of dumped imports from China has increased significantly, reducing the volumes both of the domestic product (Australian Paper) and imports from other sources. By June 2013, the Chinese import volumes had grown to exceed the volume of all imports from other sources.




Dumped imports from China in the June quarter 2013 made up 33.5% of the Australian market, up from 25.9% in June 2012 and 15.4% in June 2011.

Imports from other sources made up [redacted] in June 2013, [redacted] in June 2012 and [redacted] in June 2011.

Market share for the domestic product (Australian Paper) has fallen from [redacted] in June 2011 to [redacted] in June 2012 and [redacted] in June 2013, a fall of [redacted] percentage points or, a very significant [redacted], expressed as a percentage of Australian Paper's share.

The dumped imports from China have displaced volume and market share previously held by both the domestic producer (Australian Paper) and imports from other sources.

Australian Paper, as the sole domestic producer, has clearly suffered material injury in loss of domestic sales volume and domestic market share.

2. Use the data at appendix A2 (Australian market) to show the influence of the price of dumped imports on your quarterly prices, profits and profitability provided at appendix A6.1 (costs to make and sell). If appropriate, refer to any price undercutting and price depression evident in the market.

Appendix A2 reveals that sales of like goods by Australian Paper fell from [redacted] tonnes or a [redacted] market share in the March quarter 2010 (and [redacted] tonnes or [redacted] in the June 2010 quarter) to [redacted] tonnes or a [redacted] market share in the June quarter 2013 (which was up from [redacted] tonnes or a [redacted] market share in the March 2013 quarter following price reductions by Australian Paper. It is worth noting that this price reduction by Australian Paper had no impact on the continuously growing volume or share of dumped Chinese imports, but instead took volume from other imported sources.

At the same time, dumped imports from China increased from 8,471 tonnes or a 15% market share in the March quarter 2010 to 18,141 tonnes or a 32% market share in the June 2013 quarter. The growth in volume (114% over the period) and market share (more than double) by dumped Chinese imports has been relentless.

Dumped Chinese imports have been sold in Australia at an average FIS price per tonne of between $1,206 and $1,316 in 2010, but by the June quarter 2013, the average FIS price was $1,117, a reduction of 10-20%. This is despite an exchange rate in Jun-13 very similar to that in 2010.

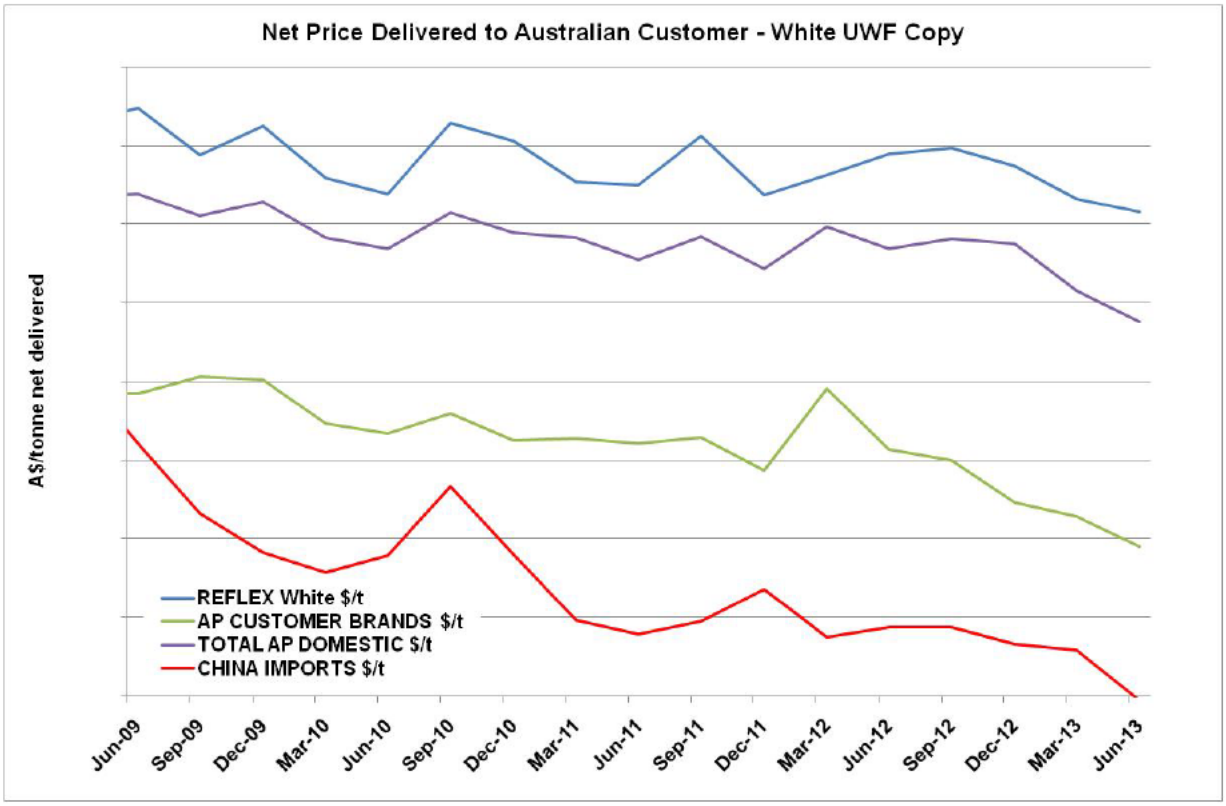
[redacted]

*[AP strategy in response to Chinese dumped imports]*

To get a better sense of the marketplace dynamic at work, it is worth looking at individual market categories.

While the FOB and CIF price of dumped Chinese imports has been trending downward from June 2009, Australian Paper's customer brand domestic product prices began to be significantly affected following the massive ramp-up in the volume of these dumped imports which began in early 2012, with the effect on the net price of Australian Paper's market leading *REFLEX*© brand taking longer to flow through, becoming significant from the final quarter of 2012.

These price reductions had no impact on the growth of dumped Chinese imports, instead taking volume and share from other imports. Chinese dumped imports continued to increase volume and market share.




The graph above shows starkly the level of price undercutting by the dumped Chinese imports since mid-2009 and the effect this has had in depressing Australian Paper's prices, both for its customer brands, which have been severely affected and for its leading Reflex brand, which is now, after a delay, also being subject to accelerating price reductions to attempt to maintain volume and share, albeit at the expense of revenue and returns.

Revenue from like goods declined by [redacted] from [redacted] in YE Dec-11 to [redacted] in YE Jun-13, with a flow-on effect on the revenue for the entire Australian Paper business, which declined by [redacted] from [redacted] in YE Dec-11 to [redacted] in YE Jun-13. (*Confidential Appendix A7*)

Australian Paper has been able to control production, sales and distribution costs through [redacted] *[AP cost reduction/control strategy]*

Return on investment for like goods has been [redacted], declining marginally over the period from [redacted] for YE Dec-11 to [redacted] for YE Jun-13. At the same time, return on investment from other production increased from [redacted] to [redacted]

[redacted] *[comment on business result and forecast]*

3. Compare the data at appendix A2 (Australian market) to identify the influence of dumped imports on your quarterly costs to make and sell at appendix A6.1 (for example refer to changes in unit fixed costs or the ability to raise prices in response to material cost increases).

Because of the high level of investment and relatively high costs which do not vary in proportion to production levels, the total volume of production is, wherever possible, maintained to give high equipment utilisation, with any volume above the domestic cut sheet paper sales sold in other markets.

Because Australian Paper has, so far, been able to maintain its total uncoated printing & writing paper production volumes, reduced domestic sales of like goods have not affected its manufacturing costs per tonne of paper. Australian Paper has managed to control input costs and improve productivity so that the manufacturing cost per tonne of paper has been essentially unchanged since the start of 2011. This is despite increases in wage levels and in government and utility charges.

Domestic selling costs, independent of sales volume, are quite variable, with promotional and marketing spend being intermittent in nature. There are also accounting end of year effect which make quarter by quarter comparisons problematic. Using annual figures, if we compare YE Dec-10 with the most recent YE Jun-13, [redacted].

As a result of this and other changes to business practices, per tonne selling costs have been held at similar or slightly reduced levels. This is despite the business having the same number of customers and prospective customers which must be serviced regardless of the volume of goods sold.

In summary, Australian Paper has had to reduce its prices despite increases in wage levels, government taxes and charges and utility costs (a major cost in papermaking) and attempts by many of its suppliers to obtain price increases. Australian paper has responded through increases in labour efficiency (reduced jobs) and aggressively controlling the cost of other (purchased) inputs. There is, however, a limit to this process of manning and cost reduction.

The current level of return does not support ongoing investment or a sustainable long term business.

4. The quantity and prices of dumped imported goods may affect various economic factors relevant to an Australian industry. These include, amongst other things, the return on investment in an industry, cash flow, the number of persons employed and their wages, the ability to raise capital, and the level of investment in the industry. Describe, as appropriate, the effect of dumped imports on these factors and where applicable use references to the data you have provided at appendix A7 (other economic factors). If factors other than those listed at appendix A7 (other economic factors) are relevant, include discussion of those in response to this question.

In the face of reducing market prices for cut sheet resulting from price undercutting by dumped imports from China which are a rapidly growing share of the Australian market, [redacted]

*[cost reduction strategy & business profitability]*

The increasing quantity and decreasing price of dumped imported goods have reduced domestic cut sheet sales volumes and prices, impacting on the overall return on investment of Australian Paper [redacted]

*[forecast for the business]*

Australian Paper IS the entire cut sheet (and all printing & writing paper) manufacturing industry in Australia. It is critically dependent on the profitability of its domestic cut sheet business and with the volume of dumped imports continuing to rise at ever decreasing prices, its viability is under severe threat.

In 2011 Australian Paper commissioned the Western Research Institute (WRI) to undertake an Economic Impact Study of Australian Paper. That study (*Attachment A-9.4*) found that the ongoing operations of Maryvale mill:

- Contributed $610m to the Victorian gross State product
- Contributed $310m in household income
- Contributed over 4,200 FTE jobs (of which about 890 were direct employment)

WRI also found that the age distribution and occupational skill rating of employees reduced their scope for reemployment.

A subsequent study this year by WRI has demonstrated that the government revenue per ream of paper (due to operational expenditure by Australian Paper) is $1.44 per ream or $577/tonne. This contribution to Government revenue would NOT be made by imported copy (cut sheet) paper.

WRI estimates further government revenue due to present levels of capital expenditure by Australian Paper is $0.37/ream or $148/tonne.

The $ 90 million waste paper deinking plant Australian Paper currently has under construction to support its recycled cut ream paper production will, during its 18 month construction phase:

- Contribute $109.5m to the Australian GNP
- Contribute $56.8m in household income
- Contribute 967 FTE jobs

And once operating will:

- Contribute $50.7m to the Australian GNP
- Contribute $18.8m in household income
- Contribute 246 FTE jobs

The paper industry is inherently highly capital intensive and demanding of high levels of ongoing investment to remain up to date with product quality and productivity.

Over the past 15 years, Australian Paper has invested close to 1 billion dollars into its printing and writing paper business, with paper machine M5 commissioned in 1998 (~$330m), along with the first cut size sheeting line, a second cut size sheeting line a few years later, a new bleached pulp mill commissioned in 2008 (~$500m) to provide fibre to paper machines M3 & M5 and a waste paper deinking plant currently under construction (~$90m) and numerous smaller projects to improve performance and product quality and reduce operating costs.

[redacted] *[forecast for the business]*

The Australian paper industry is in a fragile state and dumping puts its survival in doubt. It is worth reflecting that Amcor, previously Australia's largest packaging paper manufacturer is now down to a single paper machine in its Sydney plant from at least 8 packaging paper machines less than 15 years ago, and Australian Paper itself once operated another 6 paper machines in its Tasmanian mills, from which it separated in 2009 and which were closed in 2010. Australian Paper is a regional business and closure of a major industry in a regional area has a much more devastating impact on its community than a similar closure in a large city.

5. Describe how the injury factors caused by dumping and suffered by the Australian industry are considered to be 'material'.

The volume of dumped imports from China began its dramatic ramp-up in early 2011.

Comparing the just completed YE Jun-13 with YE Dec-10, just prior to the major ramp-up in volume of dumped goods:

- Australian Paper has lost [redacted] tonnes of domestic sales to the dumped imports;
- This is a [redacted] loss of domestic sales volume for all white A4/A3 cut sheet papers;
- The loss was more pronounced in the AP Customer Brands, which more directly compete with the dumped Chinese imports;
- In Customer Brands, the volume loss was [redacted] over the same period;
- Australian Paper lost [redacted] in market share, going from a [redacted] share to a [redacted] share;
- Dumped Chinese imports went from a 13.8% to 30.4% market share.
- Imports from other sources declined slightly, but Chinese imports continued to increase.
- Revenue from like goods declined by [redacted] from [redacted] in YE Dec-11 to [redacted] in YE Jun-13, with a flow-on to the revenue for the entire Australian Paper business, which declined by [redacted] from [redacted] in YE Dec-11 to [redacted] in YE Jun-13. (*Confidential Appendix A7*)
- Despite cutting jobs associated with [redacted] and taking other significant measures to reduce cost to make and sell, return on investment for like goods has gone from [redacted] for YE Dec-11 to [redacted] for YE Jun-13.

[redacted] *[comment on alternative markets]* the growing need to divert surplus capacity to these alternative markets constitutes a rising material injury through loss of domestic market volume and loss of domestic market share directly attributed to dumped imports from China. This is in addition to the injury from price depression.

To avoid a much larger loss of Australian domestic market share to dumped Chinese goods which are undercutting its prices, [redacted] *[comment on market strategy]*

- Again comparing YE Jun-13 with YE Dec-10, the price of dumped Chinese imports reduced by 14.4% on a delivered basis (a 14.7% reduction in FOB);
- Australian Paper has had to decrease its prices for domestic cut sheet papers by [redacted] on average (but has still lost volume and share);
- Australian Paper has had to reduce its prices for Customer brand papers by [redacted] These customer brand papers compete much more directly with the dumped imports. This has still had no impact on the growth in market share and volume by the dumped Chinese imports.

With both market share/volume reductions and price reductions in its domestic market, this has had a major effect on Australian Paper's profit, despite [redacted].

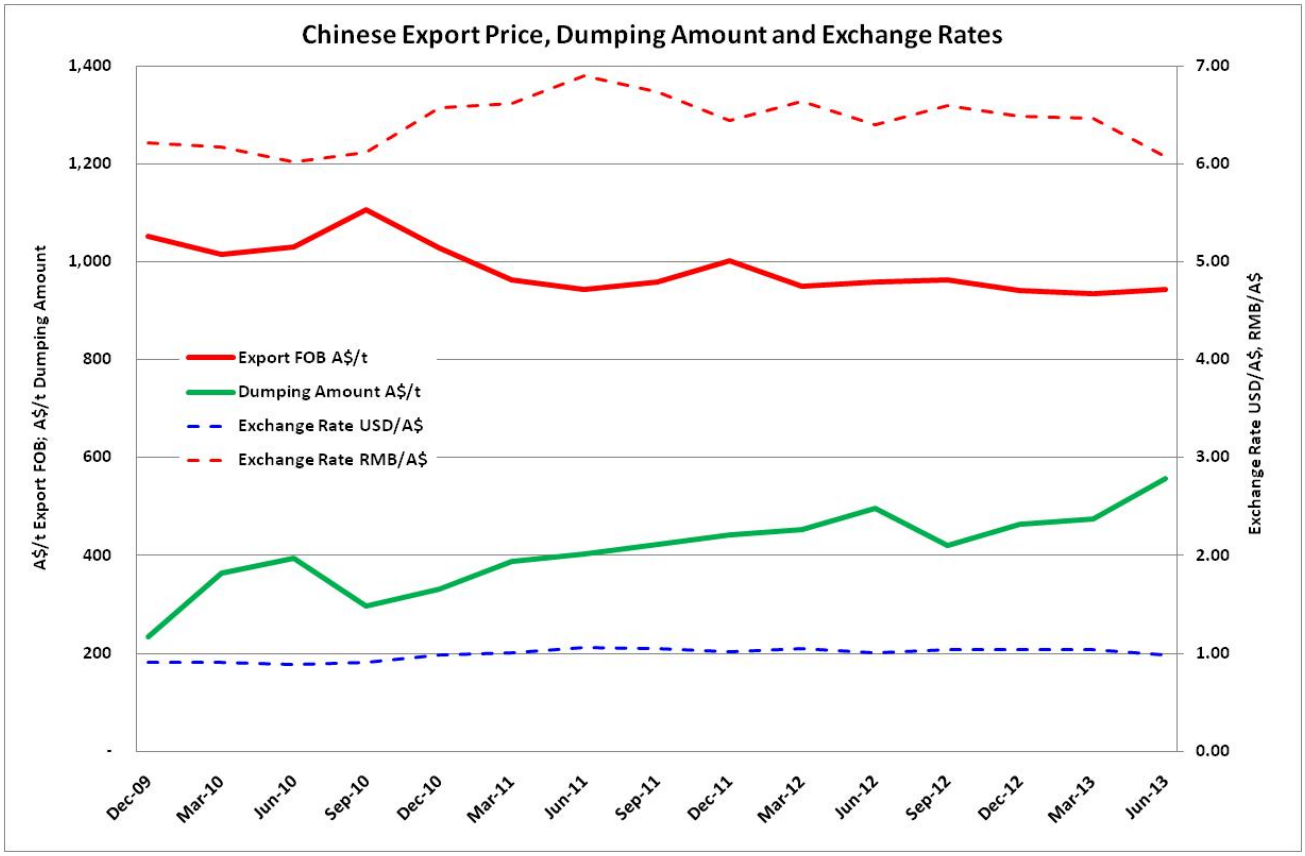
*[AP cost reduction strategy]*

6. Discuss factors other than dumped imports that may have caused injury to the industry. This may be relevant to the application in that an industry weakened by other events may be more susceptible to injury from dumping.

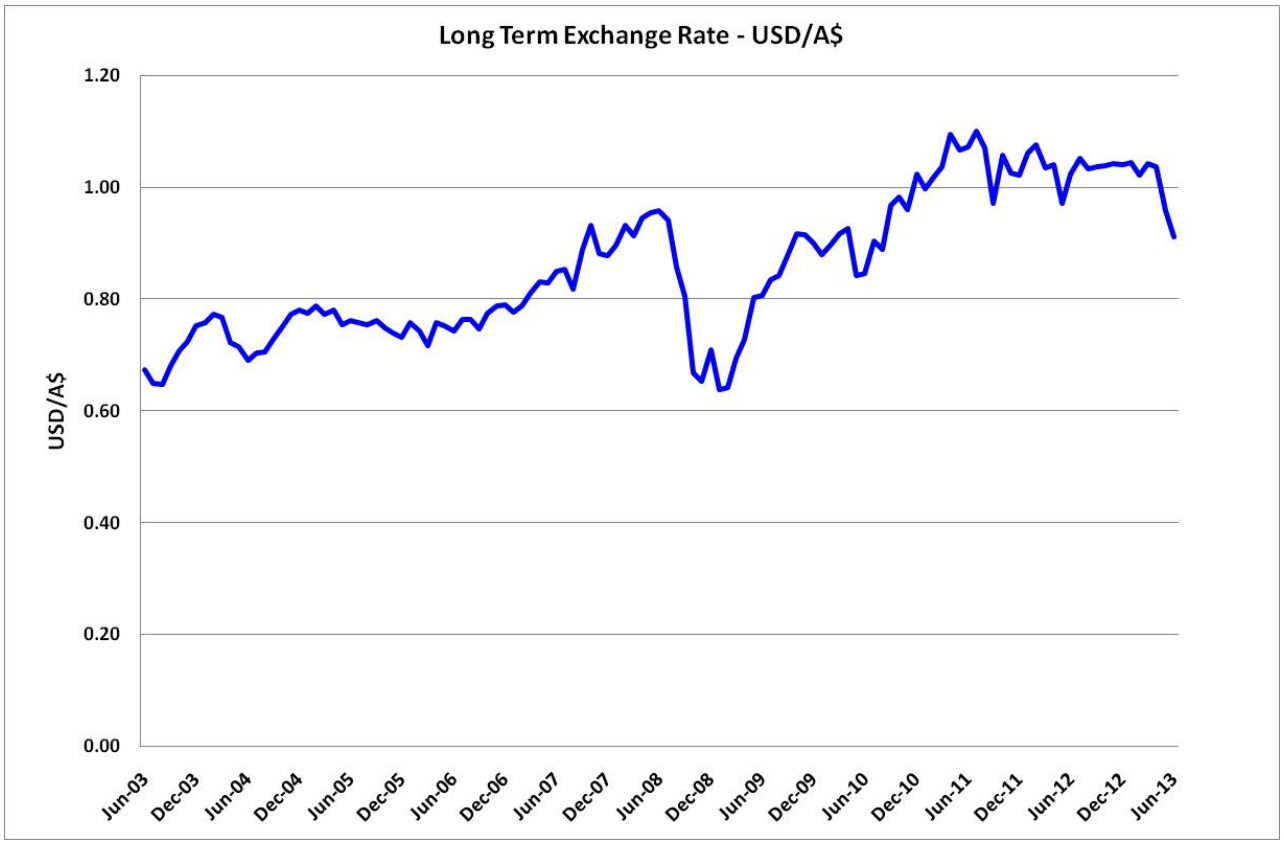
- A generally slow world economy since the 2007 GFC has reduced paper demand across the developed world and has markedly reduced or halted the previously high demand growth in China. This has resulted in a considerable surplus of production capacity over demand worldwide and particularly in China where major capacity expansions were either just completed or were already underway. These have suppressed and depressed prices in most markets, making sales to these markets marginal and making maintenance of market share in the Australian market critical to the continued viability of Australian Paper, which is the only domestic producer.
- The Australian dollar has been at a high value relative to the US dollar, which is the currency of international paper trade, including sales by China.

  While the A$/USD exchange rate varied between USD 0.986 and USD 1.062 over the period of injury, the Jun-13 exchange rate, USD 0.986, is very close to the Dec-10 exchange rate of USD 0.988 and the A$ had fallen from RMB6.57 to RMB6.07.

  Overall, the exchange rate is not thought to significantly influence the dumping by China.



Over the longer term, however, the A$ has averaged USD 0.969 since mid 2009. This is considerably higher than the previous 10 years average of USD 0.693. Since the vast majority of Australian Paper's inputs are sourced locally in A$, the higher A$ has made injury from dumping a much more critical issue than it would have been at a lower exchange rate, going directly to the viability of Australian Paper.



7. This question is not mandatory, but may support your application. Where trends are evident in your estimate of the volume and prices of dumped imports, forecast their impact on your industry's economic condition. Use the data at appendix A2 (Australian market), appendix A6 (cost to make and sell), and appendix A7 (other economic factors) to support your analysis.

See information provided in sub-sections 1-6 of A-9.

There is a clear trend to the continuously and rapidly increasing volume of dumped Chinese imports displacing Australian Paper domestic cut sheet volume.

The reducing prices of dumped Chinese imports are undercutting Australian Paper cut sheet prices to an increasing extent, forcing Australian Paper to decrease its prices in both its customer brand cut sheet and now its Reflex brand.

[redacted]

There appears to be no halt in the decrease of import prices from China or of volume growth in Chinese cut sheet imports. [redacted]

*[comment on AP strategy & forecasts]*

The direction of the vast and rapidly growing production capacity of the Chinese paper industry into the relatively small Australian market, if unchecked, will cause the collapse of the Australian printing & writing paper industry, including the cut sheet industry in a very few years.

# PART B

# DUMPING

**IMPORTANT**

All questions in Part B should be answered even if the answer is 'Not applicable' or 'None' (unless the application is for countervailing duty only: refer Part C). If an Australian industry comprises more than one company/entity, Part B need only be completed once.

For advice about completing this part please contact the Commission's client support section on:

**Phone**: 1300 884 159
**Fax:** 1300 882 506
**Email**: clientsupport@adcommission.gov.au

## B-1 Source of exports.

1. Identify the country(ies) of export of the dumped goods.

   China

2. Identify whether each country is also the country of origin of the imported goods. If not, provide details.

   China is the country of origin of the imported goods

3. If the source of the exports is a non-market economy, or an 'economy in transition' refer to Part C.4 and Part C.5 of the application.

   Australia does not regard China as a 'non-market economy' or an 'economy in transition'

4. Where possible, provide the names, addresses and contact details of:

   - producers of the goods exported to Australia;

     - **UPM (China) Co., Ltd.**
       Shanghai Office
       23/F, Grand Gateway Tower 2, No. 3 Hongqiao Road,
       200030 Shanghai
       Tel. +86 21 6288 1919
       Fax +86 21 6288 2929/1079
       www.upm.com

     - **Sun Paper and associated companies**
       No.1 Youyi Rd.
       Yanzhou, Shandong, China 272100
       Tel (Exchange)： 0086 537 7925888,
       Fax：0086 537 7928489
       www.sunpapergroup.com

     - **Chenming Paper and associated companies**
       No.2199 Nongsheng East Street, Shouguang City
       WEIFANG, SDG 262705
       China
       Tel: +86-536-2158008 (Phone)
       Fax: +86-536-2158977 (Fax)
       www.chenmingpaper.com/en

- **Asia Pacific Resources International Limited (APRIL) and associated companies**
  No 369 Beijing Road
  Rizhao, Shandong Province
  China
  Tel : +86 633 336 1000
  Fax : +86 633 336 1280

- **Asia Pulp & Paper Company (China) Pte. Ltd. and associated companies**
  8/9F, Bund Center
  222 Yan'an Road East
  Shanghai, 200002
  China
  Phone: 86 21 6335 2222
  Fax: 86 21 6361 8585
  **www.asiapulppaper.com.cn**

- Possibly others we have not been able to identify

- exporters to Australia;

  As above unless producers are using export intermediaries such as paper traders or Australian sellers are also active in the Chinese market or have purchasing representatives in China [redacted]

  We are not aware of the use of export intermediaries although past dumping investigations have identified this practice for some manufacturers.

- importers in Australia.

  - **UPM-Kymmene Pty. Ltd.**
    Level 13, 124 Walker Street
    NSW 2060 North Sydney
    Tel. +61 2 9334 5000
    Fax +61 2 9334 5001

  - **B J Ball**
    41 - 45 Mills Road, Braeside VIC 3195
    PO Box 113, Braeside VIC 3195
    Tel: +61 3 8587 3500
    Fax: +61 3 8587 3560
    Email designlinevic@bjball.com.au

  - **Central National Australia Pty. Ltd.**
    420 Burwood Highway
    Wantirna South, VIC, 3152
    Tel: (03) 98816222

  - **Complete Office Supplies**
    25 Nyrang Street
    Lidcombe NSW 2141
    Tel: 1300 882 244

- **Fuji Xerox**
  101 Waterloo Road
  NORTH RYDE NSW 2113
  Tel: 131411
  Fax: (02) 8756 6856
- **Lyreco**
  Unit 12,
  2-8 South Street
  Rydalmere NSW 2116
  Tel: 1300 363 608
- **OfficeMax**
  636 Wellington Road
  Mulgrave VIC 3170
  Tel: 136 629
- **Paper Force (Oceania) Pty. Ltd.**
  Ste10/ 255 Whitehorse Rd.
  Balwyn VIC 3103
  Tel: (03) 8809 3333

  (Note – believed to be a related company to APP)
- **PaperlinX and associated companies** (Spicers, Dalton Fine Paper)
  7 Dalmore Drive
  Scoresby VIC 3179
  Tel: (03) 9764 7300
  Fax: (03) 9730 9741
- **Canon**
  1 Thomas Holt Drive
  Macquarie Park NSW, 2113
  Tel: 132353
- Almost certainly there are other importers we have not been able to identify.

5. If the import volume from **each** nominated country at Appendix A.2 (Australian Market) does not exceed 3% of all imports of the product into Australia refer to Part C.6 of the application.

   Not Applicable

6. In the case of an application for countervailing measures against exports from a developing country, if the import volume from **each** nominated country at Appendix A.2 (Australian Market) does not exceed 4% of all imports of the product into Australia refer to Part C.6 of the application

   Not Applicable

## B-2 Export price

Possible sources of information on export price include export price lists; estimates from the Australian Bureau of Statistics; a deductive export price calculation from the Australian selling price of the imported goods; export sales quotations or invoices; foreign government export trade clearances.

1. Indicate the FOB export price(s) of the imported goods. Where there are different grades, levels of trade, models or types involved, an export price should be supplied for each.

   *Attachment B-2.1.1* contains ABS import statistics for the following tariff classifications and statistical codes of the imported goods since 1 January 2012:

   | | |
   |---|---|
   | 4802.56.10 | |
   | 03 | 297mm x 210 mm (A4 paper) 40-89 gsm white |
   | 09 | 297mm x 210 mm (A4 paper) 90-150 gsm |
   | 4802.56.90 | |
   | 19 | Other (predominantly white A3) 40-150gsm |

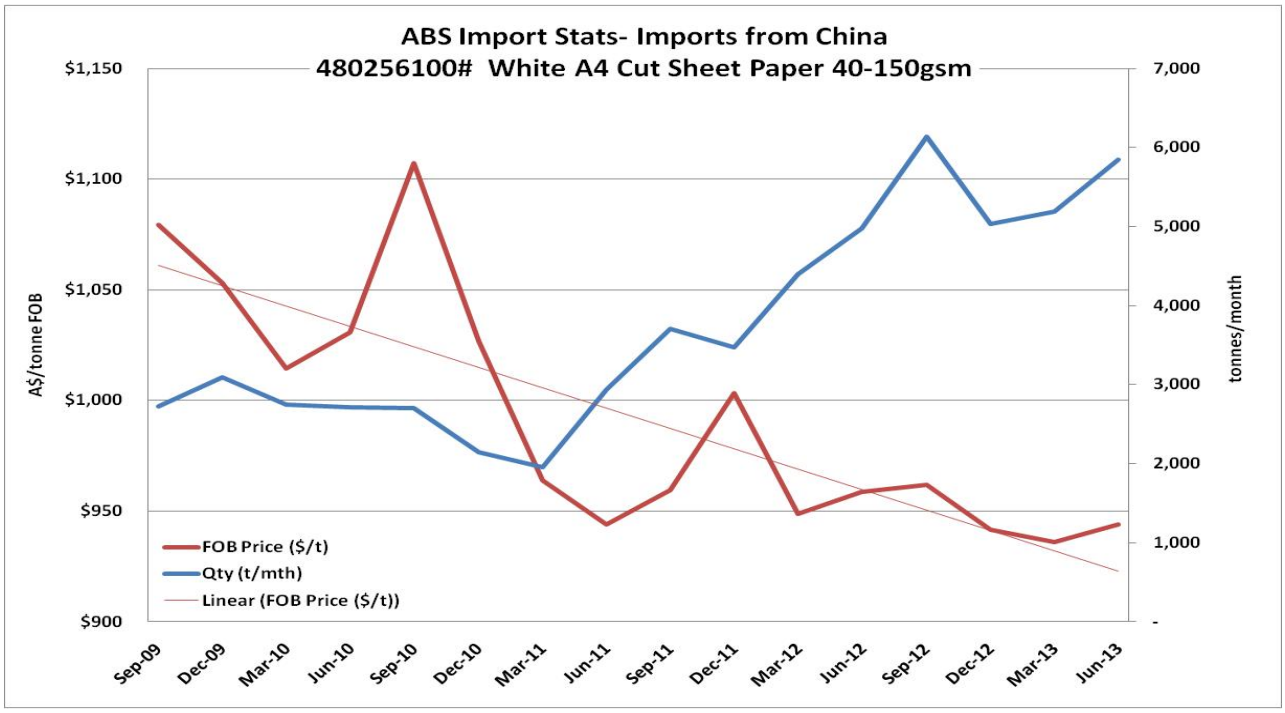
   And, prior to January 2012 for:

   | | |
   |---|---|
   | 4802.56.10 | |
   | 03 | 297mm x 210 mm (A4 paper) 40-89 gsm white |
   | 07 | 297mm x 210 mm (A4 paper) 90-150 gsm white |
   | 4802.56.90 | |
   | 30 | 297mm x 420mm (A3 paper) 40-150gsm |

   Each of these categories contain a small volume of goods which are not like goods, however code 03 is believed to be almost wholly 80gsm white A4 paper and has, in the analysis of dumping margin, been used as the basis for comparison with the normal value derived from Chinese domestic prices for 80gsm white A4 paper.

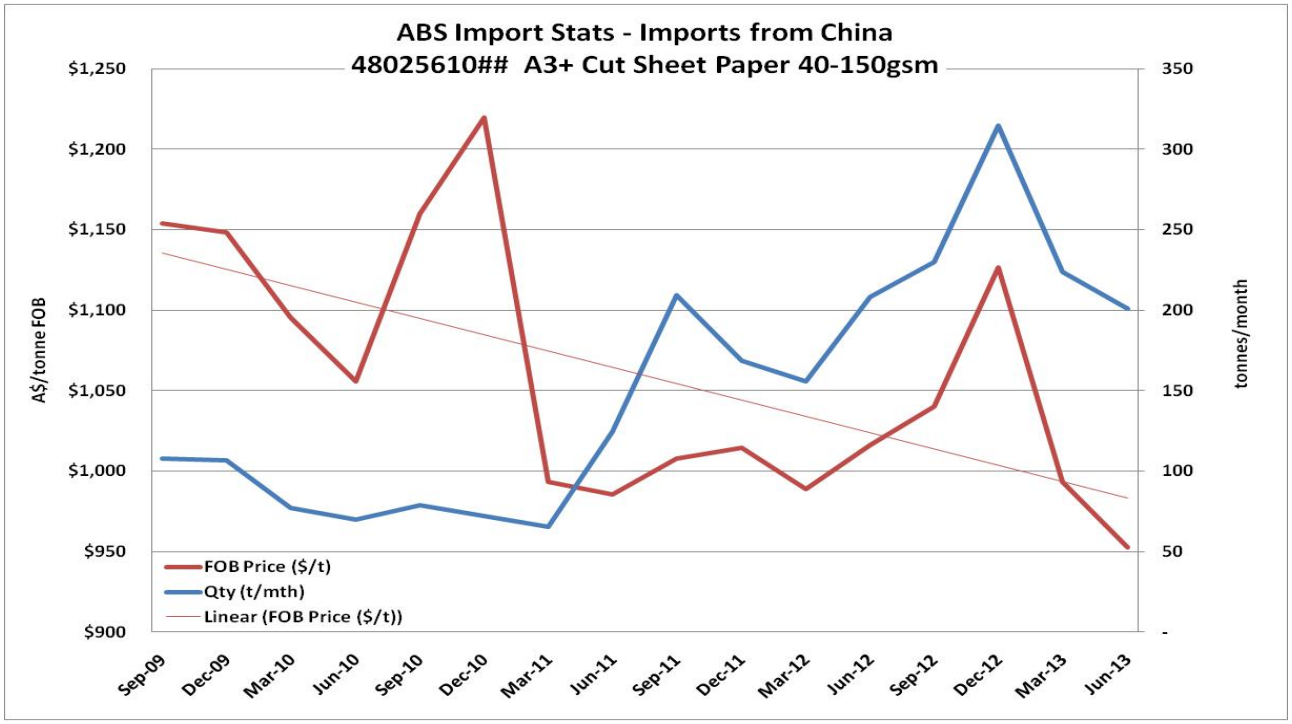
   Duty for imports from China is in all cases 5%.

   As a second source, *Attachment B-2.1.2* contains Chinese export statistics for tariff classification 48025600 which is described as *"Paper, no fibres, for other purpose, 40<gsm<150, Cut Ream"*. This data has been compared with the Australian import statistics, with the comparison provided in *Attachment B-2.1.3* and shows quite good agreement when compared on a rolling 12 month average basis.




The detailed import statistics are supplied as *Attachment B-2.2.1*; The graph above, which is for Chinese product imported under the three codes which cover white A4 paper, shows clearly the declining FOB price of the goods since 2009 (with a major drop in late 2010) and the response of the Australian marketplace, which has ramped up its demand for Chinese imports dramatically since the start of 2011.

The graph below is for Chinese product imported under the two codes which cover A3 paper (and which also include a small volume of tints and some non-standard sizes). It shows a similar pattern, albeit at a volume less than 5% of A4 imports. A3 papers are frequently purchased by the same customer as matching products for the high volume A4 product to complete their product range.



2. Specify the terms and conditions of the sale, where known.

Market sources inform us that credit terms of 90 days from bill of lading are most common for sales to Australia. Chinese domestic sales are cash before delivery for non-related customers. Market prices obtained by our sources are on that basis.

3. If you consider published export prices are inadequate, or do not appropriately reflect actual prices, please calculate a deductive export price for the goods. Appendix B1 (Deductive Export Price) can be used to assist your estimation.

Over the period to Jun-13, we regard Australian import prices published by ABS as an adequate reflection of actual Chinese export prices.

We have validated this data by comparison with Chinese export statistics *(Attachment B-2.1.2)* and, through comparison of 12 month rolling averages, we have found quite good agreement over the period from YE Dec-10 to YE Jun-13. *(Attachment B-2.1.3.)*

For imports sold through Australian agents, either related or unrelated, these offices are understood to be paid through a commission directly from either the mill or paper company head office rather than through adding a margin to the selling price.

4. It is important that the application be supported by evidence to show how export price(s) have been calculated or estimated. The evidence should identify the source(s) of data.

The quarterly average of the monthly Export FOB price reported by ABS has been used without adjustment.

## B-3 Selling price (normal value) in the exporter's domestic market.

Possible sources of information about domestic selling prices in the country of export include: price lists for domestic sales (with information on discounts); actual quotations or invoices relating to domestic sales; published material providing information on the domestic selling prices; or market research undertaken on behalf of the applicant.

1. State the selling price for each grade, model or type of like goods sold by the exporter, or other sellers, on the domestic market of the country of export.

   *Confidential Attachment B-3.1* provides quarterly ex-mill price information for like goods sold by major sellers in the Chinese domestic market.

   The prices for A4 80gsm cut sheet paper (401 reams of 500 sheets per tonne) in the quarter ending June 2013 were:

   **Top Quality** (equivalent to product exported to Australia by major producers)

   - APP Gold Flagship RMB 28.0/ream
   - APP Blue Flagship RMB 26.5/ream
   - April PaperOne RMB 22.0/ream
   - Xerox Red RMB 25.0/ream
   - HP RMB 26.0/ream
   - UPM Premium Jetset RMB 24.5/ream

   **Medium Quality**

   - Asia Pacific Paper Converting Co. Ltd. RMB 22.0/ream

2. Specify the terms and conditions of the sale, where known.

   Domestic sales are cash prior to collection and include 17% VAT.

3. Provide supporting documentary evidence.

   Documentary evidence in the form of extracts from reports prepared by Consultants in China for Australian Paper prepared quarterly are provided at *Confidential Attachment B-3.1*.

   The most recent full report is also provided as *Confidential Attachment B-3.3.*

   Prior full quarterly reports are available on request on a confidential basis.

4. List the names and contact details of other known sellers of like goods in the domestic market of the exporting country.

In addition to the producers listed at B-1.4 above, we have been able to identify the following manufacturers of uncoated woodfree paper in China. Most or all would either manufacture cut sheets or have their paper converted into cut sheets by others:

- China Metallurgy Meili Paper
- Ahhui Anquing Huatai
- Yuayang Paper
- Guangxi Liujiang Paper
- Gold East Paper (APP)
- Gold Huasheng Paper (APP)
- Guangxi Yongkai
- Hebei Baoding Orient Paper
- Henan Zhumadian City Baiyun Paper
- Heinan Yinge Paper
- Hubei Chibi Chenming Paper
- Hubei Maxleaf Jianli Paper
- Jiangsu Oji
- Jiangsu Xinda Paper
- Jindaxing
- Jinzheng Paper
- Linyi Zhenyuan Paper
- MCC Yinhe Paper
- Nanping
- Nine Dragons
- Qunxing Paper
- Shandong Bohui
- Shandong Chenming (Chenming)
- Shandong Long Kou
- Shandong Huatai
- Shandong Huajin Paper
- Shandong Binzhou Huanghe Paper
- Shandong Gaoqing Paper
- Shandong Sun Paper (Sun)
- Shandong Taishan
- Shandong Tralin
- Sichuan Yongfeng Paper
- Tiger Forest & Paper
- Wuhan Chenming Paper (Chenming)
- Xinxiang Xinya Paper
- Zhumadian Baiyun

The list above has been assembled from public sources 2007-2012, so some company or mill names and affiliations may have changed and some manufacturers listed as making coated paper may be selling some of their capacity as uncoated paper because of market circumstances.

There are other small producers of uncoated woodfree papers which could be converted into cut sheets, but these are unlikely to be significant exporters. They are also likely to be producing an inferior grade of cut sheet paper not comparable with that sold in Australia.

There are many distributors, resellers and agents for the goods throughout China, some owned by manufacturers or affiliated companies or affiliated individuals and some independent. We have no means of gathering this information.

## B-4 Estimate of normal value using another method.

This section is not mandatory. It need only be completed where there is no reliable information available about selling prices in the exporter's domestic market. Other methods of calculating a normal value include:

- the cost to make the exported goods plus the selling and adminstration costs (as if they were sold in the exporter's domestic market) plus an amount for profit (if applicable);
  OR
- the selling price of like goods from the country of export to a third country.

1. Indicate the normal value of the like goods in the country of export using another method (if applicable, use appendix B2 Constructed Normal Value).
2. Provide supporting documentary evidence.

**Normal Value calculation based on Cost to Make and Sell**

UPM-Kymmene Changshu is, we estimate, responsible for at least 75% of the exports of A4/A3 cut sheet paper from China to Australia.

We have therefore focussed our calculations of the cost to make the goods plus selling and administration costs plus profit on this exporter.

Appendix B2 contains construction of the normal value on a quarterly basis from July 2009 to June 2013. For the quarter ending June 2013, the constructed normal value is A$1,323/tonne.

A detailed spreadsheet showing the derivation of all data used in the construction of the normal value is also provided.

**About UPM-Kymmene Changshu:**

***General:***

From the Changshu Economic & Technological Development Zone website www.cedz.org, UPM-Kymmene (Changshu) Paper Industry Co., Ltd is a wholly owned subsidiary of UPM Group, one of the largest Finnish companies. The company was established in 2003, covering an area of 1,840,920 square metres, with the total investment of US$ 1.1 billion. At this plant, high-quality writing and printing paper with an annual output of 800,000 tons are produced (*Attachment B-4.1*).


The second paper machine on site, PM1, installed in 2005, manufactures the goods.

