

Importance of the Pulp and Paper Industry and the Need for Emissions-Intensive Trade-Exposed Measures to Maintain International Competitiveness

19 August 2008

URS

Overview: The pulp & paper industry

- Major Australian manufacturing industry
- One of the largest emissions intensive trade exposed non-metal manufacturing industries
- Industry has a number of key strengths to assist in competitiveness
- But Australia small player in global market

Overview: Socio-economic importance of the industry



- \$2.7 billion contribution to GDP, accounts for 2% of total manufacturing sector
- Underpins viability of forest/plantation supply chain – accounts for about 30% of all wood processing in Australia
- Large processing facilities in several regional towns provide important source of employment and economic activity, including:

Location	Company	Direct employees*	% of local labour force
Maryvale (Gippsland), Vic	Australian Paper	950	3.1%
Millicent, SA	Kimberly-Clark	630	12.0%
Tumut, NSW	Visy	191	3.6%
Albury, NSW	Norske Skog	260	1.1%
Boyer, Tas	Norske Skog	340	2.7%
Burnie and Wesley Vale, Tas	Australian Paper	500	1.6%

- Significant flow on-effects:
 - Regional economic activity
 - Dependent jobs – forest management, harvesting, haulage
 - Technical and professional skills drawn to regions e.g. engineering

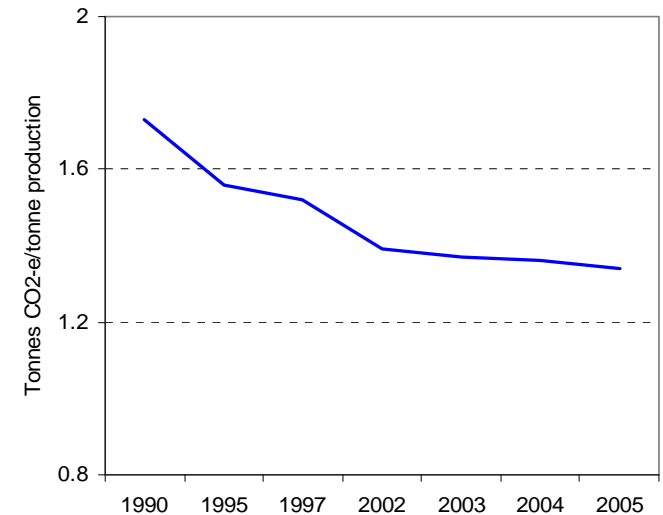
* Approximate figures provided by companies

Overview: Commitment to the environment

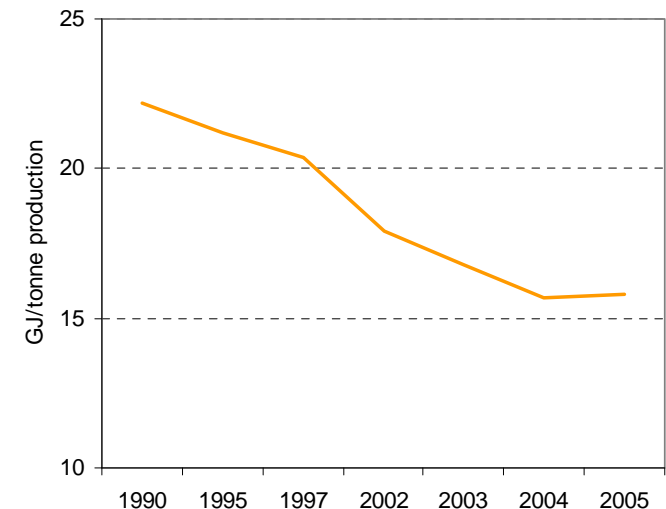


- Pulp and paper industry supports market based approaches to climate change policies
- Demonstrated committed to continuous environmental improvement:
 - 29% of energy use is from renewable sources
 - Industry emissions reduced by 23% since 1990
 - 48% of fibre furnish is recycled material, diversion from landfill
 - Water consumption reduced by 65% per tonne of paper produced since 1990
 - Most companies have environmental and emissions reduction targets that they continue to work towards

