



PARLIAMENT OF AUSTRALIA

When the rubber hits the road

Inquiry into the Australian tyre industry

House of Representatives

Standing Committee on Industry, Innovation and Science

September 2026

CANBERRA

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Foreword

Tyres are an essential part of modern life. They support the movement of people and goods across Australia, underpinning economic activity and connecting communities across our vast nation. Yet when tyres reach the end of their service life, they present a complex challenge. Each year, hundreds of thousands of tonnes of tyres become waste, and how Australia manages these materials has significant implications for our environment, economy and communities.

Throughout this inquiry, the Committee heard compelling evidence that end-of-life tyres should not simply be viewed as a waste problem, but as a valuable resource. Witnesses and submitters pointed to significant opportunities to recover materials, develop domestic manufacturing capability, and advance Australia's transition to a circular economy. These opportunities align with the Australian Government's *National Circular Economy Framework*, which sets out a pathway to maximise resource value, reduce waste and strengthen Australia's economic resilience. At the same time, the Committee received evidence about persistent challenges, including stockpiling and illegal dumping, limited recycling markets, inconsistencies in regulation and barriers to higher-value uses of recovered tyre materials.

The inquiry considered the tyre lifecycle from manufacture and importation through to end-of-life management. We examined the role of local governments, which are often at the frontline of dealing with illegally dumped tyres and promoting the use of tyre-derived products in infrastructure projects. We also considered the effectiveness of Australia's regulatory framework and product stewardship arrangements, including views on whether a mandatory national approach is required to improve outcomes across the supply chain.

On behalf of the Committee, I thank everyone who contributed to this inquiry through submissions, public hearings and site visits. Their expertise and insights have greatly assisted the Committee in its examination of these important issues. I also acknowledge my fellow Committee members for their constructive and bipartisan approach throughout the inquiry. It is the Committee's hope that this report will contribute to the development of a more sustainable, resilient and circular future for Australia's tyre industry.

Mr Rob Mitchell MP

Chair

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This Committee is supported by staff of the Department of the House of Representatives.

¹ Appointed 29 July 2025 to 22 January 2026, re-appointed 9 February 2026 to 2 June 2026.

² Appointed 2 June 2026.

³ Appointed 29 July 2025 to 22 January 2026, re-appointed 9 February 2026.



Terms of reference

The House of Representatives Standing Committee on Industry, Innovation and Science will inquire into and report on the current state of the Australian tyre industry, and any challenges and opportunities for the industry within the context of a circular economy, with reference to:

- (a) Reviewing tyre manufacturing, distribution, importation, and retail trends.
- (b) Investigating current practices in tyre reuse, retreading, recycling, and resource recovery, including reviewing federal, state, and local regulations governing tyre production, disposal, and recycling.
- (c) Exploring technological advancements in tyre design, recycling processes, and alternative materials.
- (d) Identifying opportunities to develop high-value uses for waste tyres and tyre-derived materials, including applications in construction, manufacturing, and other commercial sectors.
- (e) Evaluating the effectiveness of the existing circular economy models and identifying opportunities for research and development to support improved sustainable practices.
- (f) Considering the role of commercially viable product stewardship schemes and whether these should be made mandatory, and identifying infrastructure gaps in collection, processing, and recycling facilities.
- (g) Investigating environmental, community, and health and safety concerns related to tyre waste and recycling operations.



Abbreviations

AAAA	Australian Automotive Aftermarket Association
ABF	Australian Border Force
ACCC	Australian Competition and Consumer Commission
ACL	Australian Consumer Law
ACT	Australian Capital Territory
ADR	Australian Design Rules
ALGA	Australian Local Government Association
AMM	Approved Management Method
ATIC	Australian Tyre Industry Council
ATRA	Australian Tyre Recyclers Association
BCSD	Business Council for Sustainable Development
CEMAG	Circular Economy Ministerial Advisory Group
CO ₂	carbon dioxide
CoD	Certificate of Destruction
CSIRO	Commonwealth Scientific and Industrial Research Organisation
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DITRDCSA	Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts
DNA	deoxyribonucleic acid
DSG	Department of State Growth (Tasmania)
ELT	end-of-life tyre(s)
EOL	end-of-life
EOLT	end-of-life tyre(s)

EPA	Environment Protection Authority
EPR	extended producer responsibility
EPU	equivalent passenger unit
EU	European Union
EV	electric vehicle
FNQROC	Far North Queensland Regional Organisation of Councils
HS	Harmonised System
ICE	internal combustion engine
ISJO	Illawarra Shoalhaven Joint Organisation
JV	joint venture
Km	kilometre
KPI	key performance indicator
LGAQ	Local Government Association of Queensland
LGP	Local Government Procurement
MFA	Material Flow Analysis
MP	Member of Parliament
MTAA	Motor Trades Association of Australia
NESP	National Environmental Science Program
NQROC	North Queensland Regional Organisation of Councils
NSROC	Northern Sydney Regional Organisation of Councils
NSW	New South Wales
NT	Northern Territory
NTRO	National Transport Research Organisation
OECD	Organisation for Economic Co-operation and Development
OTR	off-the-road
PAH	polycyclic aromatic hydrocarbon