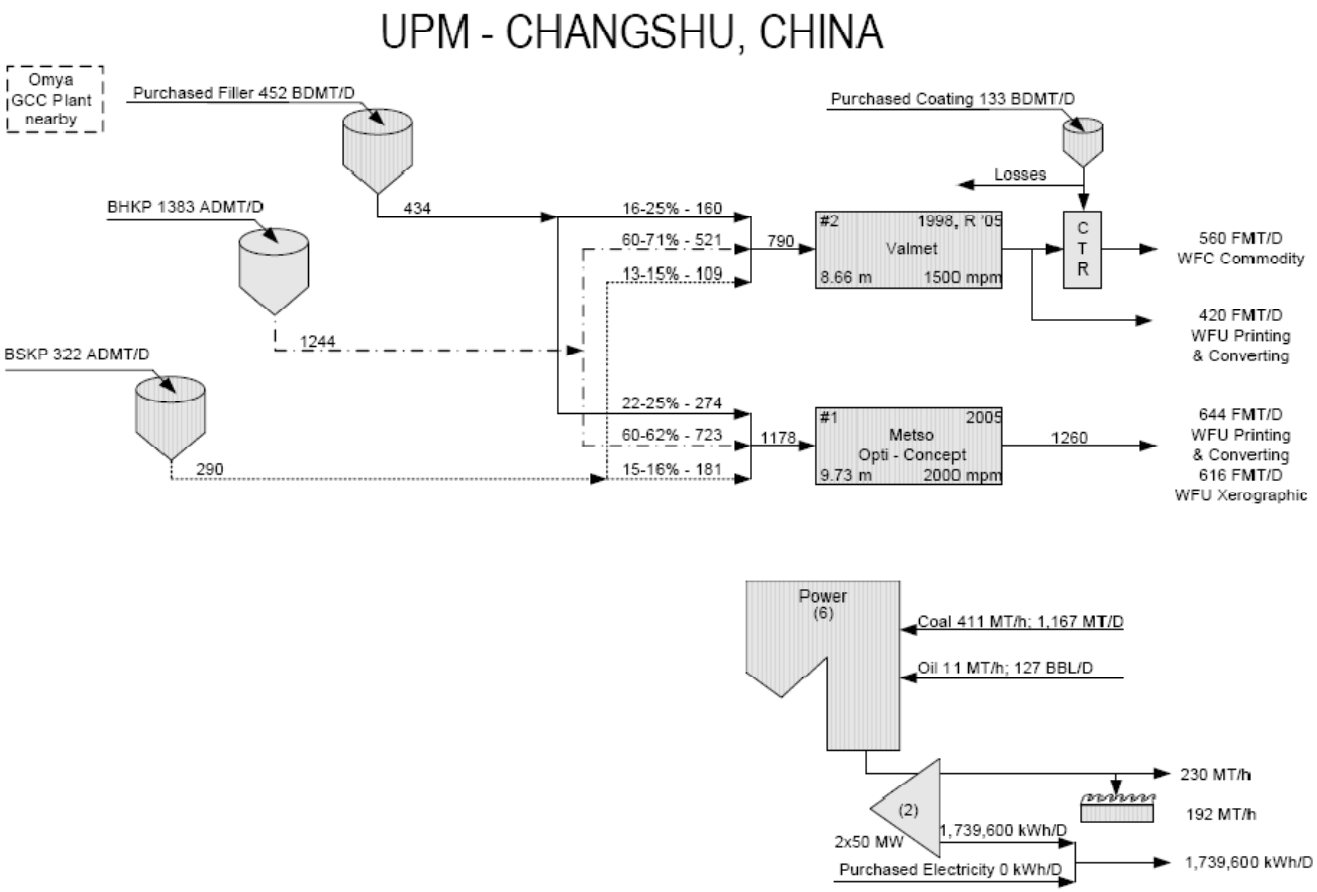
*Attachment B-4.18* describes the scope of the project to install PM1, its capacity and its cost.

UPM-Kymmene Changshu PM1 has a capacity of 450,000 tonnes/year and the project, which also included the necessary services infrastructure and cut-size sheeting equipment cost USD 470 million in 2005.

***Process Flow and Major Inputs:***

RISI, the largest global forest products industry intelligence supplier publishes information about the major paper suppliers, including process flow diagrams and inputs to production up to the point of producing paper reels on the paper machine (without finishing). For UPM-Kymmene Changshu, this information is as follows *(Attachment B-4.2)*.

On this diagram, the goods are described as WFU Xerographic, i.e. woodfree copy paper.




| SUMMARY | | | | |
|---|---|---|---|---|
| | | WFU Xerographic | WFU Printing & Converting | WFC Commodity |
| BHKP | ADMT/FMT | 0.654 | 0.622 | 0.567 |
| BSKP | ADMT/FMT | 0.163 | 0.156 | 0.100 |
| Filler | BDMT/FMT | 0.219 | 0.240 | 0.109 |
| Coating | BDMT/FMT | --- | --- | 0.237 |
| Coal | MT/FMT | 0.510 | 0.510 | 0.553 |
| Oil | BBL/FMT | 0.057 | 0.058 | 0.054 |
| MANNING: | TOTAL: | | | |
| Operators | 350 | 85 | 154 | 111 |
| Maintenance | 150 | 37 | 66 | 47 |
| Sub-Total | 500 | 122 | 220 | 158 |
| Exempt | 115 | 28 | 51 | 36 |
| Non-Exempt | 50 | 12 | 22 | 16 |
| Total | 665 | 162 | 292 | 210 |
| MH/FMT | | 1.66 | 1.73 | 2.36 |
| 165 people excluded for converting and other operations | | | | |

- RISI list WFU Xerographic production as 616 FMT/D (finished metric tonnes/day) compared with a site production of 2,240 FMT/D, or 27.5% of site production. On the basis of a site capacity of 800,000 t/yr, this is 220,000 tonnes/yr. UPM-Kymmene is understood to have purchased an additional cut size sheeting line which could almost double their capability to produce cut sheet (rather than other types of uncoated paper sold as reels or folio sheets.
- The RISI profile reveals that the mill uses purchased paper pulp to manufacture the goods. Each tonne of the goods requires:
    - 0.654 AD tonnes Bleached Hardwood Kraft
    - 0.163 AD tonnes Bleached Softwood Kraft Pulp
- In addition, each tonne of the goods requires:
    - 0.219 tonnes Omya GCC filler
    - 0.510 tonnes coal (boiler fuel)
    - 0.057 barrels fuel oil (boiler fuel)
- The labour required for each tonne of the goods is 1.66 man-hrs/tonne up to the point that jumbo reels are produced from the paper machine winder (refer *section A-3.6*)
- RISI comments that its numbers do not include *'165 workers excluded for converting and other operations'*. Making the simplistic assumption that these could be allocated to all products in proportion to tonnes, the 'converting and other operations' workers for cut sheets would be 45 workers for 220,000 tonnes or 0.38 man-hrs/tonne.
  This calculation is likely to underestimate the labour for cut sheets, since cut size sheeting, wrapping, packaging and palletising is much more complex than wrapping customer reels or pallets of folio sheets and would involve more labour.
  This brings the total labour to 2.04 man-hrs/tonne.
- In addition to the inputs revealed by the diagram published by RISI, there are starch, sizing and retention chemicals, dyes, wrapping and packaging materials, water and effluent treatment costs and the cost of processing the jumbo reels into cut sheets, wrapping, packaging and palletising.

**Mill Gate Cash Costs:**

***Major Inputs identified on the RISI Flow Diagram***

- **Wood Pulp:**
  RISI (a US-based pulp & paper industry information service) publishes monthly CIF prices of various types of wood pulp on a CIF China basis in their publication 'RISI Asia Pulp and Paper Monitor'. The June 2013 edition reveals June quarter 2013 prices CIF China as follows:
    - Bleached Hardwood Kraft USD 625/tonne
    - Bleached Softwood Kraft USD 682/tonne

  This is representative of the price paid CIF by UPM-Kymmene and would need Chinese port fees and freight from port to be added for a delivered mill price.

  We have established from suppliers *(Confidential Attachment B-4.7)* that port fees of RMB900 per container or USD 7 per tonne would apply and that freight from Waigaoqiao, Shanghai port to the mill would be USD255/40' container or USD 11 per tonne *(Confidential Attachment B-4.11).*

The delivered cost of pulp in the June quarter 2013 is therefore:

- Bleached Hardwood Kraft USD 643/tonne
- Bleached Softwood Kraft USD 700/tonne

*Attachment B-4.3* contains extracts from RISI Asia Pulp and Paper Monitor providing quarterly bleached hardwood and pulp prices from Sep-09 to Jun-13.

- **Omya GCC filler**
  UPM-Kymmene Changshu uses ground calcium carbonate (GCC) filler made from marble feedstock by Omya in China. We are advised that the ex-works pricing of GCC in China is (May 2013) USD80 – 100/tonne *(Attachment B-4.4).*

  Using USD90/tonne ex works and an estimated USD20/tonne road/rail freight to mill, the 2013Q4 price would be USD110/tonne delivered. We have used the Chinese *Raw Chemical Materials Index (Attachment B-4.6)* to derive a time series for constructed normal value purposes.

- **Thermal Coal**
  Newcastle export thermal coal is representative of low ash, low sulphur thermal coal exported by Australia and others to China. Shanxi coal may be suitable, but its delivered costs are likely to be similar to Newcastle coal.

  Chinese thermal coal mined along the Yangtze river upstream from Changshu is high ash, usually high sulphur and is relatively low calorific value, and so is unlikely to be used at Changshu, close to Shanghai, for environmental and solid waste disposal reasons.

  The constructed normal value calculations are based on 6,700 kcal/kg coal FOB Newcastle +USD11/t ocean freight + USD5/t local delivery (river ship).

  ANZ Commodity Daily (previously ANZ Commodity Weekly) *(Attachment B-4.4)* publish regular FOB prices for Newcastle export coal. The quarter ending June 2013 price FOB Newcastle is USD 86.30/t.

- **Fuel Oil**
  The constructed normal value calculations are based on Singapore prices for Fuel Oil 180cst, as reported by ANZ Commodity Daily (previously ANZ Commodity Weekly) *(Attachment B-4.4)*. The June Quarter 2013 price reported is USD603.0/bbl.

- **Electricity**
  Electricity for UPM-Kymmene Changshu is produced on-site and its variable costs are implicitly included in the coal and oil cost.

- **Labour:**
  The Changshu Economic & Technological Development Zone website www.cedz.org *(Attachment B-4.1)* publishes indicative staff costs (2012) for the industrial park in which the mill is located.

  Paper mill production workers and maintenance workers would be equivalent to a 'Technical Worker' (RMB 1,800-2,400/month), with 10% at 'Engineer' level (RMB 3,500-4,000/month) and 10% at 'manager' level (RMB 5,000-8,000/month). The skill levels required by the sophisticated and complex manufacturing process would suggest that wages would be at the high end of these ranges.

In addition, as revealed on the website, there are employer costs of 20% for Pension fund, 2% for unemployment fund, 8.5% for healthcare, 1-3% for accident insurance, 1% for maternity cover and 8 - 12% for housing fund. These total a 43.5% on-cost over the basic wage or salary.

These have been adjusted in line with published time series of wages in manufacturing *(Attachment B-4.7)*

UPM-Kymmene Changshu provides a superior standard of accommodation and sporting and other facilities for its employees and the cost of this would be at least equal to the 'optional' housing fund contributions noted on the CEDZ website.

***Other Production Inputs Required:***

- **Starch**
  Starch is used both as an additive in the sheet (added to the pulp at the 'wet end') and as a surface treatment at the size press (see section A-3.6). These starches have different properties and prices.

  Usage rates of wet-end and size press starch have been based on those for similar products at AP Maryvale mill. *(Confidential Attachment B-4-15).*

  Prices for both wet-end and size press starch have been provided by a supplier selling in the Shanghai area *(Confidential Attachment B-4.8).*

- **Other Paper Machine Chemicals**
  Paper machines use small quantities of other chemicals such as wet end and size press sizing agents, retention aids and pH adjustment.

  Both usage rates and costs for these minor chemicals have been based on those for similar products at AP Maryvale mill in 2013. *(Confidential Attachment B-4-15)* but discounted [redacted] to allow for location and larger quantities used.

- **Dyes and Optical Brightening Agents:**
  Uncoated white paper uses small quantities of a number of dyes to adjust and regulate its shade and also has optical brightening agents (OBAs) which enhance the perceived brightness of the sheet.

  Both usage rates and costs for these small quantities of dyes and OBAs have been based on those for similar products at AP Maryvale mill in 2013. *(Confidential Attachment B-4-15)* but discounted [redacted] to allow for location and larger quantities used.

- **Water & effluent:**
  We have made an assumption that UPM-Kymmene Changshu PM1 is 'best practice' in terms of its water and effluent volumes.

  The European Commission IPPC Reference Document on Best Available Techniques in the Pulp and Paper Industry *(Attachment B-4.17)* nominates 6 $m^3$/t of water used and 5.1$m^3$/t of liquid effluent to be treated (1 cubic metre ($m^3$) $\simeq$ 1 tonne) as representing best practice.

  The CEDZ website reveals a water cost of RMB 3.1/cubic metre (tonne) and an effluent treatment cost of RMB 0.62/tonne (2012). *(Attachment B-4.1)*

While UPM-Kymmene Changshu undertakes its own extensive biological effluent treatment, its costs (chemicals, energy, labour, maintenance and solid waste disposal) would be similar to those of the CEDZ.

- **Packing Materials:**
  Production of cut sheets requires provision of printed and laminated ream wrappers, printed cartons (generally holding 5 reams for sale in the Australian market), wooden pallets (generally holding around 0.6 tonnes) and general supplies including hot-melt glue, strapping and shrink wrapping.

  Costs for these packing materials have been based on those for similar products at AP Maryvale mill in 2013. *(Confidential Attachment B-4-15)* but discounted [redacted] to allow for lower printing and conversion costs in China.

- **Miscellaneous Operating Materials:**
  In addition to the pulp, chemicals and energy which go to make up the product, the paper machine operations require other 'consumables' which include, as examples, 'machine clothing' (fabrics, felts etc. which carry the sheet through the machine), roll covers (the machine uses a large number of rolls which have covers needing periodic regrinding and replacement) and refiner plates (used in treating the pulp and which wear, requiring regular replacement).

  Costs for these miscellaneous operating materials have been based on those for similar products at AP Maryvale mill in 2013. *(Confidential Attachment B-4-15)* but discounted [redacted] to allow for location.

- **Maintenance:**
  Maintenance costs have been based on those for similar products at AP Maryvale mill in 2013. *(Confidential Attachment B-4-15)* but discounted [redacted] to allow for location cost structures.

- **Production Indirect Costs**
  Production indirect costs (site costs, senior management, technical services etc.) have been based on those for similar products at AP Maryvale mill in 2013. *(Confidential Attachment B-4-15)* but discounted [redacted] to allow for location cost structures.

For each of these 'other production inputs required', the Chinese *Raw Chemical Materials Index (Attachment B-4.6)* was used to derive a time series for constructed normal value purposes.

**Financial costs and profit:**

***Plant Fixed Assets:***
The project cost for Changshu PM1 was USD475m for 400,000 t/yr *(Attachment B-4.18)*, or USD 1,188 per annual tonne of production capacity. This is an underestimate for cut sheet product since it does not allow for the allocation of the cut size lines solely to the cut size product. This will cause depreciation and finance costs for cut sheet product to be under-estimated.

***Depreciation:***
Depreciation for machinery in China is 10 years straight line. *(Attachment B-4.11)*

***Finance costs for fixed assets:***
Referring to the UPM-Kymmene interim report for Q1 2013 *(Attachment B-4.9)*, liabilities/assets was 49.2% and the effective interest rate was 1.99% for the international parent company. These have been used to calculate finance costs for UPM-Kymmene Changshu, although the interest rates in China are around 3 times this rate and are generally much higher than in Europe. The liabilities/assets ratio for the company as a whole has also been assumed to apply to UPM-Kymmene Changshu. These assumptions may lead to an under estimate of the finance cost by 3 – 6 times.

***Working Capital Finance Costs:***

- **Raw Materials and Work in Progress:**
  Raw materials stocks are assumed to be 45 days, with a working capital interest rate assumed to be equal to the PBoC interbank lending rate *(Attachment B-4.5)*.

- **Finished Goods and sales finance:**
  Export paper would most probably be loaded on the overseas container ship within 10 days of production. Sales for export are, from marketplace conversations, net 90 days from bill of lading.

  The PBoC interbank lending rate *(Attachment B-4.5)* has been used for working capital.

***Profit:***
A UPM-Kymmene press release on 6 August 2013 *(Attachment B-4.12)* quotes an operating profit for the paper division (internationally) excluding special items (which are related to European mill rationalisation).

This almost certainly underestimates the operating profit for domestic sales by UPM-Kymmene Changshu, which operates in a low input cost location and in a domestic market which, unlike Europe and USA (where UPM-Kymmene have their other mills) has a growing domestic market with comparatively high prices.

Despite this, the international operating profit has been used in the constructed normal value because it is the best publicly available.

**<u>Costs between mill gate and point of export:</u>**

***Selling Costs:***

- **Agency Costs**
  UPM-Kymmene operate their own office in Australia which, to the best of our knowledge, acts as an agent for imports, not taking legal possession of the paper.

  Its costs need to be covered, either by UPM-Kymmene Changshu, or via UPM-Kymmene head office.

  [redacted] *[AP internal practices]*

- **Provision for bad and doubtful debts**
  A provision needs to be made for bad and doubtful debts, particularly when selling on 90 day terms. [redacted] . *[AP internal practices]*

***Freight to Shanghai Port and Shanghai Port Costs:***
Finished goods are freighted to Shanghai by road, rail or river ship to be consolidated with other containerised cargos for export, most probably through Waigaoqiau port. There are also port costs which need to be included in the FOB cost.

*(Confidential Attachment B-4.10)* details these costs.

**Other issues in constructing the Normal Value:**

The UPM-Kymmene Annual Report for 2012 *(Attachment B-4.13)* reveals annual capacity and production, allowing capacity utilisation to be calculated. This figure, for 'Fine and Specialty Papers', is relatively high by international standards.

While this is not specific to UPM-Kymmene Changshu, it is the best publicly available and has been used in the constructed normal value.

## B-5 Adjustments.

A fair comparison must be made between the export price and the normal value. Adjustments should be made for differences in the terms and circumstances of the sales such as the level of trade, physical characteristics, taxes or other factors that affect price comparability.

1. Provide details of any known differences between the export price and the normal value. Include supporting information, including the basis of estimates.
2. State the amount of adjustment required for each and apply the adjustments to the domestic prices to calculate normal values. Include supporting information, including the basis of estimates.

**For the Normal Value calculated from the Chinese Domestic Price:**

The Chinese domestic selling price we have established is a 'mill to major distributor' price on an ex-works basis, including VAT.

- There is VAT 17% on domestic sales (we have been told this VAT should be paid on exports as well as domestic sales, but we have informally established that VAT is not being paid on exports, at least by major producers). This must be 'backed out' by dividing the domestic price by 117%.
- Delivery to Port in China and Chinese port charges need to be added.

  Finished goods are freighted to Shanghai by road, rail or river ship to be consolidated with other containerised cargos for export, most probably through Waigaoqiau port. This freight (2013) is USD11/tonne.

  There is also a booking fee of USD 3/tonne and loading fee at the port of USD 8/tonne. *Confidential Attachment B-4.10* details these costs.
- We have assumes UPM-Kymmene Changshu does not use an export agent, but undertakes its own paperwork and arrangements in-house. No adjustment for the cost of an export agent has been made.

- UPM-Kymmene operate their own office in Australia which, to the best of our knowledge, acts as an agent for imports, not taking legal possession of the paper. Its costs need to be covered, either by UPM-Kymmene Changshu, or via UPM-Kymmene head office. 3% of the selling price is a common allowance for indent sales to be delivered directly to the customer.
- Terms of Trade for export are 90 days from bill of lading, while domestic sales are understood to be cash before delivery. Finance costs for these sales terms need to be added. The PBoC interbank lending rate *(Attachment B-4.5)* is appropriate for working capital (trade finance).

  The PBoC interbank lending rate in the June quarter of 2013 is 6% pa, which would give rise to a trade finance cost of 6% x 90/365 = 1.48% of the selling price.
- A provision for bad & doubtful debts must be made. In the Australian context, AP has made a provision of 1.7% of sales. This would also be appropriate for UPM-Kymmene Changshu sales to Australia on 90 day terms

**For the Constructed Normal Value:**

No further adjustments are required – the above adjustments have been included in the calculation of the constructed Normal Value.

## B-6 Dumping margin.

1. Subtract the export price from the normal value for each grade, model or type of the goods (after adjusting for any differences affecting price comparability).

2. Show dumping margins as a percentage of the export price.

**Dumping Margin based on Chinese Domestic Price**

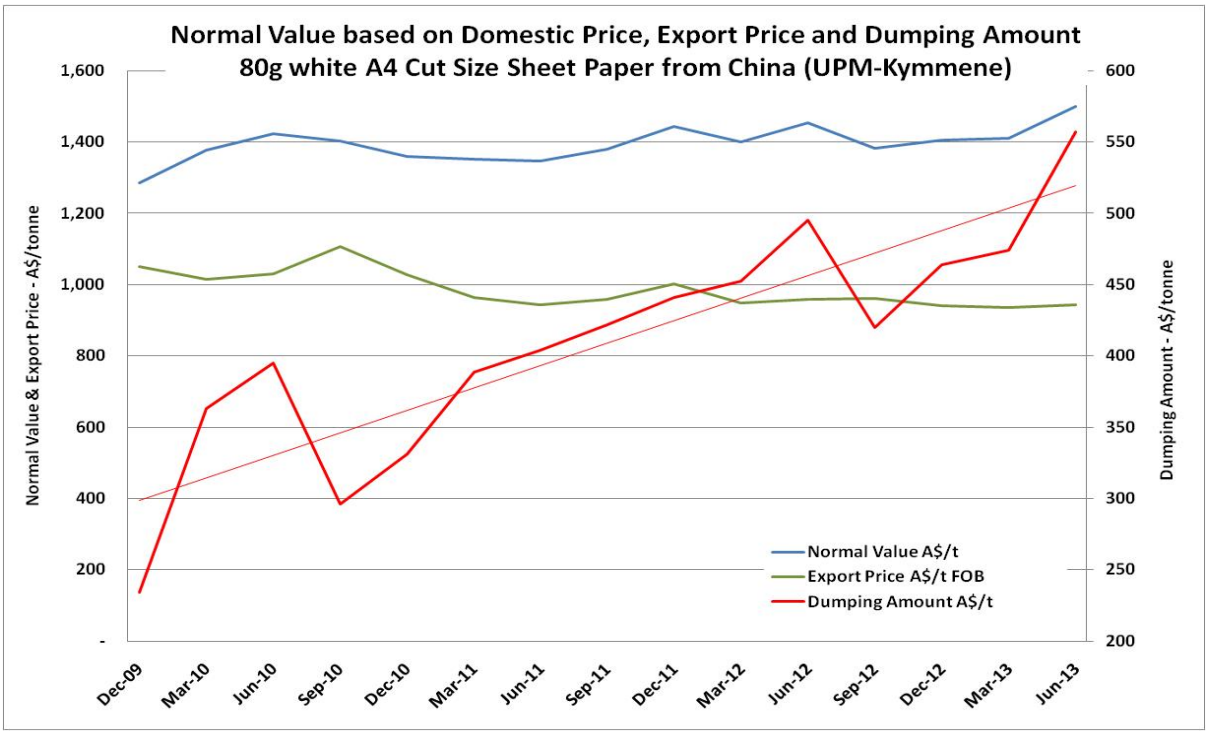
Chinese domestic prices include 17% VAT. Adjustments also need to be made for delivery to port and port charges, commission/cost of the Australian sales agent, trade finance for 90 day terms and an allowance for bad and doubtful debts.

The calculation of normal values and dumping margins for each of the comparable papers we have been able to gather Chinese domestic prices for is contained in Appendix B3.

We estimate that around 75% of Australia's imports are sourced from UPM-Kymmene Changshu. The following example from Appendix B3 is for UPM product in the June 2013 quarter.

| | |
|---|---|
| • Chinese domestic price (80gsm white A4) | A$ 1,618.78/t inc. GST<br>A$ 1,383.58/t exc. GST |
| • Delivery and port charges | A$ 22.31/t |
| • Sales agent (3%)<br>• Trade Finance 100d x 6% pa (1.64%)<br>• Allowance for bad & doubtful debts (1.7%) | A$ 95.17/t |
| • Like Product Normal Value (FOB) | A$ 1,501.05/t |
| • Imported Product Export Price | A$ 943.95/t |
| • Dumping Amount (Normal value – export price) | A$ 557.09/t |
| • Dumping Margin (as % of export price) | 59.0% |

Over the period 2009-2013, the dumping amount based on domestic price has risen from A$234/t to A$557/t and the dumping margin has risen from 22% to 59%.



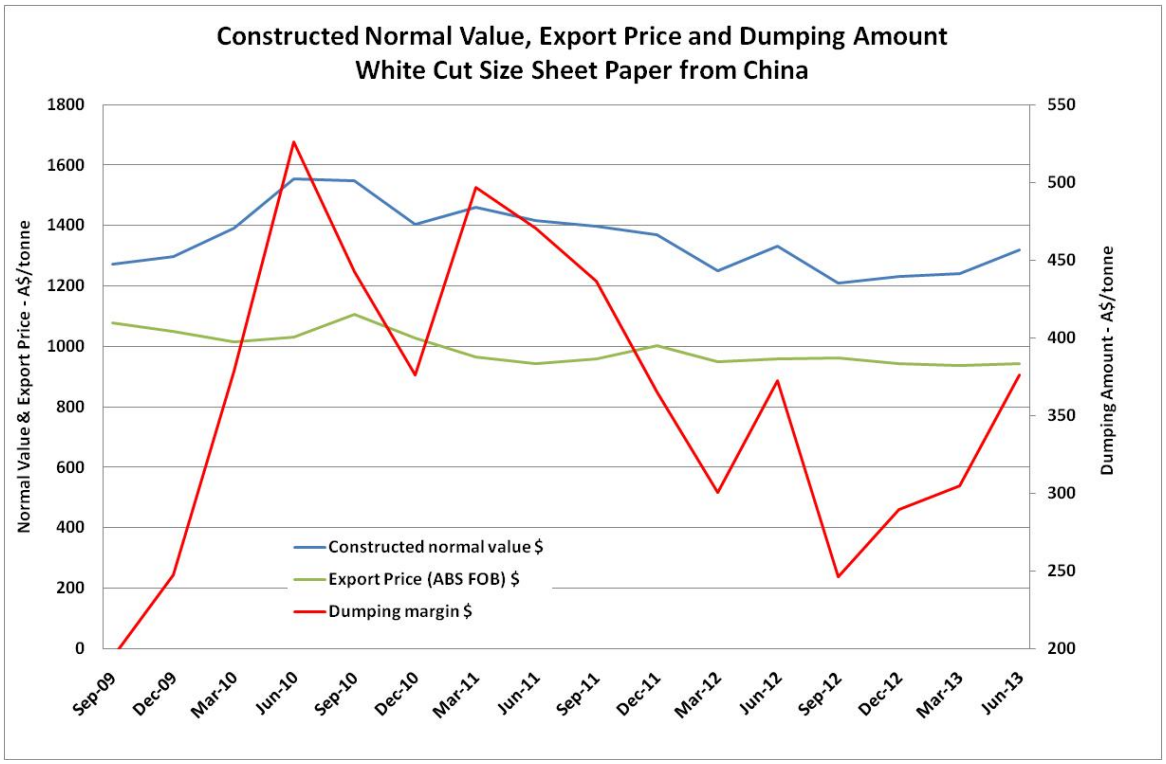
## Dumping Margin based on Constructed Normal Value

The constructed normal value includes all adjustments to FOB as set out in B-4 and the dumping margin, calculated quarterly, has been added to Appendix B2.

For the June quarter 2013, the dumping margin calculation is as follows:

- Like product normal value (FOB) A$ 1,319.96/t
- Imported product export price (FOB) A$ 943.95/t
- Dumping Amount (Normal value – export price) A$ 376.01/t
- Dumping Margin (as % of export price) 39.8%

Over the period 2009 – 2013, the dumping amount varied from A$195/t to A$497/t and the dumping margin varied from 18% to 51.6%.




The constructed normal value, and thus the dumping amount and margin derived from it, are highly dependent on the market price of purchased paper pulp.

# PART C

# SUPPLEMENTARY SECTION

**IMPORTANT**

Replies to questions in Part C are not mandatory in all instances, but may be essential for certain applications.

For advice about completing this part please contact the Commission's client support section on:

**Phone**: 1300 884 159
**Fax:** 1300 882 506
**Email**: clientsupport@adcommission.gov.au

## C-1 Subsidy

This section must be completed where countervailing duties are sought to offset foreign government assistance through subsidies to exporters or producers.

If the application is for countervailing duty alone, the domestic price information required by Part B of the application need not be supplied.

Responses to questions A-9 will need to identify the link between subsidisation and injury.

1. Identify the subsidy paid in the country of export or origin. Provide supporting evidence including details of:
   (i) the nature and title of the subsidy;
   (ii) the government agency responsible for administering the subsidy;
   (iii) the recipients of the subsidy; and
   (iv) the amount of the subsidy.

   Not Applicable

## C-2. Threat of material injury

Address this section if the application relies solely on threat of material injury (ie where material injury to an Australian industry is not yet evident).

1. Identify the change in circumstances that has created a situation where threat of material injury to an Australian industry from dumping/subsidisation is foreseeable and imminent, for example by having regard to:
   1. the rate of increase of dumped/subsidised imports;
   2. changes to the available capacity of the exporter(s);
   3. the prices of imports that will have a significant depressing or suppressing effect on domestic prices and lead to further imports;
   4. inventories of the product to be investigated; or
   5. any other relevant factor(s).

   Not Applicable

2. If appropriate, include an analysis of trends (or a projection of trends) and market conditions illustrating that the threat is both foreseeable and imminent.

   Not Applicable

## C-3. Close processed agricultural goods

Where it is established that the like (processed) goods are closely related to the locally produced (unprocessed) raw agricultural goods, then – for the purposes of injury assessment – the producers of the raw agricultural goods form part of the Australian industry. This section is to be completed only where processed agricultural goods are the subject of the application**. Applicants are advised to contact the Commission's client support section before completing this section**.

Not Applicable

## C-4. Exports from a non-market economy

Complete this section only if exports from a non-market economy are covered by the application. The domestic price information required by Part B of the application need not be supplied if this question is answered.

Normal values for non-market economies may be established by reference to selling prices or to costs to make and sell the goods in a comparable market economy country.

Not Applicable

## C-5 Exports from an 'economy in transition'

An 'economy in transition' exists where the government of the country of export had a monopoly, or substantial monopoly, on the trade of that country (such as per question C-4) and that situation no longer applies.

Complete this section only if exports from an 'economy in transition' are covered by the application. **Applicants are advised to contact the Commission's client support section before completing this section**

Not Applicable

## C-6 Aggregation of Volumes of dumped goods

Only answer this question if required by question B-1.5 of the application and action is sought against countries that individually account for less than 3% of total imports from all countries (or 4% in the case of subsidised goods from developing countries). To be included in an investigation, they must collectively account for more than 7% of the total (or 9% in the case of subsidised goods from developing countries).

Not Applicable

## APPENDICES

The following Appendices are also provided as spreadsheets:
*[all appendices are confidential]*

| | |
|---|---|
| Appendix A1 | Australian Production |
| Appendix A2 | Australian Market |
| Appendix A3 | Sales Turnover |
| Appendix A4 | Domestic Sales<br>*(provided only as a spreadsheet on disk due to its large size)* |
| Appendix A5 | Sales of Other Production |
| Appendix A6.1 | Cost to Make and Sell (& profit) Domestic Sales |
| Appendix A6.2 | Cost to Make and Sell (& profit) Export Sales |
| Appendix A7 | Other Injury Factors |
| Appendix A8 | Authority to Deal With Representative *(not applicable)* |
| Appendix B1 | Deductive Export Price *(not applicable)* |
| Appendix B2 | Constructed Normal Value and Dumping Margin |
| Appendix B3 | Normal Value and Dumping Margin based on Chinese domestic price |

## ATTACHMENTS

*[Only attachments not marked as Confidential are included in the Public Record]*

| | |
|---|---|
| Attachment A-2.2 | Internal organisation chart for Paper Australia Pty. Ltd. |
| Attachment A-2.6 | Diagram of the associated or affiliated companies |
| Confidential Attachment A-2.9.1 | Audited half year report for July-December 2009 |
| Confidential Attachment A-2.9.2 | Audited Annual Report for 2010 |
| Confidential Attachment A-2.9.3 | Audited Annual Report for 2011 |
| Confidential Attachment A-2.9.4 | Audited Annual Report for 2012 |
| Confidential Attachment A-2.9.5 | Unaudited report for the half year to June 2013 |
| Confidential Attachment A-3.3.1 | Technical information on Australian Paper's cut sheet papers – Australian Paper brands |
| Confidential Attachment A-3.3.2 | Technical information on Australian Paper's cut sheet papers – Customer Paper brands |
| Confidential Attachment A-5.6 | Typical distributor agreement |
| Confidential Attachment A-5.7.1 | Large Stationery Retailer price list |
| Confidential Attachment A-5.7.2 | Buying Group price list |
| Confidential Attachment A-5.7.3 | Independent Stationers price list |
| Confidential Attachment A-5.8 | Underlying principles of AP's discount & rebate system. |
| Confidential Attachment A-5.9 | Complete sets of commercial documentation for two domestic sales in each quarter over the 12 months to June 2013 |
| Confidential Attachment A-6.3.1 | Australian Paper's chart of accounts |
| Confidential Attachment A-6.3.2 | Extracts from AP internal management accounts<br>*(provided only as a spreadsheet on disk)* |
| Attachment A-9.4 | Economic Impact Study of Australian Paper |
| Attachment B-2.1.1 | ABS Australian import statistics |
| Attachment B-2.1.2 | Chinese export statistics |
| Attachment B-2.1.3 | Comparison between ABS Australian import statistics and Chinese export statistics |
| Confidential Attachment B-3.1 | Extracts from domestic market reports prepared by Consultants in China for Australian Paper |
| Confidential Attachment B-3.3 | Full June 2013 domestic market report prepared by Consultants in China for Australian Paper |

Note: the following attachments are all associated with calculation of a constructed normal value (Appendix B-2) based on cost to make and sell, including finance costs. Some of this data is also used for adjustments to the normal value.

| | |
|---|---|
| Attachment B-4.1 | Changshu Economic & Technological Development Zone – information from official website www.cedz.org |
| Attachment B-4.2 | RISI Benchmark datasheet – UPM-Kymmene Changshu |
| Attachment B-4.3 | RISI Asia Pulp and Paper Monitor (extracts - pulp prices) |
| Attachment B-4.4 | ANZ Commodity Weekly/Commodity Daily (extracts) |
| Attachment B-4.5 | PBoC interbank lending rate (www.globalrates.com) |
| Attachment B-4.6 | Chinese cost indexes (Chinese Govt/ANZ bank) |
| Attachment B-4.7 | China wages in manufacturing (www.tradingeconomics.com) |
| Confidential Attachment B-4.8 | Starch Costs in Asia (supplier correspondence) |
| Confidential Attachment B-4.9 | GCC Filler Costs (supplier correspondence) |
| Confidential Attachment B-4.10 | Chinese port and mill to port costs (supplier correspondence) |
| Attachment B-4.11 | Chinese depreciation rate |
| Attachment B-4.12 | UPM-Kymmene Press Release 6 August 2013 |
| Attachment B-4.13 | UPM-Kymmene Annual Report 2012 (extracts) |
| Attachment B-4.14 | UPM-Kymmene Interim Report 1st quarter 2013 (extracts) |
| Confidential Attachment B-4-15 | AP Maryvale Standard Cost Sheet 58150 |
| Confidential Attachment B-4.16 | AP Maryvale Paper Machine M5 fixed costs |
| Attachment B-4.17 | EU IPPC best practice (extract - water & effluent volumes) |
| Attachment B-4.18 | Poyry info sheet – Changshu PM1 Project 2005 |

## ATTACHMENTS

Note: The public file does not contain attachments listed as 'Confidential Attachment'.

| | |
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| Attachment B-4.1 | Changshu Economic & Technological Development Zone – information from official website www.cedz.org |
| Attachment B-4.2 | RISI Benchmark datasheet – UPM-Kymmene Changshu |
| Attachment B-4.3 | RISI Asia Pulp and Paper Monitor (extracts - pulp prices) |
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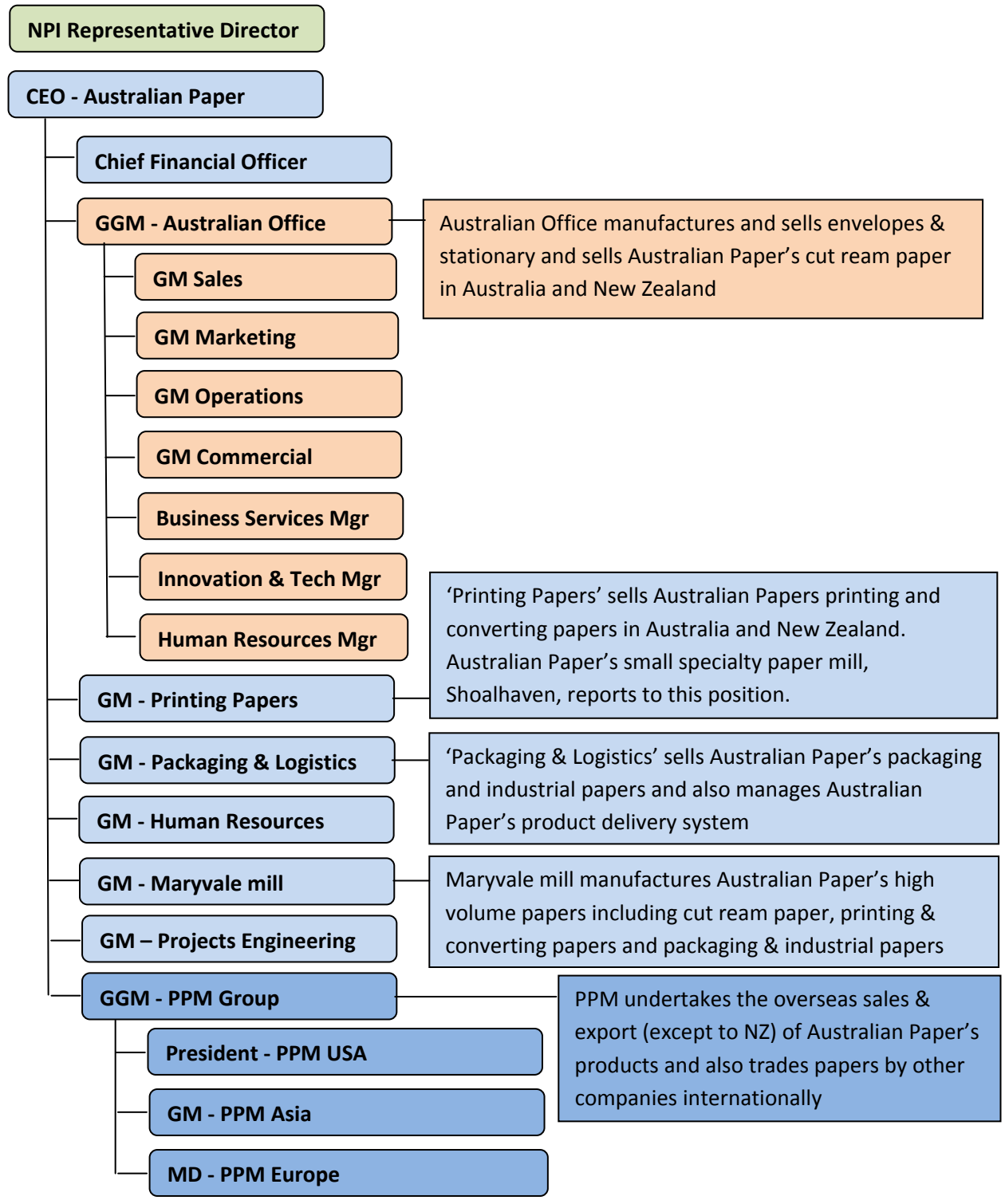
| Confidential Attachment B-4.8 | Starch Costs in Asia (supplier correspondence) |
| Confidential Attachment B-4.9 | GCC Filler Costs (supplier correspondence) |
| Confidential Attachment B-4.10 | Chinese port and mill to port costs (supplier correspondence) |
| Attachment B-4.11 | Chinese depreciation rate |
| Attachment B-4.12 | UPM-Kymmene Press Release 6 August 2013 |
| Attachment B-4.13 | UPM-Kymmene Annual Report 2012 (extracts) |
| Attachment B-4.14 | UPM-Kymmene Interim Report 1st quarter 2013 (extracts) |
| Confidential Attachment B-4-15 | AP Maryvale Standard Cost Sheet 58150 |
| Confidential Attachment B-4.16 | AP Maryvale Paper Machine M5 fixed costs |
| Attachment B-4.17 | EU IPPC best practice (extract - water & effluent volumes) |
| Attachment B-4.18 | Poyry info sheet – Changshu PM1 Project 2005 |

# Attachment A-2.2

## Internal organisation chart for Paper Australia Pty. Ltd.

## Paper Australia Pty. Ltd. Organisation Chart

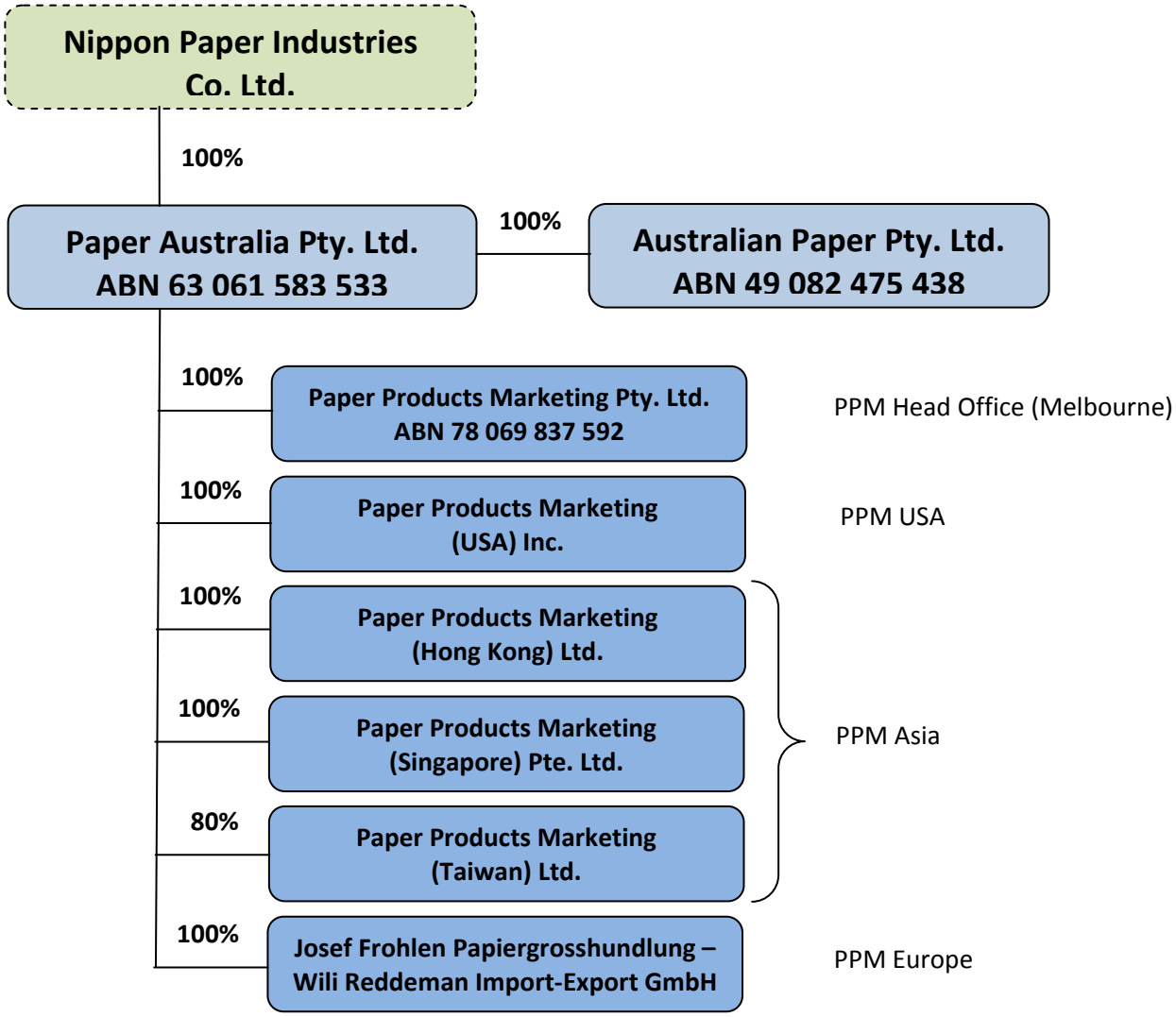



*NPI: Nippon Paper Industries*
*CEO: Chief executive Officer*
*GGM: Group General Manager*
*GM: General Manager*
*Mgr: Manager*
*MD: Managing Director*
*PPM: Paper Products Marketing*

# Attachment A-2.6

## Diagram of the associated or affiliated companies

## Paper Australia Pty. Ltd. Company Structure



# Attachment A-9.4

## Economic Impact Study of Australian Paper

PUBLIC FILE

WESTERN RESEARCH INSTITUTE LTD

# Economic Impact Report

## Australian Paper


Prepared For Australian Paper

11th September 2012

Disclaimer



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12013 Australian Paper/ Reports


Acknowledgements

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# ECONOMIC IMPACT REPORT

## EXECUTIVE SUMMARY

The Western Research Institute (WRI) was commissioned by Australian Paper to measure its impact on national, state and regional economies. The economic impacts were assessed using primary data provided by Australian Paper. National, state and regional input-output tables were developed using the GRIT technique and analysed using Simulating Impacts on Regional Economies (SIRE).The impacts were measured in terms of gross domestic, gross state and gross regional product, household income and full-time equivalent (FTE) jobs. The results are summarised below.

