

Recycling Markets in the Current International Economic Climate

Background Paper Series, No 1

Jessica Sheehan,
Policy and Research Officer, NPCIA

Executive Summary

- Australia's recycling markets currently face two problems on the international stage: export figures have been negatively impacted by a weaker global demand, and the prices of our materials are less competitive due to the strong A\$.
- Australian recycling markets have been fuelled by demand from the Chinese manufacturing industry since 2003-2004. Subdued demand from the EU and the USA are currently weakening demand for Chinese manufactured goods into these areas.
- Subdued demand, low prices and economic uncertainty are likely to create a temporary lull on the recycling rates in the short term.
- Recycling rates during the GFC stagnated at 57%, to rebound sharply to 62.5% in the following year. Whilst the current economic conditions are different, we may see a similar increase once the global economy recovers.
- Market cycles aside, the overall trend is that recycling rates are on the rise due to better collection of recyclable materials by industry and government, improved infrastructure and expansion of recycling services.

1. Background Economic Information

Economic recovery has slowed almost to a halt in the major industrialised economies, with falling household and business confidence affecting both world trade and employment (OECD, 2011). The Organisation for Economic Co-operation and Development (OECD) has predicted that the US will only grow by 1.4% this year, down sharply from a forecast of 2.6% three months ago (Business Spectator, 9 Sept 2011). The combined economies of Germany, France and Italy, the three largest members of the Eurozone, will grow just under 1% this year, less than half the OECDs May forecast of 2% growth.

Confidence in the global markets has fallen sharply over the course of the last few months. At the time of writing (22nd September 2011) Italy and the US have experienced a downgrade in their credit rating by agency Standard and Poor. The crisis in the European Union's banking sector continues with uncertainty surrounding Greece debt (Business Spectator, 22 September 2011). As a result of default concerns, two major French banks were downgraded by agency Moodys in early September, highlighting the risk for a domino effect that could reach the wider European Union (Business Spectator, 14 September 2011). The International Monetary Fund (IMF) identified that the global economy is in a 'dangerous new phase' with the greatest risks associated with the European Union and the US (IMF, September 2011).

Whilst the Australian economy rebounded from the effects of natural disasters with 1.2% growth in the last quarter, deep concerns remain for the next 3 months with a potential global slowdown. The RBA reports at this stage little evidence is available to gauge the extent of effects of the European and US problems on other regions (RBA, 6 September 2011), though the IMF reports that the Asia Pacific region is in a better position to face current global risks. However the recycling markets in general are particularly subject to global conditions. The Chinese manufacturing sector, which supplies the US and the European Union, fuels most of the demand for recycled material from our market. Any change in demand will thus have a flow on effect on price.

2. Recycling Market Impacts

Our recycling markets currently face two hurdles on the international stage. Our recycle exports face weaker global demand, and the prices of our materials are less competitive due to the strong A\$. DFAT reports that there was a total 0.9% drop in trade from June to July. However if the prices of exports are lowered domestically, then in real terms based on A\$ there will be less incentive for the reprocessing of materials. Domestically, recyclers have also been affected by the slowdown in domestic demand caused by the natural disasters in early 2011.

The economic conditions will be expected to affect each material type recycled differently, and each economic cycle also varies in its impact. During the 2008 GFC it was found that the paper/cardboard market prices were comparatively stable (with some variation depending on grade), whilst the PET market was subject to the highest volatility. Glass and steel were similarly affected, dropping 6 times from their pre GFC prices (OneWorld, 2009).

3. Chinese Demand

Over the past 30 years, China's economic growth has averaged approximately 10% a year. This has fuelled strong demand for recovered paper and plastics to feed a rapidly expanding manufacturing sector (WRAP, 2011). However the financial uncertainties in the USA and Europe are currently weakening demand for Chinese products into these areas. This has a direct link to the quantities of imported recovered materials from Australia, as this recycled material is used to supply their manufacturing industry. Recovery for newsprint remains strong, but recovery for recycled packaging has slowed. The general expectation is that demand will pass through a trough until European and North American markets recover.