P&L	profit and loss
QLD	Queensland
QR	quick response
R&D	research and development
RAPAD	Remote Area Planning and Development Board
RAWR Act	<i>Recycling and Waste Reduction Act 2020</i>
rCb	recycled carbon black
RMF	Recycling Modernisation Fund
The Rules	Recycling and Waste Reduction (Export—Waste Tyres) Rules 2021
RWMP	Regional Waste Management Plan
SA	South Australia
SSROC	Southern Sydney Regional Organisation of Councils
SUV	sport utility vehicle
TAS	Tasmania
TDF	tyre-derived fuel
TPSS	Tyre Product Stewardship Scheme
TSA	Tyre Stewardship Australia
TV	television
TWP	tyre wear particles
UNSW	University of New South Wales
US	United States
USA	United States of America
VIC	Victoria
WA	Western Australia
WALGA	Western Australian Local Government Association
WBF	wood waste-based fuel

WMRR	Waste Management and Resource Recovery Association of Australia
WSROC	Western Sydney Regional Organisation of Councils

List of recommendations

Recommendation 1

- 3.164** The Committee recommends that the Australian Government, through the Environment Ministers Meeting and in partnership with state and territory governments, develop a nationally harmonised regulatory framework for end-of-life tyres, including:
- nationally consistent definitions and classifications;
 - harmonised storage, transport and processing requirements; and
 - consistent landfill and disposal controls.

Recommendation 2

- 3.176** The Committee recommends that the Australian Government, in partnership with state and territory governments, the mining sector and relevant stakeholders, develop and implement a nationally consistent framework for off-the-road (OTR) tyre management that prioritises recovery, reuse and recycling over onsite burial.
- 3.177** The framework should include:
- a staged reduction in the use of onsite burial as an end-of-life management practice for OTR tyres over the next 5 years;
 - interim OTR tyre recovery targets to support the transition away from onsite burial practices;
 - support for regional and remote collection, retreading and recycling infrastructure; and
 - public reporting on progress against the interim recovery targets and the staged reduction of onsite burial, to support transparency and accountability, and to inform any additional measures required to achieve long-term resource recovery objectives.

Recommendation 3

- 3.182** The Committee recommends that the Australian Government undertake a review of the regulatory framework for replacement tyres, noting that replacement tyres are not currently subject to the Australian Design Rules. The review should identify the most appropriate mechanism to establish and

enforce design, performance and sustainability standards for replacement tyres, and consider the adoption, where appropriate, of contemporary international standards. The review should also consider measures to improve tyre durability, retreadability, repairability and resource efficiency.

Recommendation 4

- 3.185** The Committee recommends that the Australian Government review its processes for enforcement of the Recycling and Waste Reduction (Export—Waste Tyres) Rules 2021 to ensure non-compliant exports are identified and effectively managed.

Recommendation 5

- 4.104** The Committee recommends the Department of Climate Change, Energy, the Environment and Water to undertake an independent audit of the Tyre Product Stewardship Scheme administered by Tyre Stewardship Australia, and table the findings publicly.

Recommendation 6

- 4.113** The Committee recommends that, pending the outcome of the independent audit of the Tyre Product Stewardship Scheme, the Australian Government take steps to strengthen Australia's tyre stewardship framework, including consideration of a transition to a mandatory national Tyre Product Stewardship Scheme under the Recycling and Waste Reduction Act 2020. The strengthened framework should require tyre manufacturers, importers, retailers, recyclers and other relevant stakeholders to contribute to and participate in the responsible management of tyres throughout its product lifecycle.

Recommendation 7

- 4.118** The Committee recommends that, should a mandatory national tyre product stewardship scheme be established, the Australian Government appoint the scheme operator through an open, transparent and competitive tender process.

Recommendation 8

- 5.95** The Committee recommends that the Australian Government ensure that any mandatory national tyre product stewardship scheme provides dedicated and ongoing funding to address gaps in tyre collection, storage, transport and processing infrastructure, particularly in regional, rural and remote areas. Funding should support regional recovery hubs, secure storage facilities, mobile and modular processing infrastructure, local processing solutions, and transport and logistics costs associated with end-of-life tyre recovery. The

scheme should recognise the higher costs faced by geographically dispersed communities and improve access to viable recovery and recycling pathways across Australia.

Recommendation 9

6.157 The Committee recommends that the Australian Government, in partnership with state, territory and local governments, support the increased use of crumb rubber in road infrastructure through national specifications, procurement settings and demonstration projects.

Recommendation 10

6.158 The Committee recommends that the Australian Government support the tyre retreading industry as a priority circular economy activity that extends tyre life, reduces waste and retains valuable materials in productive use.

Recommendation 11

6.159 The Committee recommends that the Australian Government strengthen Commonwealth procurement policies, including the Commonwealth Environmentally Sustainable Procurement Policy, to increase the use of Australian-made products containing recycled tyre materials and retreaded tyres, particularly in government-owned and government-contracted truck, bus and heavy vehicle fleets. This should support the development of domestic markets for end-of-life tyres and improve resource recovery outcomes.

Recommendation 12

6.163 The Committee recommends that the Australian Government facilitate greater collaboration between industry, universities, CSIRO and other research institutions to accelerate the development and commercialisation of emerging tyre recycling and recovery technologies.