### Overall impact of Australian Paper

In 2011, Australian Paper had intra-company purchases between its Maryvale Mill and Shoalhaven Mill. These intra-company purchases were excluded from the economic impact of Australian Paper as a whole to avoid double-counting of expenditure and associated flow-on effects. As a result, the overall impact of Australian Paper on the Australian economy in terms of contribution to gross domestic product was smaller than the sum of the individual impacts when the Maryvale Mill, Shoalhaven Mill, and Melbourne operations were examined as "stand alone" entities. There is no effect on total employment and household income impacts.

When flow-on effects are taken into account, the aggregated operations of Australian Paper contributed $701 million in gross domestic product, $430 million in household income and supported 5,443 FTE jobs in 2011. This equated to 0.05 per cent of gross domestic product and 0.06 per cent of FTE jobs in Australia.

The main industry sectors, as defined in the 2006 Australian and New Zealand Standard Industrial Classification (ANZSIC)[1], benefiting from the flow-on of Australian Paper operations, in terms of full-time equivalent (FTE) employment, were:

- transport, postal and warehousing (457 FTE);
- agriculture, forestry and fishing (437 FTE);
- other services (377 FTE);
- retail trade (335 FTE); and
- professional, scientific and technical services (298 FTE).

1 The ANZSIC classifications are outlined in Appendix 2

In addition to the contribution from operations, capital expenditure by Australian Paper contributed the following to the national economy when flow-on effects are taken into account:

- $54 million in gross domestic product;
- $29 million in household income; and
- 484 FTE jobs.

Aggregating the impact from operations and capital expenditure in 2011, Australian Paper contributed in excess of $750 million to gross domestic product and more than 5,900 FTE jobs nationally when flow-on effects are taken into account.

The economic impact of Australian Paper in the national economy in the 2011 calendar year is shown in Table 1.

Table 1: The economic impact of Australian Paper in the Australian economy, 2011

| | Value Added $m | Household Income $m | Employment FTE |
|---|---|---|---|
| Total incl. flow-on | $754.4 | $458.5 | 5,928 |
| % of Australia | 0.05% | 0.07% | 0.06% |

### Impacts of the Maryvale Mill

The economic impacts of Australian Paper's Maryvale Mill operation on Victoria and the Gippsland region are shown in Table 2.

Table 2: State and regional economic impacts of the Maryvale Mill operation, 2011

| | Value Added $m | Household Income $m | Employment FTE |
|---|---|---|---|
| Total (incl. flow-on) | $611.9 | $309.6 | 4,224 |
| % Victoria | 0.19% | 0.20% | 0.17% |
| Total (incl. flow-on) | $360.5 | $192.3 | 2,684 |
| % Gippsland | 2.73% | 3.15% | 2.23% |

The operation of the Maryvale Mill, when examined as a "stand alone" entity, is estimated to have contributed $612 million to gross state product in Victoria, $310 million in household income and over 4,200 FTE jobs when flow-on effects are taken into account.

The main industry sectors in Victoria that benefited from flow-on effects of the Maryvale Mill operation in 2011, in terms of FTE employment, were:

- agriculture, forestry and fishing (437 FTE);
- transport, postal and warehousing (394 FTE);
- other services (294 FTE);
- retail trade (241 FTE); and
- wholesale trade (188 FTE).

In the Gippsland[2] region in which the Maryvale Mill operates, the contribution to gross regional product was $360 million. The Maryvale Mill also contributed $192 million in household income and supported 2,684 FTE jobs. The Maryvale Mill is a significant part of the economy of the Gippsland region contributing almost 3 per cent of the region's gross regional product and household income and 2.2 per cent of FTE jobs.

The main industry sectors that benefited from flow-on employment in the Gippsland region, as a result of the Maryvale Mill operation, were:

- agriculture, forestry and fishing (401 FTE);
- electricity, gas, water and waste services (161 FTE);
- other services (157 FTE);
- transport, postal and warehousing (148 FTE);
- retail trade (145 FTE).

## Impact of the Melbourne operations

The economic impact of Australian Paper's Melbourne operations, including Australian Office the office products division of Australian Paper, on Victoria is shown in Table 3.

Table 3: State economic impact of Melbourne operations, 2011

| | Value Added $m | Household Income $m | Employment FTE |
|---|---|---|---|
| Total (incl. flow-on) | $49.2 | $67.3 | 784 |
| % Victoria | 0.02% | 0.04% | 0.03% |

When flow-on effects were taken into account, Australian Paper's Melbourne operations, as a "stand alone" entity, contributed $49 million to gross state product, $67 million in household income and 784 FTE jobs. This equated to 0.02 per cent of gross state product and 0.03 per cent of full-time equivalent jobs in Victoria in 2011.

The main industry sectors in Victoria that benefited from flow-on effects of Australian Paper's Melbourne operations in 2011, in terms of FTE employment, were:

- professional, scientific and technical services (60 FTE);
- transport, postal and warehousing (47 FTE);
- administrative and support services (47 FTE);
- other services (34 FTE); and
- financial and insurance services (26 FTE).

2 The Gippsland region encompasses the statistical divisions of East Gippsland and Gippsland as defined in the Australian Standard Geographical Classification (ASGC) developed by the Australian Bureau of Statistics (ABS).

# ECONOMIC IMPACT REPORT

## Impacts of the Shoalhaven Mill operation

The economic impacts of Australian Paper's Shoalhaven Mill operation on New South Wales and Illawarra are shown in Table 4.

Table 4: State and regional economic impacts of the Shoalhaven Mill operation, 2011

| | Value Added $m | Household Income $m | Employment FTE |
|---|---|---|---|
| Total (incl. flow-on) | $30.2 | $20.3 | 254 |
| % NSW | 0.01% | 0.01% | 0.01% |
| Total (incl. flow-on) | $23.7 | $16.8 | 226 |
| % Illawarra | 0.12% | 0.17% | 0.14% |

The operation of the Shoalhaven Mill, when examined as a "stand alone" entity, was estimated to have contributed $30 million to gross state product in New South Wales, $20 million in household income and 254 FTE jobs when flow-on effects were taken into account.

The main industry sectors in New South Wales that benefited from flow-on effects of the Shoalhaven Mill operation in 2011, in terms of FTE employment, were:

- other services (43 FTE);
- retail trade (14 FTE);
- transport, postal and warehousing (12 FTE);
- accommodation and food services (11 FTE); and
- professional, scientific and technical services (10 FTE).

In the Illawarra[3] region in which the Shoalhaven Mill operates, the contribution to gross regional product was $24 million. The Shoalhaven Mill also contributed $17 million in household income and supported 226 FTE jobs when flow-on effects are taken into account.

The main industry sectors that benefited from flow-on employment in the Illawarra region, as a result of the Shoalhaven Mill operation, were:

- other services (40 FTE);
- retail trade (11 FTE);
- transport, postal and warehousing (10 FTE);
- accommodation and food services (10 FTE); and
- education and training (8 FTE).

## Impacts of the proposed recycling plant at Maryvale

The economic impacts of both the construction and operation phases of the proposed $90 million recycling plant at Maryvale are shown in Table 5.

Table 5: Economic Impacts of the proposed paper recycling plant at Maryvale, 2011 $ values

| | Value Added $m | Household Income $m | Employment FTE |
|---|---|---|---|
| Construction Phase | | | |
| Australia (incl. flow-on) | $109.5 | $56.8 | 967 |
| % of Australia | 0.01% | 0.01% | 0.01% |
| Victoria (incl. flow-on) | $85.2 | $44.8 | 757 |
| % of Victoria | 0.03% | 0.03% | 0.03% |
| Gippsland (incl. flow-on) | $29.1 | $15.5 | 347 |
| % of region | 0.22% | 0.25% | 0.29% |
| Operation Phase | | | |
| Australia (incl. flow-on) | $50.7 | $18.8 | 246 |
| % of Australia | 0.00% | 0.00% | 0.00% |
| Victoria (incl. flow-on) | $34.9 | $12.1 | 168 |
| % of Victoria | 0.01% | 0.01% | 0.01% |
| Gippsland (incl. flow-on) | $17.7 | $3.7 | 51 |
| % of region | 0.13% | 0.06% | 0.04% |

3 The Illawarra region encompasses the Illawarra statistical division as defined in the ASGC.

When flow on effects are taken into account it is estimated that the proposed recycling plant at Maryvale, during construction phase, will contribute $110 million to gross domestic product and more than 960 FTE jobs. Once in operation the recycling plant is estimated to contribute $51 million to gross domestic product and 246 FTE jobs.

## Contribution to Government Revenue

Australian Paper provided information regarding the number of employees in predefined wage and salary brackets and estimates of the proportion of total logistics expenditure spent on road freight transport. Utilising data from the Australian Taxation Office estimates were prepared of the contribution to Federal Government revenue from these sources. In 2011 it was estimated that Australian Paper operations contributed the following to government revenue:

- Employee Withholdings - $40 million
- Fuel Excise (net of fuel tax credits) - $3 million

In addition, Australian Paper contributes approximately $7 million in taxes on products and production. Furthermore, contributions to Victorian and New South Wales government revenue through payroll tax was $7.24 million and $0.54 million respectively. These are direct effects and do not include flow-on.

## Downstream Impacts

The downstream industries supplied by Australian Paper have the potential to be adversely impacted in the absence of Australian Paper. It is estimated that Australian Paper currently underpins approximately 15 per cent of the balance of the pulp, paper and converted paper product manufacturing sector nationally, equating to approximately $567 million in industry value added and 3,580 FTE jobs when flow-on effects are taken into account. In the absence of Australian Paper, unless replaced by an equivalent imported product, downstream industries could be affected detrimentally.

## Assessment of the scope for re-employment of Australian paper Workers

Any reduction in Australian Paper's operations would obviously have a direct impact on its workforce. Assessment of the adaptive capacity of employees of Australian Paper has been based on analysis of ABS data regarding age, educational attainment, occupation and income as well as Department of Education, Employment and Workplace Relations data relating to unemployment rates. The results are summarised in the table below.

Table 6: Summary of adaptive capacity of Australian Paper employees

| | Gippsland region | Illawarra region | Melbourne region |
|---|---|---|---|
| Age distribution | ↓ | ↓ | ↓ |
| Educational attainment | ↑ | ↓ | ↓ |
| Occupation skill rating | ↓ | - | ↓ |
| Income | ↑ | ↑ | ↑ |
| Industry growth | - | - | - |
| Regional labour force | ↑ | ↓ | - |
| Overall rating | ↑ | ↓ | ↓ |

Key:

↓ low scope for re-employment

↑ high scope for re-employment

\- neutral

Based on analysis of the selected characteristics, Employees in the Gippsland region would appear to have greater opportunity of re-employment locally than those in either the Illawarra or Melbourne regions, primarily resulting from lower than average unemployment rates in the region, coupled with anticipated strong workforce growth.

MARYVALE MILL

Dating back to 1937, the Maryvale Paper Mill is the largest integrated fine paper-making and packaging papers complex in Australia, producing over 500,000 tonnes of paper each year. Located in the Gippsland region of Victoria, the Maryvale Mill is the single largest private employer in that region, with over 890 employees. There are three pulp mills, five paper-making machines, an ECF bleach plant, pulp lapping machine, finishing facility and a waste paper processing plant at the Maryvale Mill. A large amount of the fine paper output from the Maryvale Mill is A4 copy paper sold in Australia and New Zealand, including popular brands like REFLEX and Australian Pure White.

SHOALHAVEN MILL

The Shoalhaven Paper Mill is located in Bomaderry on the south coast of New South Wales, 160km south of Sydney. The mill produces over 1,400 different grades of paper and is Australia's leading manufacturer of high-quality specialty papers, including security, watermark, coloured, envelope, copy and printing papers.

# 1 INTRODUCTION

## 1.1 Scope of the Study

Australian Paper commissioned the Western Research Institute (WRI) to prepare an assessment of the economic impacts of its Maryvale, Shoalhaven and Melbourne operations for the calendar year 2011. Specifically, the scope of the work required WRI to prepare an assessment of the:

- Economic impacts on Australia from Australian Paper's Maryvale Mill, Shoalhaven Mill and Melbourne operations;
- Economic impacts on Victoria from the Maryvale Mill and Melbourne operations,
- Economic impacts on the Gippsland region from the Maryvale Mill operation;
- Economic impacts on New South Wales from the Shoalhaven Mill operation;
- Economic impacts on the Illawarra region from the Shoalhaven Mill operation; and
- Additional impacts on Australia, Victoria and Gippsland from the proposed $90 million paper recycling plant to be installed at the Maryvale Mill site.

In addition, the report examines Australian Paper's economic contribution to Government revenue in terms of employee withholdings tax and fuel excise. An assessment of the downstream impacts of Australian Paper's operations is also included. The report also provides an assessment of the scope for re-employment of Australian Paper workers should operations be scaled back or closed down.

The economic impacts were assessed using primary data provided by Australian Paper. National, state and regional input-output tables were developed using the GRIT technique and analysed using Simulating Impacts on Regional Economies (SIRE). Details regarding the methodology utilised in preparing this economic impact assessment as well as information regarding the inter-industry model are provided as Appendices to this report.

Direct comparison of the results found in this economic impact assessment of Australian Paper and its entities and previous studies should be treated with caution for a number of reasons including changes in Australian Bureau of Statistics industry classifications, updated national input-output tables and significant improvements to the inter-industry model utilised in the analysis.

It should be noted that the economic impacts of the Maryvale Mill, Shoalhaven Mill and Melbourne operations are estimated as "stand alone" entities. As there are intra-company linkages within Australian Paper as a whole, aggregation of the individual entity impact results would result in double-counting of expenditure and flow-on effects, causing significant over-estimation of the total economic impact of Australian Paper as a whole. As such intra-company purchases and sales are excluded from the economic impact of Australian Paper in the first section of this report. Economic impacts have been estimated using income and

expenditure data supplied by Australian Paper for all three operations.

## 1.2 Overview of Australian Paper

Paper Australia Pty Ltd, trading as Australian Paper, is the only local paper manufacturer of integrated office, printing and packaging products. The company produces and markets over two thousand grades of paper. It also employs over 1,400 people and has a positive economic impact on the Australian economy and the regional communities in which it operates. The company has paper manufacturing mills in Maryvale, Victoria and Shoalhaven, New South Wales. It also has an office products division, Australian Office, located in Melbourne, Victoria.

The majority of Australian Paper's products are sold in the business to business sector, with 380,000 tonnes of product being supplied around Australia. A further 34,000 tonnes are supplied into New Zealand. Australian Paper also exports, through their wholly owned trading company Paper Products Marketing, approximately 220,000 tonnes of product to over 60 countries in Asia, North America, Latin America, Europe, the Middle East, the Indian subcontinent and Africa.

### MELBOURNE OPERATIONS

The office products division of Australian Paper, Australian Office, is located in Melbourne and manufactures and supplies high quality stationery products to the retail, corporate and government market sectors in Australia, New Zealand and the Pacific Islands. Australian Office has stationery operations facilities in Melbourne and sales offices in all mainland capital cities and the ACT. It also has warehousing operations in all mainland states and envelope overprinting operations in several states.

Source: Australian Paper http://www.australianpaper.com.au

# 2 THE ECONOMIC IMPACT OF AUSTRALIAN PAPER

In aggregate, Australian Paper's Melbourne, Maryvale Mill and Shoalhaven Mill operations contribute to the national economy through employment levels and job creation, expenditure on goods and services, expenditure on capital items and through purchases made by staff of Australian Paper.

## 2.1 Impact on Australia

### Australian Paper

Aggregating the impact from operations and capital expenditure in 2011, Australian Paper contributed in excess of $750 million to gross domestic product and more than 5,900 FTE jobs nationally when flow-on effects are taken into account.

Table 2.1 summarises the economic impact of Australian Paper (including flow-on effects) in the national economy for the calendar year 2011.

Table 2.1: Economic Impact of Australian Paper in the Australian economy, 2011

| | Value Added $m | Household Income $m | Employment FTE |
|---|---|---|---|
| Total (including Flow-on) | $754.4 | $458.5 | 5,928 |
| % of Australia | 0.05% | 0.07% | 0.06% |

In 2011, Australian Paper operations and capital expenditure contributed 0.05 per cent of gross domestic product, 0.07 per cent of household income and 0.06 per cent of FTE employment in the Australian economy when flow-on effects were taken into account.

Overall, the operations of Australian Paper, including flow-on effects, contributed 5,440 FTE jobs, $430 million in household income and $700 million in gross domestic product to the Australian economy in 2011.

The main industry sectors that benefited from flow-on from operations of Australian Paper, in terms of full-time equivalent (FTE) employment, were:

- transport, postal and warehousing (457 FTE);
- agriculture, forestry and fishing (437 FTE);
- other services (377 FTE);
- retail trade (335 FTE);and
- professional, scientific and technical services (298 FTE).

#### Capital Expenditure

Capital expenditure by Australian Paper also contributes to the economy. When flow-on effects are taken into account, capital expenditure by Australian Paper in 2011 contributed the following to the Australian economy:

- $54 million in gross domestic product;
- $29 million in household income; and
- 484 FTE jobs.

Table 2.2 summarises the economic impact of capital expenditure by Australian Paper at the national, state and regional level.

Table 2.2: Economic Impact of Capital Expenditure by Australian Paper in the Australian economy, 2011

| | Value Added $m | Household Income $m | Employment FTE |
|---|---|---|---|
| Australia | $53.9 | $28.9 | 484 |
| Victoria | $38.4 | $21.1 | 346 |
| Gippsland region | $11.6 | $6.4 | 140 |
| New South Wales | $5.3 | $2.9 | 54 |
| Illawarra | $0.9 | $0.5 | 10 |

# 3 THE ECONOMIC IMPACT OF THE MARYVALE MILL

## 3.1 Impact on Victoria

Table 3.1 summarises the economic impact of the Maryvale Mill operation (including flow-on effects) in the Victorian economy, estimated as a "stand alone" entity.

The main industry sectors impacted by the flow-on from the operations the Maryvale Mill in terms of FTE employment in Victoria are:

- agriculture, forestry and fishing (437 FTE);
- transport, postal and warehousing (394 FTE);
- other services (294 FTE);
- retail trade (241 FTE); and
- wholesale trade (188 FTE).

Table 3.1: Economic Impact of Maryvale Mill operations on Victoria, 2011

| | Value Added $m | Household Income $m | Employment FTE |
|---|---|---|---|
| Total Impact (including Flow-on) | $611.9 | $309.6 | 4,224 |
| % of Victoria | 0.19% | 0.20% | 0.17% |

In 2011, the Maryvale Mill contributed 0.19 per cent of gross state product, 0.20 per cent of household income and 0.17 per cent of FTE employment in the Victorian economy when flow-on effects are taken into account.

Overall, the Maryvale Mill operation contributed more than 4,000 FTE jobs, $310 million in household income and more than $600 million in gross state product to the Victorian economy in 2011 when flow-on effects are taken into account.

## 3.2 Impact on the Gippsland region

The Maryvale Mill operation has a direct impact on the regional economy in which it operates through expenditure on goods and services purchased locally, expenditure on capital items in the combined statistical divisions of Gippsland and East Gippsland (the Gippsland region), wages and salaries paid to staff and purchases made by staff. In the Gippsland region, the Maryvale Mill is the largest private employer with over 890 full-time equivalent staff.

Table 3.2 opposite summarises the economic impact of the Maryvale Mill operations (including flow-on effects) in the Gippsland region of Victoria in the 2011 calendar year.

Table 3.2: Economic Impact of Maryvale Mill operations on the Gippsland region, 2011

| | Value Added $m | Household Income $m | Employment FTE |
|---|---|---|---|
| Total Impact (including Flow-on) | $360.5 | $192.3 | 2,684 |
| % of Gippsland | 2.73% | 3.15% | 2.23% |

Australian Paper makes a significant contribution to the economy of the Gippsland region. In 2011, the Maryvale Mill contributed 2.7 per cent of gross regional product, 3.1 per cent of household income and 2.2 per cent of FTE employment in the Gippsland regional economy, when flow-on effects are taken into account.

Overall, the Maryvale Mill operation contributed almost 2,700 FTE jobs, $192 million in household income and $360 million in gross regional product to the Gippsland economy in 2011 when flow-on effects are included.

The main industry sectors impacted by the flow-on from the Maryvale Mill in terms of FTE employment in the Gippsland region are:

- agriculture, forestry and fishing (401 FTE);
- electricity, gas, water and waste services (161 FTE);
- other services (157 FTE);
- transport, postal and warehousing (148 FTE);
- retail trade (145 FTE).

# 4 THE ECONOMIC IMPACT OF THE SHOALHAVEN MILL

Like the Maryvale Mill operation, the Shoalhaven Mill has a direct impact on the regional Illawarra economy in which it operates. Australian Paper's Shoalhaven Mill is Australia's leading manufacturer of high-quality specialty papers and contributes to both the state and regional economies of New South Wales.

## 4.1 Impact on New South Wales

Table 4.1 summarises the economic impact of the Shoalhaven Mill operation, as a "stand alone" entity (including flow-on effects) in the New South Wales economy.

Table 4.1: Economic Impact of Shoalhaven Mill operations on New South Wales, 2011

| | Value Added $m | Household Income $m | Employment FTE |
|---|---|---|---|
| Total Impact (including Flow-on) | $30.2 | $20.3 | 254 |
| % of New South Wales | 0.01% | 0.01% | 0.01% |

The main industry sectors impacted by the flow-on from operations of the Shoalhaven Mill in New South Wales, in terms of FTE employment, were:

- other services (40 FTE);
- retail trade (14 FTE);
- transport, postal and warehousing (12 FTE);
- accommodation and food services (11 FTE); and
- professional, scientific and technical services (10 FTE).

The Shoalhaven Mill contributed 0.01 per cent to each of gross state product, household income and FTE employment in the New South Wales economy when flow-on effects are taken into account.

Overall, the Shoalhaven Mill operation, including flow-on effects, contributed 250 FTE jobs, $20 million in household income and $30 million in gross state product to the New South Wales economy in 2011.

## 4.2 Impact on Illawarra

Table 4.2 summarises the economic impact of the Shoalhaven Mill operation (including flow-on effects) in the Illawarra region of New South Wales.

Table 4.2: Economic Impact of Shoalhaven Mill operations on Illawarra Statistical Division, 2011

| | Value Added $m | Household Income $m | Employment FTE |
|---|---|---|---|
| Total Impact (including Flow-on) | $23.7 | $16.8 | 226 |
| % of Illawarra | 0.12% | 0.17% | 0.14% |

The Shoalhaven Mill contributed 0.12 per cent of gross regional product, 0.17 per cent of household income and 0.14 per cent of FTE employment in the Illawarra regional economy, defined as the Illawarra statistical division, when flow-on effects are taken into account.

Overall, the Shoalhaven Mill operation, including flow-on effects, contributed 226 FTE jobs, $17 million in household income and almost $24 million in gross regional product to the Illawarra regional economy.

# 5 THE ECONOMIC IMPACT OF THE MELBOURNE OPERATIONS

The Melbourne operations of Australian Paper incorporate Australian Office, the office products division of the company. Australian Office supplies high quality stationery products to the retail, corporate and government market sectors in Australia, New Zealand and the Pacific Islands. In this study, the economic impact of the Melbourne operations, as a "stand alone" entity was estimated only for the Victorian state economy.

## 5.1 Impact on Victoria

Table 5.1 summarises the economic impact of the Melbourne operations (including flow-on effects) on the Victorian economy.

Table 5.1: Economic Impact of Melbourne operations on Victoria, 2011

| | Value Added $m | Household Income $m | Employment FTE |
|---|---|---|---|
| Total Impact (including Flow-on) | $49.2 | $67.3 | 784 |
| % of Victoria | 0.02% | 0.02% | 0.03% |

The Melbourne operations of Australian Paper contributed 0.02 per cent of gross state product, 0.04 per cent of household income and 0.03 per cent of FTE employment in the Victorian economy when flow-on effects were taken into account.

Overall, the Melbourne operations contributed 784 FTE jobs, $67 million in household income and $49 million in gross state product to the Victorian economy in 2011.

The main industry sectors impacted by the flow-on from operations of the Melbourne operations, in terms of FTE employment, were:

- professional, scientific and technical services (60 FTE);
- transport, postal and warehousing (47 FTE);
- administrative and support services (also 47 FTE);
- other services (34 FTE); and
- financial and insurance services (26 FTE).

# 6 ECONOMIC IMPACT OF PROPOSED RECYCLING PLANT AT MARYVALE MILL

Australian Paper is proposing to construct a paper recycling plant at Maryvale. The contribution of this facility to the regional, state and national economies has been assessed for both the construction phase and full operational phase. The economic contribution of the construction phase will only hold for the period of construction whilst the impact derived from operations will be ongoing. The assessments of each impact are outlined below in 2011 dollar values.

## 6.1 Construction Impact

The paper recycling plant proposed for construction at Maryvale is estimated to cost approximately $90 million. Australian Paper provided estimates of the distribution of expenditure by geographical location and this was used to determine the economic impact of the construction phase using final demand analysis. The impact of the construction phase is summarised in Table 6.1 with impacts expressed in 2011 dollar values. It has been assumed that construction will occur in a twelve month period.

Table 6.1: Economic Impact of construction of the proposed paper recycling plant at Maryvale, 2011 $ values

| | Value Added $m | Household Income $m | Employment FTE |
|---|---|---|---|
| Australia | | | |
| Total Impact (incl. flow-on) | $109.5 | $56.8 | 967 |
| % of Australia | 0.01% | 0.01% | 0.01% |
| Victoria | | | |
| Total Impact (incl. flow-on) | $85.2 | $44.8 | 757 |
| % of Victoria | 0.03% | 0.03% | 0.03% |
| Gippsland | | | |
| Total Impact (incl. flow-on) | $29.1 | $15.5 | 347 |
| % of region | 0.22% | 0.25% | 0.29% |

Construction of the proposed paper recycling plant is estimated to contribute $110 million to Australia's gross domestic product and $57 million in household income when flow-on effects are taken into account. In addition, it will underpin more than 960 FTE jobs in the year of construction.

Nationally, the main industry sectors likely to be impacted by the construction of the paper recycling plant, in terms of FTE employment, are:

- construction (154 FTE);
- machinery and equipment manufacturing (154 FTE);
- financial and insurance services (112 FTE);
- professional scientific and technical services (105 FTE); and
- retail trade (42 FTE).

At the state level, the main industry sectors likely to be impacted by the construction of the paper recycling plant, in terms of FTE employment, are:

- machinery and equipment manufacturing (129 FTE);
- construction (121 FTE);
- financial and insurance services (92 FTE);
- professional, scientific and technical services (76 FTE); and
- retail trade (33 FTE).

# ECONOMIC IMPACT REPORT

Regionally, the main industry sectors likely to be impacted by the construction of the paper recycling plant, in terms of FTE employment, are:

- construction (108 FTE);
- machinery and equipment manufacturing (50 FTE);
- professional, scientific and technical services (28 FTE);
- public administration and safety (28 FTE); and
- financial and insurance services (27 FTE)>

Nationally, the main industry sectors likely to be impacted by the flow-on from the operations of the paper recycling plant, in terms of FTE employment, are:

- electricity, gas, water and waste services (53 FTE);
- retail trade (17 FTE);
- other services (17 FTE);
- professional, scientific and technical services (16 FTE); and
- accommodation and food services (14 FTE).

The impact on Victoria equates to a contribution of $85 million to gross state product and $45 million to household income when flow-on effects are taken into account. The construction project will also support approximately 760 FTE jobs.

In the Gippsland region, construction of the paper recycling plant will contribute $29 million to gross regional product and $16 million to household income when flow-on effects are included. It will also support almost 350 FTE jobs.

## 6.2 Operational Impact

The economic impact of the operations of the proposed recycling plant at Maryvale has been based on estimates of income and expenditure provided by Australian Paper. The impact of the operations of the recycling plant, expressed in 2011 dollar values is outlined in Table 6.2.

Table 6.2: Economic Impact of the operations of the proposed paper recycling plant at Maryvale, 2011 $ values

| | Value Added $m | Household Income $m | Employment FTE |
|---|---|---|---|
| Australia | | | |
| Total Impact (incl. flow-on) | $50.7 | $18.8 | 246 |
| % of Australia | 0.00% | 0.00% | 0.00% |
| Victoria | | | |
| Total Impact (incl. flow-on) | $34.9 | $12.1 | 168 |
| % of Victoria | 0.01% | 0.01% | 0.01% |
| Gippsland | | | |
| Total Impact (incl. flow-on) | $17.7 | $3.7 | 51 |
| % of region | 0.13% | 0.06% | 0.04% |

The operations of the proposed paper recycling plant will contribute an estimated $51 million to Australia's gross domestic product and $19 million in household income when flow-on effects are taken into account. In addition, it will underpin more than 240 FTE jobs.

The impact on Victoria equates to a contribution of almost $35 million to gross state product and $12 million to household income when flow-on effects are taken into account. The full operations phase will also support almost 170 FTE jobs in the state.

In the Gippsland region, operations of the paper recycling plant will contribute $18 million to gross regional product and almost $4 million to household income when flow-on effects are included. It will also support 51 FTE jobs.

Regionally, the main industry sectors likely to be impacted by the flow-on from the operations of the paper recycling plant, in terms of FTE employment, are:

- electricity, gas, water and waste services (10 FTE);
- other services (5 FTE);
- retail trade (3 FTE);
- accommodation and food services (2 FTE); and
- administrative services (2 FTE).

# 7 ADDITIONAL IMPACTS

## 7.1 Downstream Impact on distribution and freight

The preceding economic impact assessment focusses on the upstream, or purchase impacts, of Australian Paper on the Australian economy. Such impacts occur as a result of purchases of inputs to production including raw materials, energy, transport and wages of Australian Paper employees. The impacts do not include the effect of sales of Australian Paper products (downstream effects) to other businesses in the pulp, paper and converted paper product manufacturing sector, printing and publishing businesses and wholesale and retail trade.

Based on data provided by Australian Paper and the national input-output table, Australian Paper supplies approximately two-thirds of the paper purchased from domestic sources by the balance of the pulp, paper and converted paper product manufacturing sector nationally. It also supplies almost 17 per cent of paper products used in the printing sector and purchased from local suppliers. Should Australian Paper cease to exist, downstream industries would be required to import replacement purchases or reduce throughput by a similar level.

Detailed information is not available regarding the purchasing patterns of the other sectors of the national pulp, paper and converted paper product industries. It has been assumed that the proportion of imports associated with pulp and paper is similar to that exhibited by Australian Paper. Using that assumption would suggest that Australian Paper supplies 15 per cent of the paper purchased by the remainder of the sector and could therefore be said to underpin 15 per cent of the sector unless replaced by imports. This equates to a total of 3,580 FTE jobs across the country, when flow-on effects are taken into account. The majority of these are in the pulp, paper and converted paper product sector but a significant downstream impact is also felt in retail trade, accommodation and food services, transport, postal and warehousing and professional and scientific services. This equates to $297 million in household income and $567 million in industry value added when flow-on effects are included.

Similarly, assuming that the balance of the pulp, paper and converted paper product manufacturing sector has a similar pattern of expenditure on road freight transport to that exhibited by Australian Paper, the downstream industries reliant on Australian Paper for inputs are estimated to generate approximately $2 million in fuel excise net of any fuel tax credits. It should be noted however, that if those downstream industries were to replace products currently purchased from Australian Paper with equivalent imported products, the only net change to the downstream impacts would be as a result of price differentials.

## 7.2 Benefit of Australian Paper to Government Revenue

Australian Paper is a significant direct contributor to the revenues of the three levels of government: local, state and federal. The company's overall contribution to federal government revenue, in relation to employee withholdings, fuel excise and taxes on products and production amounted to approximately $50 million in 2011. In addition, contributions to Victorian and New South Wales government revenue through payroll tax was $7.24 million and $0.54 million respectively. This does not include any flow-on effects.

### Employee Withholdings

Australian Paper supplied data relating to the number of employees in each income tax bracket for the 2011 year. The median of each tax bracket was used to estimate the gross annual salaries for the Australian Paper operations. Australia Taxation Office tax rates for the 2011-2012 year were used to calculate tax withheld amounts, based on Australian Paper median gross salaries for each tax bracket. For the 2011 calendar year, it was estimated that Australian Paper contributed

just over $40 million in employee withholdings to the Australian Government.

### Fuel Excise

Australian Paper spends a significant amount of money on logistics, much of which is directed to road freight transport. The company is therefore indirectly contributing to government receipts in terms of fuel excise. In order to assess the magnitude of this government revenue, Australian Paper provided estimates of the proportion of logistics expenditure directed towards road freight transport as well as estimates of that expenditure spent on fuel. Data from the Australian Taxation Office regarding fuel excise rates and fuel tax credit rates was used to calculate the net taxation revenue generated per litre of fuel used. Data from the Australian Institute of Petroleum was used to estimate the volume of fuel used by the road freight transport companies. In total, it was estimated that Australian Paper indirectly contributed approximately $3 million in fuel excise payments, net of fuel tax credits, in 2011.

## 7.3 Scope for re-employment of Australian Paper workers

Analysing the scope for re-employment of Australian Paper workers in detail would require an in-depth survey of individuals. As it was not feasible to undertake such a survey and obtain specific data relating to age, education, occupation and income for each of Australian Paper's workers, data from the Australian Bureau of Statistics (ABS) on key socio-demographic characteristics of the pulp, paper and converted paper product manufacturing industry was extracted. These data provide an indication of the overall adaptive capacity of workers in the industry and enable assessment of the adaptive capacity of Australian Paper workers. It has been assumed that the socio-demographic characteristics of employees of Australian Paper are similar to those of pulp, paper and converted paper product manufacturing workers in general. It should also be noted that 2011 ABS census data had not been released at the time of analysis so 2006 ABS census data was used in the assessment.

The scope for re-employment of workers can be measured, in part, by their age distribution and rate of ageing, their level of education and training, and their financial capacity. Details of the assessment of adaptive capacity are provided in Appendix 3 of this report and the results are summarised in the table below.

Table 7.3: Summary of adaptive capacity of Australian Paper employees

| | Gippsland region | Illawarra region | Melbourne region |
|---|---|---|---|
| Age distribution | ↓ | ↓ | ↓ |
| Educational attainment | ↑ | ↓ | ↓ |
| Occupation skill rating | ↓ | - | ↓ |
| Income | ↑ | ↑ | ↑ |
| Industry growth | - | - | - |
| Regional labour force | ↑ | ↓ | - |
| Overall rating | ↑ | ↓ | ↓ |

Key:

↓ low scope for re-employment

↑ high scope for re-employment

\- neutral

Based on analysis of the selected characteristics employees in the Gippsland region would appear to have greater opportunity of re-employment locally than those in either the Illawarra or Melbourne regions.

# 8 CONCLUSION

At the national level, Australian Paper contributed the following from operations and capital expenditure in 2011 when flow-on effects are taken into account:

- $754 million in gross domestic product;
- $458 million in household income; and
- 5,928 FTE jobs.

The contribution to the economy of Victoria from the Melbourne operations of Australian Paper in 2011, including flow-on effects was:

- $49 million in gross domestic product;
- $67 million in household income; and
- 784 FTE jobs.

The contribution to the economy of Victoria from the operations of the Maryvale Mill in 2011, including flow-on effects was:

- $612 million in gross domestic product;
- $310 million in household income; and
- 4,224 FTE jobs.

Australian Paper makes a significant contribution to the national economy and, more particularly, to the Victorian economy and the economy of the Gippsland region where the company's principal facility is located.

The company also contributes to the state economy of New South Wales and the regional Illawarra economy through the operations of the Shoalhaven Mill.

Construction and operation of the paper recycling plant proposed for Maryvale will further increase Australian Paper's economic contribution. Not unexpectedly, the geographical area that will benefit most from both construction and operation of the proposed recycling plant in terms of percentage contribution to the economy will be the Gippsland region. It is estimated that operations of the proposed recycling plant will contribute a further 0.13 per cent to the gross regional product whilst the construction phase will inject an additional 0.22 per cent to the Gippsland region's gross regional product.

Australian Paper makes a significant contribution to Federal Government revenue through withholding taxes on employee income and, indirectly, through fuel excise (net of fuel tax credits) paid by logistics providers. It also pays approximately $7 million in taxes on products and production. It is estimated that total government receipts from these sources in 2011 approximated $50 million. In addition, contributions to Victorian and New South Wales government revenue through payroll tax was $7.24 million and $0.54 million respectively.

Furthermore, the downstream industries supplied by Australian Paper have the potential to be adversely impacted in the absence of Australian Paper. It is estimated that Australian Paper currently underpins approximately 15 per cent of the balance of the pulp, paper and converted paper product manufacturing sector nationally, equating to approximately $567 million in industry value added and 3,580 FTE jobs when flow-on effects are taken into account. In the absence of Australian Paper, unless replaced by an equivalent imported product, downstream industries could be affected detrimentally.

Any reduction in Australian Paper's operations would obviously have a direct impact on its workforce. Assessment of the adaptive capacity of employees of Australian Paper has been based on analysis of ABS data regarding age, educational attainment, occupation and income as well as Department of Education, Employment and Workplace Relations data relating to unemployment rates.

Based on analysis of the selected characteristics employees in the Gippsland region would appear to have greater opportunity of re-employment locally than those in either the Illawarra or Melbourne regions.

# AUSTRALIAN PAPER

In the Gippsland region, Australian Paper contributed 2.7 per cent of gross regional product,more than 3 per cent of household income and 2.2 per cent of FTE jobs when flow-on effects are taken into account. This equates to the following:

- $360 million in gross domestic product;
- $192 million in household income; and
- 2,684 FTE jobs.

# APPENDIX 1: METHODOLOGY

In this project WRI has used modified input-output analysis to estimate the economic impact of Australian Paper and its operations on national, state and regional economies. The impacts are measured in terms of gross domestic, gross state and gross regional product, household income and full-time equivalent jobs. Inter-industry tables have been created for the individual state and regional economies and for Australia as a whole. All impacts are measured in either dollar terms or full-time equivalent employment terms and as a percentage of the national or relevant state or regional economy.

Inter-industry models can be used for economic impact analysis, to estimate the benefits or costs generated by new initiatives on each and every sector of an economy. For example, if there is a change in the purchasing or sales pattern of any industry, the flow-on or multiplier effects on upstream industries can be calculated. Simulating Impacts on Regional Economies (SIRE) analysis was used to estimate the economic impacts. Further details about SIRE analysis are provided in Appendix 2.

The application of SIRE analysis to estimate the contribution of Australian Paper and its operations to national, state and regional economies involves four basic steps:

- Construction of appropriate national, state and regional input-output tables using the Generation of Regional Input Output Tables (GRIT) technique;
- Analysis of the value of the sales and purchases of the sector using data supplied by Australian Paper;
- Insertion of a separate sector representing the economic activities of Australian Paper; and
- Balancing of the tables using the RAS method.

## Constructing the Tables

The input-output table for this project was extracted from the Australian Bureau of Statistics (ABS) 2007-08 national input-output table using the GRIT technique developed by Professor Guy West and Professor Rod Jensen of the University of Queensland. The GRIT technique, which uses both national Australian Bureau of Statistics data and local superior data concerning the industry in question, is the most reputable method of input-output table construction in Australia and indeed elsewhere in the world. GRIT uses a series of non-survey steps to produce a prototype regional table from the national table, but provides the opportunity at various stages for the insertion of superior data. The system is “variable interference” in that the analyst is able to determine the extent to which they interfere with the mechanical processes by introducing primary or other superior data.

The GRIT system is designed to produce regional tables that are:

- Consistent in accounting terms with each other and with the national table;
- Capable of calculations to a reasonable degree of holistic accuracy; and
- Capable of being updated with minimum effort as new data becomes available.

The GRIT technique is essentially a hybrid method of deriving state and regional input-output tables from the national input-output table while at the same time allowing for the insertion of superior data (i.e. information collected from Australian Paper) at various stages in the construction of the tables.

For the Maryvale Mill and Melbourne operations, the national table was adjusted to first represent Victoria and subsequently to represent the Gippsland region (the combined statistical divisions of Gippsland and East Gippsland), using

detailed ABS data from the 2010-11 publication State Accounts (ABS Cat no. 5220.0) as well as data from the Australian Taxation Office (ATO) combined with data on income by industry of employment from the 2006 Census and quarterly data on employment by industry sector (ABS Cat. no. 6291.0.55.003).

For the Shoalhaven Mill, the national table was adjusted to represent NSW, then the Illawarra region, using the same techniques as those for Maryvale and Melbourne. The adjustments provide base tables for the 2011 calendar year. The GRIT technique derives regional input-output tables from the national input-output table using location quotients and superior data (in this case, information regarding the operations of Australian Paper) as well as regional employment and income data at various stages in the construction of the tables.

## Data Collection

The national input-output table includes only one sector for all Pulp, Paper and Converted Paper Product Manufacturing. Australian Paper provided WRI with detailed information about the company's expenditure, location of expenditure, employment and revenues. This information was used to construct a new sector in the input-output table representing the operations of Australian Paper. This was then subtracted from the Pulp, Paper and Converted Paper Product Manufacturing sector to maintain the integrity of the table.

The following data were supplied regarding the operations of Australian Paper:

### Revenue

Data on revenue received by Australian Paper were provided by staff at the company. Revenue was allocated to the region from which it was paid i.e. within the relevant state or statistical division or from outside the local area.

### Wages and Salaries

Australian Paper supplied information on the number of full-time equivalent (FTE) employees and associated wages and salaries for the 2011 year.

### Other Expenditure

Australian Paper supplied information regarding other expenditure during 2011 by industry category and the location where the purchase was made. Local expenditure was defined as that made in the immediate local area e.g. only those purchases where the expenditure was made in the East Gippsland and Gippsland statistical divisions were classed as local for the Gippsland table, with the balance being treated as imports to the region.

### Capital Expenditure

Australian Paper supplied information regarding capital expenditure during 2011 by type of expenditure and the location where the purchase was made. This one-off capital expenditure was treated as a final demand impact in the relevant tables.

## Impact Analysis

### Industry Significance

Input-output tables are frequently used to provide estimates of the significance of a particular industry or organisation in terms of its contribution to the economy. This is done by examining the effects of the organisation shutting down and

ceasing all economic activities. This method provides an estimate of the level of economic activity that can be attributed to that particular organisation, in this case Australian Paper.

### Final Demand Impacts

The impact of one-off capital expenditure was estimated as a final demand impact. Specifically, expenditure was allocated to the relevant sectors to give the estimated impacts of this expenditure including both initial and flow-on effects.

### Total Impacts

The economic impact of Australian Paper on Australia was estimated by adding the industry significance of Australian Paper to the final demand impact of capital expenditure. The impact of Australian Paper on each of the study areas was estimated in terms of:

- Value added which is equal to gross output minus intermediate inputs. Value added is equivalent to the contribution to Gross Regional Product (GRP) (the local equivalent of gross domestic product).
- Household Income which measures the benefit received by regional households from economic activity. It typically refers to compensation of employees but can also include income in return for productive activity such as, the gross mixed income of unincorporated enterprises, gross operating surplus on dwellings owned by persons, and property income receivable and transfers receivable such as social assistance benefits and non-life insurance claims.
- Employment which refers to full-time equivalent (FTE) employment and is a measure of the total level of staff resources used. The FTE of a full-time staff member is equal to 1.0. The FTE of a part-time worker will be a fraction of this depending on the relative number of hours worked.