Industry emission reductions



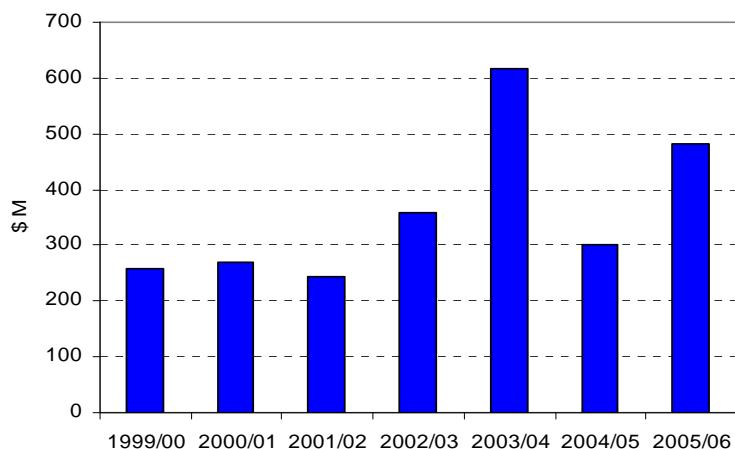
Industry energy intensity



Overview: Investment

- Industry has continued to invest in capital to maintain competitiveness and improve environmental footprint:
- Examples:
 - Amcor: reduced emissions by 30% since 2003
 - Australian Paper: reduced emissions by 23% since 2001
 - Norske Skog: reduced emissions by 30% per tonne of paper produced since 1990

Industry capital expenditure



Recent and current major investments:

2004: \$290M tissue mill upgrade, Millicent

2006: \$130M newsprint mill upgrade, Albury

Now: \$258M expansion of pulp and paper mill, Maryvale

2009: \$500M upgrade of pulp and packaging mill, Tumut

2010: \$480M new packaging paper machine, Sydney

- Pulp and paper industry currently economically efficient and internationally competitive
- High trade exposure heavily constrains passing on of increased costs
- Major step-change emission reduction projects require significant re-investment
- Industry committed to reductions, but medium to longer term prospect
- CPRS cost increases could put a number of operations below the capital re-investment threshold and threaten continued competitiveness of industry
- Potentially severe consequences for pulp and paper and forest industries as well as regions in which industry located:
 - No new investment, mill closures, job losses
 - Carbon leakage as production transfers to emission havens

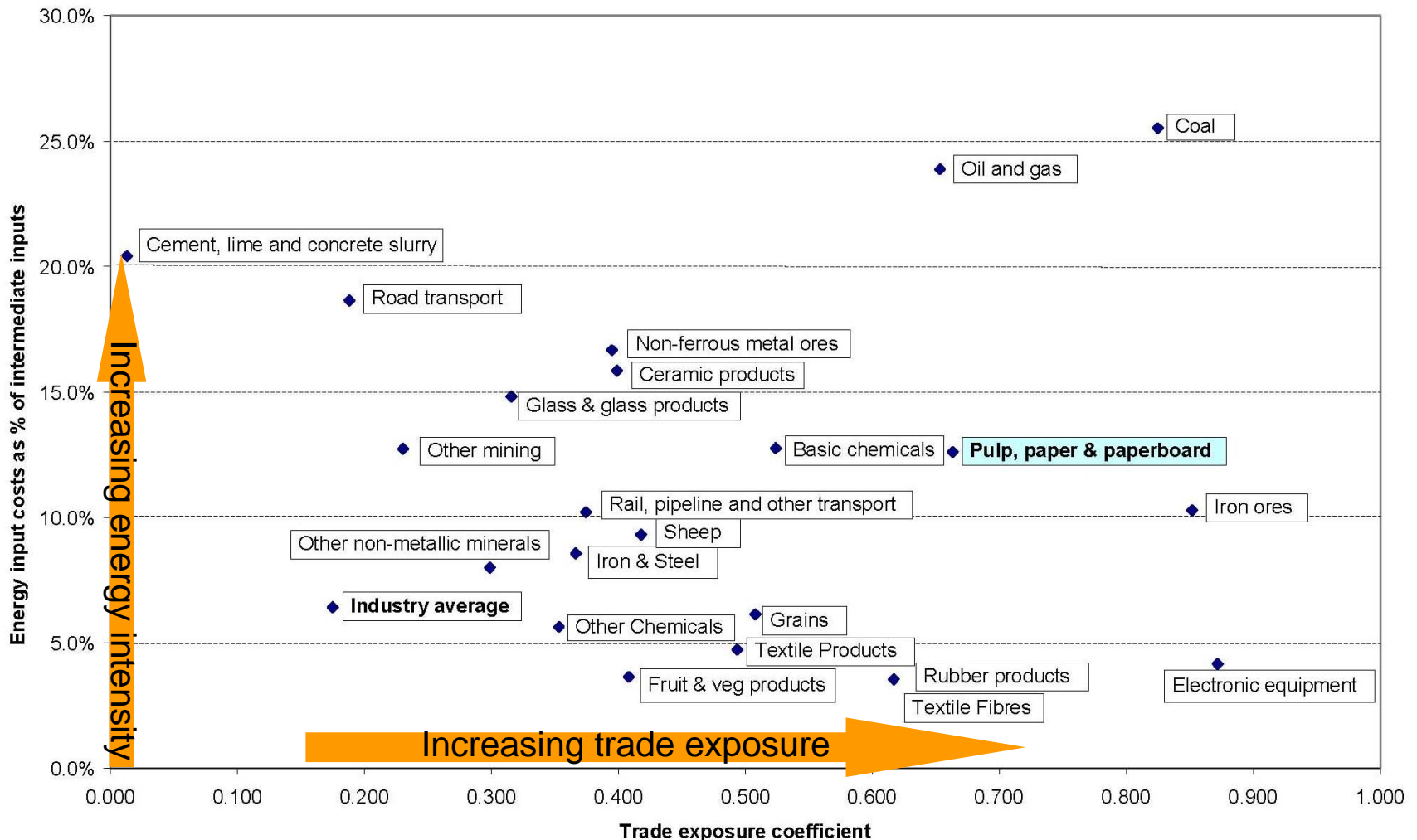
- Transitional assistance will be provided to industries that are emissions-intensive and trade-exposed in order to:
 - Reduce carbon leakage
 - Smooth the transition to a low-carbon economy
- Despite high trade exposure and emissions intensity, key activities within the pulp and paper industry will fall outside the Green Paper's proposed EITE criteria