1. Introduction

Overview

- 1.1 As a nation heavily reliant on road transport, Australia must manage a considerable stream of tyres reaching their end-of-life each year. While tyres are essential to the movement of people and goods, their durability and complex composition make them difficult to manage at the end of their service life. Poor management of end-of-life tyres can contribute to environmental harm and health risks, as well as the loss of valuable materials that could otherwise be recovered and reused.
- 1.2 End-of-life tyres represent a valuable resource within a circular economy. Tyres contain significant quantities of rubber, steel and other materials that can be recovered and reprocessed into new products. Technologies and markets already exist to support a range of end uses, including tyre-derived crumb rubber for roads and infrastructure, tyre-derived fuel, retreading, and the recovery of constituent materials through advanced recycling processes.
- 1.3 This report examines the current state of Australia's tyre industry, the challenges and opportunities facing the sector, and Australia's approach to tyre stewardship. It considers the effectiveness of existing arrangements, emerging technologies and markets, regulatory and policy settings, and measures that could improve resource recovery while reducing environmental and community impacts.

Previous inquiries and government reports

2018 Senate Environment and Communications References Committee inquiry

- 1.4 In June 2018, the Senate Environment and Communications References Committee tabled its final report for its inquiry into the waste and recycling industry in Australia and made 18 recommendations.
- 1.5 Two recommendations related to a product stewardship scheme for tyres:
 - Recommendation 12: The committee recommends that product stewardship schemes established under the *Product Stewardship Act 2011* be mandatory schemes.

- Recommendation 13: The committee recommends that mandatory product stewardship schemes be established for tyres, mattresses, e-waste, and photovoltaic panels.¹

1.6 In its response to the report, the Australian Government noted all 18 recommendations and said ‘...given the passage of time since this report was tabled, a substantive Government response is no longer appropriate.’²

2020 House Standing Committee on Industry, Innovation, Science and Resources inquiry

1.7 In December 2020, the House Standing Committee on Industry, Innovation, Science and Resources tabled its final report for its inquiry into Australia’s waste management and recycling industries and made 24 recommendations.

1.8 While the report discussed matters such as a waste tyre export ban, the Recycling Modernisation Fund, and support for a mandatory product stewardship scheme for tyres and crumb rubber, it did not make any recommendations specific to tyres.³

2024 Senate Environment and Communications References Committee inquiry

1.9 In April 2025, the Senate Environment and Communications References Committee tabled its final report for its inquiry into waste reduction and recycling policies and made 19 recommendations.

1.10 While the report considered matters relating to the Tyre Product Stewardship Scheme, the Minister’s product stewardship priority list (which includes tyres), waste tyre exports and the *Recycling and Waste Reduction Act 2020*, it did not make any recommendations specific to tyres.⁴

2024 CSIRO and Curtin University case study

1.11 In May 2024, a case study report titled *Best practice case studies for increasing value recovery from end-of-life tyres and conveyor belts* was jointly released by CSIRO and Curtin University, funded by the Australian Government National Environmental Science Program. The report analysed product stewardship schemes implemented in various other countries, enablers for recycling, reverse logistics,

¹ Senate Environment and Communications References Committee, *Never waste a crisis: the waste and recycling industry in Australia*, June 2018, p. x.

² Australian Government response to the Environment and Communications References Committee report: *Never waste a crisis: the waste and recycling industry*, May 2024, p. 5.

³ House Standing Committee on Industry, Innovation, Science and Resources, *From rubber to resources: Building a circular economy*, December 2020, pp. 29–30, 33–34, 51, 56, 58.

⁴ Senate Environment and Communications References Committee, *No time to waste: Waste reduction and recycling policies*, April 2025, pp. 8, 31, 83, 87, 94, 97–98, 161, 204.

value recovery and end-markets, and strategies for communicating with Indigenous communities.⁵

2025 Productivity Commission inquiry

- 1.12 In August 2025, the Productivity Commission presented a final report for its inquiry into Australia's opportunities in the circular economy. While the report discussed some matters related to policy reforms for end-of life tyres, the Productivity Commission considered:

...Australia's Environment Ministers to be best placed to decide on policy actions regarding end-of-life tyre management. However, any decision must consider the key issues highlighted above including the environmental impacts of the various options for end-of-life tyres, the economic costs of compliance for industry and enforcement for government, and progress in developing viable markets for end-of-life tyre products.⁶

2025 National project on options for end-of-life tyres

- 1.13 In August 2025, the Western Australian Government released two reports following a national project to assess options for end-of-life tyres:
- National End-of-Life Tyres Options project – Project report (project report)
 - National End-of-Life Tyres Options project – Investigation report – off-the-road tyres (OTR) and related products (OTR investigation report)
- 1.14 The national project was undertaken by the Western Australian Government on behalf of Australia's Environment Ministers and aimed to support government decision-making by outlining issues and possible policy solutions.⁷

Project report

- 1.15 The project report identified three key problem areas in Australia's current tyre management system, which were:
- 1 risks and costs to the environment and communities
 - 2 missed opportunities for recovery and the loss of resources

⁵ CSIRO and Curtin University, *Best practice case studies for increasing value recovery from end-of-life tyres and conveyor belts*, May 2024, pp. xi–xiii.

⁶ Productivity Commission, *Australia's circular economy: unlocking the opportunities Inquiry report*, August 2025, p. 60,

⁷ See, for example: Environment Ministers' Meeting, *Agreed Communique*, 9 June 2023, p. [3]; Western Australian Government, *National End-of-Life Tyres Options project: Project report*, August 2025, p. 6; Western Australian Government, *Submission 63*, p. 1.