## Comparison with previous studies

Direct comparison between the results found in this economic impact assessment of Australian Paper and its entities and previous studies should be treated with caution for a number of reasons including:

- The assessment undertaken for the 2003-04 financial year used, as the base table, the national input output table for 2001-02 published by the Australian Bureau of Statistics (ABS). That table, as well as the National and State Accounts for 2003-04, used 1993 ANZSIC classifications of industries. The current assessment for the 2011 calendar year used the 2007-08 national input output table as the base as well as National and State Accounts for 2010-11. These latter documents adopt the 2006 ANZSIC classification of industries which has some key variations from the earlier version, particularly in relation to the classification of sectors in food sales and service and repairs and maintenance. In addition, a key sector in the 1993 classification, “property and business services” has been subdivided into three sectors, but again there is no direct correlation. This has implications for the estimation of full-time equivalent employment numbers in the table and associated multiplier effects.
- The previous study was based on data supplied by Australian paper for the 2003-2004 financial year. Since then, Australian Paper has switched to reporting on a calendar year basis. As such this current assessment has inflated the 2010-11 tables mentioned above to 2011 values to allow more accurate analysis of the data supplied by Australian Paper.
- The previous study included marginal income coefficients to remove the problems associated with linearity and associated over- estimation associated with traditional input output analysis. The SIRE model used in this study also includes marginal income coefficients, although these have been updated. However, it also includes a number of other coefficients as outlined in Appendix 2.

## ANZSIC Classifications

The input-output tables used in this analysis are derived from the national input-output table which comprises 111 categories. The 2010-11 national and state tables have been aggregated to 32 categories based on the 2006 Australian and New Zealand Standard Industrial Classification (ANZSIC). The categories used in the tables are as follows:

| | |
|---|---|
| Agriculture, Forestry & Fishing | Construction |
| Coal & Oil Mining | Wholesale Trade |
| Other Mining | Retail Trade |
| Food, Beverage & Tobacco Product Manufacturing | Accommodation & Food Services |
| Textile, Leather, Clothing & Footwear Manufacturing | Transport, Postal & Warehousing |
| Wood Product Manufacturing | Information Media & Telecommunications |
| Pulp, Paper & Converted Paper Product Manufacturing | Financial & Insurance Services |
| Printing (including the Reproduction of Recorded Media) | Rental, Hiring & Real Estate Services |
| Chemical & Chemical Product Manufacturing | Ownership of Dwellings |
| Non-Metallic Mineral Product Manufacturing | Professional, Scientific & Technical Services |
| Primary Metal & Metal Product Manufacturing | Administrative & Support Services |
| Fabricated Metal Product Manufacturing | Public Administration & Safety |
| Transport Equipment Manufacturing | Education & Training |
| Machinery & Equipment Manufacturing | Health Care & Social Assistance |
| Furniture & Other Manufacturing | Arts & Recreation Services |
| Electricity, Gas, Water & Waste Services | Other Services |

# APPENDIX 2: SIRE METHODOLOGY

Economic modelling at the regional and small area level is restricted by model and data availability. Often, resource and time limitations preclude the construction of complex models such as computable general equilibrium (CGE) models, and in fact there are arguments to suggest that building a CGE model for a small region, while not invalid, may not be a very efficient use of resources in the context of the tradeoff between increased complexity and increased data 'fuzziness'.

Input output modelling is usually used in such cases since it really provides the only practical option to planners. The assumptions of the input output model are concerned almost entirely with the nature of production. Inter-industry models are based on the premise that it is possible to divide all productive activities in an economy into sectors or industries whose inter-relations can be meaningfully expressed as a set of equations. The crucial assumption in the input output model[4] is that the money value of goods and services delivered by an industry to other producing sectors is a linear and homogeneous function of the output level of the purchasing industry with supply being infinitely elastic.

This linearity assumption clearly lays simple IO models open to valid criticism. It implies a strict proportional relationship between input coefficients and output; for example, income coefficients are average propensities and employment coefficients reflect average labor productivity rates. In impact studies, this property can lead to an overestimation of the flow-on (multiplier) effects, particularly if the initial impacts are relatively modest. For example, many industries can increase output in the short term without corresponding proportional increases in wage costs and employment, particularly if there is slack capacity.

In the following section, a more general structural form of a model for simulating impacts on regional economies (SIRE) is suggested which provides for non-linearities in production in both primary and intermediate inputs.

The SIRE model shares much of the structure of the conventional input output model. Total inputs are equal to intermediate inputs plus primary inputs (labour and capital). In the conventional input-output model, the inputs purchased by each sector are a function only of the level of output of that sector. The input function is assumed linear and homogeneous of degree one, which implies constant returns to scale and no substitution between inputs.

The SIRE model departs here from the conventional input-output model by a number of steps that a) replace sets of average propensities with corresponding marginal propensities (elasticities) within the model's major linkages, and b) provide for changes in intermediate input coefficients as a function of relative price changes. There is room for variation between models and applications in the implementation and specifications of these linkages.

## Primary Inputs

The first step is to allow for non-constant returns to scale and substitution between primary input factors. Value added at factor cost is calculated based on marginal changes in output by industry. The value added elasticities are estimated econometrically for industry i using time-series data assuming a long-run equilibrium relationship between real value added at factor cost and total production.

The shares of wage (compensation of employees) and non-wage (gross operating surplus and mixed income) contributions to factor costs are assumed to be based on the same long-run relationship as that for total value added. The change in wage cost is then calculated from the marginal change in the share of wage costs in total factor costs. Gross operating surplus plus mixed income is calculated as the residual. The change in employment is calculated based on the average wage rate in each industry times the change in wages.

4 Input-output is a special case of inter-industry analysis. Inter-industry economics encompasses any methodology which takes into account the interdependence among the productive units of the economy. Input-output is only one of several methods for analysing these interdependencies.

## Household Consumption Expenditure

In a similar manner to primary inputs, total household consumption expenditure is assumed to follow long-run equilibrium relationship between real consumption and income. Ideally, consumption expenditure should be a function of disposable income and the function should also include variables such as wealth, etc. In this simplified version of the model, income is taken as wage income.

To ensure consistency between the long-run and short-run relationships, the constraint should be satisfied which gives a long-run elasticity equal to unity. The estimated short-run elasticity of consumption with respect to wage income is 0.926. Individual commodity expenditures are expressed in terms of total expenditure and are assumed to be based on the same long-run relationship as that for total expenditure. The budget shares for each commodity should remain constant in the long-run but that the short-term fluctuations are possible as income changes. Industry sourced non-wage household income is included in the other value added component of primary inputs.

## Intermediate Inputs

Intermediate input coefficients can vary because of substitution effects caused by relative price changes, or through changes in technology. Technology change is generally regarded as a long run phenomenon. Hence, in short run impact situations, price effects will be the major source of change.

The regional technology coefficient is the sum of the regional purchase coefficient and the regional import coefficient and industry output prices are a weighted average of industry local and import prices. Note that the regional direct requirements coefficients can change, even when industry technology is fixed, as a result of relative price changes.

## Import Substitution

The price model can also be used to adjust the regional purchase coefficients by calculating the substitution effect between locally produced and imported purchases. In most impact situations at the regional level, it can be assumed that changes in local production will have no or negligible effect on import prices. The Trade Weighted Index provides the base level differential between the local and import price levels. In addition, when adjusting the regional purchase coefficients, a penalty function is applied as a surrogate for capacity limitations in the case where the local price decreases relative to the import price thus resulting in increased demand for the local product.

## Model Solution

The structural equations in this type of model cannot be solved analytically, because the input coefficients vary with the endogenous variables and thus also become endogenous. Hence, the solution procedure requires the use of an iterative recursive algorithm, such as the Gauss-Seidel method.

The operational performance of the model, compared to the conventional input-output model, is determined in part by the productivity gains, both labour and capital, experienced by industries as they expand. This results in reduced unit factor costs and local product prices. If import prices are assumed to be unaffected by local production, then the reduction in local prices relative to import prices will see a shift towards locally produced inputs, thus further stimulating local production. The extent of these additional flow-on effects will not only depend on the relative shifts in local and import prices, but also the elasticity of substitution between local and imported inputs.

This has implications for the results of this type of model, particularly if compared with those from the conventional input-output model. If price effects are ignored, then we would expect that, while the output multipliers and impacts may not be

significantly different, income and employment impacts should be smaller because of the marginal coefficients associated with labour productivity. This is because many industries, especially those that are more capital intensive and can implement further productivity gains, can increase output, particularly in the short run, without corresponding proportional increases in employment and hence income payments. However, when price effects are incorporated into the model, the direction of change becomes less clear, since these potentially can generate compounding or offsetting changes. If the import substitution elasticities are inelastic, then this will reinforce the downward effects on multipliers, but if the elasticities are large (elastic) then the price effects offset the productivity gains and the multipliers and impacts could exceed those from the conventional input-output model.

# APPENDIX 3: ASSESSMENT OF SCOPE FOR RE-EMPLOYMENT OF AUSTRALIAN PAPER WORKERS

The sustainability of a workforce can be measured, in part, by its workers age distribution and rate of ageing, their level of education and training, and their financial capacity. These measures of human and financial or economic capital can indicate the ability of individuals and communities to adapt to workforce changes. Sudden changes or 'shocks' in a business or industry can impact significantly on workers and their families. Such changes might, for example, include the closing of a local manufacturing plant or the restructure of a local business. The ability of a worker to adapt and respond to a workplace change can influence their scope for re-employment and is often referred to as their adaptive capacity.

As it was not feasible to obtain specific data relating to age, education, occupation and income for each of Australian Paper's workers, data from the Australian Bureau of Statistics (ABS) on key socio-demographic characteristics of the pulp, paper and converted paper product manufacturing sector was extracted to enable assessment of the adaptive capacity of Australian Paper workers. In addition, as 2011 ABS census data had not been released at the time of analysis, 2006 ABS census data was used for the assessment.

For the purpose of this study, the adaptive capacity and scope for re-employment of Australian Paper workers was assessed in terms of the following three areas:

- Human capital - factors likely to influence a workers adaptability and scope for re-employment including age, education and occupation. Educational characteristics examined include both level of school education achieved and level of post-school education attained. Occupational characteristics have been assessed using a "skills rating" by occupation to generate an average skills rating by region as well as Department of Education, Employment and Workplace Relations (DEEWR) projections of employment growth by occupation over the next five years.
- Financial capital – weekly income of workers in the pulp, paper and converted paper product manufacturing industry. Higher incomes and low debt levels indicate higher adaptive capacity to change as workers will generally have more resources available and greater access to financial capital. Access to financial capital gives workers the security to be able to adapt to a work related relocation or sudden job loss. For the purpose of this study only weekly income was used to assess the financial capital of workers in the pulp, paper and converted paper product manufacturing industry due to difficulties involved in extracting industry specific home loan repayment data.
- Regional labour force characteristics – the relative unemployment rate locally and distribution of employment by industry sector. Historical employment growth rates by industry sector (ABS) as well as projected growth rates based on DEEWR data have also been examined.

The re-employment opportunities likely to be available have been assessed for each of the geographical regions in which Australian Paper operates.

## Gippsland region

At the 2006 Census, persons employed in the pulp, paper and converted paper product manufacturing sector were aged 44 years on average compared with an average of 41.6 years for the total workforce in the Gippsland region and 39.8 years for the entire Victorian workforce. Almost 68 per cent of employees in the pulp, paper and converted paper product manufacturing sector in the Gippsland region were aged 40 years and above compared with 58 per cent for the region's workforce as a whole and 50 per cent for the total Victorian workforce. Based on age alone, the adaptive capacity of workers in this sector would be lower than average as the ability to adapt to technological changes or retraining tends to be higher amongst younger workers who are more willing to learn or acquire new skills.

The educational characteristics of persons employed in the pulp, paper and converted paper product manufacturing sector were examined and compared with the total workforce regionally and across the state. At the 2006 Census, 12.1 per cent of persons employed in the industry in the Gippsland region had not completed Year 10 or equivalent. This is similar to the proportion for the total workforce in the Gippsland region (12.4 per cent) but substantially higher than the Victorian workforce (8.8 per cent). However, on its own it does not provide a full picture of the adaptive capacity of workers in the pulp, paper and converted paper product manufacturing sector.

Analysis of levels of post-school qualifications indicates that whilst the proportion of employees holding a university qualification is lower than the regional or state average (17.7 per cent compared with 24 per cent and 36.2 per cent respectively), the proportion holding a Certificate III and above is significantly higher. More than 60 per cent of employees in the pulp, paper and converted paper product manufacturing sector in the Gippsland region held a Certificate III and above compared with 50 per cent for the total workforce in the region and 56 per cent at the state level. As a corollary, almost 43 per cent of the Victorian workforce and 48 per cent of the Gippsland workforce had no post-school qualification compared with 39 per cent of those employed in the pulp, paper and converted paper product manufacturing sector in the Gippsland region. As educational attainment is a key component in the ability to adapt in the workforce, this would suggest that employees in the pulp, paper and converted paper product manufacturing sector in the Gippsland region have an above average adaptive capacity.

The occupational distribution of employees in the pulp, paper and converted paper product manufacturing sector in the Gippsland region indicates that the single biggest occupational category is machinery and stationary plant operators. Persons employed in such occupations may adapt well to changing to a similar job in a different industry sector such as forestry, mining or other parts of the manufacturing sector. However, an assessment of the overall skills level of employees in the pulp, paper and converted paper product manufacturing sector in the Gippsland region indicates levels lower on average than either the total Gippsland or Victorian workforce which might have a marginally negative impact on their adaptive capacity. Based on DEEWR projections of employment growth by occupation, the current distribution of employees in the pulp, paper and converted paper product manufacturing sector in the Gippsland region would be expected to experience lower growth than the average for the region or Victoria as a whole.

At the time of the 2006 Census employees in the pulp, paper and converted paper product manufacturing sector in the Gippsland region had average weekly earnings that were more than twice that of the average for the entire workforce of the Gippsland region. Their average weekly income was also approximately 75 per cent higher than the Victorian average at that time. A comparison of data provided by Australian Paper with average weekly earnings data from the ABS indicates that employees of Australian Paper in the Gippsland region continue to earn substantially more than the state average. This would suggest that employees in the pulp, paper and converted paper product manufacturing sector in the Gippsland region have an above average adaptive capacity.

It has been suggested that the majority of employees in the pulp, paper and converted paper product manufacturing sector may be more likely to find alternative employment in the forestry, mining and manufacturing sector. Over the past five years, employment in the former two sectors has grown at an above average rate in the Gippsland region whilst employment in manufacturing has experienced slower growth. Furthermore, DEEWR projects that employment in the manufacturing sector will decline nationally in the coming five years.

Data on unemployment rates suggests that, all other things being equal, employees in the Gippsland region would find less difficulty finding new employment locally. With an average unemployment rate of 5.1 per cent in the year ending June 2012, the Gippsland region has a lower level than Victoria as a whole (5.4 per cent). DEEWR projections also indicated higher growth in employment in the Gippsland region than that expected for Victoria as a whole.

An overall assessment of the adaptive capacity of workers in the pulp, paper and converted paper product manufacturing sector in the Gippsland region is provided below. No weighting has been applied to any characteristic.

| | Gippsland region |
|---|---|
| Age distribution | ↓ |
| Educational attainment | ↑ |
| Occupation skill rating | ↓ |
| Income | ↑ |
| Industry growth | - |
| Regional labour force | ↑ |
| Overall rating | ↑ |

Key:

↓ low scope for re-employment

↑ high scope for re-employment

\- neutral

Overall, the adaptive capacity of employees in the pulp, paper and converted paper product manufacturing sector in the Gippsland region is assessed as being above average, particularly in light of recent initiatives to retrain and up-skill older workers.

## Illawarra region

At the 2006 Census, persons employed in the pulp, paper and converted paper product manufacturing sector were aged 44.8 years on average compared with an average of 40.2 years for the total workforce in the Illawarra region and 39.9 years for the entire New South Wales workforce. Almost 72 per cent of employees in the pulp, paper and converted paper product manufacturing sector in the Illawarra region were aged 40 years and above compared with 54 per cent for the region's workforce as a whole and 51 per cent for the total New South Wales workforce. Based on age alone, the adaptive capacity of workers in this sector would be lower than average as the ability to adapt to technological changes or retraining tends to be higher amongst younger workers who are more willing to learn or acquire new skills.

The educational characteristics of persons employed in the pulp, paper and converted paper product manufacturing sector were examined and compared with the total workforce regionally and across the state. At the 2006 Census, 11.4 per cent of persons employed in the industry in the Illawarra region had not completed Year 10 or equivalent. This is higher than the proportion for the total workforce in the Illawarra region (10.0 per cent) and substantially higher than the New South Wales workforce (8.4 per cent). However, on its own it does not provide a full picture of the adaptive capacity of workers in the pulp, paper and converted paper product manufacturing sector.

Analysis of levels of post-school qualifications indicates that the proportion of employees holding a university qualification is lower than the regional or state average (18.2 per cent compared with 29.6 per cent and 36.3 per cent respectively). The proportion holding a Certificate III and above is also lower than the Illawarra region as a whole or the state average. Just over 52 per cent of employees in the pulp, paper and converted paper product manufacturing sector in the Illawarra region held a Certificate III and above compared with 56 per cent for the total workforce in the region and 58 per cent at the state level. As a corollary, more than 45 per cent of those employed in the pulp, paper and converted paper product manufacturing sector in the Illawarra region held no post-school qualification compared with 42 per cent for the region's workforce in total and 40 per cent of the state's workforce. As educational attainment is a key component in the ability to adapt in the workforce, this would suggest that employees in the pulp, paper and converted paper product manufacturing sector in the Illawarra region have a lower than average adaptive capacity.

# ECONOMIC IMPACT REPORT

The occupational distribution of employees in the pulp, paper and converted paper product manufacturing sector in the Illawarra region indicates that the single biggest occupational category is machinery and stationary plant operators. Persons employed in such occupations may adapt well to changing to a similar job in a different industry sector such as forestry, mining or other parts of the manufacturing sector. An assessment of the overall skills level of employees in the pulp, paper and converted paper product manufacturing sector in the Illawarra region indicates levels that are similar to the total Illawarra region and only marginally lower than the New South Wales workforce which should have minimal impact on their adaptive capacity. Based on DEEWR projections of employment growth by occupation, the current distribution of employees in the pulp, paper and converted paper product manufacturing sector in the Illawarra region would be expected to experience similar growth as that for the region and New South Wales as a whole.

At the time of the 2006 Census employees in the pulp, paper and converted paper product manufacturing sector in the Illawarra region had average weekly earnings that were 45 per cent higher than that of the average for the entire workforce of the Illawarra region. Their average weekly income was also approximately 29 per cent higher than the New South Wales average at that time. A comparison of data provided by Australian Paper with average weekly earnings data from the ABS indicates that employees of Australian Paper in the Illawarra region continue to earn substantially more than the state average. This would suggest that employees in the pulp, paper and converted paper product manufacturing sector in the Illawarra region have an above average adaptive capacity.

It has been suggested that the majority of employees in the pulp, paper and converted paper product manufacturing sector may be more likely to find alternative employment in the forestry, mining and manufacturing sector. Over the past five years, employment in the former two sectors has grown at an above average rate in the Illawarra region whilst employment in manufacturing has experienced slower growth. Furthermore, DEEWR projects that employment in the manufacturing sector will decline nationally in the coming five years.

Data on unemployment rates suggests that, all other things being equal, employees in the Illawarra region would find more difficulty finding new employment locally. With an average unemployment rate of 6.7 per cent in the year ending June 2012, the Illawarra region has a significantly higher level than New South Wales as a whole (5.2 per cent).

An overall assessment of the adaptive capacity of workers in the pulp, paper and converted paper product manufacturing sector in the Illawarra region is provided below. No weighting has been applied to any characteristic.

| | Illawarra region |
|---|---|
| Age distribution | ↓ |
| Educational attainment | ↓ |
| Occupation skill rating | - |
| Income | ↑ |
| Industry growth | - |
| Regional labour force | ↓ |
| Overall rating | ↓ |

Key:

| | |
|---|---|
| ↓ | low scope for re-employment |
| ↑ | high scope for re-employment |
| - | neutral |

Overall, the adaptive capacity of employees in the pulp, paper and converted paper product manufacturing sector in the Illawarra region is assessed as being below average, particularly for those seeking re-employment locally.

## Melbourne region

At the 2006 Census, persons employed in the pulp, paper and converted paper product manufacturing sector were aged 42.3 years on average compared with an average of 39.4 years for Melbourne statistical division and 39.8 years for the entire Victorian workforce. Almost 59 per cent of employees in the pulp, paper and converted paper product manufacturing sector in the Melbourne region were aged 40 years and above compared with 49 per cent for the region's workforce as a whole and 50 per cent for the total Victorian workforce. Based on age alone, the adaptive capacity of workers in this sector would be lower than average as the ability to adapt to technological changes or retraining tends to be higher amongst younger workers who are more willing to learn or acquire new skills.

The educational characteristics of persons employed in the pulp, paper and converted paper product manufacturing sector were examined and compared with the total workforce regionally and across the state. At the 2006 Census, 12.8 per cent of persons employed in the industry in the Melbourne region had not completed Year 10 or equivalent. This is higher than the proportion for the total workforce in the Melbourne region (7.4 per cent) and substantially higher than the Victorian workforce (8.8 per cent). However, on its own it does not provide a full picture of the adaptive capacity of workers in the pulp, paper and converted paper product manufacturing sector.

Analysis of levels of post-school qualifications indicates that the proportion of employees holding a university qualification is lower than the regional or state average (21.7 per cent compared with 40.9 per cent and 36.2 per cent respectively). The proportion holding a Certificate III and above is also lower than the Melbourne region as a whole or the state average. Just over 44 per cent of employees in the pulp, paper and converted paper product manufacturing sector in the Melbourne region held a Certificate III and above compared with 58 per cent for the total workforce in the region and 56 per cent at the state level. As a corollary, almost 55 per cent of those employed in the pulp, paper and converted paper product manufacturing sector in the Melbourne region held no post-school qualification compared with 41 per cent for the region's workforce in total and 43 per cent of the state's workforce. As educational attainment is a key component in the ability to adapt in the workforce, this would suggest that employees in the pulp, paper and converted paper product manufacturing sector in the Melbourne region have a lower than average adaptive capacity.

The occupational distribution of employees in the pulp, paper and converted paper product manufacturing sector in the Melbourne region indicates that the single biggest occupational category is machinery and stationary plant operators. Persons employed in such occupations may adapt well to changing to a similar job in a different industry sector such as forestry, mining or other parts of the manufacturing sector. An assessment of the overall skills level of employees in the pulp, paper and converted paper product manufacturing sector in the Melbourne region indicates levels that are lower on average than either the total Melbourne or Victorian workforce which might have a marginally negative impact on their adaptive capacity. Based on DEEWR projections of employment growth by occupation, the current distribution of employees in the pulp, paper and converted paper product manufacturing sector in the Melbourne region would be expected to experience similar growth as that for the region and Victoria as a whole.

At the time of the 2006 Census employees in the pulp, paper and converted paper product manufacturing sector in the Melbourne region had average weekly earnings that were 15 per cent higher than that of the average for the entire workforce of the Melbourne region. Their average weekly income was also approximately 22 per cent higher than the Victorian average at that time. A comparison of data provided by Australian Paper with average weekly earnings data from the ABS indicates that employees of Australian Paper in the Melbourne region continue to earn substantially more than the state average. This would suggest that employees in the pulp, paper and converted paper product manufacturing sector in the Melbourne region have an above average adaptive capacity.

# ECONOMIC IMPACT REPORT

It has been suggested that the majority of employees in the pulp, paper and converted paper product manufacturing sector may be more likely to find alternative employment in the forestry, mining and manufacturing sector. Over the past five years, employment in the former two sectors has grown at an above average rate in the Melbourne region whilst employment in manufacturing has experienced slower growth. Furthermore, DEEWR projects that employment in the manufacturing sector will decline nationally in the coming five years.

Data on unemployment rates suggests that, all other things being equal, employees in the Melbourne region would have no more difficulty finding new employment locally than any other worker. With an average unemployment rate of 5.4 per cent in the year ending June 2012, the Melbourne region is identical to Victoria as a whole.

An overall assessment of the adaptive capacity of workers in the pulp, paper and converted paper product manufacturing sector in the Illawarra region is provided below. No weighting has been applied to any characteristic.

| | Melbourne region |
|---|---|
| Age distribution | ↓ |
| Educational attainment | ↓ |
| Occupation skill rating | ↓ |
| Income | ↑ |
| Industry growth | - |
| Regional labour force | - |
| Overall rating | ↓ |

Key:

↓ low scope for re-employment

↑ high scope for re-employment

\- neutral

Overall, the adaptive capacity of employees in the pulp, paper and converted paper product manufacturing sector in the Melbourne region is assessed as being below average, particularly for those seeking re-employment locally.

# WESTERN RESEARCH INSTITUTE

WRI is a regional development research organisation located in Bathurst, New South Wales. WRI holds a wealth of knowledge on employment, business development and investment issues affecting regional Australia. It has worked with Commonwealth, State and Local Governments and industry groups on numerous investment and development programs in regional areas. WRI has strong credentials in business and commercial market consulting and applied economic modelling including input-output analysis, shift-share, agribusiness and regional socio-economic surveys and analysis.

## Mr Tom Murphy – Chief Executive Officer

BEc. (Hons I) MSc. (Econ) Lancaster

Tom is currently Chief Executive Officer of WRI and has held this position since its inception in February 1999. Under Tom's leadership WRI has completed over 300 projects for all levels of government and government departments, industry groups, businesses, financial institutions, regional development boards and community groups, and educational institutions including universities, TAFE and schools in NSW, Victoria and Queensland.

Tom has previously held academic positions as senior lecturer in Economics and Director of the Regional Economics Research Unit in the Faculty of Commerce, Charles Sturt University, Bathurst and positions at the University of New England and Macquarie University. He has also held the positions of Economic Analyst with the Office of National Assessments in Canberra, with responsibility for the ASEAN economies and Senior Consultant with KPMG Peat Marwick Management Consultants.

Tom's particular expertise is in regional economics and labour markets, and he has published in a wide range of economic subject areas in refereed and non-refereed articles, books and textbooks. Tom has a high local media profile in Western NSW for economic and social commentary and also features regularly on national radio particularly in connection to the quarterly agribusiness survey conducted for Westpac Australia wide.

## Ms Lesley Arthur – Senior Research Officer

BSc. Bio Sc (Hons), MSc Tech Ec.

Lesley is an experienced researcher with particular expertise in the areas of inter-industry modelling, including input-output analysis, statistical analysis, market analysis and forecasting. Since joining WRI Lesley has been involved in a diverse range of projects encompassing a variety of industry sectors. Her strengths are in strong analytical skills and in the preparation of concise reports. Prior to joining WRI, Lesley was a Director with KPMG Peat Marwick Management Consultants in Australia and Malaysia.

## Ms Danielle Ranshaw – Senior Research Officer

BEc&Fin NSW

Danielle's experience in project management in the information technology sector combined with qualifications in economics and finance provides a solid background for WRI projects. With skills in systems design and development, Danielle has been able to extend WRI's capability in developing robust and increasingly complex systems to support research fieldwork. Additionally, Danielle has extensive experience in business process analysis, performance planning and review, report writing and project planning.

## Ms Kath Behrendt - Senior Research Officer

BFA, GradDip AgEc, MEcST (Economics) (UNE)

Kath has a professional background in agricultural economics, resource economics and accounting. She has worked in both the private and public sectors and has extensive experience in agribusiness planning and development, economic and financial analysis, and small business management. Kath's strengths lie in bioeconomic modelling, cost-benefit analysis, and efficiency and productivity analysis.

## Ms Dale Curran – Executive Officer

BA ANU

Dale is responsible for all administrative processes at WRI including executive support, finance, management of the Board of Directors and maintenance of policies. She has worked in a variety of roles at WRI, including Fieldwork Supervisor and Research Assistant, and has worked on several community and business surveys. Dale brings a high level of organisational skill to her role as Executive Officer.

# AUSTRALIAN PAPER

**PUBLIC FILE**

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# Attachment B-2.1.1

## ABS Australian import statistics

# PUBLIC FILE

## Total Subject Goods Imports

Data from ABS via TradeData

### A4 White

| | | | Sep-09 | Dec-09 | Mar-10 | Jun-10 | Sep-10 | Dec-10 | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **4802561003** | **Unctd wfree; 40-89gsm, cutsz A4, white** | **Qty (t/mth)** | 8,838 | 8,931 | 8,538 | 6,677 | 8,889 | 7,599 | 7,838 | 8,382 | 12,855 | 8,026 | 8,158 | 8,489 | 11,993 | 8,192 | 10,418 | 9,614 |
| | (may include very small volume <70gsm) | **FOB Value $/mth** | 9,629,684 | 8,950,110 | 8,412,160 | 6,818,581 | 9,801,723 | 7,798,193 | 7,925,359 | 8,695,084 | 12,620,662 | 8,243,484 | 8,051,792 | 8,465,290 | 11,796,755 | 8,011,713 | 9,933,059 | 9,306,048 |
| | | **FOB Price ($/t)** | 1,090 | 1,002 | 985 | 1,021 | 1,103 | 1,026 | 1,011 | 1,037 | 982 | 1,027 | 987 | 997 | 984 | 978 | 953 | 968 |
| | | **CIF Value $/mth** | 10,363,457 | 9,574,810 | 9,077,114 | 7,389,750 | 10,559,092 | 8,379,826 | 8,496,878 | 9,348,666 | 13,558,517 | 8,893,837 | 8,707,237 | 9,166,922 | 12,706,669 | 8,619,874 | 10,749,929 | 10,106,321 |
| | | **CIF Price ($/t)** | 1,173 | 1,072 | 1,063 | 1,107 | 1,188 | 1,103 | 1,084 | 1,115 | 1,055 | 1,108 | 1,067 | 1,080 | 1,060 | 1,052 | 1,032 | 1,051 |
| **4802561007** | **Unctd wfree; 90-150gsm, cutsz A4 white** | **Qty (t/mth)** | 135 | 144 | 175 | 111 | 148 | 182 | 137 | 125 | 113 | 122 | *end of series* | | | | | |
| | (includes small volume >100gsm) | **FOB Value $/mth** | 306,073 | 310,568 | 354,466 | 220,556 | 260,486 | 375,368 | 261,952 | 230,475 | 205,239 | 240,339 | | | | | | |
| | | **FOB Price ($/t)** | 2,271 | 2,151 | 2,029 | 1,990 | 1,764 | 2,065 | 1,915 | 1,840 | 1,814 | 1,970 | | | | | | |
| | | **CIF Value $/mth** | 332,743 | 335,302 | 383,408 | 240,851 | 286,437 | 407,207 | 284,564 | 251,234 | 224,167 | 258,877 | | | | | | |
| | | **CIF Price ($/t)** | 2,469 | 2,322 | 2,194 | 2,173 | 1,940 | 2,240 | 2,080 | 2,006 | 1,982 | 2,122 | | | | | | |
| **4802561009** | **Unctd wfree; 90-150gsm, cutsz A4** | **Qty (t/mth)** | | | | | | | | | | *start of series* | 54 | 102 | 118 | 92 | 74 | 74 |
| | (includes tints from 2012) | **FOB Value $/mth** | | | | | | | | | | | 99,804 | 182,338 | 214,462 | 169,472 | 128,154 | 136,713 |
| | | **FOB Price ($/t)** | | | | | | | | | | | 1,862 | 1,783 | 1,815 | 1,839 | 1,731 | 1,838 |
| | | **CIF Value $/mth** | | | | | | | | | | | 108,699 | 194,658 | 231,277 | 182,160 | 138,457 | 147,912 |
| | | **CIF Price ($/t)** | | | | | | | | | | | 2,028 | 1,904 | 1,957 | 1,976 | 1,870 | 1,989 |

### A3 White (+ small volume of tints and other sizes > A4)

| | | | Sep-09 | Dec-09 | Mar-10 | Jun-10 | Sep-10 | Dec-10 | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **4802569019** | **Unctd wfree; 40-150gsm, >435x297mm&>36x15cm, cutsz** | **Qty (t/mth)** | | | | | | | | | | *start of series* | 1,411 | 1,546 | 1,953 | 1,235 | 503 | 368 |
| | (Includes tints and some other low volume sizes) | **FOB Value $/mth** | | | | | | | | | | | 1,496,997 | 1,645,119 | 2,214,469 | 1,485,230 | 565,566 | 413,109 |
| | | **FOB Price ($/t)** | | | | | | | | | | | 1,061 | 1,064 | 1,134 | 1,203 | 1,125 | 1,122 |
| | | **CIF Value $/mth** | | | | | | | | | | | 1,646,489 | 1,801,803 | 2,427,928 | 1,628,604 | 610,913 | 452,549 |
| | | **CIF Price ($/t)** | | | | | | | | | | | 1,167 | 1,166 | 1,243 | 1,319 | 1,215 | 1,229 |
| **4802569030** | **Unctd wfree; 40-150gsm, cutsz A3** | **Qty (t/mth)** | 405 | 555 | 446 | 312 | 522 | 419 | 323 | 422 | 631 | 541 | *end of series* | | | | | |
| | (includes tints) | **FOB Value $/mth** | 557,987 | 693,387 | 557,160 | 471,997 | 743,506 | 635,279 | 424,750 | 544,340 | 733,016 | 654,854 | | | | | | |
| | | **FOB Price ($/t)** | 1,378 | 1,250 | 1,250 | 1,512 | 1,425 | 1,518 | 1,317 | 1,291 | 1,162 | 1,210 | | | | | | |
| | | **CIF Value $/mth** | 599,275 | 742,293 | 601,842 | 517,780 | 805,794 | 684,588 | 464,833 | 598,405 | 803,002 | 712,021 | | | | | | |
| | | **CIF Price ($/t)** | 1,479 | 1,338 | 1,350 | 1,659 | 1,544 | 1,636 | 1,441 | 1,419 | 1,273 | 1,316 | | | | | | |

### Total Subject Goods Imports

| | | | Sep-09 | Dec-09 | Mar-10 | Jun-10 | Sep-10 | Dec-10 | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (includes small volume of tints, sizes other than A4, A3 | **Qty (t/mth)** | 9,378 | 9,630 | 9,158 | 7,100 | 9,559 | 8,199 | 8,297 | 8,929 | 13,599 | 8,689 | 9,622 | 10,137 | 14,064 | 9,519 | 10,995 | 9,934 |
| | and <70gsm, >100 gsm) | **FOB Value $/mth** | 10,493,744 | 9,954,065 | 9,323,785 | 7,511,134 | 10,805,715 | 8,808,840 | 8,612,061 | 9,469,898 | 13,558,917 | 9,138,677 | 9,648,594 | 10,292,748 | 14,225,686 | 9,666,415 | 10,626,779 | 9,718,166 |
| | | **FOB Price ($/t)** | 1,119 | 1,034 | 1,018 | 1,058 | 1,130 | 1,074 | 1,038 | 1,061 | 997 | 1,052 | 1,003 | 1,015 | 1,012 | 1,015 | 967 | 978 |
| | | **CIF Value $/mth** | 11,295,475 | 10,652,405 | 10,062,363 | 8,148,381 | 11,651,323 | 9,471,621 | 9,246,275 | 10,198,305 | 14,585,686 | 9,864,735 | 10,462,425 | 11,163,383 | 15,365,874 | 10,430,639 | 11,499,298 | 10,555,933 |
| | | **CIF Price ($/t)** | 1,204 | 1,106 | 1,099 | 1,148 | 1,219 | 1,155 | 1,114 | 1,142 | 1,073 | 1,135 | 1,087 | 1,101 | 1,093 | 1,096 | 1,046 | 1,063 |

# PUBLIC FILE

## Subject Goods Imports from China

Data from ABS via TradeData

### A4 White

| | | | Sep-09 | Dec-09 | Mar-10 | Jun-10 | Sep-10 | Dec-10 | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4802561003 | **Unctd wfree; 40-89gsm, cutsz A4, white** | **Qty (t/mth)** | 2,717 | 3,085 | 2,746 | 2,710 | 2,704 | 2,133 | 1,958 | 2,932 | 3,708 | 3,473 | 4,397 | 4,975 | 6,141 | 5,037 | 5,176 | 5,846 |
| | (may include very small volume <70gsm) | **FOB Value $/mth** | 2,929,585 | 3,242,145 | 2,784,244 | 2,789,379 | 2,990,486 | 2,193,673 | 1,886,472 | 2,767,619 | 3,557,669 | 3,482,607 | 4,172,362 | 4,770,252 | 5,907,986 | 4,742,895 | 4,840,127 | 5,517,916 |
| | | **FOB Price ($/t)** | 1,078 | 1,051 | 1,014 | 1,029 | 1,106 | 1,028 | 963 | 944 | 959 | 1,003 | 949 | 959 | 962 | 942 | 935 | 944 |
| | | **CIF Value $/mth** | 3,216,187 | 3,510,663 | 3,056,807 | 3,077,558 | 3,291,065 | 2,411,889 | 2,078,301 | 3,043,751 | 3,904,224 | 3,799,909 | 4,549,670 | 5,205,093 | 6,422,512 | 5,119,919 | 5,266,969 | 6,011,288 |
| | | **CIF Price ($/t)** | 1,184 | 1,138 | 1,113 | 1,135 | 1,217 | 1,131 | 1,061 | 1,038 | 1,053 | 1,094 | 1,035 | 1,046 | 1,046 | 1,016 | 1,018 | 1,028 |
| 4802561007 | **Unctd wfree; 90-150gsm, cutsz A4 white** | **Qty (t/mth)** | 3 | 6 | 2 | 3 | 2 | 10 | 1 | | | 2 | *end of series* | | | | | |
| | (includes small volume >100gsm) | **FOB Value $/mth** | 6,005 | 13,619 | 2,872 | 7,765 | 5,225 | 7,173 | 2,547 | | | 3,634 | | | | | | |
| | | **FOB Price ($/t)** | 2,157 | 2,155 | 1,853 | 2,450 | 2,500 | 711 | 1,959 | | | 1,943 | | | | | | |
| | | **CIF Value $/mth** | 6,301 | 14,608 | 3,033 | 8,091 | 5,447 | 7,624 | 2,657 | | | 3,715 | | | | | | |
| | | **CIF Price ($/t)** | 2,264 | 2,312 | 1,957 | 2,552 | 2,606 | 756 | 2,044 | | | 1,987 | | | | | | |
| 4802561009 | **Unctd wfree; 90-150gsm, cutsz A4** | **Qty (t/mth)** | | | | | | | | | | *start of series* | | 2 | | 1 | 8 | 1 |
| | (includes tints from 2012) | **FOB Value $/mth** | | | | | | | | | | | | 1,104 | | 1,762 | 11,348 | 1,228 |
| | | **FOB Price ($/t)** | | | | | | | | | | | | 566 | | 2,148 | 1,468 | 1,754 |
| | | **CIF Value $/mth** | | | | | | | | | | | | 1,191 | | 1,835 | 12,397 | 1,660 |
| | | **CIF Price ($/t)** | | | | | | | | | | | | 611 | | 2,237 | 1,604 | 2,371 |

### A3 White (+ some tints and other sizes > A4

| | | | Sep-09 | Dec-09 | Mar-10 | Jun-10 | Sep-10 | Dec-10 | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 4802569019 | **Unctd wfree; 40-150gsm, >435x297mm&>36x15cm, cutsz** | **Qty (t/mth)** | | | | | | | | | | *start of series* | 156 | 208 | 230 | 315 | 224 | 201 |
| | (Includes tints and some other low volume sizes) | **FOB Value $/mth** | | | | | | | | | | | 153,962 | 211,267 | 239,370 | 354,584 | 222,134 | 127,823 |
| | | **FOB Price ($/t)** | | | | | | | | | | | 989 | 1,016 | 1,040 | 1,127 | 993 | 636 |
| | | **CIF Value $/mth** | | | | | | | | | | | 172,229 | 235,770 | 264,851 | 382,315 | 245,645 | 144,596 |
| | | **CIF Price ($/t)** | | | | | | | | | | | 1,106 | 1,134 | 1,151 | 1,215 | 1,099 | 719 |
| 4802569030 | **Unctd wfree; 40-150gsm, cutsz A3** | **Qty (t/mth)** | 108 | 107 | 77 | 70 | 79 | 72 | 66 | 125 | 209 | 168 | *end of series* | | | | | |
| | (includes tints) | **FOB Value $/mth** | 124,758 | 122,618 | 84,803 | 73,975 | 91,282 | 87,990 | 65,265 | 122,814 | 210,971 | 170,860 | | | | | | |
| | | **FOB Price ($/t)** | 1,154 | 1,148 | 1,096 | 1,056 | 1,160 | 1,220 | 993 | 986 | 1,008 | 1,015 | | | | | | |
| | | **CIF Value $/mth** | 138,670 | 133,032 | 93,694 | 83,425 | 103,514 | 98,106 | 74,142 | 137,788 | 235,693 | 189,321 | | | | | | |
| | | **CIF Price ($/t)** | 1,283 | 1,246 | 1,211 | 1,191 | 1,315 | 1,360 | 1,128 | 1,106 | 1,126 | 1,124 | | | | | | |

### Total Subject Goods Imports from China

| | | | Sep-09 | Dec-09 | Mar-10 | Jun-10 | Sep-10 | Dec-10 | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | (includes small volume of tints, sizes other than A4, A3 | **Qty (t/mth)** | 2,828 | 3,198 | 2,825 | 2,784 | 2,784 | 2,215 | 2,025 | 3,056 | 3,917 | 3,643 | 4,553 | 5,185 | 6,371 | 5,353 | 5,407 | 6,047 |
| | and <70gsm, >100 gsm) | **FOB Value $/mth** | 3,060,348 | 3,378,382 | 2,871,919 | 2,871,119 | 3,086,993 | 2,288,836 | 1,954,285 | 2,890,433 | 3,768,640 | 3,657,101 | 4,326,324 | 4,982,623 | 6,147,356 | 5,099,240 | 5,073,609 | 5,646,966 |
| | | **FOB Price ($/t)** | 1,082 | 1,056 | 1,017 | 1,031 | 1,109 | 1,033 | 965 | 946 | 962 | 1,004 | 950 | 961 | 965 | 953 | 938 | 934 |
| | | **CIF Value $/mth** | 3,361,158 | 3,658,303 | 3,153,534 | 3,169,074 | 3,400,026 | 2,517,619 | 2,155,101 | 3,181,539 | 4,139,917 | 3,992,946 | 4,721,899 | 5,442,054 | 6,687,364 | 5,504,068 | 5,525,011 | 6,157,544 |
| | | **CIF Price ($/t)** | 1,189 | 1,144 | 1,116 | 1,138 | 1,221 | 1,137 | 1,064 | 1,041 | 1,057 | 1,096 | 1,037 | 1,050 | 1,050 | 1,028 | 1,022 | 1,018 |

# Attachment B-2.1.2

## Chinese export statistics

# Exports from China

**Data supplied by TradeData**

**HS4802** UNCOATED PAPER AND PAPERBOARD, OF A KIND USED FOR WRITING, PRINTING OR OTHER GRAPHIC PURPOSES, AND NON PERFORATED PUNCH-CARDS AND PUNCH TAPE PAPER, IN ROLLS SHEETS, OF ANY SIZE, OTHER THAN PAPER OF 4801 OR 4803 HAND-MADE PAPER AND PAPERBOARD

**HS4802.5** Other paper and paperboard, not containing fibres obtained by a mechanical or chemi-mechanical process or of which not more than 10% by weight of the total fibre content consists of such fibres