Despite the slowdown predicted in the current economic conditions, China may yet fuel growth in the medium term. The IMF forecasts GDP growth at 9.6% in 2011 and at 9.5% by 2015 (WRAP, 2011). Though China's own recycling market is set to expand as the government strengthens its own waste management policy, market trends indicate that China will still be reliant on imported recycle until the domestic market matures. For instance the level of paper consumption per head in China is rising (e.g 60kg in 2008, 64kg in 2009), but remains well below the current levels of consumption in advanced economies (eg 266kg in the US in 2008) (WRAP, 2011). With respect to recovered plastics, the fragmentation within the Chinese recycling industry has hindered

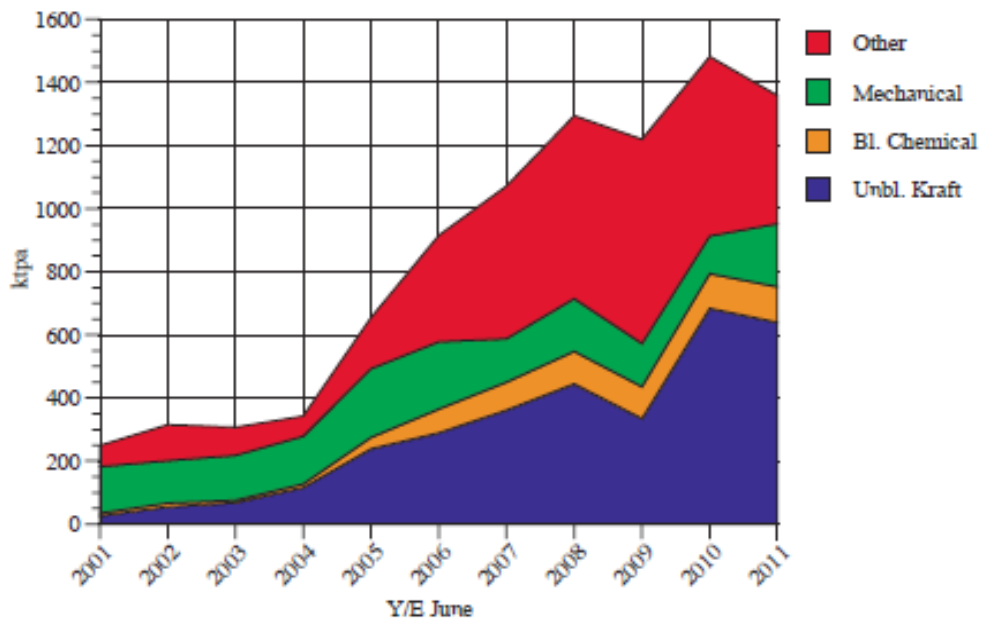
government developments in this area. This indicates that at least for the medium term, demand will outstrip domestic supply.

4. Case study: Changes in Markets for Recovered Paper and Paperboard

Markets indicate that momentum is gathering for a further slide in prices for most grades of pulp, both virgin and recycled, extending through to the end of 2011. Any change in this trend is unlikely to materialise until the first quarter of 2012 (IndustryEdge, 2011b).

Over the last month several listed pulp, paper and fibre businesses in Australia reported significant losses for the 2011 financial year (IndustryEdge, 2011b). One exception to this trend was global packaging company Amcor Pty Ltd, which ended the 2010-2011 financial year with a net profit up 94.9% to \$356.7 million on revenue up 26% to \$12.412 billion (Business Spectator, 22 Aug 2011). However, the cause of this growth is largely attributed to internal changes and not the wider market. During this time Amcor had taken over two smaller packaging businesses, in addition to increasing its diversification within the company. The performance of the Australasian and Packaging Distribution segment was more consistent with the market, with only a small increase in sales (up A\$35.9M to A\$2.836bn) and a very small fall in profit (IndustryEdge, 2011b). Amcor attributes these weaker results due to a combination of Cyclone Yasi, the high A\$ and the weakening of the Australian economy.