3 limitations of and inequities in the current framework.⁸

- 1.16 The project report concluded that, while the existing voluntary Tyre Product Stewardship Scheme has delivered benefits, it has inherent limitations in addressing free-riders, improving national participation and driving higher-order recovery outcomes. The assessment found that a broad-based regulated product stewardship scheme offered the greatest potential to address the identified problems, improve tyre recovery, support domestic recycling markets, reduce environmental risks and provide a more equitable and sustainable funding mechanism across the tyre supply chain.⁹
- 1.17 The project report also highlighted the need for complementary measures, including market development, improved regional and remote tyre management, support for higher-value recycling pathways and mechanisms to address legacy stockpiles and dumped tyres.¹⁰

OTR investigation report

- 1.18 The OTR investigation report found that OTR tyres present unique management challenges due to their size, weight, location and composition. Many OTR tyres are generated in remote areas where transport and processing costs can be prohibitive. As a result, large volumes are currently stored, buried on-site, stockpiled or otherwise disposed of rather than being recovered through recycling or reuse pathways. The report identified these practices as resulting in both environmental risks and the loss of potentially valuable materials.¹¹
- 1.19 The OTR investigation report highlighted a range of emerging opportunities to improve outcomes for OTR tyres. These included extending tyre life through repair, maintenance and retreading, recovering materials through shredding and specialised recycling technologies, and developing new markets for tyre-derived products.¹²

Conduct of the inquiry

- 1.20 The Committee issued a media release on 7 November 2025 announcing the inquiry and calling for submissions.
- 1.21 71 submissions and 17 supplementary submissions were received from a range of stakeholders, including local government authorities, community organisations, tyre

⁸ Western Australian Government, *National End-of-Life Tyres Options project: Project report*, August 2025, p. 7.

⁹ Western Australian Government, *National End-of-Life Tyres Options project: Project report*, August 2025, pp. 18–22.

¹⁰ Western Australian Government, *National End-of-Life Tyres Options project: Project report*, August 2025, pp. 18–22.

¹¹ Western Australian Government, *National End-of-Life Tyres Options project: Investigation report – off-the-road tyres and related products*, August 2025, p. 16.

¹² Western Australian Government, *National End-of-Life Tyres Options project: Investigation report – off-the-road tyres and related products*, August 2025, p. 16.

recyclers, transport and infrastructure stakeholders and industry representatives. A list of these submissions can be found at Appendix A.

- 1.22 Twenty-two of the submissions received were from local governments and community groups. A further two submissions were received from state governments—the Western Australian Government and the Tasmanian Government.
- 1.23 The Committee held eight public hearings across Canberra, Western Australia, Victoria, Queensland and New South Wales. Details of these public hearings, including a list of witnesses, can be found at Appendix B.
- 1.24 The Committee also conducted a series of site visits to tyre recycling, retreading, and research facilities throughout the inquiry. Site visits included:
 - CTS Tyre Recycling in Neerabup, WA
 - Elan Energy Matrix in Welshpool, WA
 - RubberGem in East Rockingham, WA
 - Tyrecycle in East Rockingham, WA
 - Tyrecycle in Somerton, Victoria
 - ELT Recycling in Campbellfield, Victoria
 - National Transport Research Organisation in Port Melbourne, Victoria
 - Ozcom in Redbank Plains, Queensland
 - Bridgestone's Bandag retreading facility in Wacol, Queensland
 - Michelin's retreading facility in Acacia Ridge, Queensland
 - N.B.R. Tyres in Penrith, NSW
 - Tyrecycle in Erskine Park, NSW
 - University of New South Wales Centre for Sustainable Materials Research and Technology (SMaRT@UNSW) in Kensington, NSW

Figure 1.1 The Committee visiting Elan Energy Matrix in Welshpool, WA



From left to right: Hon Michael McCormack MP, Mr Rob Mitchell MP, Ms Zaneta Mascarenhas MP, Ms Alison Byrnes MP

Figure 1.2 The Committee visiting the National Transport Research Organisation in Port Melbourne, Victoria



From left to right: Mr Rob Mitchell MP, Ms Alison Byrnes MP, Mr Michael McCormack MP, Ms Jess Teesdale MP, Mr Tom Venning MP

Report outline

- 1.25 This report has six chapters, including this introduction as Chapter 1.
- 1.26 Chapter 2 covers the service life and end-of-life management of tyres in Australia, providing an overview of tyre consumption, imports, retail markets and emerging trends such as vehicle electrification. It also explores Australia's reliance on imported tyres and the scale of end-of-life tyre generation.
- 1.27 Chapter 3 reviews Australia's regulatory framework for end-of-life tyres, including national and state and territory legislation governing tyre management. It explores stakeholder concerns about fragmented and inconsistent regulations, enforcement challenges, stockpiling and illegal dumping, the management of off-the-road mining tyres and onsite burial practices, as well as issues relating to tyre imports, exports and product standards.
- 1.28 Chapter 4 discusses the role of product stewardship for tyres in Australia, with a particular focus on the voluntary Tyre Product Stewardship Scheme administered by Tyre Stewardship Australia. It explores evidence on the scheme's achievements and limitations along with stakeholder support and opposition for a mandatory national product stewardship scheme.
- 1.29 Chapter 5 examines the role of local governments in managing end-of-life tyres. It highlights council-led initiatives to improve tyre recovery and increase the use of tyre-derived products, particularly crumb rubber in road construction. The chapter also explores some of the challenges faced by local governments, such as high transport and disposal costs, limited regional processing infrastructure, and stockpiling and illegal dumping.
- 1.30 Chapter 6 examines the application of circular economy principles for Australia's tyre industry, including opportunities to extend tyre life through reuse and retreading, increase recycling through products such as crumb rubber, and recover value from end-of-life tyres. It explores the benefits and limitations of key recovery pathways, including tyre-derived fuel, and considers how procurement, grants, research and education can support higher-value circular outcomes.

