



# ATRA

## Australia's Used Tyre Recycling Industry Update

March 2024

**The used tyre recovery and processing sector has experienced significant and encouraging improvements in recent years, thanks to the post-COVID rebound of the supply chain and adoption of the Federal Government's ban on the export of whole baled tyres. Ongoing enforcement of regulations at the state and territory levels have also played a crucial role in curbing irresponsible retailers, that allow their waste tyres to be illegally stockpiled or dumped.**

The industry has invested significantly in new collection and processing capacity, for both rubber crumb and shred and Japan has emerged as a key offtake partner for tyre derived fuels (TDF). Export markets remain absolutely vital to the sector as we continue to seek and develop onshore demand opportunities.

### COVID Impact & Recovery

The used tyre collection and recycling sector was not immune to the all-encompassing impact of the global pandemic. Severe shortages of containers and ships, resulting from closed ports, halted ship construction and overloaded wharves with container backlogs led to huge cost increases for the export-oriented tyre recycling sector in Australia.

The consequences of these supply chain bottlenecks included:

- Increased product distribution costs for recyclers - the sea-freight cost of a container load of TDF surged from around \$1,000 to \$10,000 to some overseas ports
- Labour shortages further impacted recycling costs - low unemployment rates mean these challenges persist
- Retail disposal costs consequently increased, leading some unscrupulous retailers to illegal dumping, either directly or via contracted operators to avoid these business costs.

As the impacts of the COVID pandemic stabilise, Australia's tyre recycling industry is observing export markets improving, alongside an enhanced capability for the production of onshore consumed crumb rubber and granules.



### Whole Baled Tyre Export Ban

ATRA supported the export ban on whole baled tyres which commenced in December 2021. This long-overdue reform (ATRA had been advocating for since 2016) has made bales of whole tyres illegal for export, with exemptions for casings and re-treads. Additionally, only material processed to 150mm and below is being licenced.

Thirty nine companies are licenced to export used tyres and since the bans commenced two licences have been revoked. ATRA has called on the Federal government to provide more transparency to any compliance and enforcement action they may have taken.

This ban has meant that many recyclers have re-capitalised, installing shredding and crumbing machinery to meet export criteria. ATRA is supportive of the outcomes of this initiative, as it has enhanced Australia's recycling capability and delivered improved health and environmental outcomes, particularly in developing countries.



## Tyre Collection & Feedstock

### Passenger & Commercial Tyres

The collection rate for used passenger and commercial (truck and bus) tyres remains stable, ranging between 97-98%. This performance represents one of the highest collection rates for any waste material in Australia.

In 2022, the landfilling of used tyres accounted for around 9% of onshore disposal, with the rate of dumping and stockpiling ranging between 2-3% of the market. As such, ATRA is lobbying to see a ban on the landfilling of all used tyres, including in-pit disposal of off-the-road (OTR) tyres.

### Off-The-Road Tyres

Large mine and earthmover tyres make up 25% of the Australian used tyre market. At present, about 12% of these tyres are removed for recycling, with the remainder generally permitted to be disposed of in-pit and on-site at the mine. This situation represents the most significant market failure of Australia's end-of-life tyre market.

Australia's tyre recycling industry has the capability, available capital and capacity to re-manufacture our country's OTR tyres. As such, ATRA is eager to work with the mining sector to implement policies that limit and/or restrict in-pit and on-site disposal of OTR tyres in Australia's major mining states, namely QLD and WA.

## Tyre Derived Products - Offtake Markets

### Exporting High Value Products

Around 220,000 tonnes of Australia's recycled tyres are re-manufactured into an alternate fuel. This fuel is traded and consumed globally and reduces the consumption of fossil fuels. Utilised by energy-intensive industries across the world, TDF is an in-demand fuel with proven CO<sub>2</sub>-e emission benefits, with a 30-40% reduction in CO<sub>2</sub> compared with coal. Export markets for TDF remain strong, with ATRA members securing a growing number of offtake customers in a competitive international market. A recent visit to New Zealand's Golden Bay cement kiln demonstrated the value of this material as they seek to replace around 50% of their fossil fuel use with TDF and other alternate fuels.

### Crumb Rubber

Rubber crumb and granule markets account for approximately 10% of Australia's collection/recycled tyre volume, all of which is sold domestically. ATRA acknowledges the significant capital investments throughout Australia's tyre recycling industry in recent years, investments which have enhanced our capability and capacity to produce crumb rubber.

While this capital flow into the sector is a positive outcome, rates of domestic consumption have not

kept up with these developments. ATRA acknowledges the Western Australian government, which contracted more than 3,000 tonnes of crumbed rubber bituminous binders in its road projects in 2022-23 and calls for increased government-led procurement, in other states, of recycled products as a means to enhance demand.

## State & Territory Regulations

The sector is underpinned by state and territory regulations that make it illegal to dump or stockpile (beyond manageable limits) used tyres. These relatively straightforward regulations establish the legal conditions essential for the effective removal of 97% of tyres from retail and fleet sites, ensuring they can be safely and legally processed for a useful secondary outcome.

ATRA continues to work closely with regulators across the country to document and report on instances of non-compliance, urging states to prosecute any illegal activity.

## ATRA's Advocacy Priorities

Australia's tyre recycling industry is robust, resilient and yielding positive outcomes that outstrip the performance of other resource recovery industries with a notable 97-98% collection rate for passenger and commercial tyres. However, challenges persist, particularly regarding the handling of OTR tyres.

In the coming months, ATRA will be focusing on:

- Working with governments on the development of measured policies that strike an appropriate balance between enhancing tyre recycling outcomes while maintaining the vital free-markets and economic environment that has underpinned the investment of hundreds of millions of dollars in Australia's tyre recycling infrastructure
- Continue to advocate for government-led procurement of recycled products, including crumb rubber
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- Continue to support the development of domestic offtake of TDF
- Continue to work closely with state EPAs to eradicate the practice of unscrupulous retailers (waste generators) illegally dumping used tyres (directly or through a contractor) in the environment
- Working with the mining sector and regulators for better end of life treatment of OTRs ATRA looks forward to sharing ongoing updates and remains committed to advancing sustainable practices in Australia's tyre recycling industry.

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