## Cut Sheet 40≤gsm≤150

**HS4802.56** Weighing 40 g/m2 or more but not more than 150 g/m2, in sheets with one side not exceeding 435 mm and the other side not exceeding 297 mm, in the unfolded state

**(Raw Monthly Data)**

| HS 48025600 | Jun-09 | Jul-09 | Aug-09 | Sep-09 | Oct-09 | Nov-09 | Dec-09 | Jan-10 | Feb-10 | Mar-10 | Apr-10 | May-10 | Jun-10 | Jul-10 | Aug-10 | Sep-10 | Oct-10 | Nov-10 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum of Quantity (kg) | 1,844,023 | 2,389,281 | 2,870,054 | 3,583,323 | 3,103,701 | 4,218,855 | 1,850,504 | 3,257,509 | 2,844,972 | 2,347,381 | 2,980,173 | 1,922,497 | 3,130,346 | 3,215,489 | 2,725,701 | 3,375,455 | 2,971,117 | 1,898,619 |
| Sum of Value (USD FOB) | 1,526,044 | 2,188,877 | 2,513,258 | 3,192,637 | 2,410,000 | 3,563,099 | 1,754,568 | 3,195,548 | 2,523,157 | 1,943,758 | 2,526,039 | 1,680,412 | 2,825,628 | 2,938,466 | 2,727,109 | 3,382,838 | 2,752,588 | 1,790,916 |
| **USD/tonne** | **$ 828** | **$ 916** | **$ 876** | **$ 891** | **$ 776** | **$ 845** | **$ 948** | **$ 981** | **$ 887** | **$ 828** | **$ 848** | **$ 874** | **$ 903** | **$ 914** | **$ 1,001** | **$ 1,002** | **$ 926** | **$ 943** |

| HS 48025600 | Dec-10 | Jan-11 | Feb-11 | Mar-11 | Apr-11 | May-11 | Jun-11 | Jul-11 | Aug-11 | Sep-11 | Oct-11 | Nov-11 | Dec-11 | Jan-12 | Feb-12 | Mar-12 | Apr-12 | May-12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum of Quantity (kg) | 1,495,223 | 2,234,080 | 1,729,768 | 2,467,115 | 2,419,109 | 4,068,524 | 2,248,998 | 3,566,624 | 3,081,310 | 5,132,324 | 4,246,877 | 3,392,384 | 3,507,655 | 4,062,906 | 3,362,600 | 5,328,114 | 6,692,196 | 5,165,691 |
| Sum of Value (USD FOB) | 1,494,959 | 2,123,082 | 1,660,132 | 2,493,421 | 2,448,635 | 4,132,612 | 2,350,128 | 3,653,485 | 3,219,245 | 5,645,434 | 4,705,887 | 3,534,992 | 3,630,709 | 4,138,168 | 3,304,410 | 5,102,313 | 6,517,381 | 5,006,443 |
| **USD/tonne** | **$ 1,000** | **$ 950** | **$ 960** | **$ 1,011** | **$ 1,012** | **$ 1,016** | **$ 1,045** | **$ 1,024** | **$ 1,045** | **$ 1,100** | **$ 1,108** | **$ 1,042** | **$ 1,035** | **$ 1,019** | **$ 983** | **$ 958** | **$ 974** | **$ 969** |

| HS 48025600 | Jun-12 | Jul-12 | Aug-12 | Sep-12 | Oct-12 | Nov-12 | Dec-12 | Jan-13 | Feb-13 | Mar-13 | Apr-13 | May-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Sum of Quantity (kg) | 5,391,025 | 6,085,524 | 7,502,215 | 5,490,521 | 4,966,717 | 4,757,458 | 6,603,413 | 3,973,904 | 4,886,008 | 5,567,751 | 5,890,847 | 6,897,590 | 5,021,988 |
| Sum of Value (USD FOB) | 5,286,122 | 5,916,743 | 7,354,949 | 7,354,949 | 5,242,143 | 4,931,501 | 6,668,227 | 3,973,548 | 4,562,520 | 5,060,163 | 5,521,198 | 6,546,841 | 4,426,612 |
| **USD/tonne** | **$ 981** | **$ 972** | **$ 980** | **$ 1,340** | **$ 1,055** | **$ 1,037** | **$ 1,010** | **$ 1,000** | **$ 934** | **$ 909** | **$ 937** | **$ 949** | **$ 881** |

## Quarterly Data

***Dec-Feb Mar-May Jun-Aug Sep-Nov quarters to allow 1 month shipping delay to Australia***

**(Calculated Data)**

| Export quarter | Aug-09 | Nov-09 | Feb-10 | May-10 | Aug-10 | Nov-10 | Feb-11 | May-11 | Aug-11 | Nov-11 | Feb-12 | May-12 | Aug-12 | Nov-12 | Feb-13 | May-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Corresponding Import quarter* | *Sep-09* | *Dec-09* | *Mar-10* | *Jun-10* | *Sep-10* | *Dec-10* | *Mar-11* | *Jun-11* | *Sep-11* | *Dec-11* | *Mar-12* | *Jun-12* | *Sep-12* | *Dec-12* | *Mar-13* | *Jun-13* |
| **Monthly Qty (t)** | 2,367.79 | 3,635.29 | 2,651.00 | 2,416 68 | 3,023.85 | 2,748.40 | 1,819 69 | 2,984.92 | 2,965.64 | 4,257 20 | 3,785.28 | 5,728.67 | 6,326.25 | 5,071.57 | 5,154.44 | 6,118.73 |
| **FOB Value (USD)** | 2,076,060 | 3,055,245 | 2,491,091 | 2,050,070 | 2,830,401 | 2,642,114 | 1,759,391 | 3,024,889 | 3,074,286 | 4,628,771 | 3,884,439 | 5,542,046 | 6,185,938 | 5,842,864 | 5,068,098 | 5,709,401 |
| **FOB Price (USD/t)** | $ 877 | $ 840 | $ 940 | $ 848 | $ 936 | $ 961 | $ 967 | $ 1,013 | $ 1,037 | $ 1,087 | $ 1,026 | $ 967 | $ 978 | $ 1,152 | $ 983 | $ 933 |
| **USD/A$** | 0.8327 | 0 9107 | 0.9044 | 0.8823 | 0.9034 | 0.9876 | 1.0047 | 1.0619 | 1.0492 | 1 0119 | 1.0510 | 1.0096 | 1 0385 | 1.0387 | 1.0387 | 0.9863 |
| **FOB Value (A$)** | 2,493,249 | 3,354,996 | 2,754,468 | 2,323,543 | 3,132,921 | 2,675,365 | 1,751,191 | 2,848,462 | 2,930,068 | 4,574,246 | 3,695,991 | 5,489,241 | 5,956,725 | 5,625,428 | 4,879,278 | 5,788,697 |
| **FOB Price (A$/t)** | $ 1,053 | $ 923 | $ 1,039 | $ 961 | $ 1,036 | $ 973 | $ 962 | $ 954 | $ 988 | $ 1,074 | $ 976 | $ 958 | $ 942 | $ 1,109 | $ 947 | $ 946 |

# Attachment B-2.1.3

## Comparison between ABS Australian import statistics and Chinese export statistics

# PUBLIC FILE

## Australian 480256 Imports from China

**ABS Statistics** **Quarterly**

| Import Quarter | | Sep-09 | Dec-09 | Mar-10 | Jun-10 | Sep-10 | Dec-10 | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Quantity | t/mth | 2,834 | 3,257 | 2,824 | 2,782 | 2,805 | 2,218 | 2,048 | 3,059 | 3,927 | 3,672 | 4,554 | 5,189 | 6,387 | 5,364 | 5,452 | 6,425 |
| FOB Value | A$/mth | 3,066,821 | 3,440,931 | 2,870,548 | 2,866,733 | 3,114,781 | 2,297,592 | 1,979,241 | 2,895,530 | 3,781,036 | 3,705,026 | 4,328,510 | 4,991,546 | 6,175,969 | 5,116,780 | 5,121,126 | 5,675,393 |
| FOB Price | A$/t | 1,082 | 1,056 | 1,016 | 1,030 | 1,111 | 1,036 | 966 | 947 | 963 | 1,009 | 951 | 962 | 967 | 954 | 939 | 883 |

## Chinese 480256 Exports from China to Australia

**Chinese Statistics via TradeData** **Quarterly** ***quarters displaced 1 month to allow for typical shipping delay to Australia***

| Export quarter` | | Aug-09 | Nov-09 | Feb-10 | May-10 | Aug-10 | Nov-10 | Feb-11 | May-11 | Aug-11 | Nov-11 | Feb-12 | May-12 | Aug-12 | Nov-12 | Feb-13 | May-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| *Corresponding Import quarter* | | *Sep-09* | *Dec-09* | *Mar-10* | *Jun-10* | *Sep-10* | *Dec-10* | *Mar-11* | *Jun-11* | *Sep-11* | *Dec-11* | *Mar-12* | *Jun-12* | *Sep-12* | *Dec-12* | *Mar-13* | *Jun-13* |
| Quantity | t/mth | 2,368 | 3,635 | 2,651 | 2,417 | 3,024 | 2,748 | 1,820 | 2,985 | 2,966 | 4,257 | 3,785 | 5,729 | 6,326 | 5,072 | 5,154 | 6,119 |
| FOB Value | USD/mth | 2,076,060 | 3,055,245 | 2,491,091 | 2,050,070 | 2,830,401 | 2,642,114 | 1,759,391 | 3,024,889 | 3,074,286 | 4,628,771 | 3,884,439 | 5,542,046 | 6,185,938 | 5,842,864 | 5,068,098 | 5,709,401 |
| FOB Price | USD/t | $ 877 | $ 840 | $ 940 | $ 848 | $ 936 | $ 961 | $ 967 | $ 1,013 | $ 1,037 | $ 1,087 | $ 1,026 | $ 967 | $ 978 | $ 1,152 | $ 983 | $ 933 |
| USD/A$ | | 0.8327 | 0.9107 | 0.9044 | 0.8823 | 0.9034 | 0.9876 | 1.0047 | 1.0619 | 1.0492 | 1.0119 | 1.0510 | 1 0096 | 1.0385 | 1.0387 | 1 0387 | 0.9863 |
| FOB Value | A$/mth | 2,493,249 | 3,354,996 | 2,754,468 | 2,323,543 | 3,132,921 | 2,675,365 | 1,751,191 | 2,848,462 | 2,930,068 | 4,574,246 | 3,695,991 | 5,489,241 | 5,956,725 | 5,625,428 | 4,879,278 | 5,788,697 |
| FOB Price | A$/t | $ 1,053 | $ 923 | $ 1,039 | $ 961 | $ 1,036 | $ 973 | $ 962 | $ 954 | $ 988 | $ 1,074 | $ 976 | $ 958 | $ 942 | $ 1,109 | $ 947 | $ 946 |

## Comparison of Rolling 12 month averages

### Australian Imports

| Import Quarter | | Jun-10 | Sep-10 | Dec-10 | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Quantity | t/mth | 2,924 | 2,917 | 2,657 | 2,463 | 2,532 | 2,813 | 3,177 | 3,803 | 4,335 | 4,950 | 5,373 | 5,598 | 5,907 |
| FOB Value | A$/mth | 3,061,258 | 3,073,248 | 2,787,414 | 2,564,587 | 2,571,786 | 2,738,350 | 3,090,208 | 3,677,526 | 4,201,530 | 4,800,263 | 5,153,202 | 5,351,356 | 5,522,317 |
| FOB Price | A$/t | $ 1,047 | $ 1,054 | $ 1,049 | $ 1,041 | $ 1,016 | $ 973 | $ 973 | $ 967 | $ 969 | $ 970 | $ 959 | $ 956 | $ 935 |

### Chinese Exports

| Import Quarter | | Jun-10 | Sep-10 | Dec-10 | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Quantity | t/mth | 2,768 | 2,932 | 2,710 | 2,502 | 2,644 | 2,630 | 3,007 | 3,498 | 4,184 | 5,024 | 5,228 | 5,570 | 5,668 |
| FOB Value | A$/mth | 2,731,564 | 2,891,482 | 2,721,574 | 2,470,755 | 2,601,985 | 2,551,272 | 3,025,992 | 3,512,192 | 4,172,386 | 4,929,051 | 5,191,846 | 5,487,668 | 5,562,532 |
| FOB Price | A$/t | $ 986.95 | $ 986.28 | $ 1,004.28 | $ 987.45 | $ 984.03 | $ 970.19 | $ 1,006.36 | $ 1,003.98 | $ 997.18 | $ 981 03 | $ 993.10 | $ 985.18 | $ 981.44 |

### Mismatch

| Import Quarter | | Jun-10 | Sep-10 | Dec-10 | Mar-11 | Jun-11 | Sep-11 | Dec-11 | Mar-12 | Jun-12 | Sep-12 | Dec-12 | Mar-13 | Jun-13 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Quantity | t/mth | 5.4% | -0.5% | -2.0% | -1.6% | -4.4% | 6.5% | 5.3% | 8.0% | 3.5% | -1 5% | 2.7% | 0.5% | 4.1% |
| FOB Value | A$/mth | 10.8% | 5.9% | 2.4% | 3.7% | -1.2% | 6.8% | 2.1% | 4.5% | 0.7% | -2.7% | -0.7% | -2.5% | -0.7% |
| FOB Price | A$/t | 5.7% | 6.4% | 4.3% | 5.2% | 3.1% | 0.3% | -3.4% | -3.8% | -2.9% | -1 2% | -3.6% | -3.1% | -5 0% |

# Attachment B-4.1

## Changshu Economic & Technological Development Zone
## Information from official website

- www.cedz.org
- http://~~www.changs~~hu-china.com/templates/en/

**PUBLIC FILE**



more

CEDZ Video

CEDZ Riverside Industrial Park

CEDZ Investment Sections

Easy Access | Infrastructures | Human Resources | One-stop Service | Riverside New City


**Changshu Economic & Technological Development Zone** is located in the center of Yangtze Delta, 90km west of Shanghai, 40km north of Suzhou and Kunshan, 40km east of Wuxi and faces Nantong across Yangtze River.Expressways of the Sujiahang (G15w), the Riverside (G15) and the Changkun go across Changshu and the Riverside Railway is under construction. Changshu Port is a state-level international port for both containers and bulk cargoes, connecting with more than 50 countries worldwide more>>

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+more

Scientific Innovation park

Changshu EPZ

Changshu Port

Riverside New C





ADD:Riverside International Building, Changshu, Jiangsu, China

Design by http://www eweb cn.

**PUBLIC FILE**




Clients

- Major Companies
- Jaguar Land Rover
- Qoros
- UPM-Kymmene
- Novartis
- Sumitomo-Dunlop
- Sharp

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## UPM-Kymmene

UPM

**UPM-Kymmene (Changshu) Paper Industry Co., Ltd** is a wholly owned subsidiary of UPM Group, one of the largest Finnish companies. The company was established in 2003, covering an area of 2,760 mu (1,840,920 sqm), with the total investment of US$ 1.1 billion. At this plant, high-quality writing and printing paper with an annual output of 800,000 tons are produced.





ADD:Riverside International Building, Changshu, Jiangsu, China

**PUBLIC FILE**




Cost

- Land and Workshop Cost
- Utility Cost
- Indicative Salary
- Social Securities

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## Utility Cost

*** Power Charge**

Unified in Jiangsu Province

| | Power consumption charge (RMB/kwh) | | | | | Monthly basic charge | |
|---|---|---|---|---|---|---|---|
| Voltage | 1-10kv | 20kv | 35kv | 110kv | 220kv & above | RMB 30 /kva per month (Basing on the transformer capacity①) | RMB 40/kw per month (Basing on maximum demand②) |
| Normal hours | 0.667 | 0.661 | 0 652 | 0.637 | 0.622 | (1) Normal hours: 12:00-17:00; 21:00-24:00<br>(2) Peak hours: 8 00-12:00; 17 00-21 00.<br>(3) Valley hours: 0:00-8 00. | |
| Peak hours | 1.112 | 1.102 | 1 087 | 1.062 | 1.037 | | |
| Valley hours | 0.322 | 0.320 | 0 317 | 0.312 | 0.307 | | |

Companies can decide to calculate the power consumption either in way ① or way② by themselves.

*** Water Charge**

Tap water charge: RMB 3.1/m3

*** Sewage treatment fee RMB0.62/ton**

*** Rain drainage treatment fee 0**





ADD:Riverside International Building, Changshu, Jiangsu, China

**PUBLIC FILE**




Cost

- Land and Workshop Cost
- Utility Cost
- Indicative Salary
- Social Securities

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## Indicative Salary

**The minimum wage level in Changshu is RMB 1370/month**

**Staff cost (per month, including social benefits and others)**

| | |
|---|---|
| Common worker | RMB 1,370-1,800 |
| Technical worker, welder | RMB 1,800-2,400 |
| Engineer | RMB 3,500-4,000 |
| Admin. Staff (who handle reception, and paper work in the office) | RMB 1,800-2,200 |
| Manager | RMB 5,000-8,000 |





ADD:Riverside International Building, Changshu, Jiangsu, China

**PUBLIC FILE**




Cost

- Land and Workshop Cost
- Utility Cost
- Indicative Salary
- Social Securities

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## Social Securities

**The minimum wage level in Changshu is RMB 1370/month**

| Item | | Ratio by employer | Ratio by employee |
|---|---|---|---|
| Social Insurance | Pension | 20% | 8% |
| | Unemployment | 2% | 1% |
| | Health care | 8.5% | 2% |
| | Accident | 1-3% | / |
| | Maternity | 1% | / |
| Housing Fund（not compulsory） | | 8-12% | 8-12% |





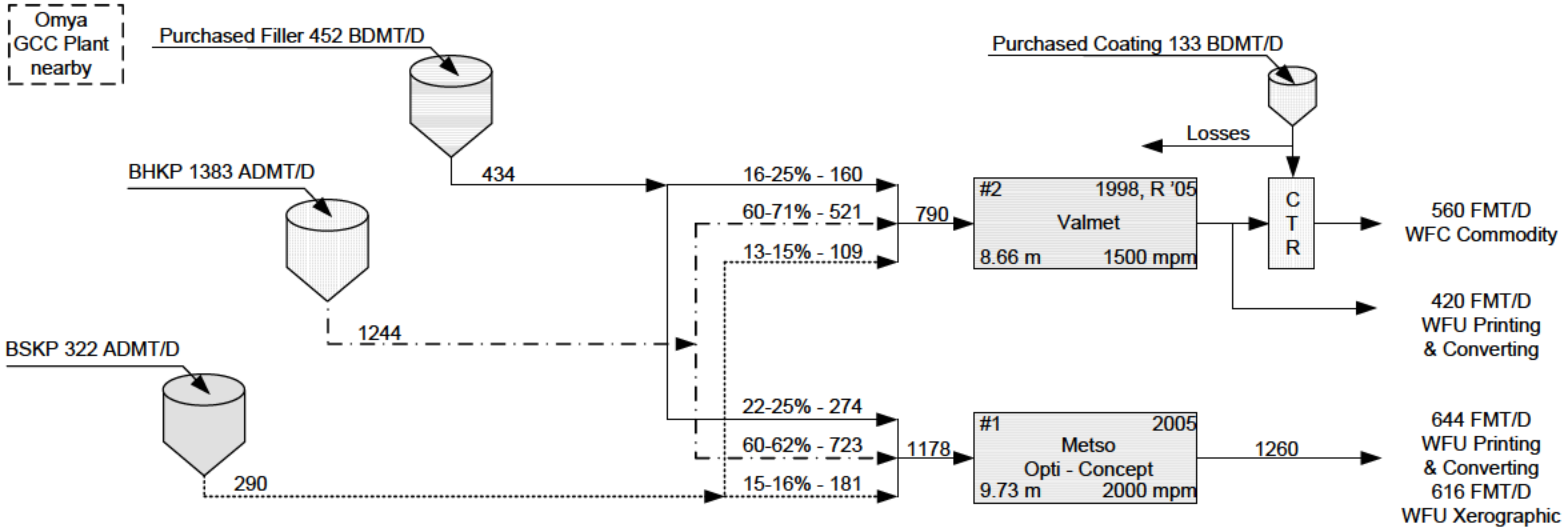
ADD:Riverside International Building, Changshu, Jiangsu, China

# Attachment B-4.2

## RISI Benchmark datasheet – UPM-Kymmene Changshu

**PUBLIC FILE**

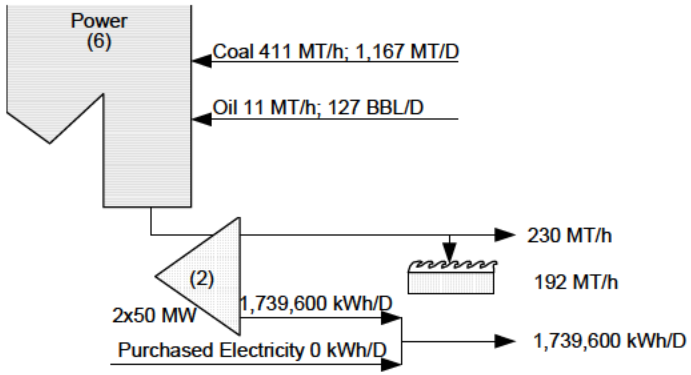
# UPM - CHANGSHU, CHINA




SUMMARY

| | | WFU Xerographic | WFU Printing & Converting | WFC Commodity |
|---|---|---|---|---|
| BHKP | ADMT/FMT | 0.654 | 0.622 | 0.567 |
| BSKP | ADMT/FMT | 0.163 | 0.156 | 0.100 |
| Filler | BDMT/FMT | 0.219 | 0.240 | 0.109 |
| Coating | BDMT/FMT | --- | --- | 0.237 |
| Coal | MT/FMT | 0.510 | 0.510 | 0.553 |
| Oil | BBL/FMT | 0.057 | 0.058 | 0.054 |
| MANNING: | TOTAL: | | | |
| Operators | 350 | 85 | 154 | 111 |
| Maintenance | 150 | 37 | 66 | 47 |
| Sub-Total | 500 | 122 | 220 | 158 |
| Exempt | 115 | 28 | 51 | 36 |
| Non-Exempt | 50 | 12 | 22 | 16 |
| Total | 665 | 162 | 292 | 210 |
| MH/FMT | | 1.66 | 1.73 | 2.36 |

165 people excluded for converting and other operations






RISI

# Attachment B-4.3

## RISI Asia Pulp and Paper Monitor (extracts - pulp prices)

## Table 11
## Bleached Kraft Pulp Quarterly Summary
US$ per Tonne, Thousand Tonnes

| | 09 Q3 | 09 Q4 | 10 Q1 | 10 Q2 | 10 Q3 | 10 Q4 | 11 Q1 | 11 Q2 | Annual 2007 | 2008 | 2009 | 2010 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Bleached Softwood Kraft** | | | | | | | | | | | | |
| **Unit Import Values (CIF)** | | | | | | | | | | | | |
| Japan Average | 609 | 664 | 715 | 820 | 903 | 874 | 882 | 920 | 738 | 778 | 625 | 828 |
| China Average | 533 | 609 | 683 | 789 | 849 | 820 | 831 | 882 | 712 | 722 | 527 | 786 |
| South Korea Average | 555 | 632 | 695 | 789 | 851 | 826 | 838 | 880 | 706 | 747 | 577 | 788 |
| **Received from:** | | | | | | | | | | | | |
| Canada | 560 | 644 | 717 | 805 | 860 | 816 | 829 | 882 | 720 | 726 | 548 | 801 |
| USA | 571 | 632 | 700 | 801 | 921 | 910 | 903 | 918 | 732 | 782 | 597 | 837 |
| Chile | 531 | 598 | 662 | 801 | 847 | 807 | 816 | 867 | 708 | 719 | 524 | 768 |
| Russia | 522 | 592 | 667 | 780 | 765 | 757 | 821 | 897 | 699 | 695 | 508 | 741 |
| **Import Volumes** | | | | | | | | | | | | |
| Japan | 214 | 205 | 216 | 209 | 226 | 209 | 225 | 220 | 924 | 909 | 783 | 860 |
| China | 1,292 | 938 | 967 | 913 | 912 | 1,203 | 1,494 | 1,408 | 3,073 | 3,553 | 4,765 | 3,995 |
| South Korea | 155 | 139 | 135 | 125 | 120 | 122 | 120 | 128 | 566 | 562 | 540 | 503 |
| Subtotal | 1,662 | 1,282 | 1,318 | 1,247 | 1,258 | 1,534 | 1,839 | 1,756 | 4,562 | 5,023 | 6,088 | 5,357 |
| **Received from:** | | | | | | | | | | | | |
| Canada | 417 | 360 | 422 | 447 | 451 | 538 | 737 | 688 | 1,605 | 1,664 | 1,734 | 1,858 |
| USA | 405 | 351 | 291 | 307 | 313 | 341 | 348 | 332 | 958 | 1,170 | 1,350 | 1,252 |
| Chile | 372 | 235 | 265 | 121 | 168 | 285 | 189 | 257 | 787 | 861 | 1,287 | 839 |
| Russia | 168 | 159 | 171 | 159 | 150 | 169 | 209 | 169 | 584 | 648 | 680 | 650 |
| Other | 300 | 177 | 170 | 212 | 175 | 201 | 356 | 309 | 628 | 681 | 1,037 | 759 |
| **Bleached Hardwood Kraft** | | | | | | | | | | | | |
| **Unit Import Values (CIF)** | | | | | | | | | | | | |
| Japan Average | 462 | 554 | 647 | 735 | 801 | 724 | 701 | 723 | 611 | 711 | 478 | 727 |
| China Average | 449 | 530 | 636 | 725 | 769 | 702 | 698 | 710 | 596 | 675 | 443 | 703 |
| South Korea Average | 456 | 540 | 642 | 748 | 786 | 735 | 698 | 701 | 601 | 704 | 494 | 727 |
| **Received from:** | | | | | | | | | | | | |
| Indonesia | 449 | 537 | 644 | 759 | 761 | 677 | 673 | 701 | 596 | 668 | 454 | 709 |
| Canada | 470 | 558 | 662 | 764 | 815 | 726 | 704 | 732 | 616 | 707 | 480 | 731 |
| Brazil | 440 | 515 | 624 | 712 | 784 | 728 | 712 | 655 | 578 | 686 | 439 | 706 |
| USA | 461 | 542 | 636 | 745 | 805 | 737 | 705 | 719 | 618 | 709 | 495 | 721 |
| **Import Volumes** | | | | | | | | | | | | |
| Japan | 150 | 139 | 139 | 138 | 137 | 135 | 142 | 135 | 702 | 641 | 523 | 549 |
| China | 1,469 | 1,349 | 1,297 | 1,121 | 990 | 1,004 | 1,386 | 1,184 | 2,966 | 3,725 | 5,931 | 4,412 |
| South Korea | 350 | 366 | 408 | 394 | 404 | 345 | 373 | 380 | 1,493 | 1,429 | 1,415 | 1,550 |
| Subtotal | 1,969 | 1,854 | 1,844 | 1,652 | 1,530 | 1,484 | 1,901 | 1,699 | 5,161 | 5,795 | 7,869 | 6,511 |
| **Received from:** | | | | | | | | | | | | |
| Indonesia | 337 | 364 | 384 | 423 | 360 | 475 | 560 | 437 | 1,759 | 1,897 | 1,702 | 1,642 |
| Canada | 168 | 133 | 151 | 120 | 86 | 116 | 174 | 165 | 612 | 551 | 596 | 472 |
| Brazil | 723 | 679 | 735 | 637 | 607 | 396 | 621 | 582 | 1,229 | 1,564 | 2,893 | 2,375 |
| USA | 172 | 183 | 169 | 120 | 115 | 106 | 136 | 100 | 374 | 389 | 526 | 510 |
| Other | 569 | 496 | 406 | 354 | 362 | 391 | 410 | 415 | 1,186 | 1,394 | 2,153 | 1,513 |

## Table 11
## Bleached Kraft Pulp Quarterly Summary
US Dollars per Tonne, Thousand Tonnes

| | Quarterly | | | | | | | | Annual | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 2011 Q3 | 2011 Q4 | 2012 Q1 | 2012 Q2 | 2012 Q3 | 2012 Q4 | 2013 Q1 | 2013 Q2 | 2009 | 2010 | 2011 | 2012 |
| **Bleached Softwood Kraft** | | | | | | | | | | | | |
| **Unit Import Values (CIF)** | | | | | | | | | | | | |
| Japan Average | 896 | 808 | 728 | 758 | 729 | 712 | 723 | 721 | 690 | 881 | 808 | 712 |
| China Average | 833 | 749 | 656 | 710 | 633 | 652 | 648 | 682 | 637 | 820 | 749 | 652 |
| South Korea Average | 872 | 776 | 704 | 730 | 693 | 698 | 679 | 716 | 661 | 814 | 776 | 698 |
| **Received from:** | | | | | | | | | | | | |
| Canada | 836 | 760 | 666 | 701 | 632 | 652 | 662 | 692 | 662 | 812 | 760 | 652 |
| USA | 884 | 813 | 705 | 744 | 724 | 698 | 681 | 722 | 664 | 908 | 813 | 698 |
| Chile | 840 | 697 | 654 | 779 | 625 | 675 | 637 | 680 | 621 | 806 | 697 | 675 |
| Russia | 756 | 701 | 652 | 668 | 604 | 607 | 613 | 645 | 612 | 774 | 701 | 607 |
| **Import Volumes** | | | | | | | | | | | | |
| Japan | 76 | 65 | 74 | 71 | 67 | 69 | 69 | 91 | 57 | 63 | 65 | 69 |
| China | 502 | 507 | 663 | 560 | 523 | 529 | 595 | 499 | 301 | 459 | 507 | 529 |
| South Korea | 41 | 42 | 47 | 42 | 43 | 35 | 37 | 38 | 50 | 41 | 42 | 35 |
| Subtotal | 619 | 615 | 784 | 674 | 632 | 633 | 701 | 629 | 408 | 563 | 615 | 633 |
| **Received from:** | | | | | | | | | | | | |
| Canada | 224 | 238 | 252 | 255 | 231 | 235 | 279 | 235 | 136 | 217 | 238 | 235 |
| USA | 128 | 124 | 145 | 116 | 130 | 143 | 163 | 130 | 99 | 120 | 124 | 143 |
| Chile | 119 | 91 | 134 | 115 | 100 | 105 | 101 | 102 | 80 | 90 | 91 | 105 |
| Russia | 60 | 52 | 58 | 48 | 67 | 65 | 56 | 69 | 36 | 38 | 52 | 65 |
| Other | 89 | 110 | 195 | 140 | 105 | 84 | 102 | 93 | 57 | 98 | 110 | 84 |
| **Bleached Hardwood Kraft** | | | | | | | | | | | | |
| **Unit Import Values (CIF)** | | | | | | | | | | | | |
| Japan Average | 678 | 602 | 550 | 632 | 594 | 601 | 605 | 626 | 592 | 717 | 602 | 601 |
| China Average | 688 | 625 | 556 | 668 | 608 | 730 | 608 | 625 | 560 | 700 | 625 | 730 |
| South Korea Average | 663 | 570 | 559 | 622 | 607 | 607 | 616 | 650 | 576 | 714 | 570 | 607 |
| **Received from:** | | | | | | | | | | | | |
| Indonesia | 649 | 568 | 561 | 616 | 578 | 574 | 600 | 629 | 575 | 673 | 568 | 574 |
| Canada | 800 | 630 | 563 | 628 | 612 | 604 | 618 | 642 | 607 | 709 | 630 | 604 |
| Brazil | 683 | 642 | 554 | 703 | 612 | 805 | 601 | 608 | 542 | 717 | 642 | 805 |
| USA | 704 | 647 | 543 | 583 | 584 | 579 | 589 | 617 | 567 | 751 | 647 | 579 |
| **Import Volumes** | | | | | | | | | | | | |
| Japan | 51 | 47 | 53 | 27 | 44 | 31 | 20 | 37 | 42 | 31 | 47 | 31 |
| China | 424 | 549 | 630 | 454 | 482 | 569 | 536 | 497 | 446 | 353 | 549 | 569 |
| South Korea | 122 | 128 | 115 | 111 | 132 | 105 | 109 | 116 | 123 | 110 | 128 | 105 |
| Subtotal | 598 | 724 | 798 | 592 | 657 | 705 | 665 | 651 | 612 | 494 | 724 | 705 |
| **Received from:** | | | | | | | | | | | | |
| Indonesia | 226 | 172 | 202 | 137 | 155 | 168 | 232 | 207 | 120 | 150 | 172 | 168 |
| Canada | 57 | 49 | 49 | 38 | 50 | 51 | 49 | 22 | 42 | 51 | 49 | 51 |
| Brazil | 126 | 305 | 292 | 221 | 201 | 279 | 155 | 232 | 195 | 143 | 305 | 279 |
| USA | 47 | 47 | 55 | 46 | 71 | 9 | 41 | 31 | 59 | 41 | 47 | 9 |
| Other | 142 | 151 | 200 | 150 | 180 | 197 | 188 | 159 | 196 | 110 | 151 | 197 |

# Attachment B-4.4

## ANZ Commodity Weekly/Commodity Daily (extracts)

# COMMODITY DATA

| BASE METALS | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | | % Change | | |
| **London Metals Exchange** (US$/t) | | | | | | |
| Aluminium | 2,101 | (3.7) | 7.2 | 1.1 | 3.9 | 7.4 |
| Copper | 7,132 | (2.9) | 10.3 | 3.5 | 4.9 | 14.1 |
| N ckel | 21,208 | (3.8) | 12.3 | (1.3) | 14.2 | 8.7 |
| Zinc | 2,018 | (3.9) | 14.0 | (0.3) | (6.9) | 12.2 |
| Lead | 2,031 | (4.9) | 15.9 | 6.3 | (4.2) | 10.7 |
| Tin | 21,000 | 1.5 | 18.4 | 20.1 | 30.0 | 40.7 |
| **Shanghai** (RMB/t) | | | | | | |
| Copper | 57,275 | (1.0) | 6.7 | 1.4 | 8.3 | 14.0 |
| Aluminium | 15,200 | (0.8) | 3.3 | (0.9) | (4.2) | (0.2) |
| Zinc | 17,250 | (2.3) | 10.6 | (1.7) | (2.4) | 12.4 |
| Lead | 16,150 | (2.1) | 8.0 | 4.7 | 4.4 | 17.0 |
| **Comex** | | | | | | |
| Copper | 7,214 | (2.1) | 11.7 | 4.4 | 5.5 | 14.8 |

| PRECIOUS METALS | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | | % Change | | |
| Gold | 1,216 | 0.8 | 1.9 | (1.4) | 11.2 | 28.1 |
| Gold (A$/oz) | 1,361 | 3.7 | (0.9) | (2.2) | 10.5 | 19.5 |
| Silver | 18.1 | (1.7) | 1.7 | (6.2) | 16.8 | 23.3 |
| Platinum | 1,524 | (3.2) | 1.0 | (11.3) | 0.6 | 21.1 |
| Palladium | 478 | (2.8) | 6.3 | (9.1) | 14.6 | 73.3 |

| ENERGY | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | | % Change | | |
| **OIL & GAS** (US$bbl) | | | | | | |
| WTI Cushing (US) | 75.4 | (6.6) | (0.8) | 5.3 | 1.7 | 11.7 |
| Brent Crude (UK) | 74.6 | (7.0) | 0.0 | (3.0) | 3.3 | 5.5 |
| Tapis (Asia) | 80.0 | (7.7) | (1.6) | (0.4) | 3.1 | 0.8 |
| Gasoil 0.5% (Sing) | 86.0 | (6.7) | 0.9 | (4.5) | 5.5 | 6.3 |
| Fuel Oil 180cst (Sing $/t) | 449.5 | (5.5) | (0.6) | (5.3) | (2.2) | 2.0 |
| **THERMAL COAL** (FOB US$/t) | | | | | | |
| Newcastle | 87.0 | (5.4) | (10.4) | (14.9) | (4.2) | 17.1 |
| R chards Bay | 87.3 | (3.2) | (3.3) | (2.2) | 7.3 | 36.1 |
| Qinhuangdao | 123.3 | 0.0 | 0.7 | 6.3 | 9.1 | 45.1 |

| OTHER | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | | % Change | | |
| **STEEL** (US$/t) | | | | | | |
| HRC US (Short ton) | 545 | 0.0 | (12.8) | (15.5) | 0.0 | 17.2 |
| HRC Russia | 608 | 7.1 | 11.0 | (15.0) | 5.7 | 11.0 |
| HRC China | 645 | 2.8 | 7.1 | (6.9) | 20.6 | 7.5 |
| **OTHER METALS** | | | | | | |
| Uranium (US$/lb) | 46.0 | 1.7 | 10.2 | 11.5 | 8.9 | (2.1) |
| Alumina (US$/t) | 315 | 0.0 | (6.0) | (6.0) | (4.6) | 16.0 |
| Cobalt (US$/lb) | 19.0 | (3.8) | (5.6) | (11.4) | (12.6) | (2.6) |
| Molybdenum (US$/lb) | 15.5 | 2.7 | 10.4 | (10.4) | (3.1) | (16.5) |
| Coke (US$/t) | 365 | 0.0 | (4.0) | 1.4 | 10.6 | 10.6 |
| Iron Ore Spot (US$t) | 148 | 2.6 | 25.8 | (11.0) | 15.7 | 42.6 |
| **EMISSIONS** | | | | | | |
| RECs (A$) | 39.5 | (0.8) | (3.1) | (9.0) | 16.2 | 5.4 |
| NGACs (A$) | 5.2 | 0.0 | (4.6) | 6.1 | 13.0 | (1.0) |
| EUAs (€) | 14.5 | 1.8 | (1.1) | (7.4) | 11.5 | (2.0) |

| FREIGHT | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | | % Change | | |
| Balt c Freight Rate | 2,468 | 21.6 | 43.5 | (37.2) | (4.0) | (10.3) |
| Balt c Capesize | 3,210 | 46.3 | 91.5 | (33.2) | (1.5) | (31.8) |
| Balt c Panamax | 2,864 | 11.0 | 36.9 | (34.0) | (5.4) | 19.8 |

| KEY CURRENCIES | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | | % Change | | |
| AUD/USD - Aussie | 0.893 | (2.8) | 2.8 | 0.8 | 0.6 | 7.2 |
| NZD/USD - Kiwi | 0.706 | (3.8) | (0.7) | (0.2) | 1.2 | 4.1 |
| DXY - US$ trade weighted | 82.9 | 3.2 | 0.6 | (1.8) | 3.4 | 5.2 |
| EUR/USD - Euro | 1.275 | (4.0) | (1.4) | 3.2 | (6.4) | (10.2) |
| USD/JPY - Yen | 86.2 | 0.8 | (0.4) | (6.8) | (4.2) | (9.2) |

| INVENTORIES | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | | % Change | | |
| **London Metals Exchange** (kt) | | | | | | |
| Aluminium | 4,382 | (0.3) | 0.2 | (2.2) | (3.8) | (3.8) |
| Copper | 409 | (1.0) | (4.2) | (15.6) | (25.4) | 39.5 |
| Nickel | 117 | (0.3) | (1.7) | (17.7) | (29.3) | 8.2 |
| Zinc | 617 | (0.3) | (0.2) | 8.3 | 23.4 | 42.7 |
| Lead | 190 | 1.2 | 1.8 | 2.8 | 19.5 | 64.3 |
| Tin | 14 | (7.8) | (13.5) | (33.9) | (47.5) | (27.9) |
| **Shanghai** | | | | | | |
| Copper | 114 | 7.1 | (3.1) | (37.1) | (2.8) | 49.6 |
| Aluminium | 492 | (0.0) | (0.7) | 13.6 | 36.6 | 171.4 |
| Zinc | 249 | 1.8 | (0.4) | (5.3) | 11.5 | 115.0 |
| **Comex** | | | | | | |
| Copper | 97.6 | (2.0) | (3.5) | (3.6) | (6.6) | 83.2 |
| **OIL & GAS** (mbbl) | | | | | | |
| **DOE** | | | | | | |
| Crude | 355 | (0.8) | (0.9) | (1.6) | 7.1 | 0.8 |
| Gasoline | 223 | 0.2 | 1.8 | (0.7) | (3.1) | 5.4 |
| Distillate | 173 | 2.0 | 8.4 | 13.6 | 10.9 | 6.7 |
| Refinery utilisation (%) | 88.1 | (3.4) | (1.9) | (1.7) | 11.4 | 5.5 |

| AGRICULTURE | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | | % Change | | |
| **CBOT** (US¢/bu) | | | | | | |
| Wheat | 734 | (2.8) | 25.0 | 55.7 | 46.5 | 44.1 |
| Corn | 427 | 1.7 | 4.9 | 17.7 | 14.5 | 30.4 |
| Soybeans | 1,044 | 1.0 | 6.0 | 9.5 | 9.4 | 6.4 |
| Soybean Oil (US¢/lb) | 43.1 | 2.4 | 10.4 | 15.0 | 12.6 | 14.2 |
| Soybean Meal (US/t) | 297 | 0.3 | 2.3 | 7.2 | 8.2 | 2.7 |
| **KCBOT** (US¢/bu) | | | | | | |
| HRW | 738 | 0.4 | 23.2 | 50.3 | 45.9 | 40.7 |
| **MGE** (US¢/bu) | | | | | | |
| HRS | 728 | (0.6) | 19.1 | 42.0 | 44.3 | 29.2 |
| **ASX** ($A/t) | | | | | | |
| Wheat | 286 | (10.8) | 17.7 | 37.7 | 30.2 | (3.2) |
| **EURONEXT Liffe** (£/t) | | | | | | |
| Wheat | 155 | 2.0 | 20.2 | 49.0 | 62.7 | 58.6 |
| **EURONEXT Paris** (EUR/t) | | | | | | |
| Wheat | 215 | 1.9 | 33.4 | 59.8 | 70.6 | 64.7 |
| Corn | 188 | (1.1) | 9.0 | 28.0 | 42.0 | 51.2 |
| Rapeseed | 376 | 0.3 | 3.9 | 21.5 | 27.3 | 30.6 |
| **ICE Winnipeg** (CAD/t) | | | | | | |
| Canola | 462 | (1.3) | 1.6 | 21.8 | 21.8 | 7.2 |

| SOFTS / PALM | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | | % Change | | |
| **ICE NY** (US¢/lb) | | | | | | |
| Sugar #11 | 19.4 | 6.5 | 13.5 | 37.4 | (26.2) | (11.6) |
| Coffee | 178 | 6.1 | 6.3 | 32.2 | 32.2 | 34.2 |
| Cocoa | 2,885 | (4.9) | (8.8) | 2.6 | (7.0) | 1.5 |
| Cotton | 84.2 | 4.9 | 13.8 | 4.3 | 12.4 | 37.7 |
| **EURONEXT Liffe** ($US/t) | | | | | | |
| Sugar | 550 | 1.9 | 5.7 | 18.0 | (25.3) | (0.6) |
| Coffee | 1,768 | 2.9 | 0.2 | 28.5 | 33.0 | 26.9 |
| Cocoa (£/t) | 2,109 | (3.8) | (13.7) | (4.9) | (7.7) | 18.2 |
| **MDEX** (MYR/t) | | | | | | |
| Crude Palm Oil | 2,718 | 2.1 | 11.4 | 10.7 | 5.4 | 14.8 |

| KEY INDICES | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | | % Change | | |
| S&P 500 | 1,079 | (3.8) | 1.3 | (5.0) | 0.3 | 7.5 |
| CRB Index | 269 | (2.2) | 2.5 | 4.0 | 0.3 | 4.5 |
| S&P GSCI Agri Index | 376 | 3.1 | 13.3 | 27.6 | 13.7 | 22.1 |
| LME Metals Index | 3,306 | (3.0) | 10.5 | 2.8 | 5.1 | 12.7 |
| Market Volatil ty Index (VIX | 26 | 20.7 | (0.0) | (16.0) | 15.4 | 8.1 |