The bigger picture shows a more positive outlook. The average growth rate for exports of wastepaper over the last decade has been 18.6% (IndustryEdge, 2011a). Chinese demand for packaging materials led to a massive increase in exports of wastepaper between 2003-04 and 2007-2008, from 342.7 kilotonne (kt) to 1,294.8 kt respectively. After dipping during the weak conditions in 2008-2009, exports in 2009-2010 recovered by 21% to reach a peak at 1.48 million t. These figures are displayed graphically in **Graph 1** below, which also shows export volumes per grade of wastepaper. Notably, a second dip has also been observed for 2010-11.



Graph 1: To show overall trends in wastepaper exports by grade 2001 – 2011 (KTPA) (Source: IndustryEdge, 2011a)

Corresponding with the large increase in exports in **Graph 1** above in 2004, the paper and paperboard recycling rate increased by 50% from 2003 to 2010 (NPC, 2010). Similarly, a temporary decline was observed during 2008-2009. This data reiterates the cyclical nature of the market, but the key point is that the overall figures are on the increase.

Long term supply capacity is also increasing in this area. Amcor’s fibre packaging division is commissioning a 350 kt per annum waste-based paper machine at Botany that will boost the utilisation of wastepaper. This will be a boost for the industry once the market stabilises.

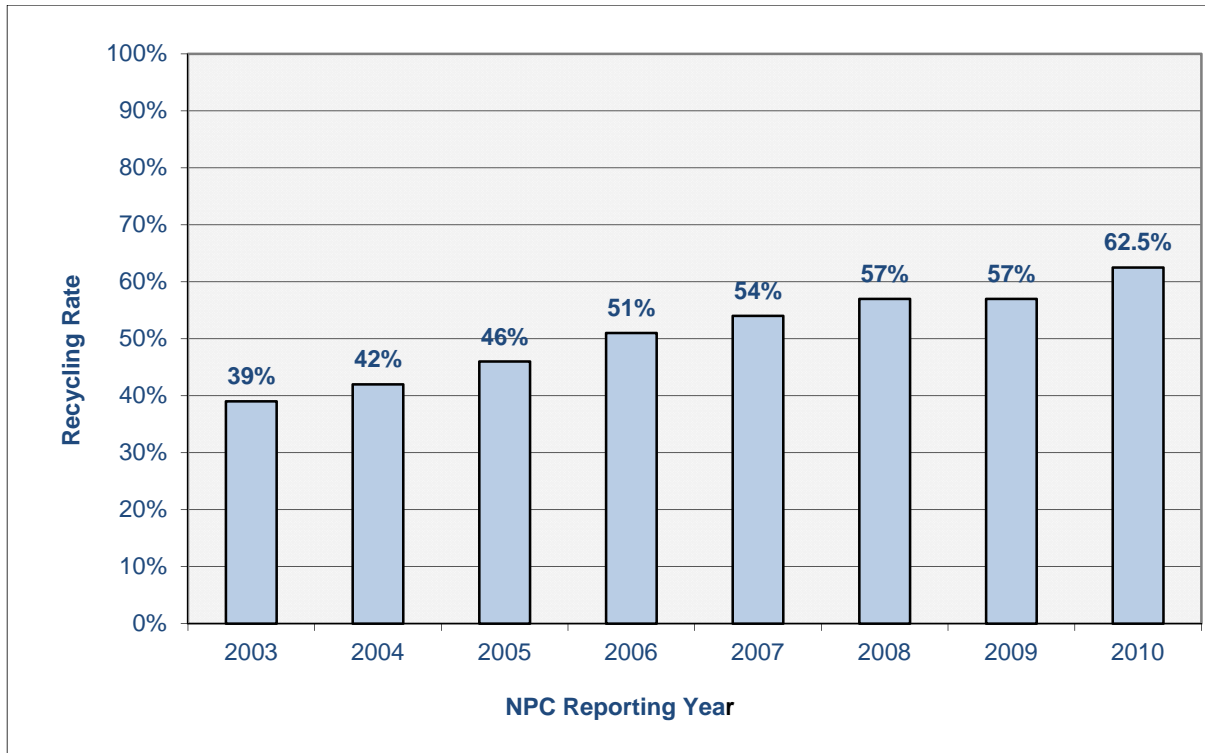
5. Overall Outlook for Recycling Rates

The recycling rate is calculated by Total Recycling/Total Consumption x 100. With consideration of the information above, if we assume that the consumption of packaging remains constant in the subdued market conditions, then we will expect to see a reduction in the total recycling rate.

In addition to the unknowns within the economy, there are other variables that create further uncertainty in predicting the outcome of the recycling rates. For instance, it is unknown how what the growth of consumption in packaging added to the application of lightweighting across more products will affect total recycling outcomes.

All factors considered, any potential decrease in material recycling rates for the 2010-2011 count will be attributable to the downward phase of the market cycle. The overall trend is that recycling rates are on the rise due to improved efficiencies and actions within the packaging supply chain. This has been attributed to heightened awareness of the environmental impacts of packaging amongst brand