Green Paper suggested criteria for EITE status:

Measure	Green Paper Criteria	Major issues
Emissions intensity	2,000 tonnes CO ₂ -e / \$ million of revenue for 90% free permit allocation and 1,500 tonnes for 60% free permit allocation	Revenue as a denominator does not adequately reflect ability to absorb additional costs
Trade exposure	All industries are included except those with a physical barrier to trade	Undervalues vulnerability of highly trade exposed industries

Emissions intensity and trade exposure

- While Australian economy is trade exposed, the extent varies among industries – ability to raise prices critical
- Majority of Australian industries are not energy intensive or trade exposed



- Pulp and paper is emissions intensive, in the top 20 industries as listed in the Green Paper
- The Green Paper reported pulp and paper industry average emissions as 1,133 tonnes CO₂-e / \$ million of revenue, below the threshold proposed for EITE assistance
- Emissions intensity varies between pulping, paper making and converting activities and is likely to range from very low to over 3,000 tonnes CO₂-e / \$ million of revenue depending on the activity
 - E.g. mechanical pulping is much more emissions intensive than chemical pulping
 - Work is currently being undertaken to determine the emissions intensity of each major activity in the pulp and paper industry

Trade exposure of pulp & paper industry

- Trade exposure coefficient =
$$\frac{\text{Imports} + \text{Exports}}{\text{Domestic production} + \text{Imports}}$$
- TEC is one indicator of trade exposure
- Reflects import competition and exposure to world markets
- Also important to consider how prices are set in world markets and capacity to increase prices
- Pulp & paper industry is in the top 10 most trade exposed industries in Australia and has a high trade exposure relative to other high emissions intensive industries

Selection of emissions intensive industries	Trade exposure coefficient
Pulp, paper and paperboard	0.663
Non-ferrous metal ores	0.395
Iron and steel	0.367
Cement, lime and concrete slurry	0.018
<i>Industry average</i>	<i>0.175</i>