Note: closing prices at 13 August 2010. Sources: Bloomberg, globalCOAL, AFMA

# COMMODITY DATA

| BASE METALS | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | % Change | | | |
| **London Metals Exchange** (US$/t) | | | | | | |
| Aluminium | 2,334 | (0.4) | 2.1 | 16.1 | 1.4 | 20.5 |
| Copper | 8,318 | (0.8) | 4.7 | 18.7 | 7.8 | 25.5 |
| Nickel | 23,160 | (3.4) | 1.0 | 14.2 | (14.2) | 22.4 |
| Zinc | 2,485 | 3.7 | 12.0 | 32.2 | 4.8 | 10.5 |
| Lead | 2,503 | 4.4 | 10.4 | 27.8 | 10.2 | 7.2 |
| Tin | 26,375 | (1.4) | 11.8 | 35.5 | 39.3 | 71.1 |
| **Shanghai** (RMB/t) | | | | | | |
| Copper | 62,325 | (0.8) | 3.6 | 14.7 | 4.1 | 23.7 |
| Aluminium | 16,010 | (0.3) | 4.0 | 8.2 | (0.2) | 7.4 |
| Zinc | 19,350 | 2.4 | 7.4 | 20.6 | 3.5 | 19.1 |
| Lead | 17,300 | 1.5 | 4.5 | 14.2 | 9.3 | 8.0 |
| **Comex** | | | | | | |
| Copper | 8,370 | (1.1) | 4.9 | 19.2 | 7.5 | 25.1 |

| PRECIOUS METALS | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | % Change | | | |
| Gold | 1,328 | (2.9) | 2.5 | 11.7 | 14.8 | 25.9 |
| Gold (A$/oz) | 1,352 | (2.1) | 0.0 | 1.8 | 8.3 | 18.1 |
| Silver | 23.3 | (4.3) | 8.6 | 28.6 | 27.0 | 31.7 |
| Platinum | 1,679 | (1.0) | 2.1 | 8.9 | (3.7) | 23.4 |
| Palladium | 592 | 0.3 | 5.8 | 27.5 | 5.1 | 76.4 |

| ENERGY | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | % Change | | | |
| **OIL & GAS** (US$bbl) | | | | | | |
| WTI Cushing (US) | 81.2 | (0.1) | 8.3 | 3.1 | (3.9) | 1.4 |
| Brent Crude (UK) | 82.0 | (0.4) | 4.8 | 6.7 | (4.8) | 6.5 |
| Tapis (Asia) | 88.6 | (2.3) | 5.9 | 9.8 | 1.4 | 5.9 |
| Gasoil 0.5% (Sing) | 91.4 | (3.6) | 4.6 | 4.3 | (3.3) | 6.9 |
| Fuel Oil 180cst (Sing $/t) | 471.3 | (0.9) | 5.5 | 2.6 | (5.5) | 0.6 |
| **THERMAL COAL** (FOB US$/t) | | | | | | |
| Newcastle | 99.0 | 2.2 | 2.0 | 4.2 | (1.1) | 36.5 |
| Richards Bay | 94.0 | 6.9 | 10.5 | 3.8 | 2.5 | 42.6 |
| Qinhuangdao | 128.0 | 1.8 | 5.2 | 3.8 | 16.8 | 43.8 |

| OTHER | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | % Change | | | |
| **STEEL** (US$/t) | | | | | | |
| HRC US (Short ton) | 505 | (5.6) | (7.3) | (19.2) | (17.9) | (1.9) |
| HRC Russia | 623 | 0.8 | (1.6) | 13.7 | (12.9) | 23.3 |
| HRC China | 600 | 1.7 | (5.5) | 0.8 | (13.7) | 27.7 |
| **OTHER METALS** | | | | | | |
| Uranium (US$/lb) | 48.5 | 1.0 | 1.0 | 16.9 | 17.6 | 2.1 |
| Alumina (US$/t) | 345 | 0.0 | 9.5 | 9.5 | 3.0 | 13.1 |
| Cobalt (US$/lb) | 20.3 | 0.0 | (3.6) | 0.6 | (13.8) | 14.1 |
| Molybdenum (US$/lb) | 15.5 | 1.3 | 2.0 | 6.6 | (10.4) | 22.3 |
| Coke (US$/t) | 365 | 0.0 | (1.4) | (2.7) | 1.4 | 23.7 |
| Iron Ore Spot (US$t) | 152 | (0.6) | 8.8 | 19.5 | (17.9) | 72.9 |
| **EMISSIONS** | | | | | | |
| RECs (A$) | 35.2 | 2.2 | (2.2) | (12.5) | (22.0) | 19.3 |
| NGACs (A$) | 6.8 | 0.0 | 12.5 | 29.8 | 48.4 | 43.6 |
| EUAs (€) | 15.1 | (2.5) | (1.6) | 7.6 | 0.8 | 1.8 |

| FREIGHT | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | % Change | | | |
| Baltic Freight Rate | 2,727 | (1.3) | 11.6 | 49.3 | (9.5) | (10.4) |
| Baltic Capesize | 4,373 | 0.6 | 40.1 | 156.0 | 35.1 | (9.7) |
| Baltic Panamax | 2,219 | (1.6) | (18.4) | (6.1) | (40.9) | (27.2) |

| KEY CURRENCIES | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | % Change | | | |
| AUD/USD - Aussie | 0.983 | (0.8) | 2.5 | 9.7 | 5.9 | 6.5 |
| NZD/USD - Kiwi | 0.747 | (1.2) | 1.7 | 2.7 | 4.1 | (1.0) |
| DXY - US$ trade weighted | 77.5 | 0.6 | (2.4) | (6.1) | (4.8) | 2.7 |
| EUR/USD - Euro | 1.395 | (0.2) | 3.4 | 8.1 | 4.3 | (7.0) |
| USD/JPY - Yen | 81.4 | (0.1) | (3.4) | (7.0) | (13.4) | (11.6) |

| INVENTORIES | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | % Change | | | |
| **London Metals Exchange** (kt) | | | | | | |
| Aluminium | 4,321 | 0.2 | (1.1) | (2.0) | (5.4) | (5.7) |
| Copper | 369 | (0.6) | (3.0) | (12.1) | (27.3) | 0.5 |
| Nickel | 126 | 1.3 | 4.2 | 7.6 | (14.3) | 1.8 |
| Zinc | 607 | (0.2) | (1.8) | (2.2) | 11.8 | 42.1 |
| Lead | 198 | 0.0 | 3.6 | 7.9 | 10.1 | 51.7 |
| Tin | 13 | 0.9 | (7.5) | (19.1) | (43.1) | (52.2) |
| **Shanghai** | | | | | | |
| Copper | 106 | 2.7 | 8.2 | (11.6) | (42.8) | 10.7 |
| Aluminium | 486 | (0.6) | (1.8) | (1.8) | 14.1 | 88.5 |
| Zinc | 283 | 0.4 | 20.1 | 14.2 | 12.8 | 140.8 |
| **Comex** | | | | | | |
| Copper | 76.3 | (2.7) | (11.4) | (24.6) | (24.6) | 30.0 |
| **OIL & GAS** (mbbl) | | | | | | |
| **DOE** | | | | | | |
| Crude | 361 | 0.2 | 1.1 | 2.3 | 2.0 | 6.5 |
| Gasoline | 219 | 0.5 | (2.3) | (0.8) | (0.9) | 6.0 |
| Distillate | 170 | (1.3) | (2.6) | 4.6 | 15.9 | 0.1 |
| Refinery utilisation (%) | 82.5 | 0.7 | (5.8) | (8.8) | (3.6) | 1.8 |

| AGRICULTURE | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | % Change | | | |
| **CBOT** (US¢/bu) | | | | | | |
| Wheat | 671 | (4.8) | (6.8) | 12.5 | 32.7 | 22.5 |
| Corn | 560 | (0.5) | 7.3 | 45.6 | 55.1 | 40.8 |
| Soybeans | 1,212 | 1.3 | 7.6 | 23.4 | 20.0 | 20.2 |
| Soybean Oil (US¢/lb) | 48.3 | 1.1 | 7.6 | 21.5 | 21.2 | 27.3 |
| Soybean Meal (US/t) | 331 | 0.8 | 4.4 | 16.8 | 13.2 | 9.1 |
| **KCBOT** (US¢/bu) | | | | | | |
| HRW | 735 | (1.4) | (3.0) | 16.2 | 42.2 | 33.7 |
| **MGE** (US¢/bu) | | | | | | |
| HRS | 743 | (3.3) | (2.6) | 15.2 | 37.9 | 32.4 |
| **ASX** ($A/t) | | | | | | |
| Wheat | 280 | 0.0 | (9.7) | 11.6 | 34.0 | (5.1) |
| **EURONEXT Liffe** (£/t) | | | | | | |
| Wheat | 162 | (0.5) | (0.2) | 20.8 | 54.8 | 53.3 |
| **EURONEXT Paris** (EUR/t) | | | | | | |
| Wheat | 210 | (2.4) | (6.5) | 23.2 | 59.9 | 58.7 |
| Corn | 196 | (3.3) | (6.6) | 15.0 | 35.6 | 49.0 |
| Rapeseed | 395 | 1.2 | 2.9 | 7.8 | 27.2 | 39.7 |
| **ICE Winnipeg** (CAD/t) | | | | | | |
| Canola | 523 | 3.1 | 7.7 | 13.7 | 35.5 | 34.8 |

| SOFTS/PALM | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | % Change | | | |
| **ICE NY** (US¢/lb) | | | | | | |
| Sugar #11 | 28.2 | 4.3 | 15.7 | 54.5 | 79.2 | 22.1 |
| Coffee | 199 | 6.7 | 10.1 | 19.8 | 50.7 | 45.0 |
| Cocoa | 2,846 | 1.5 | 1.9 | (4.0) | (11.0) | (15.4) |
| Cotton | 119.7 | 9.0 | 19.8 | 58.9 | 38.9 | 77.7 |
| **EURONEXT Liffe** ($US/t) | | | | | | |
| Sugar | 707 | 1.5 | 11.7 | 26.4 | 46.7 | 17.6 |
| Coffee | 1,826 | 8.6 | 5.7 | 5.5 | 36.7 | 34.0 |
| Cocoa (£/t) | 1,925 | 4.1 | 2.2 | (16.2) | (17.6) | (11.5) |
| **MDEX** (MYR/t) | | | | | | |
| Crude Palm Oil | 3,005 | 2.6 | 11.3 | 20.3 | 18.3 | 36.0 |

| KEY INDICES | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | % Change | | | |
| S&P 500 | 1,183 | 0.6 | 3.0 | 7.3 | (2.8) | 9.6 |
| CRB Index | 297 | 0.4 | 4.8 | 11.5 | 6.5 | 6.0 |
| S&P GSCI Agri Index | 441 | 0.7 | 5.7 | 32.9 | 42.2 | 30.8 |
| LME Metals Index | 3,836 | (0.5) | 4.9 | 19.8 | 5.0 | 23.7 |
| Market Volatility Index (VIX | 19 | (1.3) | (13.5) | (20.0) | 13.0 | (15.7) |

Note: closing prices at 22 October 2010. Sources: Bloomberg, globalCOAL, AFMA

# ANZ Commodity Daily

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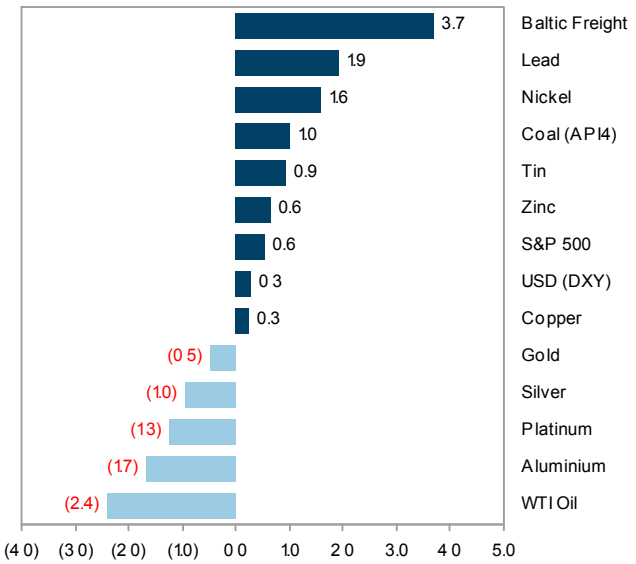
**February 14, 2011**

## Market Highlights

- **Oil slipped after Egypt President Mubarak resigned**
- **Gold fell on stronger US dollar**
- **Base metals firmed on positive US data**

## Daily Ranked Price Moves (%)




## Overnight Wrap

- **WTI crude slipped 2.4% to US$85.6/bbl**, the lowest since the start of this year, while Brent fell 0.1% to US$101.4/bbl, widening the premium of Brent to WTI to a record of $15.85/bbl. The aftermath of Egyptian President Mubarak's resignation resulted in oil markets easing as the supply risk premium was removed. The sell-off was expected, and the crude market shifted the focus back to fundamentals. WTI was anchored by record crude supplies in Cushing and the negative US expectations index which fell by 1.7 points to 67.6, while tightness in the North Sea market provided support to Brent prices. US President Obama said it would ask Congress to repeal US$3.6bn in oil, natural gas and coal industry subsidies as part of its proposed government budget for the 2012 spending year, released today – something to watch out for.
- **Gold fell 0.5% to US$1,357/oz** after Egypt's President Hosni Mubarak stepped down after weeks of unrest in the region, removing some safe-haven gold demand. A stronger US dollar also pressured prices, after US confidence data rose to an eight month high, buoying the currency.
- **Base metals firmed**, after Egyptian President Hosni Mubarak resigned and on better than expected US confidence data. Market sentiment is positive, despite China's recent cooling initiatives. Although having said that, a 10kt rise in Shanghai copper stockpiles to 144kt could reflect short term copper demand concerns in China. The market will closely watch China's preliminary data due for release today, with the market expecting softer import data for Jan.
- **API2 and API4 prices rose**. Stronger oil prices helped boost European gas and power markets and coal higher. AsiaPac prices were mixed and the market was quiet with Japan on holidays and some participants waiting for the results of a recent Korean coal tender. Australian prices were up slightly with an April bid for US$124/t on Friday, but Indonesian prices fell after the government re-issued export permits and allowed traders to export again.

## Price Data

| Commodities | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| **LME BASE METALS** (US$/t) | | | | | |
| Aluminium | 2,474 | (1.7) | (2.0) | 0.4 | 4.0 |
| Copper | 9,975 | 0.3 | (0.9) | 3.7 | 15.6 |
| Nickel | 28,276 | 1.6 | (0.3) | 10.8 | 25.0 |
| Zinc | 2,445 | 0.6 | (1.6) | (0.3) | 3.1 |
| Lead | 2,578 | 1.9 | (2.7) | (3.1) | 3.3 |
| Tin | 31,754 | 0.9 | 1.7 | 18.1 | 21.4 |
| **PRECIOUS METALS** (US$/oz) | | | | | |
| Gold | 1,357 | (0.5) | 0.6 | (1.2) | (0.9) |
| Gold (A$/oz) | 1,354 | (0.3) | 1.8 | (1.5) | (2.6) |
| Silver | 29.9 | (1.0) | 2.7 | 4.3 | 14.7 |
| Platinum | 1,804 | (1.3) | (2.1) | 0.1 | 7.3 |
| Palladium | 814 | (1.0) | (0.1) | 0.8 | 20.0 |
| **ENERGY** (US$/bbl) | | | | | |
| WTI Oil* | 85.6 | (2.4) | (3.9) | (6.4) | 0.8 |
| Brent Oil* | 101.4 | (0.1) | 1.6 | 3.4 | 17.5 |
| Tapis Oil | 104.6 | 0.0 | 2.7 | (0.2) | 13.9 |
| Sing Gasoil 0.5% | 115.7 | 0.0 | 3.7 | 6.1 | 16.6 |
| Sing Fuel Oil 180cst (US$/t) | 589 | 0.0 | 6.7 | 9.8 | 16.1 |
| **OTHER** (US$/t) | | | | | |
| China HR Coil (RmB/t) | 4,868 | 0.0 | 0.0 | 0.0 | 10.5 |
| Richards Bay Coal API4 | 114.8 | 1.0 | (4.0) | (10.0) | 7.3 |
| Newcastle Coal** | 122.5 | ... | (3.9) | (5.7) | 12.5 |
| Iron Ore Spot | 188.9 | 0.5 | 1.8 | 7.0 | 16.7 |

** Front-month futures ** Weekly prices*

| Inventories | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| **LME BASE METALS** (kt) | | | | | |
| Aluminium | 4,599 | (0.1) | 1.5 | 3.7 | 8.2 |
| Copper | 397 | (0.1) | 0.7 | 5.1 | 9.4 |
| Nickel | 131 | (0.6) | (1.3) | (4.1) | 0.6 |
| Zinc | 709 | (0.0) | (0.1) | (0.1) | 12.2 |
| Lead | 295 | 0.1 | 2.0 | 39.6 | 45.5 |
| Tin | 18 | 0.4 | (3.4) | 5.6 | 34.1 |
| **Key Indices** | **Close** | **1 Day** | **1 Wk** | **1 Mth** | **3 Mth** |
| | | | % Change | | |
| S&P 500 | 1,329 | 0.6 | 1.4 | 3.5 | 10.8 |
| VIX Volatility Index | 15.7 | (2.5) | (1.5) | (4.3) | (23.9) |
| CRB Index | 338 | (0.6) | (0.3) | 1.4 | 11.3 |
| LME Metals Index | 4,398 | 0.1 | (0.9) | 3.8 | 12.9 |
| **Freight** | **Close** | **1 Day** | **1 Wk** | **1 Mth** | **3 Mth** |
| | | | % Change | | |
| Baltic Freight Rate | 1,178 | 3.7 | 12.9 | (18.1) | (49.1) |
| Baltic Capesize | 1,475 | 4.5 | 13.5 | (8.2) | (59.2) |
| Baltic Panamax | 1,620 | 3.4 | 20.2 | (16.9) | (31.5) |
| Baltic Handysize | 649 | 1.4 | 0.9 | (14.6) | (22.1) |
| **Currencies** | **Close** | **1 Day** | **1 Wk** | **1 Mth** | **3 Mth** |
| | | | % Change | | |
| DXY - USD Index | 78.5 | 0.3 | 0.5 | (0.9) | 0.5 |
| AUD/USD - Aussie | 1.002 | (0.2) | (1.2) | 0.2 | 1.8 |
| NZD/USD - Kiwi | 0.761 | (0.7) | (1.2) | (1.1) | (1.6) |

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# ANZ RESEARCH

## COMMODITY DAILY

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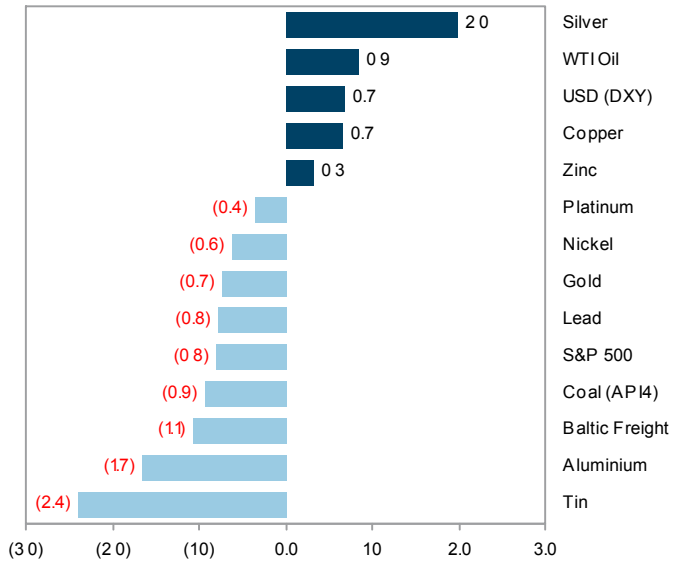
**May 16, 2011**

## Market Highlights

- **Oil up on positive EU and US data**
- **Gold down on firmer USD, silver continues recovery**
- **Base metals mixed as better EU data offset firmer USD**

## Daily Ranked Price Moves (%)




## Overnight Wrap

- **Oil rose marginally in choppy trading and lighter trading volumes.** Oil prices rose on better than expected European GDP (particularly in Germany and France) and as US consumer sentiment exceeded expectations in May. Although consumers are reportedly still wary about the inflation outlook due to higher energy prices, with April CPI up by 0.4%MoM or 3.2% YoY. Worsening floods in Louisiana also provided support, with some oil refinery production expected to be impacted by flood water diversions. Concerns over Greece's budget deficit this year (expected to exceed the limit imposed under its bail-out terms at 9.5% of GDP) ahead of the scheduled EU finance ministers meeting today could generate some volatile price action today. A Bloomberg survey found 85% of investors expect a Greek default.
- **Gold fell 0.7%** as the firmer US dollar against the Euro prompted selling. Although gold prices could reverse as safe-haven buying resumes on reignited Greece sovereign debt issues. On the flipside, silver continued to rebound after last week's 25% price correction, finding support around the US$35/oz level.
- **Base metals were mixed**, with better European data offsetting a stronger USD. Copper was the best of a dull bunch, up 0.7% with an eighth consecutive weekly drop in Shanghai copper stockpiles flagging rising domestic demand. Aluminium and nickel were softer, with choppy to lower oil prices and a drop in Chinese steel prices prompting profit-taking (key markets for both commodities).
- **Asian and Atlantic coal prices ended the week down** with a choppy oil price and slowing Asian demand weakening sentiment. Newcastle spot price fell 3.2% for the week, hitting a six month low, with traders noting softer demand out of Japan and well-stocked supply in South Korea and Taiwan. Interest in China and India remains more buoyant but mainly for lower quality, cheaper Indonesian supply.

## Price Data

| Commodities | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| **LME BASE METALS** (US$/t) | | | | | |
| Aluminium | 2,590 | (1.7) | (0.5) | (3.2) | 4.7 |
| Copper | 8,770 | 0.7 | (0.4) | (6.5) | (12.1) |
| Nickel | 24,398 | (0.6) | (0.8) | (6.7) | (13.7) |
| Zinc | 2,135 | 0.3 | 0.6 | (10.3) | (12.7) |
| Lead | 2,301 | (0.8) | (0.7) | (15.3) | (10.7) |
| Tin | 28,548 | (2.4) | (3.6) | (13.7) | (10.1) |
| **PRECIOUS METALS** (US$/oz) | | | | | |
| Gold | 1,495 | (0.7) | (0.0) | 0.6 | 10.2 |
| Gold (A$/oz) | 1,414 | 0.1 | 1.2 | 0.5 | 4.4 |
| Silver | 35.4 | 2.0 | (0.6) | (17.6) | 18.4 |
| Platinum | 1,765 | (0.4) | (1.2) | (1.5) | (2.2) |
| Palladium | 709 | (1.1) | (1.7) | (7.5) | (12.9) |
| **ENERGY** (US$/bbl) | | | | | |
| WTI Oil* | 99.7 | 0.9 | 2.5 | (9.1) | 16.4 |
| Brent Oil* | 113.8 | 0.6 | 4.3 | (7.8) | 12.2 |
| Sing Gasoil 0.5% | 125.2 | 0.0 | 3.4 | (8.7) | 8.2 |
| Sing Fuel Oil 180cst (US$/t) | 643 | 0.0 | 4.6 | (5.8) | 9.2 |
| **OTHER** (US$/t) | | | | | |
| China HR Coil (RmB/t) | 4,874 | (0.5) | (0.6) | 0.1 | 0.1 |
| Richards Bay Coal API4 | 117.9 | (0.9) | (4.5) | (5.9) | 2.7 |
| Newcastle Coal** | 118.7 | ... | (3.2) | (3.7) | (3.0) |
| Australia Coking Coal** | 318.2 | ... | (0.9) | (2.1) | 2.6 |
| Iron Ore Spot | 178.8 | (0.1) | (1.1) | (1.5) | (5.3) |

| Inventories | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| **LME BASE METALS** (kt) | | | | | |
| Aluminium | 4,623 | 0.7 | 0.5 | 1.2 | 0.5 |
| Copper | 469 | 0.2 | 0.3 | 4.0 | 18.1 |
| Nickel | 114 | (0.3) | (1.6) | (5.0) | (12.7) |
| Zinc | 831 | 0.3 | 1.0 | 8.8 | 17.2 |
| Lead | 317 | 0.2 | 1.6 | 10.3 | 7.3 |
| Tin | 22 | 0.8 | 3.4 | 16.6 | 22.1 |
| **Key Indices** | **Close** | **1 Day** | **1 Wk** | **1 Mth** | **3 Mth** |
| | | | % Change | | |
| S&P 500 | 1,338 | (0.8) | (0.2) | 1.4 | 0.6 |
| VIX Volatility Index | 17 | 6.5 | (7.2) | 11.4 | 8.8 |
| CRB Index | 339 | (0.0) | 0.3 | (6.7) | 0.2 |
| LME Metals Index | 3,995 | (0.2) | (0.8) | (7.1) | (9.2) |
| **Freight** | **Close** | **1 Day** | **1 Wk** | **1 Mth** | **3 Mth** |
| | | | % Change | | |
| Balt c Freight Rate | 1,306 | (1.1) | (2.5) | 0.8 | 10.9 |
| Balt c Capesize | 1,494 | (0.3) | (4.6) | (4.5) | 1.3 |
| Balt c Panamax | 1,720 | (2.8) | (2.8) | 13.6 | 6.2 |
| Balt c Handysize | 788 | (0.1) | (0.5) | (1.0) | 21.4 |
| **Currencies** | **Close** | **1 Day** | **1 Wk** | **1 Mth** | **3 Mth** |
| | | | % Change | | |
| DXY - USD Index | 75.8 | 0.7 | 1.2 | 1.2 | (3.4) |
| AUD/USD - Aussie | 1.057 | (0.9) | (1.2) | 0.0 | 5.5 |
| NZD/USD - Kiwi | 0.787 | (1.1) | (0.4) | (1.5) | 3.5 |

** Front-month futures ** Weekly prices*

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# ANZ RESEARCH

## COMMODITY DAILY

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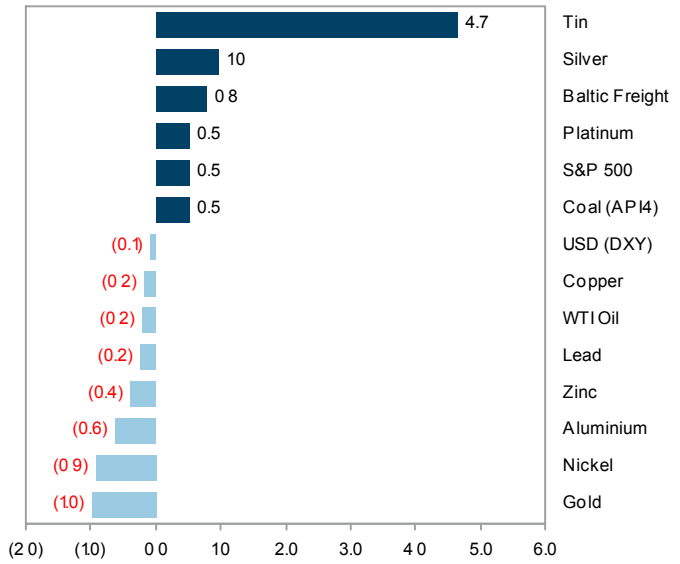
**August 15, 2011**

## Market Highlights

- **Oil was flat on Friday, but posted a 3rd week of declines**
- **Gold fell, as risk-on sentiment prevailed**
- **Metals fell, except for tin, due to new Indonesian royalty**

## Daily Ranked Price Moves (%)




## Overnight Wrap

- **Overnight Themes** – Commodities ended mixed, as markets took a breather after tumultuous trading during the week and volumes remained low. Equities rose, assisted by widening bans on short-selling of financial stocks. The US S&P ended only 1.7% down for the week, although the intra-week moves were the largest swings in history. Data released was also mixed with US consumer sentiment plunged from 63.7 to 54.9, much more than expected, but retail sales for July rose 0.5% in line with market views. European data flow was bearish, with EU industrial production down 0.7% and French Q2 GDP at 0% growth. A positive development was that Italy passed an austerity budget that is not quite as severe as Greek version, but is still likely to dampen growth. Commodity moves appears to be very sentiment-driven, so we expect continued choppiness depending on headlines this week.
- **Oil was flat**, as a pick-up in equities and weaker US dollar was offset by weaker economic data. Crude futures continued a third week of declines, with US crude down 1.7% and Brent dipped 1.2%. Implied oil volatility eased, but remained at elevated levels. CFTC data showed that money managers cut long positions to the lowest level in over 8 months, suggesting a bearish sentiment amid the current economic turmoil.
- **Spot gold prices fell 1% to US$1,747/oz**, as risk on sentiment prevailed on Friday and safe-haven buying was pared back. The lower gold prices provided an opportunity for physical gold buyers to re-enter.
- **Base metals were weaker**, with the exception of tin. Reports of a slowdown in China rail investments, a cut in the number of public homes China will construct and tightening measures are some of the worries that are impacting sentiment for base metals. Market direction may be influenced by manufacturing activity from the US and Europe this week.
- **API4 and API2 rose**, in line with firmer crude prices. AsiaPac prices came off over the past week fluctuating with mixed sentiment over broader market concerns. Japanese utilities have received many spot offers from Indonesian and Australian suppliers, with little or no interest.

## Price Data

| Commodities | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| **LME BASE METALS** (US$/t) | | | | | |
| Aluminium | 2,365 | (0.6) | (0.4) | (4.0) | (8.7) |
| Copper | 8,845 | (0.2) | (1.9) | (8.4) | 0.9 |
| Nickel | 21,353 | (0.9) | (5.0) | (11.5) | (12.5) |
| Zinc | 2,149 | (0.4) | (1.2) | (8.5) | 0.7 |
| Lead | 2,378 | (0.2) | 0.9 | (11.8) | 3.4 |
| Tin | 24,623 | 4.7 | 1.4 | (9.3) | (13.7) |
| **PRECIOUS METALS** (US$/oz) | | | | | |
| Gold | 1,747 | (1.0) | 5.0 | 9.6 | 16.8 |
| Gold (A$/oz) | 1,687 | (1.6) | 5.9 | 12.8 | 19.3 |
| Silver | 39.1 | 1.0 | 1.9 | (0.5) | 10.4 |
| Platinum | 1,797 | 0.5 | 4.6 | 2.1 | 1.9 |
| Palladium | 747 | 0.5 | 0.4 | (4.6) | 5.4 |
| **ENERGY** (US$/bbl) | | | | | |
| WTI Oil* | 85.4 | (0.2) | (1.7) | (12.2) | (14.3) |
| Brent Oil* | 108.0 | 0.1 | (1.2) | (7.9) | (5.1) |
| Sing Gasoil 0.5% | 120.8 | 0.0 | 0.6 | (5.7) | (3.5) |
| Sing Fuel Oil 180cst (US$/t) | 634 | 0.0 | (0.5) | (4.8) | (1.4) |
| **OTHER** (US$/t) | | | | | |
| China HR Coil (RmB/t) | 4,824 | 0.1 | (0.4) | 0.7 | (1.0) |
| R chards Bay Coal API4 | 119.1 | 0.5 | (0.3) | 1.4 | 1.1 |
| Newcastle Coal** | 119.7 | ... | (0.4) | (2.2) | 0.8 |
| Australia Coking Coal** | 299.3 | ... | (0.9) | (2.7) | (5.9) |
| Iron Ore Spot | 175.9 | (0.1) | (1.2) | 0.7 | (1.6) |

| Inventories | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| **LME BASE METALS** (kt) | | | | | |
| Aluminium | 4,564 | (0.2) | 3.5 | 3.4 | (1.3) |
| Copper | 462 | (0.3) | (0.7) | (0.1) | (1.4) |
| Nickel | 104 | 0.1 | 0.9 | 0.4 | (9.5) |
| Zinc | 879 | (0.3) | (0.9) | (1.4) | 5.8 |
| Lead | 309 | (0.2) | (0.4) | 0.2 | (2.5) |
| Tin | 23 | 0.7 | 1.4 | 6.9 | 2.9 |
| **Key Indices** | **Close** | **1 Day** | **1 Wk** | **1 Mth** | **3 Mth** |
| | | | % Change | | |
| S&P 500 | 1,179 | 0.5 | (1.7) | (10.4) | (11.9) |
| VIX Volatility Index | 36 | (6.8) | 13.6 | 86.2 | 113.0 |
| CRB Index | 327 | 0.1 | (0.1) | (5.7) | (3.5) |
| LME Metals Index | 3,887 | (0.1) | (1.4) | (7.9) | (2.7) |
| **Freight** | **Close** | **1 Day** | **1 Wk** | **1 Mth** | **3 Mth** |
| | | | % Change | | |
| Balt c Freight Rate | 1,287 | 0.8 | 1.5 | (4.9) | (1.5) |
| Baltic Capesize | 1,851 | 0.8 | 2.6 | (3.5) | 23.9 |
| Balt c Panamax | 1,520 | 1.3 | 2.8 | (3.7) | (11.6) |
| Balt c Handysize | 642 | (0.5) | (2.7) | (7.8) | (18.5) |
| **Currencies** | **Close** | **1 Day** | **1 Wk** | **1 Mth** | **3 Mth** |
| | | | % Change | | |
| DXY - USD Index | 74.6 | (0.1) | 0.0 | (0.7) | (1.5) |
| AUD/USD - Aussie | 1.036 | 0.7 | (0.8) | (2.8) | (2.1) |
| NZD/USD - Kiwi | 0.832 | 0.7 | (1.3) | (1.6) | 5.7 |

** Front-month futures ** Weekly prices*

**PUBLIC FILE**

# ANZ RESEARCH

## COMMODITY DAILY

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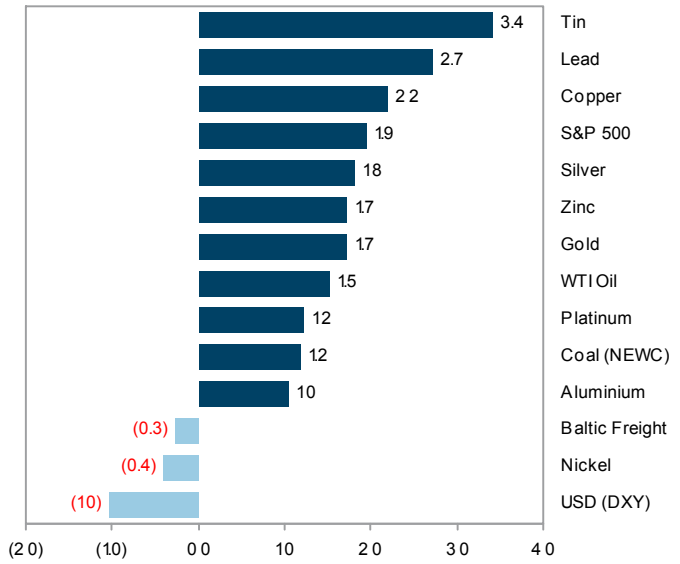
## Market Highlights

- **Oil gained on improving European political backdrop**
- **Gold rose on a weaker US dollar**
- **Metals up – aluminium outperforms on weekly basis**

## Daily Ranked Price Moves (%)




## Overnight Wrap

**November 14, 2011**

- **Overnight Themes** – Markets were quieter on Friday with the US Veteran's Day holiday. Risk appetite improved as new political steps in Greece and Italy were encouraging. Equities were up, while Italian 10-year bond yields fell 44bps to 6.420% buoyed by successful bond auctions and the improving political landscape. In Italy, former EC Commissioner Mario Monti has been nominated to form a new government, replacing Prime Minister Berlusconi. Meanwhile, Greece's new technocrat Prime Minister, Lucas Papademos, will begin his term today. He will be aiming to take advantage of a political truce between the two major parties in order to push through Greece's required austerity measures and spending reforms in the coming weeks. US economic data continued to show some encouraging signs with the estimate of the University of Michigan consumer confidence survey outperform market expectations – up 3.3 points to 64.5 (market: 61.5). Commodity markets are expected to be less sensitive to European risk this week, which will likely see some profit taking in the US dollar and potential for opportunistic buying at still good price levels.
- **Oil benchmarks rose**, as markets were buoyed by the improving European political backdrop and a rise in US consumer confidence. Reports that Iran will ask OPEC nations to cut supplies to pre-Libyan levels enabled Brent to outperform WTI on Friday.
- **Gold was up 1.1% to US$1,789/oz**, with reduced worries about euro zone helping to prop up prices by helping lift the Euro against the USD.
- **Base metals closed higher**, with Europe's political situation looking more positive. On a weekly basis, aluminium stood out, rising 1.2%, while the rest of the base metals were dragged by a 3% drop in the bellwether copper market. Aluminium is seeing support from higher energy costs.
- **Newcastle coal prices rose 1.2% to US$115/t**, reacting positively to firmer oil price on Friday, but sentiment remains cautious with prices down for the week.

## Price Data

| Commodities | Close | 1 Day | 1 Wk % Change | 1 Mth % Change | 3 Mth % Change |
|---|---|---|---|---|---|
| **LME BASE METALS** (US$/t) | | | | | |
| Aluminium | 2,144 | 1.0 | 1.2 | (2.5) | (9.3) |
| Copper | 7,621 | 2.2 | (3.0) | 1.2 | (13.8) |
| Nickel | 18,070 | (0.4) | (4.3) | (4.1) | (15.4) |
| Zinc | 1,914 | 1.7 | (1.5) | 0.1 | (10.9) |
| Lead | 1,970 | 2.7 | (2.8) | (1.8) | (17.2) |
| Tin | 21,896 | 3.4 | (0.6) | 0.6 | (11.1) |
| **PRECIOUS METALS** (US$/oz) | | | | | |
| Gold | 1,789 | 1.7 | 1.9 | 6.4 | 2.4 |
| Gold (A$/oz) | 1,741 | 0.6 | 2.9 | 7.1 | 3.2 |
| Silver | 34.7 | 1.8 | 1.5 | 7.7 | (11.3) |
| Platinum | 1,645 | 1.2 | 0.7 | 5.8 | (8.5) |
| Palladium | 661 | 1.9 | 0.6 | 5.8 | (11.6) |
| **ENERGY** (US$/bbl) | | | | | |
| WTI Oil* | 99.0 | 1.5 | 5.0 | 14.0 | 15.9 |
| Brent Oil* | 114.2 | 1.0 | 2.0 | (0.5) | 5.7 |
| Sing Gasoil 0.5% | 132.4 | 0.0 | 2.9 | 8.4 | 9.6 |
| Sing Fuel Oil 180cst (US$/t) | 720 | 0.0 | 2.5 | 6.5 | 13.4 |
| **OTHER** (US$/t) | | | | | |
| China HR Coil (RmB/t) | 4,230 | (0.0) | 0.3 | (6.8) | (12.3) |
| R chards Bay Coal API4 | 107.9 | 0.7 | (3.0) | (4.9) | (9.4) |
| Newcastle Coal | 115.4 | 1.2 | (1.3) | (4.7) | (3.6) |
| Australia Coking Coal** | 248.8 | ... | (0.7) | (7.6) | (16.9) |
| Iron Ore Spot | 137.7 | 2.2 | 12.0 | (12.6) | (21.7) |

| Inventories | Close | 1 Day | 1 Wk % Change | 1 Mth % Change | 3 Mth % Change |
|---|---|---|---|---|---|
| **LME BASE METALS** (kt) | | | | | |
| Aluminium | 4,534 | (0.1) | (0.3) | (0.3) | (0.7) |
| Copper | 408 | (0.6) | (2.4) | (9.4) | (11.7) |
| Nickel | 84 | 1.1 | (1.5) | (8.0) | (18.7) |
| Zinc | 753 | (0.6) | (1.6) | (5.7) | (14.4) |
| Lead | 377 | (0.5) | (2.0) | (3.0) | 22.1 |
| Tin | 15 | (2.7) | (3.6) | (23.6) | (36.0) |
| **Key Indices** | **Close** | **1 Day** | **1 Wk % Change** | **1 Mth % Change** | **3 Mth % Change** |
| S&P 500 | 1,264 | 1.9 | 0.8 | 3.2 | 7.2 |
| VIX Volatility Index | 30 | (8.4) | (0.4) | 6.4 | (17.4) |
| CRB Index | 320 | 0.4 | (0.1) | 1.0 | (1.9) |
| LME Metals Index | 3,385 | 1.8 | (1.9) | (0.3) | (12.9) |
| **Freight** | **Close** | **1 Day** | **1 Wk % Change** | **1 Mth % Change** | **3 Mth % Change** |
| Baltic Freight Rate | 1,835 | (0.3) | 2.9 | (15.6) | 42.6 |
| Baltic Capesize | 3,150 | (0.4) | 13.0 | (12.2) | 70.2 |
| Balt c Panamax | 1,761 | 0.0 | (4.1) | (15.5) | 15.9 |
| Balt c Handysize | 675 | (1.2) | (7.3) | (17.9) | 5.1 |
| **Currencies** | **Close** | **1 Day** | **1 Wk % Change** | **1 Mth % Change** | **3 Mth % Change** |
| DXY - USD Index | 76.9 | (1.0) | (0.0) | 0.4 | 3.1 |
| AUD/USD - Aussie | 1.028 | 1.2 | (1.0) | (0.6) | (0.8) |
| NZD/USD - Kiwi | 0.785 | 1.0 | (1.1) | (2.5) | (5.6) |

** Front-month futures ** Weekly prices*

## Price Data

| Commodities | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| **LME BASE METALS** (US$/t) | | | | | |
| Aluminium | 2,206 | (2.0) | (0.1) | 4.4 | 2.9 |
| Copper | 8,461 | (3.2) | (0.9) | 5.9 | 11.0 |
| Nickel | 20,608 | (3.8) | (2.9) | 5.4 | 14.0 |
| Zinc | 2,065 | (3.9) | (3.4) | 5.7 | 7.9 |
| Lead | 2,103 | (4.0) | (4.1) | 5.8 | 6.7 |
| Tin | 24,990 | (1.4) | 2.6 | 18.7 | 14.1 |
| **PRECIOUS METALS** (US$/oz) | | | | | |
| Gold | 1,722 | (0.4) | (0.2) | 5.1 | (3.7) |
| Gold (A$/oz) | 1,613 | 0.8 | 0.7 | 1.6 | (7.3) |
| Silver | 33.6 | (0.9) | (0.3) | 13.0 | (3.2) |
| Platinum | 1,660 | 0.1 | 2.2 | 11.4 | 0.9 |
| Palladium | 703 | (1.2) | (0.6) | 10.1 | 6.4 |
| **ENERGY** (US$/bbl) | | | | | |
| WTI Oil* | 98.7 | (1.2) | 0.8 | (0.0) | (0.3) |
| Brent Oil* | 117.3 | (1.1) | 2.4 | 6.2 | 2.8 |
| Sing Gasoil 0.5% | 133.2 | 0.0 | 3.9 | 3.3 | 0.6 |
| Sing Fuel Oil 180cst (US$/t) | 736 | 0.0 | 4.0 | 2.8 | 2.3 |
| **OTHER** (US$/t) | | | | | |
| China HR Coil (RmB/t) | 4,247 | (0.0) | 0.0 | 0.5 | 0.4 |
| Richards Bay Coal API4 | 103.3 | (0.6) | (2.0) | (0.3) | (4.3) |
| Newcastle Coal | 115.2 | (2.3) | (1.9) | 0.8 | (0.1) |
| Australia Coking Coal** | 216.0 | ... | (0.1) | (3.5) | (13.2) |
| Iron Ore Spot | 142.7 | (0.1) | (0.4) | 0.4 | 3.6 |

| Inventories | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| **LME BASE METALS** (kt) | | | | | |
| Aluminium | 5,027 | (0.0) | 0.8 | 1.1 | 10.9 |
| Copper | 313 | (0.3) | (4.1) | (12.4) | (23.3) |
| Nickel | 94 | 0.2 | (0.0) | 2.2 | 12.2 |
| Zinc | 836 | (0.3) | (0.4) | 2.3 | 11.1 |
| Lead | 383 | 0.0 | 1.9 | 8.5 | 1.5 |
| Tin | 9 | 0.7 | (1.0) | (18.3) | (37.2) |
| **Key Indices** | | | | | |
| S&P 500 | 1,343 | (0.7) | (0.2) | 4.2 | 6.2 |
| VIX Volatility Index | 21 | 11.6 | 21.6 | (0.6) | (30.8) |
| CRB Index | 312 | (1.1) | (0.7) | 1.4 | (2.5) |
| LME Metals Index | 3,707 | (3.0) | (0.9) | 6.3 | 9.5 |
| **Freight** | | | | | |
| Baltic Freight Rate | 715 | 2.9 | 10.5 | (32.1) | (61.0) |
| Baltic Capesize | 1,457 | 0.1 | 1.5 | (15.4) | (53.7) |
| Baltic Panamax | 967 | 7.9 | 39.5 | (23.5) | (45.1) |
| Baltic Handysize | 366 | (0.5) | (4.2) | (31.3) | (45.8) |
| **Currencies** | | | | | |
| DXY - USD Index | 79.1 | 0.7 | 0.2 | (2.9) | 2.8 |
| AUD/USD - Aussie | 1.067 | (1.2) | (0.9) | 3.4 | 3.9 |
| NZD/USD - Kiwi | 0.827 | (1.1) | (1.1) | 4.0 | 5.3 |

