## FACTSHEET – PRODUCT STEWARDSHIP FOR END-OF-LIFE TYRES

The problem of managing Australia's end-of-life tyres has been a focus for industry and government for over 10 years. Under the *National Waste Policy: Less waste, more resources*, assisting the tyre industry to develop a voluntary approach to product stewardship for end-of-life tyres has been a priority initiative for Australian, state and territory governments.

### Tyre Stewardship Australia

Tyre Stewardship Australia (TSA) has been established by tyre importers to administer a national tyre product stewardship scheme. Minister for the Environment, the Hon. Greg Hunt MP, launched TSA on behalf of the tyre industry on 20 January 2014.

Through the scheme, TSA aims to increase domestic tyre recycling, expand the market for tyre-derived products and reduce the number of Australian end-of-life tyres that are sent to landfill, exported as baled tyres or illegally dumped.

TSA administers the tyre product stewardship scheme and conducts education, communication, compliance and market development activities.

### The tyre product stewardship scheme

The tyre product stewardship scheme has been developed through an extensive consultation process with a broad range of stakeholders across the tyre supply chain, including tyre and vehicle importers, retailers, fleet operators, local governments, tyre collectors, tyre recyclers and the mining industry.

These tyre industry stakeholders worked together with the Australian and state and territory governments to design a voluntary, industry-led tyre product stewardship scheme.

The Australian Competition and Consumer Commission has granted authorisation for the scheme for five years until 3 May 2018

Key features of the scheme outlined in the guidelines are:

- Any stakeholder in the tyre supply chain, including tyre and vehicle importers, retailers, fleet operators, local governments, collectors, recyclers and the mining industry, may apply to become a participant in the voluntary scheme.
- Participants commit to play their part in ensuring end-of-life tyres go to an environmentally sound use.
- Businesses and organisations can enter into enterprise-to-enterprise agreements or contractual arrangements to ensure that end-of-life tyres are recycled in an environmentally sustainable manner, subject to consideration of relevant competition laws.
- TSA will monitor compliance through random and risk-based audits. Failure to comply may lead to revocation of a participant's accreditation.
- TSA will publish detailed annual reports on the operation of the scheme. There will also be an independent review of the scheme after two years as required by the ACCC.
- The scheme will aim to develop stronger domestic markets for tyre derived products to strengthen the demand for local tyre recycling.

TSA is operated and funded by the industry. The collection and recycling costs associated with ensuring end-of-life tyres go to an environmentally sound use are likely to be passed on to consumers at around the same level as current tyre disposal charges.

**What is the problem with end-of-life tyres?**

A large number of Australia's end-of-life tyres are being disposed of through landfill, stockpiles, exported or illegally dumped and only a small proportion are being recycled. An estimated 48 million tyre equivalent passenger unit (EPU) tyres reached their end of life in Australia in 2009-10. Of these approximately 66% were disposed either to landfill, stockpiled or illegally dumped or categorised as unknown, 16% were domestically recycled and 18% were exported.[1]

- An EPU is a standardised measure for the quantity of end-of-life tyres.
- One EPU contains as much rubber and other materials as a 'typical' passenger tyre.
- The assumed weight of one new EPU is taken to be 9.5 kilograms and one used EPU is taken to be 8 kilograms.
- Tyres are generally made from rubber, steel and textiles.

Apart from the costs to the community and governments through littering our landscapes and waterways and taking up scarce landfill space, end-of-life tyres can be a source of health and environmental concerns; fires in stockpiles can release toxic gases and tyre stockpiles provide breeding habitats for mosquitoes and vermin. Dumped and landfilled tyres also represent a loss of potentially valuable resources as end-of-life tyres and tyre derived products can be put to productive use in many ways, which include:

- the manufacture of new rubber products
- road construction as a constituent in asphalt roads
- surface materials such as artificial turf, sporting field and playground surfaces, and conveyor belts
- alternative fuel for industries such as producers of energy and cement, and as a substitute for diesel in explosives
- civil engineering such as embankments and lightweight fill.

[1] Hyder (2012). *Study into domestic and international fate of end-of-life tyres*, pg i.

*Table 1 Fate of end-of-life tyres by equivalent passenger units, 2009-10*

| | | Passenger tyres | | Truck tyres | | Passenger and truck tyres | | 'Off the road' (e.g. tractor or mining truck) | | Total | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| *All data are equivalent passenger units* | | | | | | | | | | | |
| **Domestic** | Recycling | 1,853,750 | 14.00% | 2,999,750 | 20.40% | 4,853,500 | 17.40% | 75,000 | 0.40% | 4,928,500 | **10.20%** |
| | Energy recovery | 250,000 | 1.90% | - | 0.00% | 250,000 | 0.90% | - | 0.00% | 250,000 | **0.50%** |
| | Civil engineering | 1,016,625 | 7.70% | 1,276,375 | 8.70% | 2,293,000 | 8.20% | 500,000 | 2.40% | 2,793,000 | **5.80%** |
| | Licensed landfill | 1,450,073 | 11.00% | 161,119 | 1.10% | 1,611,192 | 5.80% | - | 0.00% | 1,611,192 | **3.30%** |
| | Unknown* | 1,865,043 | 14.10% | 9,078,286 | 61.90% | 10,943,329 | 39.30% | 19,400,840 | 94.20% | 30,344,169 | **62.60%** |
| | **SUB TOTAL** | 6,435,491 | 48.80% | 13,515,530 | 92.10% | 19,951,021 | 71.60% | 19,975,840 | 97.00% | 39,926,862 | **82.40%** |
| **International** | Reuse & retreading | 45,758 | 0.30% | 56,281 | 0.40% | 102,038 | 0.40% | 8,448 | 0.00% | 110,486 | **0.20%** |
| | Recycling | 3,261,175 | 24.70% | 522,350 | 3.60% | 3,783,525 | 13.60% | 218,900 | 1.10% | 4,002,425 | **8.30%** |
| | Energy recovery | 3,455,180 | 26.20% | 579,721 | 4.00% | 4,034,901 | 14.50% | 393,704 | 1.90% | 4,428,605 | **9.10%** |
| | **SUB TOTAL** | 6,762,113 | 51.20% | 1,158,352 | 7.90% | 7,920,464 | 28.40% | 621,052 | 3.00% | 8,541,516 | **17.60%** |
| **TOTAL** | | **13,197,603** | | **14,673,882** | | **27,871,485** | | **20,596,893** | | **48,468,378** | |

*Source: Hyder Consulting (2012)*
** Data categorised as 'Unknown' represents balance of tyres which have not been recycled, recovered for energy, used in civil engineering or deposited in licensed landfill.*

For more information on end-of life tyres see:

- Study into domestic and international fate of end-of-life tyres
- http://www.environment.gov.au/topics/environment-protection/national-waste-policy/tyres