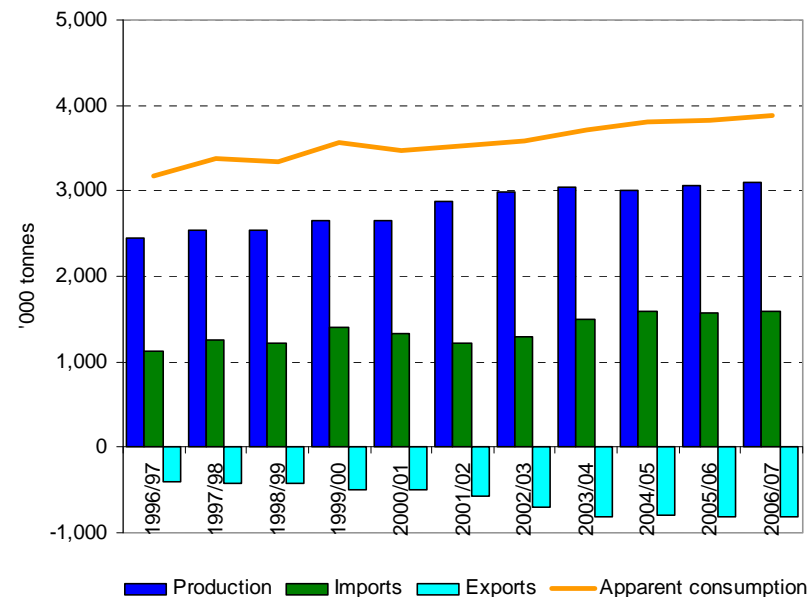
Trade exposure: Global pulp & paper trade

- Pulp and paper products are freely traded commodities with low product differentiation and significant global trade
- Capacity in Non-Annexure 1 countries has been growing

Product	2006 production (1000 air dry tonnes) pa			Global trade	Proportion of global production that is traded
	Global	Australia	Australia as a % of World		
Wood pulp for paper & paperboard	193,826	1,153	0.59%	44,469	23%
Paper & paperboard	365,139	3,890	1.07%	118,398	32%
Total	558,965	5,043	0.90%	162,867	29%

Apparent consumption of paper & paperboard in Australia

- 40% of paper products consumed in Australia are imported
- Exports account for one-quarter of production



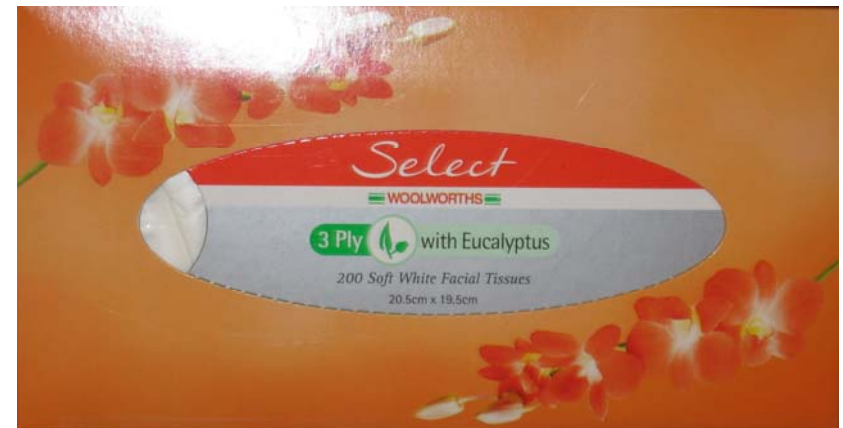
Trade exposure: Imports to Australia

- International companies can break into Australian market, particularly through generic branding, product placement and price (e.g. newsprint)