** Front-month futures ** Weekly prices*

Sources: Bloomberg, globalCOAL, Argus Coal

## US Commodity Futures Trading Commission (CFTC) Data

| METALS | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | Actual | | | |
| **Gold** (t) | | | | | | |
| Long | 695 | 658 | 531 | 624 | 995 | 738 |
| Short | 86 | 73 | 109 | 70 | 95 | 143 |
| Net Posit on | 609 | 585 | 422 | 554 | 900 | 595 |
| Open Interest | 2,142 | 2,056 | 1,999 | 2,445 | 2,544 | 2,032 |
| **Silver** (t) | | | | | | |
| Long | 5,151 | 4,445 | 4,322 | 3,805 | 5,867 | 6,982 |
| Short | 1,006 | 1,097 | 2,213 | 1,040 | 801 | 881 |
| Net Posit on | 4,145 | 3,348 | 2,109 | 2,765 | 5,067 | 6,101 |
| Open Interest | 23,831 | 22,475 | 22,195 | 25,453 | 27,783 | 29,491 |
| **Copper** (kt) | | | | | | |
| Long | 459 | 426 | 336 | 325 | 579 | 715 |
| Short | 380 | 380 | 354 | 304 | 304 | 381 |
| Net Pos t on | 79 | 46 | (18) | 21 | 275 | 334 |
| Open Interest | 1,818 | 1,724 | 1,371 | 1,435 | 1,771 | 1,845 |

| ENERGY | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | Actual | | | |
| **WTI Crude Oil** (mbbls) | | | | | | |
| Long | 338 | 342 | 327 | 332 | 335 | 344 |
| Short | 92 | 99 | 113 | 108 | 143 | 108 |
| Net Position | 245 | 244 | 214 | 224 | 192 | 236 |
| Open Interest | 1,485 | 1,400 | 1,373 | 1,345 | 1,529 | 1,537 |
| **Natural Gas** (1000 mmbtu) | | | | | | |
| Long | 2,679 | 2,703 | 1,818 | 1,441 | 1,687 | 1,731 |
| Short | 3,956 | 3,983 | 3,429 | 3,059 | 3,377 | 3,639 |
| Net Position | (1,277) | (1,280) | (1,611) | (1,619) | (1,690) | (1,909) |
| Open Interest | 12,993 | 12,452 | 10,448 | 9,920 | 10,147 | 9,646 |
| **RBOB Gasoline** (m gallons) | | | | | | |
| Long | 4,370 | 4,216 | 3,567 | 3,365 | 3,534 | 3,255 |
| Short | 691 | 745 | 900 | 874 | 824 | 389 |
| Net Position | 3,679 | 3,471 | 2,667 | 2,491 | 2,710 | 2,865 |
| Open Interest | 14,625 | 14,271 | 12,142 | 12,108 | 11,629 | 12,443 |

Note: Closing pr ces at 7 February 2012

Source: Bloomberg

## Price Data

| Commodities | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| **LME BASE METALS** (US$/t) | | | | | |
| Aluminium | 2,005 | (0.0) | (2.3) | (2.9) | (9.1) |
| Copper | 8,103 | (1.3) | (2.2) | (2.0) | (4.2) |
| Nickel | 17,158 | 0.2 | (0.3) | (7.9) | (16.7) |
| Zinc | 1,950 | (0.8) | (1.4) | (4.6) | (5.6) |
| Lead | 2,066 | (1.1) | (0.8) | (1.5) | (1.7) |
| Tin | 20,461 | 0.4 | (5.9) | (9.4) | (18.1) |
| **PRECIOUS METALS** (US$/oz) | | | | | |
| Gold | 1,579 | (0.9) | (3.5) | (5.8) | (8.3) |
| Gold (A$/oz) | 1,576 | (0.0) | (1.2) | (1.8) | (2.3) |
| Silver | 28.9 | (0.5) | (3.9) | (10.7) | (13.9) |
| Platinum | 1,465 | (1.6) | (4.8) | (8.7) | (11.8) |
| Palladium | 603 | (1.9) | (8.7) | (7.7) | (14.2) |
| **ENERGY** (US$/bbl) | | | | | |
| WTI Oil* | 96.1 | (0.4) | (6.3) | (7.2) | (2.6) |
| Brent Oil* | 112.3 | 0.2 | (3.3) | (7.8) | (4.3) |
| Sing Gasoil 0.5% | 123.9 | 0.0 | (5.6) | (6.8) | (7.0) |
| Sing Fuel Oil 180cst (US$/t) | 674 | 0.0 | (6.5) | (7.7) | (8.4) |
| **OTHER** (US$/t) | | | | | |
| China HR Coil (RmB/t) | 4,281 | (0.3) | (1.4) | (2.5) | 0.8 |
| Richards Bay Coal API4 | 96.8 | (0.7) | (0.5) | (5.7) | (6.3) |
| Newcastle Coal** | 98.1 | ... | (0.4) | (7.4) | (16.4) |
| Australia Coking Coal** | 218.5 | ... | 1.0 | 5.3 | 1.2 |
| Iron Ore Spot | 137.6 | (1.2) | (5.0) | (7.5) | (3.6) |

| Inventories | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| **LME BASE METALS** (kt) | | | | | |
| Aluminium | 4,951 | 0.1 | (1.1) | (2.1) | (1.5) |
| Copper | 221 | 0.6 | (5.9) | (16.8) | (29.2) |
| Nickel | 106 | (0.1) | 2.4 | 8.0 | 12.5 |
| Zinc | 933 | (0.2) | 0.7 | 3.7 | 11.6 |
| Lead | 353 | (0.0) | (2.2) | (5.6) | (7.9) |
| Tin | 14 | (0.2) | (0.1) | 9.6 | 58.4 |
| **Key Indices** | | | | | |
| S&P 500 | 1,353 | (0.3) | (2.7) | (2.5) | 0.8 |
| VIX Volatility Index | 20 | 5.6 | 13.3 | 15.6 | (4.3) |
| CRB Index | 292 | (0.9) | (3.2) | (4.5) | (6.5) |
| LME Metals Index | 3,423 | (0.7) | (2.3) | (3.4) | (7.7) |
| **Freight** | | | | | |
| Baltic Freight Rate | 1,138 | (0.7) | (1.6) | 18.5 | 59.2 |
| Baltic Capesize | 1,614 | (0.2) | 5.7 | 2.4 | 10.8 |
| Baltic Panamax | 1,322 | (2.1) | (19.1) | 19.1 | 36.7 |
| Baltic Handysize | 616 | 1.0 | 2.3 | 14.7 | 68.3 |
| **Currencies** | | | | | |
| DXY - USD Index | 80.3 | 0.2 | 1.3 | 1.2 | 1.5 |
| AUD/USD - Aussie | 1.002 | (0.9) | (2.3) | (4.0) | (6.1) |
| NZD/USD - Kiwi | 0.783 | (0.6) | (2.2) | (5.3) | (5.3) |

** Front-month futures ** Weekly prices*

Sources: Bloomberg, globalCOAL, Argus Coal

## US Commodity Futures Trading Commission (CFTC) Data

| METALS | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | Actual | | | |
| **Gold** (t) | | | | | | |
| Long | 514 | 547 | 562 | 695 | 694 | 796 |
| Short | 138 | 88 | 97 | 86 | 69 | 133 |
| Net Posit on | 376 | 458 | 465 | 609 | 625 | 662 |
| Open Interest | 2,077 | 2,018 | 1,938 | 2,142 | 2,628 | 2,452 |
| **Silver** (t) | | | | | | |
| Long | 4,419 | 4,291 | 4,800 | 5,151 | 3,876 | 5,476 |
| Short | 2,165 | 1,539 | 1,168 | 1,006 | 965 | 886 |
| Net Posit on | 2,254 | 2,752 | 3,632 | 4,145 | 2,910 | 4,590 |
| Open Interest | 23,366 | 22,310 | 24,072 | 23,831 | 26,073 | 30,539 |
| **Copper** (kt) | | | | | | |
| Long | 487 | 470 | 545 | 459 | 303 | 391 |
| Short | 447 | 425 | 438 | 380 | 299 | 257 |
| Net Posit on | 40 | 44 | 107 | 79 | 4 | 134 |
| Open Interest | 1,640 | 1,636 | 1,778 | 1,818 | 1,403 | 1,365 |

| ENERGY | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | Actual | | | |
| **WTI Crude Oil** (mbbls) | | | | | | |
| Long | 364 | 393 | 396 | 338 | 342 | 389 |
| Short | 114 | 96 | 100 | 92 | 108 | 107 |
| Net Position | 249 | 297 | 295 | 245 | 234 | 282 |
| Open Interest | 1,591 | 1,602 | 1,569 | 1,485 | 1,366 | 1,654 |
| **Natural Gas** (1000 mmbtu) | | | | | | |
| Long | 2,643 | 2,663 | 2,799 | 2,679 | 1,481 | 1,605 |
| Short | 3,778 | 3,879 | 4,076 | 3,956 | 3,087 | 3,343 |
| Net Position | (1,135) | (1,216) | (1,277) | (1,277) | (1,606) | (1,738) |
| Open Interest | 12,679 | 12,970 | 12,737 | 12,993 | 10,049 | 10,420 |
| **RBOB Gasoline** (m gallons) | | | | | | |
| Long | 4,025 | 4,352 | 4,824 | 4,370 | 3,393 | 3,489 |
| Short | 770 | 618 | 724 | 691 | 888 | 927 |
| Net Position | 3,254 | 3,734 | 4,101 | 3,679 | 2,505 | 2,562 |
| Open Interest | 14,129 | 13,533 | 15,419 | 14,625 | 12,764 | 13,852 |

Note: Closing pr ces at 8 May 2012

Source: Bloomberg

## Price Data

| Commodities | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| **LME BASE METALS** (US$/t) | | | | | |
| Aluminium | 1,841 | (1.1) | 0.9 | (1.9) | (8.2) |
| Copper | 7,484 | (0.6) | 0.6 | (2.9) | (8.8) |
| Nickel | 15,337 | (0.7) | (1.4) | (4.8) | (10.4) |
| Zinc | 1,819 | (1.5) | (0.5) | (2.8) | (7.5) |
| Lead | 1,889 | (1.3) | 0.3 | 1.0 | (9.6) |
| Tin | 17,880 | (0.1) | 0.0 | (4.7) | (12.2) |
| **PRECIOUS METALS** (US$/oz) | | | | | |
| Gold | 1,620 | 0.2 | 1.0 | 1.9 | 1.6 |
| Gold (A$/oz) | 1,533 | 0.2 | 1.1 | (1.4) | (2.7) |
| Silver | 28.1 | (0.1) | 1.2 | 2.9 | (3.2) |
| Platinum | 1,401 | (0.8) | (0.4) | (2.1) | (5.8) |
| Palladium | 583 | (0.5) | 0.4 | (0.4) | (5.2) |
| **ENERGY** (US$/bbl) | | | | | |
| WTI Oil* | 92.9 | (0.6) | 1.6 | 6.6 | (4.3) |
| Brent Oil* | 113.0 | (0.3) | 3.7 | 10.3 | 0.2 |
| Sing Gasoil 0.5% | 129.6 | 0.0 | 6.5 | 11.5 | 3.3 |
| Sing Fuel Oil 180cst (US$/t) | 670 | 0.0 | 4.3 | 9.2 | (1.7) |
| **OTHER** (US$/t) | | | | | |
| China HR Coil (RmB/t) | 3,634 | (0.3) | (1.2) | (8.6) | (15.4) |
| Richards Bay Coal API4 | 91.6 | (0.8) | 1.8 | 7.2 | (6.1) |
| Newcastle Coal** | 87.2 | ... | 1.8 | (1.7) | (11.1) |
| Australia Coking Coal** | 177.0 | ... | (2.9) | (18.7) | (19.0) |
| Iron Ore Spot | 113.8 | (0.9) | (2.5) | (14.3) | (18.3) |

| Inventories | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| **LME BASE METALS** (kt) | | | | | |
| Aluminium | 4,861 | (0.0) | (0.1) | 1.2 | (1.7) |
| Copper | 241 | (1.0) | (1.4) | (4.1) | 9.7 |
| Nickel | 117 | (0.1) | 1.2 | 10.3 | 9.7 |
| Zinc | 974 | (0.4) | (1.9) | (0.3) | 4.1 |
| Lead | 326 | 0.6 | (0.5) | (5.5) | (7.7) |
| Tin | 12 | 0.0 | 0.3 | (3.4) | (19.5) |

| Key Indices | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| S&P 500 | 1,406 | 0.2 | 1.1 | 3.6 | 3.5 |
| VIX Volatility Index | 15 | (3.5) | (5.8) | (11.9) | (21.7) |
| CRB Index | 302 | (1.0) | 0.4 | 2.7 | 2.5 |
| LME Metals Index | 3,163 | (0.8) | 0.5 | (2.6) | (8.3) |

| Freight | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| Baltic Freight Rate | 774 | (2.0) | (9.2) | (30.3) | (32.5) |
| Baltic Capesize | 1,169 | (1.9) | (2.6) | (11.4) | (27.8) |
| Baltic Panamax | 814 | (1.1) | (10.5) | (32.3) | (39.7) |
| Baltic Handysize | 531 | (0.7) | (3.8) | (23.3) | (13.0) |

| Currencies | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| DXY - USD Index | 82.6 | (0.1) | 0.2 | (1.0) | 3.0 |
| AUD/USD - Aussie | 1.057 | (0.1) | (0.0) | 3.3 | 4.5 |
| NZD/USD - Kiwi | 0.812 | 0.2 | (0.8) | 2.0 | 3.2 |

** Front-month futures ** Weekly prices*

Sources: Bloomberg, globalCOAL, Argus Coal

## US Commodity Futures Trading Commission (CFTC) Data

| METALS | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | Actual | | | |
| **Gold** (t) | | | | | | |
| Long | 517 | 542 | 577 | 547 | 695 | 903 |
| Short | 146 | 141 | 150 | 88 | 86 | 97 |
| Net Position | 370 | 401 | 427 | 458 | 609 | 806 |
| Open Interest | 1,937 | 2,004 | 2,085 | 2,018 | 2,142 | 2,819 |
| **Silver** (t) | | | | | | |
| Long | 4,872 | 4,972 | 4,559 | 4,291 | 5,151 | 4,981 |
| Short | 2,638 | 2,759 | 2,736 | 1,539 | 1,006 | 968 |
| Net Position | 2,234 | 2,214 | 1,823 | 2,752 | 4,145 | 4,013 |
| Open Interest | 25,100 | 24,719 | 24,710 | 22,310 | 23,831 | 27,299 |
| **Copper** (kt) | | | | | | |
| Long | 450 | 439 | 429 | 470 | 459 | 390 |
| Short | 646 | 605 | 579 | 425 | 380 | 267 |
| Net Position | (196) | (167) | (150) | 44 | 79 | 123 |
| Open Interest | 1,646 | 1,620 | 1,539 | 1,636 | 1,818 | 1,459 |

| ENERGY | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | Actual | | | |
| **WTI Crude Oil** (mbbls) | | | | | | |
| Long | 353 | 332 | 334 | 393 | 338 | 324 |
| Short | 106 | 113 | 134 | 96 | 92 | 145 |
| Net Position | 248 | 220 | 201 | 297 | 245 | 179 |
| Open Interest | 1,450 | 1,396 | 1,433 | 1,602 | 1,485 | 1,564 |
| **Natural Gas** (1000 mmbtu) | | | | | | |
| Long | 2,413 | 2,449 | 2,434 | 2,663 | 2,679 | 1,665 |
| Short | 3,166 | 3,212 | 3,360 | 3,879 | 3,956 | 3,399 |
| Net Position | (753) | (762) | (926) | (1,216) | (1,277) | (1,734) |
| Open Interest | 11,495 | 11,645 | 11,554 | 12,970 | 12,993 | 10,341 |
| **RBOB Gasoline** (m gallons) | | | | | | |
| Long | 3,927 | 3,543 | 3,542 | 4,352 | 4,370 | 2,801 |
| Short | 1,032 | 830 | 669 | 618 | 691 | 640 |
| Net Position | 2,896 | 2,712 | 2,872 | 3,734 | 3,679 | 2,161 |
| Open Interest | 11,794 | 11,021 | 11,609 | 13,533 | 14,625 | 11,567 |

Note: Closing prices at 07 August 2012

Source: Bloomberg

## Price Data

| Commodities | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| **LME BASE METALS** (USD/t) | | | | | |
| Aluminium | 1,902 | (0.0) | 0.1 | (3.4) | 3.3 |
| Copper | 7,568 | (0.8) | (1.2) | (6.9) | 1.1 |
| Nickel | 15,907 | (1.3) | (0.1) | (6.5) | 3.7 |
| Zinc | 1,863 | (1.9) | 1.4 | (1.8) | 2.4 |
| Lead | 2,178 | (2.3) | 3.8 | 2.4 | 15.3 |
| Tin | 20,330 | (1.2) | 0.8 | (4.8) | 13.7 |
| **PRECIOUS METALS** (USD/oz) | | | | | |
| Gold | 1,731 | (0.0) | 3.2 | (1.3) | 6.8 |
| Gold (A$/oz) | 1,667 | 0.5 | 2.7 | (2.8) | 8.8 |
| Silver | 32.6 | 0.8 | 5.5 | (2.7) | 15.9 |
| Platinum | 1,555 | 0.8 | 0.7 | (5.9) | 11.0 |
| Palladium | 607 | (1.4) | 0.8 | (4.4) | 4.1 |
| **ENERGY** (USD/bbl) | | | | | |
| WTI Oil* | 86.1 | 1.3 | 1.4 | (6.3) | (7.3) |
| Brent Oil* | 109.4 | 2.1 | 3.5 | (4.6) | (3.1) |
| Sing Gasoil 0.5% | 121.4 | 0.0 | (2.2) | (7.3) | (6.4) |
| Sing Fuel Oil 180cst (US$/t) | 597 | 0.0 | (3.0) | (9.4) | (10.9) |
| **OTHER** (USD/t) | | | | | |
| China HR Coil (RmB/t) | 3,889 | 0.5 | 3.2 | 4.1 | 7.0 |
| Richards Bay Coal API4 | 85.5 | 0.0 | 3.5 | 0.9 | (6.7) |
| Newcastle Coal** | 80.0 | ... | 0.4 | (4.7) | (8.3) |
| Australia Coking Coal** | 157.0 | ... | 4.7 | 6.0 | (11.3) |
| Iron Ore Spot | 122.1 | 0.6 | 1.7 | 6.6 | 7.3 |

| Inventories | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| **LME BASE METALS** (kt) | | | | | |
| Aluminium | 5,096 | 0.2 | 0.2 | 0.5 | 4.8 |
| Copper | 246 | 0.6 | 1.4 | 14.1 | 2.1 |
| Nickel | 130 | (0.4) | 0.0 | 4.5 | 11.6 |
| Zinc | 1,161 | (0.2) | (0.8) | 14.7 | 19.2 |
| Lead | 334 | 6.1 | 4.1 | 12.6 | 2.6 |
| Tin | 12 | (0.2) | (2.5) | (0.6) | (0.0) |

| Key Indices | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| S&P 500 | 1,380 | 0.2 | (2.4) | (3.4) | (1.9) |
| VIX Volatility Index | 19 | 0.6 | 5.8 | 15.3 | 26.3 |
| CRB Index | 292 | 0.1 | (0.0) | (4.7) | (3.2) |
| LME Metals Index | 3,245 | (0.9) | (0.5) | (5.6) | 2.6 |

| Freight | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| Baltic Freight Rate | 940 | 2.6 | (4.7) | 1.5 | 21.4 |
| Baltic Capesize | 2,203 | 4.0 | (4.4) | 15.1 | 88.5 |
| Baltic Panamax | 722 | (0.6) | (5.7) | (17.1) | (11.3) |
| Baltic Handysize | 407 | (0.5) | (3.6) | (8.3) | (23.4) |

| Currencies | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| DXY - USD Index | 81.0 | 0.3 | 0.5 | 1.7 | (1.8) |
| AUD/USD - Aussie | 1.039 | (0.5) | 0.5 | 1.5 | (1.8) |
| NZD/USD - Kiwi | 0.814 | (0.5) | (1.4) | (0.3) | 0.1 |

** Front-month futures ** Weekly prices*

Sources: Bloomberg, globalCOAL, Argus Coal

## US Commodity Futures Trading Commission (CFTC) Data

| METALS | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | Actual | | | |
| **Gold** (t) | | | | | | |
| Long | 653 | 686 | 822 | 542 | 547 | 694 |
| Short | 82 | 85 | 76 | 141 | 88 | 69 |
| Net Posit on | 571 | 602 | 746 | 401 | 458 | 625 |
| Open Interest | 2,178 | 2,146 | 2,363 | 2,004 | 2,018 | 2,628 |
| **Silver** (t) | | | | | | |
| Long | 6,973 | 7,340 | 7,754 | 4,972 | 4,291 | 3,876 |
| Short | 1,321 | 1,342 | 1,075 | 2,759 | 1,539 | 965 |
| Net Posit on | 5,653 | 5,999 | 6,679 | 2,214 | 2,752 | 2,910 |
| Open Interest | 28,945 | 28,034 | 28,984 | 24,719 | 22,310 | 26,073 |
| **Copper** (kt) | | | | | | |
| Long | 477 | 517 | 622 | 439 | 470 | 303 |
| Short | 502 | 543 | 519 | 605 | 425 | 299 |
| Net Pos t on | (25) | (26) | 102 | (167) | 44 | 4 |
| Open Interest | 1,765 | 1,778 | 1,728 | 1,620 | 1,636 | 1,403 |

| ENERGY | Spot | 1 Wk | 1 Mth | 3 Mth | 6 Mth | 12 Mth |
|---|---|---|---|---|---|---|
| | | | Actual | | | |
| **WTI Crude Oil** (mbbls) | | | | | | |
| Long | 368 | 370 | 378 | 332 | 393 | 342 |
| Short | 134 | 129 | 100 | 113 | 96 | 108 |
| Net Position | 233 | 241 | 278 | 220 | 297 | 234 |
| Open Interest | 1,615 | 1,598 | 1,557 | 1,396 | 1,602 | 1,366 |
| **Natural Gas** (1000 mmbtu) | | | | | | |
| Long | 2,652 | 2,851 | 2,608 | 2,449 | 2,663 | 1,481 |
| Short | 3,271 | 3,375 | 3,152 | 3,212 | 3,879 | 3,087 |
| Net Position | (619) | (524) | (545) | (762) | (1,216) | (1,606) |
| Open Interest | 12,150 | 12,228 | 11,918 | 11,645 | 12,970 | 10,049 |
| **RBOB Gasoline** (m gallons) | | | | | | |
| Long | 4,153 | 4,281 | 4,821 | 3,543 | 4,352 | 3,393 |
| Short | 1,461 | 1,591 | 1,590 | 830 | 618 | 888 |
| Net Position | 2,692 | 2,690 | 3,231 | 2,712 | 3,734 | 2,505 |
| Open Interest | 11,715 | 11,990 | 12,210 | 11,021 | 13,533 | 12,764 |

Note: Closing posit ons at 6 November 2012

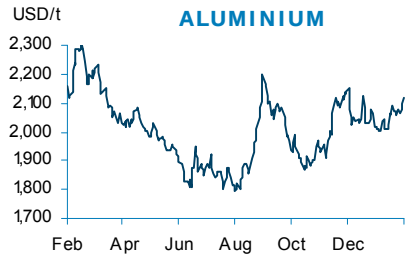
Source: Bloomberg

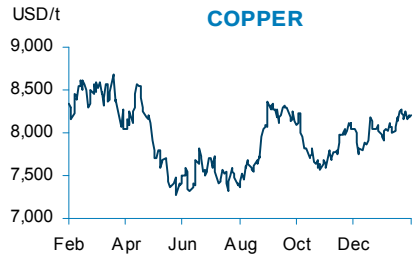
# COMMODITY DATA

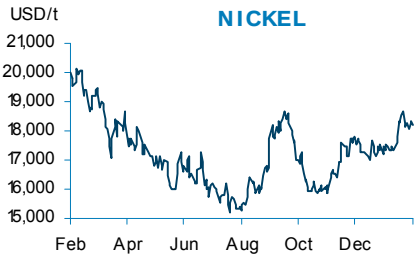
## PRICE DATA

| Commodities | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| **LME BASE METALS** (USD/t) | | | | | |
| Aluminium | 2115 | 0.7 | 2.7 | 5.1 | 8.9 |
| Copper | 8205 | 0.2 | 0.5 | 2.2 | 7.5 |
| Nickel | 18187 | (0.6) | 0.4 | 3.7 | 14.7 |
| Zinc | 2163 | (0.3) | 1.1 | 8.7 | 12.1 |
| Lead | 2394 | 0.3 | (0.1) | 5.2 | 8.1 |
| Tin | 24800 | (0.3) | 0.6 | (0.8) | 20.7 |
| **PRECIOUS METALS** (USD/oz) | | | | | |
| Gold | 1,634 | (0.5) | (2.2) | (3.1) | (4.7) |
| Gold (A$/oz) | 1,580 | (0.5) | (2.8) | (1.3) | (5.1) |
| Silver | 30 | (1.2) | (3.4) | (4.2) | (6.8) |
| Platinum | 1,711 | (0.6) | (0.5) | 1.1 | 8.8 |
| Palladium | 766 | (0.3) | 1.9 | 5.6 | 21.3 |
| **ENERGY** (USD/bbl) | | | | | |
| WTI Oil* | 97.32 | 0.3 | 1.6 | 1.9 | 13.9 |
| Brent Oil* | 118.00 | (0.6) | 0.6 | 6.2 | 6.3 |
| Sing Gasoil 0.5%*** | 135 | 0.0 | 0.7 | 7.5 | 9.8 |
| Sing Fuel Oil 180cst (US$/t)*** | 661 | 0.0 | 0.7 | 4.9 | 6.4 |
| **OTHER** (USD/t) | | | | | |
| China HR Coil (RmB/t)*** | 4,153 | 0.0 | 0.0 | 2.4 | 5.0 |
| R chards Bay Coal | 86 | (0.4) | (0.1) | (1.0) | (2.0) |
| Newcastle Coal* | 94.4 | (0.3) | (1.6) | 0.3 | 5.2 |
| Australia Coking Coal** | 168 | ... | (0.8) | 3.8 | 6.9 |
| Iron Ore Spot*** | 155.1 | 0.0 | 0.0 | 6.7 | 26.3 |

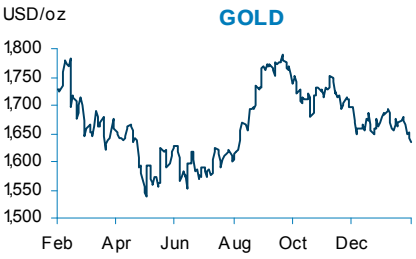
| Inventories | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| **LME BASE METALS** (kt) | | | | | |
| Aluminium | 5,148 | 0.0 | 0.2 | (0.5) | 1.2 |
| Copper | 399 | 0.1 | 2.6 | 15.4 | 57.5 |
| Nickel | 154 | (0.1) | 1.8 | 4.4 | 15.2 |
| Zinc | 1,188 | 0.0 | (0.7) | (2.9) | 3.1 |
| Lead | 287 | (0.1) | (0.1) | (2.8) | (11.3) |
| Tin | 13 | 0.0 | 0.3 | 3.8 | 16.2 |
| **Key Indices** | **Close** | **1 Day** | **1 Wk** | **1 Mth** | **3 Mth** |
| | | | % Change | | |
| S&P 500 | 1,521 | 0.1 | 0.8 | 2.7 | 12.4 |
| VIX Volatility Index | 13 | (2.5) | (6.2) | (6.7) | (29.6) |
| CRB Index | 293 | (2.6) | (2.7) | (2.5) | (0.0) |
| LME Metals Index | 3,606 | 0.4 | 1.1 | 3.3 | 9.6 |
| **Freight** | **Close** | **1 Day** | **1 Wk** | **1 Mth** | **3 Mth** |
| | | | % Change | | |
| Baltic Freight Rate | 748 | (0.4) | (0.1) | (8.8) | (27.0) |
| Baltic Capesize | 1,429 | (1.3) | (3.5) | (9.2) | (39.2) |
| Balt c Panamax | 808 | 3.3 | 16.3 | 8.7 | (4.5) |
| Balt c Handysize | 412 | (0.5) | (3.1) | (11.2) | 2.2 |
| **Currencies** | **Close** | **1 Day** | **1 Wk** | **1 Mth** | **3 Mth** |
| | | | % Change | | |
| DXY - USD Index | 80.4 | 0.4 | 0.2 | 0.9 | (0.9) |
| AUD/USD - Aussie | 1.035 | (0.0) | 0.6 | (1.9) | 0.3 |
| NZD/USD - Kiwi | 0.847 | 0.7 | 1.9 | 0.7 | 4.8 |



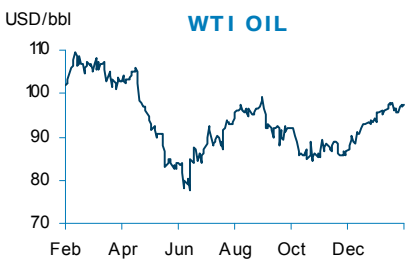



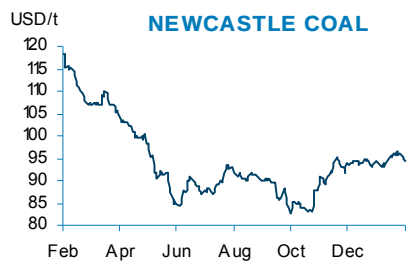



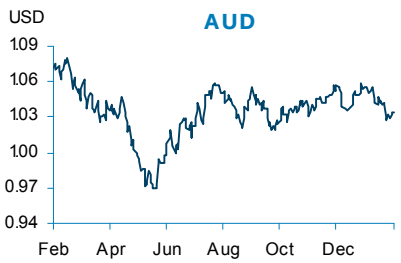









Notes: *Front-month futures **Weekly pr ces ***Market closed for Lunar New Year holidays

Sources: Bloomberg, McCloskey, ANZ Commodity Strategy

# COMMODITY DATA

## PRICE DATA

| Commodities | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| **LME BASE METALS** (USD/t) | | | | | |
| Aluminium | 1828 | (0.7) | (1.1) | (3.0) | (12.1) |
| Copper | 7216 | (2.3) | (0.3) | (0.7) | (12.0) |
| Nickel | 15034 | (1.1) | (0.6) | (3.8) | (17.8) |
| Zinc | 1814 | (0.9) | (1.3) | (2.5) | (17.0) |
| Lead | 1965 | (1.3) | (2.1) | (3.7) | (18.2) |
| Tin | 20933 | 0.5 | 3.9 | (0.6) | (15.8) |
| **PRECIOUS METALS** (USD/oz) | | | | | |
| Gold | 1,425 | (0.4) | (1.9) | 4.2 | (13.7) |
| Gold (A$/oz) | 1,439 | 0.1 | 0.8 | 9.1 | (10.1) |
| Silver | 23 | (1.1) | (2.3) | 0.0 | (24.8) |
| Platinum | 1,501 | 1.4 | 1.2 | 3.6 | (12.6) |
| Palladium | 731 | 1.9 | 7.0 | 7.9 | (5.3) |
| **ENERGY** (USD/bbl) | | | | | |
| WTI Oil* | 94.21 | (1.0) | (1.5) | 6.2 | (3.4) |
| Brent Oil* | 102.60 | (0.2) | (1.7) | 2.7 | (13.5) |
| Sing Gasoil 0.5% | 117 | 0.1 | 0.8 | 4.1 | (13.1) |
| Sing Fuel Oil 180cst (US$/t) | 603 | (0.7) | (4.6) | 0.5 | (8.7) |
| **OTHER** (USD/t) | | | | | |
| China HR Coil (RmB/t) | 3,645 | (0.1) | (1.1) | (4.0) | (12.2) |
| Richards Bay Coal | 81 | 0.3 | (1.5) | (2.5) | (7.1) |
| Newcastle Coal* | 86.3 | (0.1) | (1.6) | (2.0) | (9.5) |
| Australia Coking Coal** | 146 | ... | (0.8) | (5.2) | (13.0) |
| Iron Ore Spot | 128.1 | (1.0) | (1.5) | (8.1) | (17.4) |

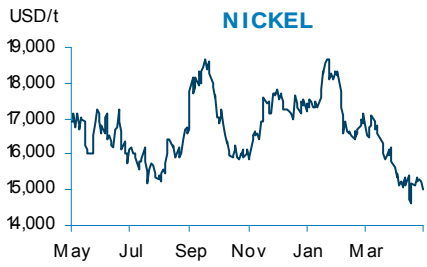
| Inventories | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| **LME BASE METALS** (kt) | | | | | |
| Aluminium | 5,230 | 1.5 | 1.4 | 0.6 | 1.7 |
| Copper | 619 | 2.0 | 2.3 | 1.1 | 54.7 |
| Nickel | 178 | 0.3 | 0.1 | 5.8 | 15.8 |
| Zinc | 1,033 | (0.5) | (1.8) | (8.3) | (13.0) |
| Lead | 246 | 0.8 | (2.2) | (5.4) | (14.6) |
| Tin | 14 | 0.2 | 1.8 | (3.4) | 6.1 |

| Key Indices | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| S&P 500 | 1,650 | 1.0 | 1.5 | 4.8 | 8.6 |
| VIX Volatil ty Index | 13 | 1.8 | (0.5) | (8.5) | 1.0 |
| CRB Index | 288 | (0.4) | (0.5) | 1.6 | (4.3) |
| LME Metals Index | 3,122 | (1.5) | (0.2) | (1.6) | (13.0) |

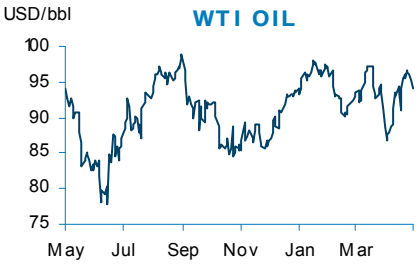
| Freight | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| Balt c Freight Rate | 872 | (0.8) | (1.9) | (0.9) | 16.7 |
| Balt c Capesize | 1,360 | (0.7) | (2.4) | 8.7 | (6.1) |
| Balt c Panamax | 988 | (0.5) | (1.1) | (13.6) | 31.9 |
| Balt c Handysize | 555 | 0.4 | 1.6 | 4.5 | 33.1 |

| Currencies | Close | 1 Day | 1 Wk | 1 Mth | 3 Mth |
|---|---|---|---|---|---|
| | | | % Change | | |
| DXY - USD Index | 83.6 | 0.4 | 1.7 | 2.3 | 4.4 |
| AUD/USD - Aussie | 0.990 | (0.4) | (2.7) | (4.5) | (4.0) |
| NZD/USD - Kiwi | 0.821 | (0.4) | (2.9) | (3.3) | (2.6) |

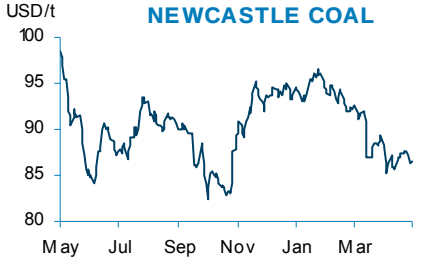












Notes: *Front-month futures **Weekly prices

Sources: Bloomberg, McCloskey, ANZ Commod ty Strategy

# Attachment B-4.5

## PBoC interbank lending rate

http://www.global-rates.com/interest-rates/central-banks/central-bank-china/pbc-interest-rate.aspx

**PUBLIC FILE**





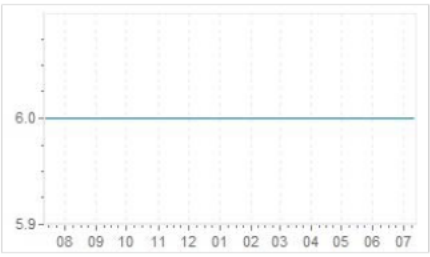




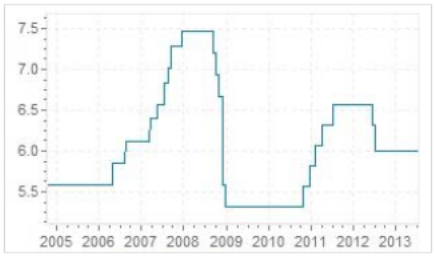
# PBC base interest rate - Chinese central bank's interest rate

## Charts - historic PBC interest rates

Graph Chinese interest rate PBC - interest rates last year




Graph Chinese interest rate PBC - long-term graph




The current Chinese interest rate PBC (base rate) is 6.000 %

## PBC - The People's Bank of China

The People's Bank of China (PBC or PBOC) is the central bank of the People's Republic of China. There is no financial institution in the world which has more financial assets / resources than the People's Bank of China. Under the guidance of the State Council the PBC deals with:

- drafting and implementing monetary policy. The most important aim of this is to maintain financial stability and the value of the currency in order to stimulate economic growth;
- to prevent or restrict financial risks;
- to safeguard financial stability.

Other important tasks for the Central Bank of China are:

- issuing and administering the circulation of the Renminbi, the official currency of the People's Republic of China. The name means "people's currency". The unit of the renminbi is the yuan;
- regulating the interbank lending market and the interbank bond market;
- managing the official foreign currency and gold reserves;
- recording foreign exchange transactions and regulating the interbank trade in foreign currencies;
- managing the State's "treasury";
- maintaining the normal functioning of payment traffic;
- initiating and organising the financial sector's anti-moneylaundering policy;
- calculating the financial statistics and producing research, analyses and forecasts;
- participating in international financial activities on behalf of the central bank.

## Central bank base interest rate

When reference is made to *the Chinese interest rate* this often refers to the base interest rate. The central bank base interest rate or base rate is PBC's basic interest rate. The Chinese central bank has complete autonomy with regard to the use of monetary instruments. This means - amongst other things - that the bank sets the interest rates for commercial banks. The bank thereby has a lot of influence over the rates which need to be paid in the market for loans and mortgages and the interest paid on savings.

This page shows the current and historic values of the central bank base interest rate of the Chinese central bank.

For a summary of the current interest rates of a large number of central banks please click here.