Acknowledgements

- 1.31 The Committee would like to thank everyone who contributed to this inquiry, including those who made submissions and gave evidence at public hearings.
- 1.32 The Committee also would like to thank everyone who organised and hosted the Committee at various sites around Australia. These visits provided a valuable insight into the operation of the Australian tyre industry.



2. Service life and end-of-life tyres

- 2.1 Tyres are an essential component of the nation's transport, freight, agricultural, mining and construction sectors, with millions of new tyres entering the Australian market each year to support a growing population and economy.
- 2.2 This chapter examines the scale and significance of tyre consumption in Australia and provides context for the management challenges associated with tyres throughout their lifecycle.

Service life tyres

- 2.3 According to the most recent data available from Tyre Stewardship Australia (TSA), the not-for-profit organisation established to implement the national Tyre Product Stewardship Scheme (TPSS), Australians consumed approximately 740,000 tonnes of tyres in 2023–24. The total comprised of approximately 20 million passenger tyres,¹ 8.5 million truck and bus tyres and 750,000 off-the-road (OTR) tyres used in industries such as mining, agriculture, construction, manufacturing and aviation.²
- 2.4 These figures highlight the substantial volume of tyres entering the Australian market annually and the importance of ensuring they are managed safely and sustainably throughout their service life and at end-of-life.
- 2.5 Additionally, tyre consumption has shown an overall upward trend in recent years. Despite some fluctuations from year to year, total tyre consumption increased from approximately 645,000 tonnes in 2019–20 to around 740,000 tonnes in 2023–24.³ This growth is broadly consistent with increases in Australia's population, vehicle fleet and freight activity.
- 2.6 As the number of tyres entering the market continues to rise, so too does the importance of robust systems for tyre monitoring, maintenance, recovery and disposal to minimise safety risks and environmental impacts.

¹ Note: This inquiry report will refer to passenger tyres as small and large tyres including motorcycle, car and SUV tyres; truck and bus tyres as light and heavy-duty truck and bus tyres; and OTR tyres as tyres used in industries such as mining, agriculture, construction, manufacturing and aviation.

² Tyre Stewardship Australia (TSA), *Material Flow Analysis Report 2023–24: Are we there yet? Australia's journey towards a circular economy on tyres (MFA Report)*, p. 5.

³ TSA, *MFA Report*, p. 5.

Tyre manufacturing in Australia

- 2.7 The Committee heard that Australia no longer has any domestic capacity to bulk manufacture new tyres, with nearly all tyres now supplied through imports, either as standalone products or fitted to imported vehicles.
- 2.8 Australia's last tyre manufacturing factory closed in April 2010.⁴ Bridgestone Australia operated the factory for more than 40 years and employed 600 workers at the time of its closure.⁵
- 2.9 Michelin Australia attributed the end of tyre manufacturing in Australia to:
- the decline in local vehicle manufacturing
 - Australia's market size, for both new and replacement tyres
 - domestic operation costs becoming 'cost inhibitive'
 - access and proximity to raw materials, such as natural and synthetic rubber, steel wire and carbon black.⁶
- 2.10 The loss of Australia's domestic tyre manufacturing capacity has principally occurred in the pneumatic tyre sector, encompassing tyres used for passenger vehicles, industrial machinery and heavy equipment. However, manufacturing of other tyre-type products exists, on a small scale.
- 2.11 For example, Big Tyre, a manufacturer of rubber and polyurethane products located in Toowoomba, Queensland, informed the Committee that it manufactures solid rubber bonded wheels for heavy duty applications such as underground mining.⁷ Big Tyre sell these wheels to 'equipment manufacturers [...] to dealers, and to end users.'⁸

Imported tyres

- 2.12 Almost all tyres consumed in Australia are imported, reflecting the country's very limited domestic tyre manufacturing capacity. Approximately five out of every six tyres entered Australia as loose imported products, while the remaining tyres were imported already fitted to new vehicles.⁹
- 2.13 According to TSA, 'approximately 84 per cent of tyres were imported as replacement tyres, to be distributed through wholesalers, retailers and specialist networks' in

⁴ TSA, *Submission 16*, p. 16.

⁵ TSA, *Submission 16*, p. 16.

⁶ Michelin Australia, *Submission 52*, p. [1].

⁷ Big Tyre, *Submission 2*, p. [1].

⁸ Big Tyre, *Submission 2*, p. [1].

⁹ TSA, *MFA Report*, p. 5.