Officeworks imports paper from Asian suppliers



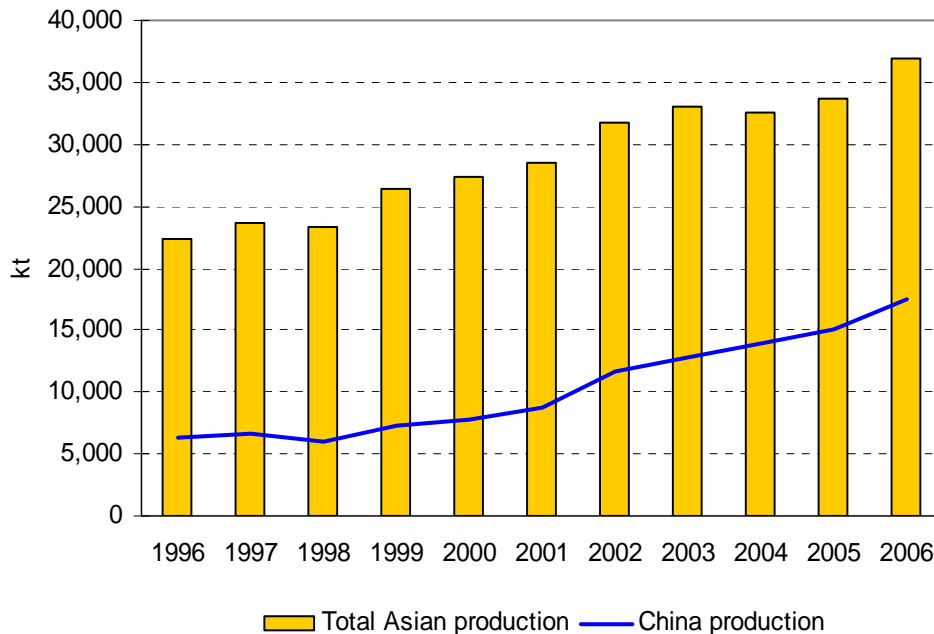
Woolworths imports a range of tissue products from Asia



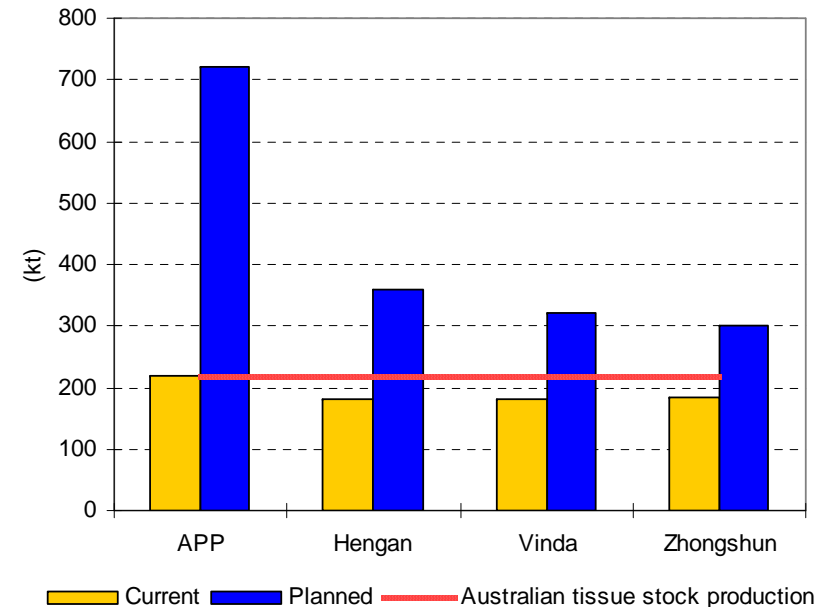
Trade exposure: Imports to Australia

- Significant growth in production capacity and exports of paper products from Asia, mainly Non-Annex 1 countries

Growth in production of printing and communication paper in Asia



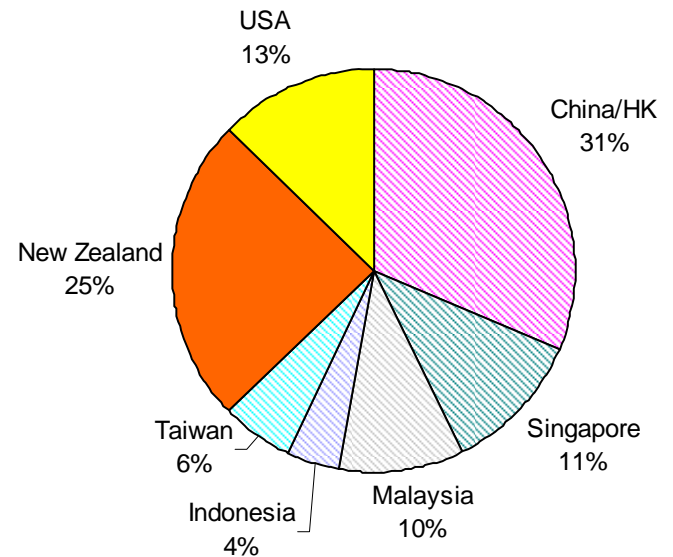
Chinese tissue company expansion plans to 2010