owners and consumers, better collection of recyclable materials by industry and governments, improved recycling infrastructure and the expansion of recycling services to commercial, industrial and community areas (NPC, 2010). **Graph 2** below shows the improvement in the overall recycling rate for post-consumer packaging over the past 9 years.



Graph 2: To show the Recycling Rate from 2003 to 2010 (Source: NPC, 2010)

The effects of the Global Financial Crisis are apparent between the years 2008 to 2009, as recycling rates stagnated at 57%. This was to rebound sharply to 62.5% in the following year after the crisis, assisted by market prices and increases in paper and glass recycling infrastructure in Australia. Hence, we may see a similar scenario occur in the recycling data presented post 2010-2011, with the recycling rate continuing at an upward trend after the global economy bounces back.

CONTACT:

Jessica Sheehan, *Research and Policy Officer, NPCIA* policy@packagingcovenant.org.au

6. References

Business Spectator, 11 August 2011. *Ancor profit up 95%*. Accessible via <http://www.businessspectator.com.au>.

Business Spectator, 14 September 2011. *Moody's downgrades French Banks*. Accessible via <http://www.businessspectator.com.au>.

Business Spectator, 22 September 2011. *No Stress Relief for Europe's Banks*. Accessible via <http://www.businessspectator.com.au>.

IndustryEdge, 2011a. *Predicted Changes in Markets for Recovered Paper and Paperboard Draft (August 2011)*

IndustryEdge, 2011b. *Pulp & Paper Edge Edition 79: September 2011*.

International Monetary Fund (IMF), September 2011. *World Economic Outlook*. Accessible via <http://www.imf.org>.

National Packaging Covenant (NPC), 2010. *The National Packaging Covenant Annual Report 2010*. Accessible via www.packagingcovenant.org.au.

OneWorld Environmental Solutions, 2009. *LGA of South Australia: Analysis of Markets for Council Collected Recyclables*. Accessible via www.lga.sa.gov.au.

Organisation of Economic Co-operation and Development (OECD), 2011. *Economic growth perspectives weakening as recovery slows, OECD says*. Accessible via <http://www.oecd.org>.

Reserve Bank of Australia, 6 September 2011. *Statement by Glenn Stevens, Governor: Monetary Policy Decision*. <http://www.rba.gov.au/media-releases/2011/mr-11-19.html>.

WRAP, 2011. *Market Situation Report Spring 2011: The Chinese markets for recovered paper and plastics – an update*. Accessible via www.wrap.org.uk