China's National Sword is cutting deep in the recycling sector


Mike Ritchie.

By Mike Ritchie

THE Australian economy has benefited immensely from the rise of China. Higher demand for our resources and lower costs for manufactured goods are well known. One benefit that is poorly understood, particularly outside the waste and recycling industry, is how Chinese demand for resources has underpinned recycling schemes around the world.

Fully half of the world's recycling was received by China, and received at a price that enabled MRF operators to offer very good rates to councils in Australia. In some cases, MRF operators were paying councils to receive their recyclables.

Councils and their ratepayers, along with industry generators, became accustomed to paying substantially less for their recycling than they did for general waste.

That has substantially changed with the Chinese National Sword policy. Banning the import of some materials, slashing permissible contamination rates in import licences from 5% to 0.5%, and restricting the number of licences issued, has sliced a very large hole in markets for recovered materials. It has cut, and it has cut deep.

With the exception of very clean input materials, MRFs are not designed to produce a product with 0.5% contamination. This rate represents a tenfold reduction in contamination from what is already being achieved. Some MRF operators suggest it is impossible to achieve with mixed recyclables.

The policy has reverberated through recycling supply chains not only in Australia, but also in the USA, Canada, Asia and Europe. Global prices for many recycled materials have tumbled as National Sword started to bite in September 2017 when the Chinese government reconfirmed National Sword to the World Trade Organisation.

The prices for mixed plastics and mixed paper have plummeted. Mixed paper has dropped from its decade-long range of $200-250/tonne to between $0-80/tonne. Mixed plastic has dropped from $250-350/tonne ($400-450 for sorted PET and HDPE) to around $50/tonne. Even the price received for OCC (old corrugated cardboard), formerly a reliable earner for MRF operators, dropped by 17%.

National Sword has affected almost 1.5 million tonnes of waste plastic and plastic exported from Australia to China, earning over $160 million dollars for MRF operators.

As if to reinforce the pain for MRF operators from National Sword, the domestic market for glass has also collapsed across Australia. Whereas glass and glass fines were previously reused in local bottle making, it is now cheaper to import whole green bottles from Mexico than to make green bottles from recycled glass. The market demand for clear and amber glass has fallen so far that the main local bottle producer, OI, has mothballed a number of glass furnaces in Australia.

Glass that was once sold for local bottle-making is now being crushed into glass sand just to find a sufficiently large market. Glass for bottle making was sold for the last decade at a consistent price of $72/tonne. Glass sand is worth only $4-12/tonne as a sand replacement. Taking into account sorting costs and transport, MRF operators are now losing $50-100 per input tonne of glass. And glass is a substantial part of the overall tonnes received.

The sharp falls in prices received for materials out of MRFs are significant for a MRF operator's business model. About 50-60% of all recycling tonnes from Australian households is paper and cardboard. 6% is plastic. Along with aluminium (1%), these are usually the highest revenue streams for a MRF operator. The remainder is glass at 30-40%. Now, all either earn significantly less, or lose large amounts of money.

The recycling industry faces a perfect storm. It is worse than the disruption of the Global Financial Crisis in 2009. It is not a mere downturn in the market that can be ridden out; rather the market demand for recyclables has been slashed through a permanent structural shift. With supply remaining constant, prices will remain low for a long time.

A dramatic and long-term fall in sales revenue at the back gate of the MRF leaves the operator needing to cover costs from elsewhere. The only place the missing revenue can be recouped is at the front gate. That is, gate fees charged to waste generators such as councils. These fees must go up if MRF operators are to survive.

We have already seen a number of commercial renegotiations taking place via Change in Law and Change in Waste contractual triggers. That the Change in Law happened in China is immaterial in contract law, the change is significant and pertinent to the contract's operation.

One of the country's large MRF operators has gone so far as to use a Force Majeure (Act of God) trigger to stop receiving kerbside recyclables from a group of 11 councils in Victoria.

The net effect is that, in the immediate term, councils can expect contract claims for gate fee increases, retention of container deposit scheme revenues where available and allowable, and contract terminations where the former are not possible. Many will be having these conversations now.

On our estimates, the MRF gate fee increases could be as high as $100/tonne of input materials. A Victorian council estimates that the increase might be almost $200/tonne. That will exist until alternative markets for glass, plastic and paper/cardboard open up, either here in Australia or overseas.

Setting aside the necessary immediate increase in gate fees to ensure recyclers remain commercially viable, governments, councils and processors will need to resolve what action they should take in the short to medium term.

This is not a time to be making a case that we need to build more landfills or waste to energy facilities to handle the extra recyclables. That will be immensely counterproductive to the industry, as the public rightly expects that the materials they diligently sort at home will be recycled into new materials.

Instead, we see some of the options for reinforcing the industry as being:

1. Capital improvements to achieve the new 0.5% contamination specification. This will be difficult and expensive, but necessary if we are to create a high value add material. Irrespective of where it ultimately goes.
2. Labour increases to achieve the same.
3. EPA allowance for stockpiling of recovered materials. We need to work together closely to ensure that any new stockpiles don't burn.
4. EPA relaxation of landfill levies on MRF residuals. Levies must remain on collected recyclables, even continue to increase, as this will keep driving the business model for recycling, however we need a short-term relaxation of levies on MRF residuals.
5. Council adoption of two-bin recycling systems (paper and containers) to reduce contamination rates, especially in the paper bin.
6. Council contract renegotiations to provide for greater responsiveness to changes in markets, and especially the Chinese market.
7. Development of domestic reprocessing capacity for paper and plastic. There are local re-processors for all of these materials, and their capacity can be increased with targeted government investment. It will cost more than re-processing in China, but needs support if we are to have a resilient recycling system.
8. Purchasing policies by all levels of government to increase domestic demand for recyclables across the board. Where export markets have been lost, we should seek to replace them with local procurement.

National Sword will hurt in the short- and mid-term. But in the longer term it may generate another jobs boon in the recycling and re-processing sector. To get there, we need coordination. And so, I call on the federal and state Environment Ministers to set up a Recycling Coordination Council with industry and local councils.

Urgently and without delay.

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