2023–24.¹⁰ Approximately half (53 per cent) of the tyres arriving in Australia as replacement tyres are imported by companies that contribute to the TPSS.¹¹

- 2.14 The TPSS is further discussed in detail in Chapter 5.
- 2.15 Australian Tyre Industry Council (ATIC), the peak industry body for tyres, described various methods of importation and distribution, including through manufacturers, exclusive or semi-exclusive importers, wholesalers and small players.¹² ATIC also reported that approximately five million tyres enter the Australian market fitted to new vehicles imported from overseas.¹³
- 2.16 Michelin Australia advised that its tyres sold in Australia are mainly imported from Asia, Europe and the Americas.¹⁴ Specifically, Michelin's tyre imports are from:
- Thailand, Indonesia, China and Sri Lanka for motorbikes, passenger cars, SUVs, four-wheel drives, trucks, industrial, bus and aviation purposes
 - France, Spain and Italy for passenger cars, infrastructure, agriculture, military and mining purposes
 - America and Brazil for mining purposes.¹⁵
- 2.17 S & J Australian Scrap Tyre Disposals reported that Australia 'relies on imports especially from the new manufacturing hubs of India, Malaysia and Asia more broadly'.¹⁶
- 2.18 Bridgestone Mining Solutions Australia, the largest supplier of OTR tyres to the mining industry in Australia, reported that Bridgestone is responsible for more than half of OTR tyres imported to Australia on a tonnage basis.¹⁷ Among the OTR tyres imported and distributed by Bridgestone Mining Solutions Australia are those used in the mining, quarrying, industrial, forestry and construction industries.¹⁸

Australia's reliance on imported tyres

- 2.19 Many submissions discussed Australia's reliance on imported tyres.¹⁹

¹⁰ TSA, *Submission 16*, p. 18.

¹¹ TSA, *Submission 16*, p. 18.

¹² Australian Tyre Industry Council (ATIC), *Submission 29*, p. 4.

¹³ ATIC, *Submission 29*, p. 4.

¹⁴ Michelin Australia, *Submission 52*, p. [1].

¹⁵ Michelin Australia, *Submission 52*, p. [1].

¹⁶ S & J Australian Scrap Tyre Disposals, *Submission 39*, p. [4].

¹⁷ Bridgestone Mining Solutions Australia, *Submission 61*, p. [2].

¹⁸ Bridgestone Mining Solutions Australia, *Submission 61*, p. [2].

¹⁹ See, for example: Fortescue, *Submission 21*, p. 3; S & J Australian Scrap Tyre Disposals, *Submission 39*, p. [4]; Australian Tyre Recyclers Association, *Submission 42*, p. [4]; Business Council for Sustainable Development Australia, *Submission 58*, p. [2].

- 2.20 Business Council for Sustainable Development Australia described Australia's tyre management system as '...structurally fragile due to its near-total reliance on imported tyres...' ²⁰
- 2.21 Due to Australia's dependence on imported tyres, Motor Trades Association of Australia (MTAA) commented that 'Australia cannot influence product design, quality standards or recycling-readiness upstream.' ²¹
- 2.22 MTAA was also of the view that the rise of online imports has 'further disrupted the market': ²²

These imports often circumvent local retail channels and therefore avoid voluntary stewardship contributions. Commentary from TSA highlights that Australia does not currently have equivalent tyre quality benchmarks to the European Union for instance, making the market potentially more vulnerable to poorer quality imports that wear out faster and place additional pressure on end-of-life management. ²³

- 2.23 N.B.R. Tyres cautioned that if there were to be geopolitical tensions or conflict around the South China Sea or Taiwan, Australia's reliance on imported tyres would be 'a real problem': ²⁴

In this real scenario all imports into Australia would most likely stop. People will have to get used to repairing and re-using their old TV sets, refrigerators, cars, trucks, washing machines etc. instead of buying new ones for the time being. But with regards to tyres, what do you do if all the remaining handful of tyre retreading factories close down in Australia?

The entire supply chain in Australia would stop because there are no new tyres being imported and there are no tyre retreading factories to recycle and re-use the worn out tyres.

This is going to be a real problem. ²⁵

- 2.24 Mr Chin Han Tan, Director of N.B.R. Tyres, further explained his views on the matter at a public hearing in Sydney:

A lot of the tyres that we import come from a particular region that is susceptible to conflict or border disputes—namely, the South China Sea and the Taiwan Strait. So if anything happened—a blockade, war, conflict or whatever—there could be no tyres coming into Australia for that period. In that scenario, it would be very important to keep our trucks going and keep fuel and food moving in that period of time. That segment of tyres should be considered a consumable. It's

²⁰ Business Council for Sustainable Development Australia, *Submission 58*, p. [2].

²¹ Motor Trades Association of Australia (MTAA), *Submission 18*, p. 3.

²² MTAA, *Submission 18*, p. 3.

²³ MTAA, *Submission 18*, p. 3.

²⁴ N.B.R. Tyres, *Submission 9*, p. [2].

²⁵ N.B.R. Tyres, *Submission 9*, p. [2].

not like a car; it should be considered more akin to fuel. As I said when I presented to the committee yesterday, if such an event occurs and we do not have any tyres being imported, all our trucking fleet will stop, and there will be nothing else to help us. At least, if we have a vibrant retreading and repair industry, we can prolong the supply of tyres to this critical sector.²⁶

- 2.25 Import regulation matters such as low-cost and poor-quality imports and parallel and grey imports will be further discussed in Chapter 3.