## Tables - current and historic Chinese central bank interest rates

PBC latest interest rate changes

| change date | percentage |
|---|---|
| july 06 2012 | 6.000 % |
| june 08 2012 | 6.310 % |
| july 07 2011 | 6.560 % |
| april 06 2011 | 6.310 % |
| february 09 2011 | 6.060 % |
| december 26 2010 | 5.810 % |
| october 20 2010 | 5.560 % |
| december 23 2008 | 5.310 % |
| november 27 2008 | 5.580 % |
| october 30 2008 | 6.660 % |

Summary of other central banks' interest rates

| central bank interest rate | region | percentage | date |
|---|---|---|---|
| FED interest rate | United States | 0.250 % | 12-16-2008 |
| RBA interest rate | Australia | 2.500 % | 08-06-2013 |
| BACEN interest rate | Brazil | 8.500 % | 07-10-2013 |
| BoE interest rate | Great Britain | 0.500 % | 03-05-2009 |
| BOC interest rate | Canada | 1.000 % | 09-08-2010 |
| PBC interest rate | China | 6.000 % | 07-06-2012 |
| ECB interest rate | Europe | 0.500 % | 05-02-2013 |
| BoJ interest rate | Japan | 0.100 % | 10-05-2010 |
| CBR interest rate | Russia | 8.250 % | 09-14-2012 |
| SARB interest rate | South Africa | 5.000 % | 07-19-2012 |

In order to be able to show the data on this page, we make use of a large number of sources of information that we believe to be reliable. For more information and our disclaimer, click here.

libor | euribor | banks | inflation

American interest rate (Fed) 0.25 % 12-16-2008
Australian interest rate (RBA) 2.50 % 08-06-2013
British interest rate (BoE) 0.50 % 03-05-2009
Canadian interest rate (BOC) 1.00 % 09-08-2010
European interest rate (ECB) 0.50 % 05-02-2013
Japanese interest rate (BoJ) 0.10 % 10-05-2010
All central banks interest rates, click here

Quick links:
Euribor interest rates | Libor interest rates
Eonia interest rates | Interest rates central banks
Inflation figures | CPI inflation

# Attachment B-4.6

## Chinese cost indexes

(Chinese Government)

- http://www.stats.gov.cn/tjsj/ndsj/2012/indexeh.htm

**PUBLIC FILE**

Link Excel Link Chinese Full Window

## 4-11 Average Wage of Employed Persons in Urban Units and Related Indices

| Year Region | Average Wage (yuan) | | | | | Indices of Average Wage(preceding year=100) | | | | | Indices of Average Real Wage(preceding year=100) | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Total | Staff and Workers | State-owned Units | Urban Collective-owned Units | Units of Other Types of Ownership | Total | Staff and Workers | State-owned Units | Urban Collective-owned Units | Units of Other Types of Ownership | Total | Staff and Workers | State-owned Units | Urban Collective-owned Units | Units of Other Types of Ownership |
| 1995 | 5348 | 5500 | 5553 | 3934 | 7728 | 118.9 | 121.2 | 117.3 | 121.1 | 119.9 | 101.8 | 103.8 | 100.4 | 103.7 | 102.6 |
| 1996 | 5980 | 6210 | 6207 | 4312 | 8521 | 111.8 | 112.9 | 111.8 | 109 6 | 110.3 | 102.8 | 103.8 | 102.7 | 100.7 | 101.3 |
| 1997 | 6444 | 6470 | 6679 | 4516 | 9092 | 107.8 | 104.2 | 107.6 | 104.7 | 106.7 | 104.5 | 101.1 | 104.4 | 101.6 | 103.5 |
| 1998 | 7446 | 7479 | 7579 | 5314 | 9241 | 115.5 | 106.6 | 113.5 | 117.7 | 101.6 | 116.2 | 107.2 | 114 2 | 118.4 | 102.3 |
| 1999 | 8319 | 8346 | 8443 | 5758 | 10142 | 111.7 | 111.6 | 111.4 | 108.4 | 109.8 | 113.2 | 113.1 | 112 9 | 109.8 | 111.2 |
| 2000 | 9333 | 9371 | 9441 | 6241 | 11238 | 112.2 | 112.3 | 111.8 | 108.4 | 110.8 | 111.3 | 111.4 | 110 9 | 107.5 | 109.9 |
| 2001 | 10834 | 10870 | 11045 | 6851 | 12437 | 116.1 | 116.0 | 117.0 | 109 8 | 110.7 | 115.3 | 115.2 | 116 2 | 109.0 | 109.9 |
| 2002 | 12373 | 12422 | 12701 | 7636 | 13486 | 114.2 | 114.3 | 115.0 | 111 5 | 108.4 | 115.4 | 115.5 | 116 2 | 112.6 | 109.5 |
| 2003 | 13969 | 14040 | 14358 | 8627 | 14843 | 112.9 | 113.0 | 113.0 | 113 0 | 110.1 | 111.9 | 112.0 | 112 0 | 112.0 | 109.1 |
| 2004 | 15920 | 16024 | 16445 | 9723 | 16519 | 114.0 | 114.1 | 114.5 | 112.7 | 111.3 | 110.3 | 110.5 | 110 9 | 109.1 | 107.7 |
| 2005 | 18200 | 18364 | 18978 | 11176 | 18362 | 114.3 | 114.6 | 115.4 | 114 9 | 111.2 | 112.5 | 112.8 | 113 6 | 113.1 | 109.4 |
| 2006 | 20856 | 21001 | 21706 | 12866 | 21004 | 114.6 | 114.4 | 114.4 | 115.1 | 114.4 | 112.9 | 112.7 | 112.7 | 113.4 | 112.7 |
| 2007 | 24721 | 24932 | 26100 | 15444 | 24271 | 118.5 | 118.7 | 120.2 | 120 0 | 115.6 | 113.4 | 113.6 | 115 0 | 114.8 | 110.6 |
| 2008 | 28898 | 29229 | 30287 | 18103 | 28552 | 116.9 | 117.2 | 116.0 | 117 2 | 117.6 | 110.7 | 111.0 | 109 8 | 111.0 | 111.4 |
| 2009 | 32244 | 32736 | 34130 | 20607 | 31350 | 111.6 | 112.0 | 112.7 | 113 8 | 109.8 | 112.6 | 113.0 | 113.7 | 114.8 | 110.8 |
| 2010 | 36539 | 37147 | 38359 | 24010 | 35801 | 113.3 | 113.5 | 112.4 | 116 5 | 114.2 | 109.8 | 110.0 | 108 9 | 112.9 | 110.7 |
| 2011 | 41799 | 42452 | 43483 | 28791 | 41323 | 114.4 | 114.3 | 113.4 | 119 9 | 115.4 | 108.6 | 108.5 | 107.7 | 113.9 | 109.6 |
| Beijing | 75482 | 75834 | 78270 | 32574 | 76251 | 115.8 | 115.5 | 116.1 | 122.1 | 115.1 | 110.0 | 109.6 | 110 3 | 116.0 | 109.3 |
| Tianjin | 55658 | 56477 | 64153 | 35213 | 52489 | 108.1 | 106.6 | 113.3 | 93.4 | 108.1 | 102.7 | 101.3 | 107 6 | 88.7 | 102.7 |
| Hebei | 35309 | 35973 | 35872 | 24788 | 35575 | 112.3 | 111.4 | 112.2 | 113 6 | 111.3 | 106.6 | 105.7 | 106 5 | 107.9 | 105.7 |
| Shanxi | 39230 | 39903 | 36542 | 27038 | 45992 | 118.7 | 119.0 | 111.9 | 125 3 | 128.2 | 112.7 | 113.0 | 106 2 | 119.0 | 121.8 |
| Inner Mongolia | 41118 | 41481 | 43788 | 37382 | 36317 | 116.8 | 116.8 | 117.5 | 127 6 | 116.1 | 110.9 | 110.9 | 111 6 | 121.2 | 110.3 |

**PUBLIC FILE**

Link Excel Link Chinese Full Window

# 9-15 Purchasing Price Indices for Industrial Producers

(preceding year=100)

| Year | General Index | Fuel and Power | Ferrous Metals | Nonferrous Metals | Raw Chemical Materials | Timber and Paper Pulp | Building Materials | Agricultural Products | Textile Materials |
|---|---|---|---|---|---|---|---|---|---|
| 1989 | 126.4 | 124.7 | 130.3 | 127.6 | 124.4 | 111.4 | 122.7 | 128.9 | 128.5 |
| 1990 | 105.6 | 110.7 | 103.9 | 97.2 | 95.6 | 99.4 | 115.2 | 107.8 | 107.4 |
| 1991 | 109.1 | 112.9 | 112.5 | 101.2 | 99.8 | 105.6 | 101.2 | 106.8 | 108.9 |
| 1992 | 111.0 | 116.4 | 114.5 | 112.4 | 102.6 | 102.0 | 118.8 | 103.4 | 100.5 |
| 1993 | 135.1 | 136.7 | 174.1 | 115.8 | 114.3 | 128.6 | 140.9 | 112.2 | 107.1 |
| 1994 | 118.2 | 118.0 | 103.8 | 110.7 | 111.7 | 115.1 | 114.3 | 148.3 | 139.6 |
| 1995 | 115.3 | 108.7 | 98.2 | 128.3 | 127.2 | 115.8 | 102.6 | 143.1 | 123.6 |
| 1996 | 103.9 | 110.2 | 99.3 | 92.4 | 98.0 | 101.9 | 102.5 | 114.7 | 94.5 |
| 1997 | 101.3 | 109.3 | 97.4 | 96.2 | 97.1 | 100.9 | 99.7 | 102.0 | 94.7 |
| 1998 | 95.8 | 99.1 | 95.1 | 88.3 | 93.6 | 96.7 | 98.6 | 94.5 | 94.3 |
| 1999 | 96.7 | 100.9 | 94.7 | 98.9 | 97.6 | 100.4 | 98.8 | 89.8 | 96.8 |
| 2000 | 105.1 | 115.4 | 100.9 | 110.3 | 105.6 | 99.8 | 101.5 | 99.9 | 102.4 |
| 2001 | 99.8 | 100.2 | 100.5 | 95.6 | 98.4 | 100.4 | 98.6 | 101.2 | 99.7 |
| 2002 | 97.7 | 100.1 | 98.2 | 96.5 | 97.5 | 98.7 | 98.2 | 95.7 | 97.1 |
| 2003 | 104.8 | 107.4 | 107.9 | 105.3 | 102.9 | 100.3 | 99.7 | 106.7 | 101.4 |
| 2004 | 111.4 | 109.7 | 120.4 | 120.1 | 108.9 | 102.8 | 105.1 | 114.2 | 104.7 |
| 2005 | 108.3 | 115.0 | 107.5 | 114.0 | 108.3 | 103.5 | 103.1 | 101.7 | 102.4 |
| 2006 | 106.0 | 111.9 | 98.3 | 130.8 | 102.1 | 102.6 | 101.9 | 104.3 | 102.9 |
| 2007 | 104.4 | 104.3 | 105.4 | 111.6 | 103.6 | 102.7 | 103.0 | 106.1 | 101.4 |
| 2008 | 110.5 | 120.6 | 118.4 | 98.6 | 105.2 | 105.2 | 109.5 | 107.5 | 103.1 |
| 2009 | 92.1 | 89.2 | 86.3 | 81.1 | 91.3 | 95.8 | 101.1 | 97.0 | 98.8 |
| 2010 | 109.6 | 116.3 | 106.6 | 122.2 | 107.0 | 103.0 | 103.8 | 110.4 | 106.7 |
| 2011 | 109.1 | 110.8 | 109.4 | 112.1 | 110.4 | 104.6 | 108.4 | 115.6 | 112.7 |

# Attachment B-4.7

## China wages in manufacturing

- http://www.tradingeconomics.com/china/wages-in-manufacturing

## CHINA WAGES IN MANUFACTURING

Wages in Manufacturing in China increased to 41650 CNY in 2012 from 36494 CNY in 2011. Wages in Manufacturing in China is reported by the National Bureau of Statistics, China. China Wages in Manufacturing averaged 9406.54 CNY from 1978 until 2012, reaching an all time high of 41650.00 CNY in December of 2012 and a record low of 597.00 CNY in December of 1978. This page contains - China Wages in Manufacturing - actual values, historical data, forecast, chart, statistics, economic calendar and news. 2013-08-12



2002 TO 2013 | CHART | STATS | FORECAST | SIGNUP TO EXPORT DATA | USE ADVANCED TOOLS


COMPARE WITH | LIST BY COUNTRY | EMBED CHART

| LABOUR | LAST | | PREVIOUS | HIGHEST | LOWEST | FORECAST | | UNIT | TREND |
|---|---|---|---|---|---|---|---|---|---|
| EMPLOYED PERSONS | 76704.00 | 2012-12-31 | 76420.00 | 76704.00 | 20729.00 | 76728.99 | 2013-12-31 | TENS OF THOUSANDS PERSONS | |
| JOB VACANCIES | 6092000.00 | 2013-06-30 | 6114853.00 | 6682486.00 | 856007.00 | 6280830.34 | 2013-09-30 | PERSONS | |
| LABOUR COSTS | 108.40 | 2013-05-15 | 109.40 | 110.40 | 108.40 | 107.38 | 2013-09-30 | INDEX POINTS | |
| UNEMPLOYED PERSONS | 923.00 | 2013-06-30 | 26.00 | 926.00 | 26.00 | -204.81 | 2013-09-30 | THOUSAND PERSONS | |
| WAGES | 46769.00 | 2012-12-31 | 42452.00 | 46769.00 | 445.00 | 47123.13 | 2013-12-31 | CNY | |
| WAGES IN MANUFACTURING | 41650.00 | 2012-12-31 | 36494.00 | 41650.00 | 597.00 | 42073.76 | 2013-12-31 | CNY | |
| POPULATION | 1354.04 | 2012-12-31 | 1347.35 | 1354.04 | 551.96 | 1354.60 | 2013-12-31 | MILLION | |
| UNEMPLOYMENT RATE | 4.10 | 2013-06-30 | 4.10 | 4.30 | 3.90 | 4.10 | 2013-09-30 | PERCENT | |

VIEW MORE INDICATORS

# Attachment B-4.11

## Chinese depreciation rate

- http://www.lehmanbrown.com/FAQ/FAQ-Acc/1.htm

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Sitemap



## Accounting FAQs



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***Does China follow international accounting practice?***

China does not follow international accounting policies and guidelines, although it is moving in this direction for a while and with its accession to the World Trade Organization will be fully compliant within a few years. Many of the accounting regulations are the same or similar to international practice, however it is important for organizations in China to understand the differences.

Tax deductibility for instance is different and a lack of understanding of this could lead to significant tax charges on such items as intercompany transactions. China treats transfer pricing with high importance and as with many other countries it wants its fair share of the international tax pie. Meanwhile proper planning and compliance can reduce an organizations tax burden.

Another area where differences lie is in depreciation of capitalized assets. China specifies that companies must use the straight line method unless they obtain approval from the Ministry of Finance for use of an accelerated method. The period over which a company may depreciate its assets also can vary to that of the holding companies own countries accounting practice. The depreciation rates per China¡¯s income tax law are:

(1) For houses and buildings: 20 years;

(2) For railway rolling stock, ships, machinery, mechanical apparatus, and other production equipment: 10 years;

(3) For electronic equipment and means of transport other than railway rolling stock and ships, as well as such fixtures, tools and furnishings related to production and business operations: 5 years.

Companies therefore on the one hand need to comply with HQ¡¯s requirements, being usually their countries GAAP, whilst on the other hand maintain compliance with China¡¯s rules and regulations. LehmanBrown provides assistance in setting up accounting procedures and systems to bridge this gap and keep.

*<- return to top ->*

***Can a foreign holding company charge to the China subsidiary for services rendered and what supporting documentation is required by the Chinese authorities?***

China allows reasonable administrative expenses paid by a foreign enterprise in connection with its subsidiary in China to be charged to its subsidiary. Agreement is required by the local tax authorities after an examination and verification of supporting documents as proof. The head office is required to provide details of the basis and methods of allocation together with an accompanying verification report of a certified public accountant.

<- return to top ->

# Attachment B-4.12

## UPM-Kymmene Press Release 6 August 2013

- http://www.upm.com/EN/INVESTORS/Investor-News/Pages/Growth-businesses-continue-to-perform-well,-weak-quarter-for-Paper-in-Europe-001-Tue-06-Aug-2013-09-30.aspx

The Biofore Company UPM

# GROWTH BUSINESSES CONTINUE TO PERFORM WELL, WEAK QUARTER FOR PAPER IN EUROPE

6 August, 2013, 09:30 EET

**Q2/2013 (compared with Q2/2012)**

• Earnings per share excluding special items was EUR 0.20 (0.16), and reported EUR 0.22 (0.39)
• Operating profit excluding special items was EUR 138 million, 5.5% of sales (128 million, 4.9%)
• EBITDA was EUR 258 million, 10.2% of sales (325 million, 12.3% of sales)
• Fixed costs were EUR 36 million lower than last year.

**Q1–Q2/2013 (compared with Q1–Q2/2012)**

• Earnings per share excluding special items was EUR 0.38 (0.38), and reported EUR 0.31 (0.62)
• Operating profit excluding special items was EUR 282 million, 5.6% of sales (284 million, 5.4%)
• EBITDA was EUR 542 million, 10.9% of sales (682 million, 13.0% of sales)
• Operating cash flow was EUR 187 million (360 million), impacted by a temporary increase in working capital.

| Key figures | Q2/2013 | Q2/2012 | Q1-Q2/2013 | Q1-Q2/2012 | Q1-Q4/2012 |
|---|---|---|---|---|---|
| Sales, EURm | 2,520 | 2,632 | 4,994 | 5,240 | 10,492 |
| EBITDA, EURm 1) | 258 | 325 | 542 | 682 | 1,312 |
| % of sales | 10.2 | 12.3 | 10.9 | 13.0 | 12.5 |
| Operating profit (loss), EURm | 146 | 108 | 227 | 268 | –1,318 |
| excluding special items, EURm | 138 | 128 | 282 | 284 | 556 |
| % of sales | 5.5 | 4.9 | 5.6 | 5.4 | 5.3 |
| Profit (loss) before tax, EURm | 128 | 221 | 194 | 367 | –1,271 |
| excluding special items, EURm | 120 | 101 | 249 | 243 | 471 |
| Net profit (loss) for the period, EURm | 114 | 208 | 161 | 328 | –1,122 |
| Earnings per share, EUR | 0.22 | 0.39 | 0.31 | 0.62 | –2.14 |
| excluding special items, EUR | 0.20 | 0.16 | 0.38 | 0.38 | 0.74 |
| Operating cash flow per share, EUR | 0.16 | 0.27 | 0.35 | 0.69 | 1.98 |
| Equity per share at end of period, EUR | 13.93 | 17.99 | 13.93 | 17.99 | 14.18 |
| Gearing ratio at end of period, % | 48 | 38 | 48 | 38 | 43 |
| Net interest-bearing liabilities at end of period, EURm | 3,524 | 3,593 | 3,524 | 3,593 | 3,210 |

1) EBITDA is operating profit before depreciation, amortisation and impairment charges, excluding the change in value of biological assets, excluding the share of results of associated companies and joint ventures, and special items.

**CEO Jussi Pesonen comments on the second quarter of 2013**

“The second quarter was in line with our expectations: growth businesses continued to perform well, whereas Paper was impacted by lower delivery volumes and prices in Europe. Our operating profit excluding special items was EUR 138 million (128 million). Operating cash flow was lower than Q2 last year due to a temporary increase in working capital.

Our Pulp business experienced a strong quarter, with good delivery volumes and increased prices. In Label, our growth actions resulted in increased volumes, more than offsetting the increased fixed costs caused by expanded operations. In Energy, profitability continued to be strong, despite being impacted by lower hydropower volumes. Plywood and Timber continued on a positive track despite the challenges of European markets.

Paper experienced what we believe will prove to be the weakest quarter in 2013. Profitability continued on a good level in our Chinese and speciality paper operations, but sales margins in our European graphic paper business as well as export business were significantly lower than last year. In Q2, our Paper business also suffered a significant negative impact from unrealised energy hedges, especially when compared with Q1 2013.

The implementation of the fixed cost savings measures and capacity closures announced in January 2013 are on schedule. The announced capacity closures were concluded in Rauma, Finland and Ettringen, Germany, by the end of April. At this point, employee negotiations have been concluded in all countries except for France, where they started in July. By the end of Q2, 40% of the annualised cost savings had materialised. Along with other cost savings, this offsets the earnings impact from lower paper deliveries, but could not compensate for the lower sales margins.

It is clear that we need to take action to improve our performance and make sure that the company continues to transform. In Label we introduced business-specific efficiency improvement measures in July,” Pesonen concludes.

**Outlook for 2013**

Economic growth in Europe is expected to remain very low in the latter part of 2013. This will continue to have a negative impact on the European graphic paper markets in particular. Growth market economies are expected to fare better, which is supportive for the global pulp and label materials markets as well as paper markets in Asia and wood products markets outside Europe. The current hydrological situation in the Nordic countries is slightly weaker than the long-term average. The forward electricity prices in Finland for the rest of 2013 are slightly lower than the realised market prices in H1 2013.

In H2 2013 compared with H1 2013, the Paper business area is expected to benefit from lower costs, driven partly by the on-going cost reduction measures, and seasonally stronger demand. Pulp business area will be impacted by annual maintenance stops in three of the four pulp mills.

Capital expenditure for 2013 is forecast to be approximately EUR 400 million.

**Conference call and press conference**

UPM's President and CEO Jussi Pesonen will present the results in a conference call and a webcast for analysts and investors, held in English language, on 6 August 2013 at 13:15 EET. Later in the afternoon, UPM's President and CEO Jussi Pesonen will present the results in a press conference held in Finnish language at UPM Group Head Office in Helsinki (main entrance, Eteläesplanadi 2) on 6 August 2013 at 14:30 EET.

**Conference call details:**

The conference call can be participated in either by dialling a number in the list below or following the webcast online at www.upm.com or through this link. Only participants who wish to ask questions in the conference call need to dial in. All participants can view the webcast presentation online. The presentation is available at www.upm.com for 12 months after the call. We recommend that participants start dialling in 5-10 minutes prior to ensure a timely start of the conference.

Conference call title: UPM Q2 Interim Report January - June 2013
PIN: 306858#

**DIRECT TELEPHONE NUMBERS:**
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Participant - Germany: +49 69 2017 44 210
Participant - Spain: +34 914 142 009
Participant - Hong Kong: +852 580 83239
Participant - India: +91 22-3301 9422
Participant - Ireland: +353 1 447 5418
Participant - Italy: +39 02 3600 6663
Participant - Japan: +81 3 5050 5409
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**

It should be noted that certain statements herein, which are not historical facts, including, without limitation, those regarding expectations for market growth and developments; expectations for growth and profitability; and statements preceded by “believes”, “expects”, “anticipates”, “foresees”, or similar expressions, are forward-looking statements. Since these statements are based on current plans, estimates and projections, they involve risks and uncertainties which may cause actual results to

materially differ from those expressed in such forward-looking statements. Such factors include, but are not limited to: (1) operating factors such as continued success of manufacturing activities and the achievement of efficiencies therein including the availability and cost of production inputs, continued success of product development, acceptance of new products or services by the Group's targeted customers, success of the existing and future collaboration arrangements, changes in business strategy or development plans or targets, changes in the degree of protection created by the Group's patents and other intellectual property rights, the availability of capital on acceptable terms; (2) industry conditions, such as strength of product demand, intensity of competition, prevailing and future global market prices for the Group's products and the pricing pressures thereto, financial condition of the customers and the competitors of the Group, the potential introduction of competing products and technologies by competitors; and (3) general economic conditions, such as rates of economic growth in the Group's principal geographic markets or fluctuations in exchange and interest rates. For more detailed information about risk factors, see pages 74–75 of the company's annual report 2012.

**

UPM-Kymmene Corporation
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**UPM** leads the integration of bio and forest industries into a new, sustainable and innovation-driven future. Our products are made of renewable raw materials and are recyclable. UPM consists of three Business Groups: Energy and pulp, Paper, and Engineered materials. The Group employs around 22,000 people. We are present in 67 countries and have production units in 17 countries. UPM's annual sales exceed EUR 10 billion. UPM's shares are listed on the Helsinki stock exchange. UPM – The Biofore Company – www.upm.com

# Attachment B-4.13

## UPM-Kymmene Annual Report 2012 (extracts)

- http://www.upm.com/EN/INVESTORS/Reports-and-Presentations/2012/Documents/UPMAnnualReport2012.pdf

The Biofore Company UPM

# ANNUAL REPORT 2012

CONTENTS

Paper

# Securing cash flow

Myllykoski integration work ran smoothly in an increasingly challenging market environment.

UPM's Paper business area produces magazine paper, newsprint and fine and selected specialty papers for a wide range of end-uses.

UPM's annual paper production capacity is 12.2 million tonnes, manufactured in 21 modern paper mills in Finland, Germany, the United Kingdom, France, Austria, China and the United States.

The main customers are publishers, retailers, printers, distributors and paper converters.

UPM has a global paper sales network and an efficient logistics system.

The combined heat and power (CHP) plants operating on paper mill sites are included in the Paper business area.

## Business performance

Operating profit increased slightly in 2012. Fixed costs decreased on a comparable basis due to the realisation of Myllykoski synergies. Variable costs also decreased, mainly due to lower fibre costs and Myllykoski synergies. However, the reduction of 10% in comparable deliveries limited the improvement in profitability. The average price of all paper deliveries decreased slightly. Cash flow continued healthy supported by low investment needs.

## Business development

The Paper business area focuses on cost leadership and European profitability to secure strong cash flow. The business area is also seeking growth in China and other emerging markets, as well as globally, in label papers.

The year 2012 was characterised by the integration of Myllykoski Group. The acquisition was made in August 2011, and through the deal, UPM aims to strengthen the cost leadership of Paper operations in Europe. The annual cost synergies of the acquisition, including the restructuring measures, are estimated to amount to approximately EUR 200 million. The integration process was well planned and well implemented, and the predicted synergy benefits were realised. During 2012, synergy benefits reduced the costs of the Paper business by approximately EUR 170 million, and the full cost synergies of EUR 200 million are expected to be visible in 2013.

Synergy benefits released from the integration of Myllykoski improved UPM's cost competitiveness considerably. However, the improvement in profitability remained small as delivery volumes were lower than expected.

In August, UPM decided to expand on attractive growth markets by investing in the label materials value chain, involving the construction of a new wood-free speciality paper machine at the UPM Changshu mill in China. UPM already holds a strong position in these markets, being the market leader in label papers both in China and globally, and the market leader in office papers in China.

Both label paper and uncoated wood-free papers have a healthy demand outlook in Asia. The annual growth of UPM's label paper mix is expected to be 8% in Asia and 4% globally. In uncoated wood-free grades, UPM is focusing on high quality office paper, where the Chinese market is expected to grow by 8% per annum.

The new machine is a wood-free speciality paper machine capable of producing up to 360,000 tonnes of uncoated wood-free grades and high quality label papers. The start-up is planned by the end of 2014. The investment will also include future-orientated infrastructure projects at the Changshu site. The total investment cost is EUR 390 million. The investment also provides an excellent platform to strengthen partnerships with self-adhesive labelstock customers and expand into new end-uses in Asia.

In February, UPM decided to build a new combined heat and power plant at the UPM Schongau mill in Germany. The rationale is to reduce energy costs significantly as well as to secure the energy supply for the mill. The total investment is EUR 85 million and the start-up is planned by the end of 2014. The power plant will replace the old plant facility, which has been in operation for more than 40 years.

In June, UPM concluded the sale of its packaging paper operations at the UPM Pietarsaari and UPM Tervasaari mills to the Swedish paper company Billerud. The deal is strategically important as it is the first time that UPM has divested production lines at its mills, leading to two companies sharing the same paper mill site.

In January, UPM ceased paper production at the Albbruck paper mill in Germany, and in August, sold the premises to the German Karl Group.

## EVENTS

15 JAN: UPM closes the Albbruck paper mill and transfers the sheeting lines to Plattling in Germany

1 FEB: UPM announces the sale of the packaging paper operations at the Pietarsaari and Tervasaari mills in Finland to Swedish manufacturer Billerud

1 FEB: UPM builds a new combined heat and power plant at the Schongau mill in Germany

7 AUG: UPM announces that it will build a new paper machine producing label papers and uncoated wood-free papers at the Changshu mill in China

## UPM'S PRODUCTION CAPACITIES AND MARKET POSITIONS

| Paper business area | Paper production capacities 1,000 t/a | UPM's market position Europe | Global |
|---|---|---|---|
| Magazine papers[1] | 5,610 | 1 | 1 |
| Newsprint | 2,730 | 1 | 2 |
| Fine papers | 3,310 | 3 | 4 |
| Speciality papers | 560 | 1–2 | |
| Total | 12,210 | | |

[1] Excluding the UPM Strasel mill which was closed in January 2013 and 50% of the jointly owned UPM Madison mill.

## CASE

### UPM USES RECOVERED PAPER EFFICIENTLY

With 3.6 million tonnes, UPM is the world's largest user of recovered paper in the graphic paper industry. UPM maximises resource efficiency and prolongs the lifecycle of its products through recycling.

Material efficiency saves raw materials both during production and at the end of the lifecycle: paper does not generate waste as it can be recycled into a raw material. Paper can be recycled up to six times after its first use, and even after the fibres wear out, they can still be used to generate renewable bioenergy.

UPM has expanded its recycled paper range to include fine and speciality papers, such as office, postal and preprint papers that are made of 100% recovered paper. UPM also received the first EU Ecolabel for newsprint since the criteria were approved in 2012. To meet the criteria, the paper must be produced using at least 70% recovered fibres.

The share of recycled fibre represents one third of all fibre raw materials used in UPM's paper production.

As Russia currently has no organised system for collecting paper from households for recycling, UPM participated in an educational project in schools in St Petersburg. In co-operation with a recovered paper collecting company, UPM set up a paper collection in 151 schools. The schoolchildren collected over 600 tonnes of paper in a competition and, in January 2013, the winners visited the UPM Kaipola paper mill in Finland where the recovered paper is turned into raw material.

The UPM Shotton mill in the UK provides a good example of material efficiency and how to utilise raw materials at all phases of their lifecycle. The mill's materials recovery facility sorts up to 270,000 tonnes of mixed materials, including 120,000 tonnes of newspapers and magazines. The facility also further processes materials such as plastics, cans and other household recyclables sourced from across the UK.

## BUSINESS PERFORMANCE

### SALES

2012 7,150
2011 7,184
0%
EUR million

### OPERATING PROFIT *)

2012 2
2011 –16
+18
EUR million

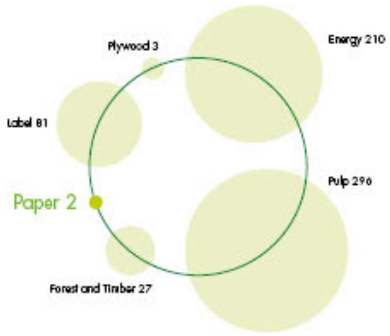
*) excluding special items

### PAPER SALES BY MARKET

| EURm | 2012 | % |
|---|---|---|
| Europe | 4,715 | 66 |
| United States and Canada | 812 | 12 |
| Asia | 1,094 | 15 |
| Rest of the world | 529 | 7 |
| Total | 7,150 | 100 |

### UPM'S OPERATING PROFIT 2012 EUR 530 MILLION

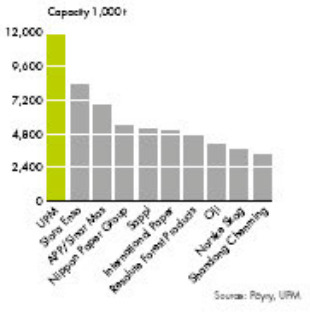
(excl. special items)
Other operations EUR –89 million




### KEY FIGURES

| | 2012 | 2011 | 2010 |
|---|---|---|---|
| Sales, EURm | 7,150 | 7,184 | 6,269 |
| Operating profit excl. special items, EURm | 2 | –16 | –254 |
| Capital employed (average), EURm | 5,470 | 5,437 | 5,465 |
| ROCE excl. special items, % | 0.0 | –0.3 | –4.6 |
| Personnel on 31 Dec. | 12,627 | 13,877 | 11,901 |
| Deliveries, 1,000 t | | | |
| Publication papers | 7,230 | 7,071 | 6,123 |
| Fine and speciality papers | 3,481 | 3,544 | 3,791 |

### WORLD'S BIGGEST GRAPHIC PAPERS PRODUCERS




### PAPER PRICES IN EUROPE

## Extracts from previous page

### BUSINESS PERFORMANCE

#### SALES

2012 7,150
2011 7,184

0%
EUR million

#### OPERATING PROFIT *)

2012 2
2011 –16

+18
EUR million

*) excluding special items

#### PAPER SALES BY MARKET

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|---|---|---|
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| United States and Canada | 812 | 12 |
| Asia | 1,094 | 15 |
| Rest of the world | 529 | 7 |
| **Total** | **7,150** | **100** |

#### KEY FIGURES

| | **2012** | 2011 | 2010 |
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## UPM'S PRODUCTION CAPACITIES AND MARKET POSITIONS

| Paper business area | Paper production capacities 1,000 t/a | UPM's market position Europe | Global |
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| Magazine papers[1)] | 5,610 | 1 | 1 |
| Newsprint | 2,730 | 1 | 2 |
| Fine papers | 3,310 | 3 | 4 |
| Speciality papers | 560 | 1–2 | |
| **Total** | **12,210** | | |

1) Excluding the UPM Stracel mill which was closed in January 2013 and 50% of the jointly owned UPM Madison mill.

# Attachment B-4.14

## UPM-Kymmene Interim Report 1st quarter 2013 (extracts)

- http://www.upm.com/EN/INVESTORS/Reports-and-Presentations/year-2013/Documents/UPM_InterimReportQ12013.pdf

The Biofore Company UPM

# INTERIM REPORT 1 JANUARY – 31 MARCH 2013

1 2 3 4

# Financial information

## Consolidated income statement

| EURm | Q1/2013 | Q1/2012 Restated [1] | Q1–Q4/2012 Restated [1] |
|---|---|---|---|
| Sales | 2,474 | 2,608 | 10,492 |
| Other operating income | 37 | 18 | 110 |
| Costs and expenses | –2,291 | –2,265 | –9,353 |
| Change in fair value of biological assets and wood harvested | 6 | –1 | 45 |
| Share of results of associated companies and joint ventures | – | 1 | 2 |
| Depreciation, amortisation and impairment charges | –145 | –201 | –2,614 |
| Operating profit (loss) | 81 | 160 | –1,318 |
| | | | |
| Gains on available-for-sale investments, net | – | 4 | 38 |
| Exchange rate and fair value gains and losses | 5 | 8 | 11 |
| Interest and other finance costs, net | –20 | –26 | –2 |
| Profit (loss) before tax | 66 | 146 | –1,271 |
| | | | |
| Income taxes | –19 | –26 | 149 |
| Profit (loss) for the period | 47 | 120 | –1,122 |
| | | | |
| Attributable to: | | | |
| Owners of the parent company | 47 | 120 | –1,122 |
| Non-controlling interests | – | – | – |
| | 47 | 120 | –1,122 |
| | | | |
| Earnings per share for profit (loss) attributable to owners of the parent company | | | |
| | | | |
| Basic earnings per share, EUR | 0.09 | 0.23 | –2.14 |
| Diluted earnings per share, EUR | 0.09 | 0.23 | –2.13 |

## Consolidated statement of comprehensive income

| EURm | Q1/2013 | Q1/2012 Restated [1] | Q1–Q4/2012 Restated [1] |
|---|---|---|---|
| Profit (loss) for the period | 47 | 120 | –1,122 |
| | | | |
| Other comprehensive income for the period, net of tax: | | | |
| Items that will not be reclassified to income statement: | | | |
| Actuarial gains and losses on defined benefit obligations | – | – | –98 |
| Items that may be reclassified subsequently to income statement: | | | |
| Translation differences | 71 | –61 | –14 |
| Net investment hedge | –17 | 4 | 4 |
| Cash flow hedges | –22 | 26 | 46 |
| Available-for-sale investments | 7 | –4 | –672 |
| | 39 | –35 | –636 |
| Other comprehensive income for the period, net of tax | 39 | –35 | –734 |
| Total comprehensive income for the period | 86 | 85 | –1,856 |
| | | | |
| Total comprehensive income attributable to: | | | |
| Owners of the parent company | 86 | 85 | –1,856 |
| Non-controlling interests | – | – | – |
| | 86 | 85 | –1,856 |

[1] Retrospective application of new and revised IFRS

## Consolidated balance sheet

| EURm | 31.3.2013 | 31.3.2012 Restated [1] | 31.12.2012 Restated [1] | 1.1.2012 Restated [1] |
|---|---|---|---|---|
| ASSETS | | | | |
| **Non-current assets** | | | | |
| Goodwill | 225 | 1,020 | 222 | 1,022 |
| Other intangible assets | 364 | 478 | 366 | 467 |
| Property, plant and equipment | 5,054 | 6,303 | 5,089 | 6,505 |
| Investment property | 39 | 38 | 39 | 39 |
| Biological assets | 1,485 | 1,499 | 1,476 | 1,513 |
| Investments in associated companies and joint ventures | 21 | 29 | 20 | 28 |
| Available-for-sale investments | 2,596 | 3,374 | 2,587 | 3,345 |
| Non-current financial assets | 423 | 410 | 441 | 423 |
| Deferred tax assets | 730 | 526 | 739 | 529 |
| Other non-current assets | 89 | 83 | 87 | 81 |
| | 11,026 | 13,760 | 11,066 | 13,952 |
| **Current assets** | | | | |
| Inventories | 1,433 | 1,407 | 1,388 | 1,439 |
| Trade and other receivables | 1,990 | 1,956 | 1,982 | 2,016 |
| Income tax receivables | 29 | 28 | 21 | 26 |
| Cash and cash equivalents | 390 | 111 | 486 | 512 |
| | 3,842 | 3,502 | 3,877 | 3,993 |
| Assets classified as held for sale | – | 41 | – | 24 |
| Total assets | 14,868 | 17,303 | 14,943 | 17,969 |
| EQUITY AND LIABILITIES | | | | |
| **Equity attributable to owners of the parent company** | | | | |
| Share capital | 890 | 890 | 890 | 890 |
| Treasury shares | –2 | –2 | –2 | –2 |
| Translation differences | 202 | 101 | 148 | 158 |
| Fair value and other reserves | 2,213 | 2,879 | 2,232 | 2,857 |
| Reserve for invested non-restricted equity | 1,219 | 1,204 | 1,207 | 1,199 |
| Retained earnings | 3,028 | 4,318 | 2,980 | 4,511 |
| | 7,550 | 9,390 | 7,455 | 9,613 |
| Non-controlling interests | 6 | 6 | 6 | 6 |
| Total equity | 7,556 | 9,396 | 7,461 | 9,619 |
| **Non-current liabilities** | | | | |
| Deferred tax liabilities | 600 | 700 | 612 | 702 |
| Retirement benefit obligations | 735 | 636 | 745 | 641 |
| Provisions | 239 | 267 | 207 | 327 |
| Interest-bearing liabilities | 3,680 | 3,895 | 3,724 | 3,972 |
| Other liabilities | 137 | 98 | 142 | 79 |
| | 5,391 | 5,596 | 5,430 | 5,721 |
| **Current liabilities** | | | | |
| Current interest-bearing liabilities | 346 | 360 | 417 | 906 |
| Trade and other payables | 1,512 | 1,900 | 1,566 | 1,682 |
| Income tax payables | 63 | 49 | 69 | 37 |
| | 1,921 | 2,309 | 2,052 | 2,625 |
| Liabilities related to assets classified as held for sale | – | 2 | – | 4 |
| Total liabilities | 7,312 | 7,907 | 7,482 | 8,350 |
| Total equity and liabilities | 14,868 | 17,303 | 14,943 | 17,969 |

[1] Retrospective application of new and revised IFRS

# Attachment B-4.17

## EU IPPC best practice (extract - water & effluent volumes)

- http://eippcb.jrc.ec.europa.eu/reference/BREF/ppm_bref_1201.pdf

EUROPEAN COMMISSION

# Integrated Pollution Prevention and Control (IPPC)

# Reference Document on Best Available Techniques in the Pulp and Paper Industry

December 2001

Using the mass stream overview, specific raw material consumption and specific emission per tonne of product can be calculated. Table 6.2 shows data from the biggest fine paper mill in Europe because no other data were available. This example stands for a mill having achieved best performance levels. In Table 6.3 below data for typical tissue mills are given.

| Input | | | Output | | |
|---|---|---|---|---|---|
| **Raw materials** | **Value** | **Unit** | **Product** | **Value** | **Unit** |
| Chemical bleached pulp (5% moisture) | 610.03 | kg/t | Fine paper (coated & uncoated) | 1000 | kg |
| Fillers ($CaCO_3$), 73% DS | 209.28 | kg/t | **Emissions** | | |
| Coating pigments ($CaCO_3$ and kaolin, 73% DS) | 210.18 | kg/t | $CO_2$ [5] | 298 | kg/t |
| Starch, dry | 40.33 | kg/t | $CO_2$, regenerative | - | kg/t |
| Binders, dry | 29.34 | kg/t | NOx [5] | 0.2 | kg/t |
| Sizing agents, 20% DS | 6.36 | kg/t | CO [5] | 0.02 | kg/t |
| Other additives and dyes | 15.35 | kg/t | $SO_2$ [5] | negligible | kg/t |
| **Energy** | | | Dust [5] | negligible | kg/t |
| Natural gas for steam generation | 5217 | MJ/t | Noise: at 2 points of measurement [4] | 47.4 (600m)<br>39.8 (1200m) | dB (A)<br>dB (A) |
| Gas for fork lift trucks | 0.002 | MJ/t | COD | 0.44 (97) | kg/t (mg/l) |
| Gas for shrink ovens | 15.4 | MJ/t | $BOD_5$ | 0.11 (24) | kg/t (mg/l) |
| Purchased electricity [2] | 611.8 | kWh/t | Suspended solids | 0.14 (30) | kg/t (mg/l) |
| Total energy consumed | 2065 | kWh/t | AOX | 0.0007 (0.15) | kg/t (mg/l) |
| Total primary energy [1] | 3136 | kWh/t | $N_{inorganic}$ | 0.041 (9.2) | kg/t (mg/l) |
| | | | $P_{total}$ | 0.003 (0.8) | kg/t (mg/l) |
| | | | Water vapour | 1.5 | $m^3/t$ |
| | | | Wastewater flow | 4.5 | $m^3/t$ |
| | | | | | |
| **Water demand** | | | **Residues** | | |
| Raw-/fresh water | 6 | $m^3/t$ | Sludge (utilised in brick industry) | 12.7 (at 100% DS) | kg/t |
| | | | Other waste | 5.1 | kg/t |

Notes:
1) The contribution of purchased electricity to the specific primary energy consumption is calculated assuming an energy yield of the electricity generating companies of 36.75%, i.e. purchased electricity of 1 kWh corresponds to primary energy of 2.75 kWh. In this case 611.8 kWh/t corresponds to 1682.45 kWh/t primary energy (e.g. coal). Conversion factor: 1 MJ = 0.2778 kWh and 1 kWh = 3.6 MJ.
2) Consumption of power includes delivery of raw water pumps
3) Air emissions from purchased electricity are not included. Steam is produced on-site in a gas fired steam boiler. Air emissions from non-integrated paper mills depend mainly on the type of fuel used.
4) The distance from the paper mills to a commercial area is about 600 m; the distance to a residential area 1200 m.

**Table 6.2: Annual average input/output data from the biggest non-integrated wood-free fine paper mill in Europe (coated and uncoated grades) manufacturing about 1018450 t/a (1997)[12]**
**The data to emission to water represent the situation after 2-stage biological treatment (high-load trickling filter plus activated sludge)**

Table 6.2 refers to a very big paper mill. However, it should be noted that smaller mills often have higher specific energy consumption values and also higher water consumption than bigger mills. Reasons for differences in environmental performance between bigger and smaller paper mills are for instance:

- fresh water needed for continuously trimming the edges of the web is the same for wider and narrower machines. Thus, paper machines with a larger width use relatively less water for that purpose.

[12] Environmental Declaration '98 Nordland Papier AG, UPM, Postfach 11 60, D-26888 Dörpen, Germany.

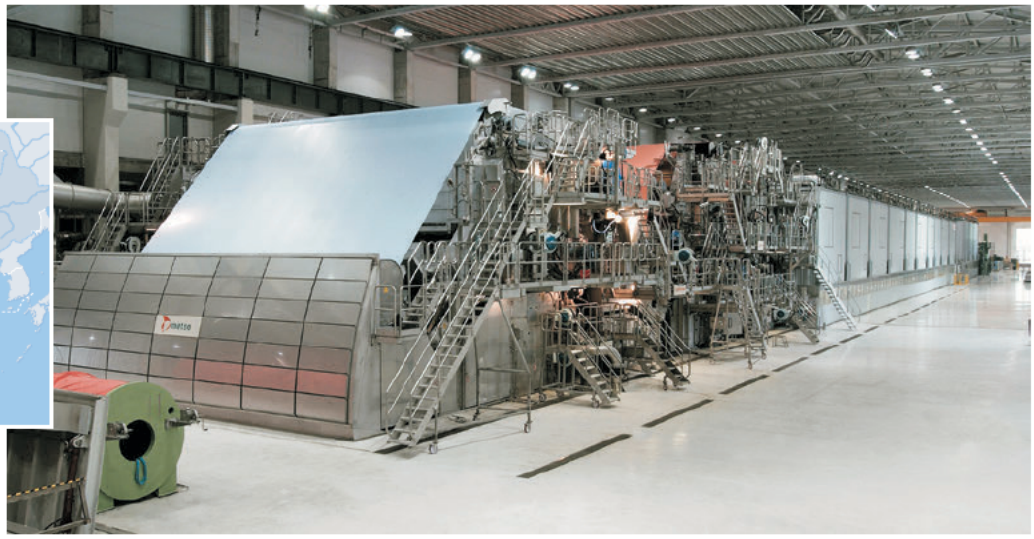
# Attachment B-4.18

## Poyry Info Sheet – Changshu PM1 Project 2005

PÖYRY

**PUBLIC FILE**

# UPM-Kymmene Paper Industry Co. Ltd
# Changshu Project, PM1
# China

**A fine paper line with a production capacity of 450 000 t/a.**

## PÖYRY SERVICES

- engineering management
- permit engineering
- time scheduling
- process engineering
- mechanical and piping engineering
- architectural design
- civil engineering
- HVAC engineering
- electrical engineering
- process control engineering
- engineering tools: 3D Model, ProElina, WebPub, DocHotel
- assistance in erection supervision
- assistance in commissioning and start-up

**Schedule**
Started up May 24, 2005
Project implementation time 21 months

**Investment cost**
USD 470 million

## TECHNICAL DATA

**Product**
- uncoated woodfree, copy and offset papers
- grammage range 60-120 g/m$^2$

**Raw material**
- hardwood, softwood, filler

**Pulp storages, existing**
- new pulper lines for short and long fibers

**Paper machine**
- supplier: Metso
- production capacity 450 000 t/a
- speed 1 800 m/min
- wire width 10 400 mm
- trim width after winder 9 650 mm
- OptiSizer
- 2 WinDrum L winders

**Intermediate storage**
- 2 automatic KCI Konecranes

**Sheeting plant and product storage**
- supplier: E.C.H. Will
- new 15-pocket cut size and odd size sheeters
- new folio sheeter
- relocation of existing cut size sheeters
- relocation and modernisation of one folio sheeter

**Rebuild of PM2**
- supplier: Metso
- new wrapping line
- coating kitchen modification
- new Off Line OptiLoad calender

**Rebuild of power plant**
- rebuild of coal boilers
  - supplier: AE & E
- 4 package boilers 56 t/h steam
  - supplier: HKB
- rebuild of coal handling
  -supplier: BMH

**Fresh water treatment plant extension**
- new raw water lagoon 100 000 m$^3$
- new softeners: Econet Engineering

**Effluent treatment extension**
- new spill basin
- upgrading of the biological treatment
  - supplier: Econet Engineering
- second sludge dewatering line
  - supplier: Andritz

**Pöyry Forest Industry Oy**
P.O.Box 4 (Jaakonkatu 3), FI 01621 Vantaa, Finland
Tel +358 9 89471, Fax +358 9 878 1818, www.forestindustry.poyry.com

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