Trade exposure: Exports out of Australia

- Packaging and paperboard sector exports 30% of production
- Planned production increases will see increased exports
- Significant exports to Non-Annex 1 countries
- Printing and communication paper sector exports around one quarter of production

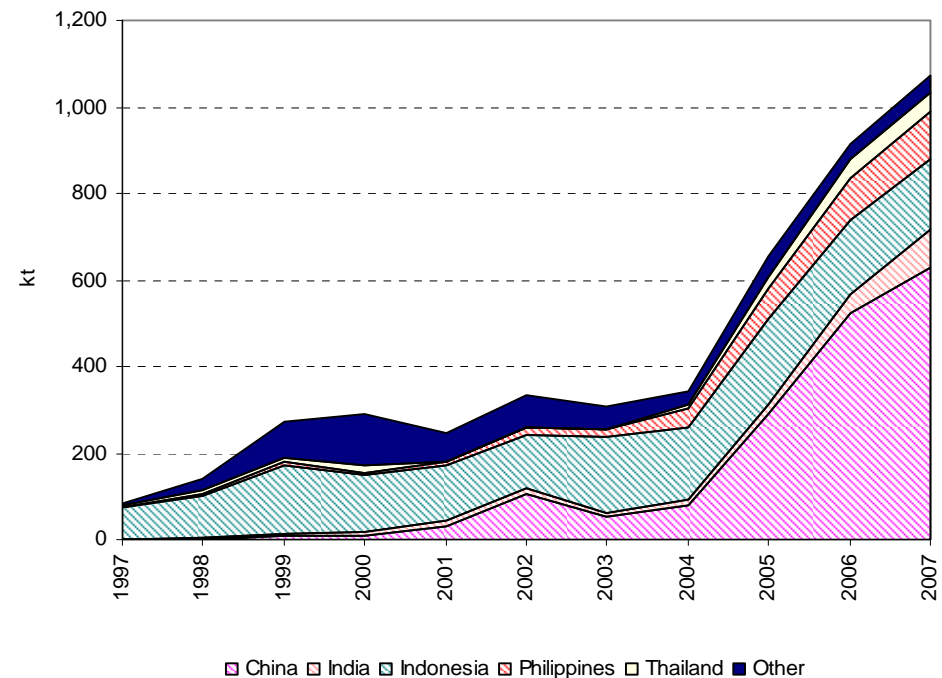
Corrugating medium exports 2007



Trade exposure: Wastepaper exports

- Paper recycling is symbol of Australians' commitment to environmental improvement
- High rates of wastepaper collection a major success
- Wastepaper accounts for 48% of domestic fibre furnish and is also exported
- Australian and Chinese producers are competing for wastepaper fibre resources
- Australia will be restricted in its ability to pay a higher price for wastepaper
- Loss of production of recycled paper will send wrong message to Australian households