Retail and its trends

- 2.26 According to IBISWorld data, in 2024–25, the Australian tyre retail industry consisted of 2,233 businesses, generated \$7.9 billion in revenue with an average profit margin of 5.5 per cent, and employed 13,100 workers.²⁷

- 2.27 In its submission, ATIC listed the various ways the retailing of tyres takes place:

- Through one of the various well-established independent chains with their capillary retail networks.
- Through a controlled retail entity owned by a tyre manufacturer.
- Through small, independent tyre dealers, garages and mechanical workshops.
- Through on-line retailers who will arrange for fitment at a location convenient for their client on a case-by-case basis.
- Through on-line operators who will deliver and fit tyres at their customers' home or work address.
- Through the vehicle retail chains controlled by vehicle importers, normally at the time of vehicle maintenance.²⁸

- 2.28 ATIC added that barriers to entering the tyre retail sector are 'relatively low' with '...relatively low investments required for stock and equipment.'²⁹ It added that a key challenge for retailers is '...the scarcity of tyre fitters available for employment.'³⁰

- 2.29 TSA reported that 73 per cent of replacement tyre units are sold through 15 networks, which represent approximately 1,900 retailers. Most of these retailers (1,700) participate in the TPSS.³¹

²⁶ Mr Chin Han Tan, Director, N.B.R. Tyres, *Committee Hansard*, 15 July 2026, p. 5.

²⁷ Joshua Campbell, 'Tyre retailing in Australia – Bumpy road: surging online sales and low-cost imports force traditional tyre retailers to shift gears', IBISWorld, May 2025, p. 3.

²⁸ ATIC, *Submission 29*, p. 5.

²⁹ ATIC, *Submission 29*, p. 5.

³⁰ ATIC, *Submission 29*, p. 5.

³¹ TSA, *Submission 16*, p. 19.

- 2.30 The remaining 27 per cent of replacement tyre units are sold by approximately 13,000 independent retailers.³² TSA also noted that most tyres in Australia are ‘purchased through physical retail outlets rather than online.’³³
- 2.31 Michelin Australia asserted that, although there has been an increase in retail activity on online platforms, ‘due to the nature of tyres’ requiring specialist service and/or fitment equipment, physical service outlets are still relevant for receiving such deliveries or selling and servicing the tyres directly.’³⁴

Electrification impacts

- 2.32 According to MTAA, the rise of electric vehicles (EVs) introduces new pressures to the industry:

Due to higher torque, heavier batteries, and different loading behaviour, EVs typically wear tyres faster than internal combustion vehicles. International studies suggest wear rates up to 20–50 per cent higher. As Australia’s vehicle fleet transitions, end-of-life tyre volumes will continue to grow, and the composition of ELTs will evolve. Tyres engineered for EVs contain modified compounds and reinforced structures, which may present new challenges for recycling, material separation, and recovery.³⁵

- 2.33 Business Council for Sustainable Development Australia echoed this sentiment and stated that the ‘rapid electrification of the vehicle fleet’ is a growing issue for early tyre wear:³⁶

Australia’s accelerating vehicle electrification presents a material intensifier of end-of-life tyre (EOLT) volumes. Due to increased mass, torque, and regenerative braking characteristics, electric vehicles (EVs) increase average tyre wear rates by 20–30% over comparable internal combustion engine (ICE) vehicles. In aggregate, this means EOLT volumes may grow at a rate disproportionate to overall fleet size.³⁷

- 2.34 In its submission, TSA detailed the research it commissioned to review the increasing EV trend and the impact on tyre manufacturing and recycling:

The research found that advanced design features in tyres to improve performance are on the rise, including noise reduction foams, stronger sidewalls, and self-sealing layers, but that little consideration was found as to how these features impact end-of-life processing. Tyre recyclers that are using granulation and crumbing equipment are experiencing challenges in processing tyres with

³² TSA, *Submission 16*, p. 19.

³³ TSA, *Submission 16*, p. 19.

³⁴ Michelin Australia, *Submission 52*, p. [2].

³⁵ MTAA, *Submission 18*, p. 3.

³⁶ Business Council for Sustainable Development Australia, *Submission 58*, p. [2].

³⁷ Business Council for Sustainable Development Australia, *Submission 58*, p. [2].

these new features, and in some cases need to remove tyres from the processing line to avoid contamination.³⁸

- 2.35 The report also highlighted that by 2034, up to 3.2 million EV tyres could enter Australia's waste stream, annually.³⁹ This rapid transition to EVs is accelerating the challenges for both processing and tyre wear, but TSA noted that 'these challenges are not exclusive to just EV tyres' and that 'the overall trend towards larger and heavier vehicles such as SUVs can also contribute to these end-of-life processing and microplastic impacts.'⁴⁰

End-of-life tyres

- 2.36 According to the most recent data available from TSA, it was estimated that Australia generated 537,000 tonnes of used tyres, consisting of 190,000 tonnes of passenger tyres, 192,000 tonnes of truck and bus tyres, and 155,000 tonnes of OTR tyres between 2023–24.⁴¹ This equates to more than 67 million end-of-life tyres generated, annually.⁴²
- 2.37 Although the recovery rate of passenger and truck and bus tyres is strong, with a combined recovery rate of 87 per cent, only 13 per cent of OTR tyres were recovered, with over 100,000 tonnes estimated to be buried in 2023–24.⁴³
- 2.38 As depicted in the figure below, there are both legal and illegal management pathways for tyres at the end-of-life phase. Waste tyres from retailers are mainly collected and sent to re-processing facilities. Upon collection, suitable tyres may also be reused as second-hand tyres or repaired and retreaded for use in Australia or overseas.