Australian wastepaper exports



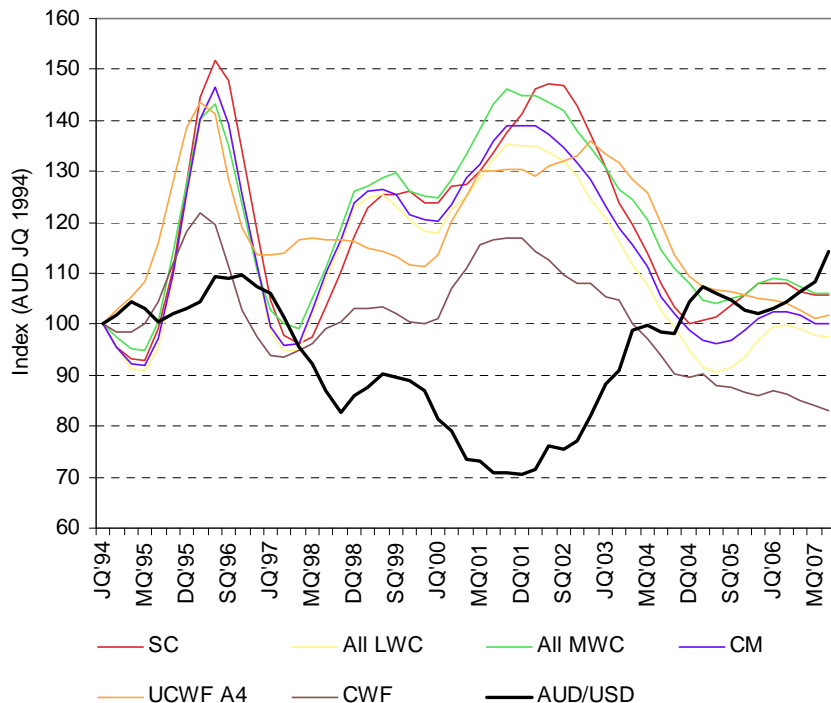
Trade exposure: Global pricing



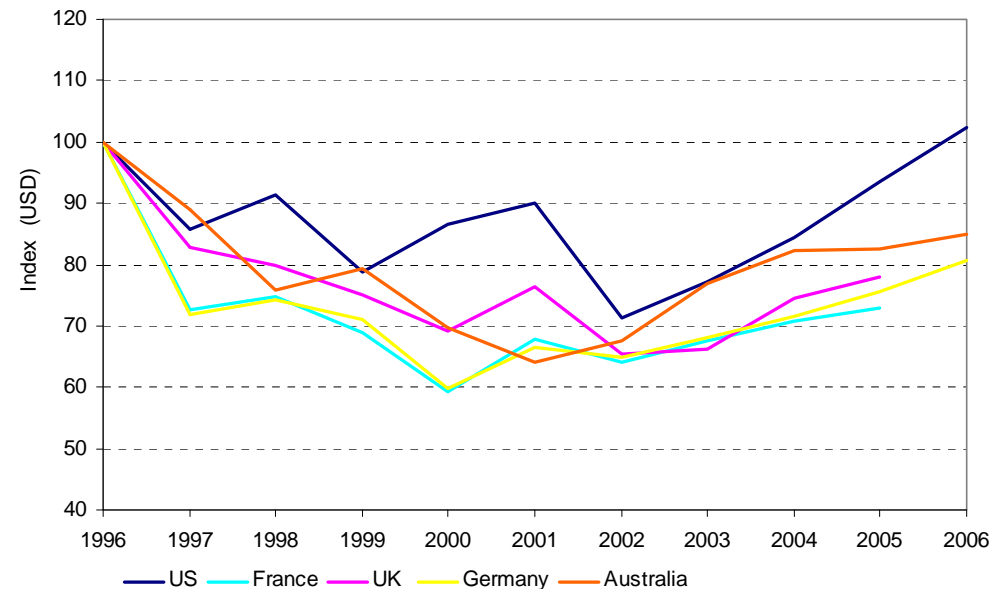
- Domestic price volatility in all paper types
- Reflects global supply-demand balance and AUD exchange rate

- Newsprint:
 - Global price follows US price, which is biggest market
 - Australian price convergence with other markets

Australia printing and communication paper price index



Average annual price for 48.8gsm



Impacts of carbon cost on pulp & paper industry



- Australian paper producers in highly competitive global markets
- Limited scope for industry to increase prices when costs rise substantially
- Lower returns mean companies will not be able to justify new capital investment
 - Under a carbon permit price of \$40 and assuming minimal ability to pass through costs, industry gross operating surplus (as percentage of production value) would reduce by 40% to below the level required to raise capital
- Industry cannot survive without continued major investment:
 - Loss of international competitiveness
 - Loss of production
 - Greater imports
 - Loss of exports
- Mill closures are likely
- Potentially severe consequences for all sectors of timber and forest industries as well as regions in which they are located
 - Job losses, regional decline
- Carbon leakage and shift of production to emission havens

- Green Paper fails to deliver on its objective to address competitive impacts of the scheme and reduce carbon leakage by providing transitional assistance to industries that will be most severely affected
 - Undervalues highly trade exposed industries' vulnerability to loss of international competitiveness
- Revenue as a denominator does not adequately reflect ability to absorb additional costs. This is more closely related to profit margins
- Industry has ongoing commitment to continue to reduce emissions, but measures to maintain international competitiveness are needed in the interim

- Suggested changes to the proposed EITE metric to maintain the international competitiveness of the pulp and paper industry:
 - Consider denominators that better reflect ability to absorb additional costs
 - Single criterion for determining EITE status is not sufficient:
 - Trade exposure needs to be a clear test and filter
 - Competitiveness in world markets should be considered
 - EITE measures need to be included from commencement of the Scheme