³⁸ TSA, *Submission 16*, p. 18.

³⁹ TSA, *Submission 16*, p. 18.

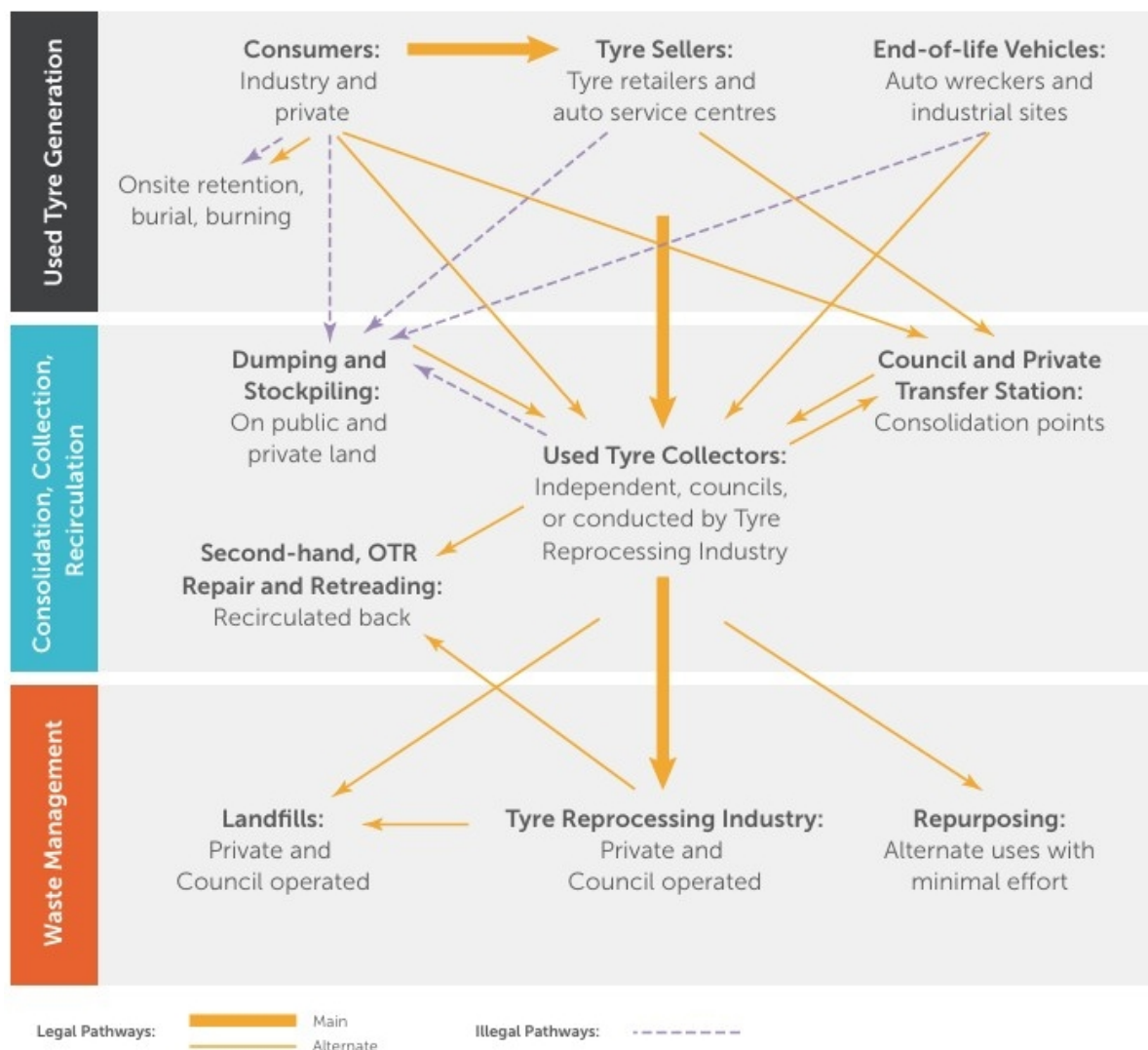
⁴⁰ TSA, *Submission 16*, p. 18.

⁴¹ TSA, *MFA Report*, p. 6.

⁴² Waste Management and Resource Recovery Association of Australia, *Submission 45*, p. [2].

⁴³ TSA, *MFA Report*, p. 9.

Figure 2.1 General management pathways for used tyres



Source: Tyre Stewardship Australia, *MFA Report*, p. 8.

2.39 According to TSA's Material Flow Analysis report (MFA report), there are seven different end-of-life 'fates' for tyres:⁴⁴

- Recovered (tyres that have been collected and processed for a second use)
 - i. Reuse
 - ii. Recycling
 - iii. Energy recovery
- Unrecovered (tyres destined for disposal)

⁴⁴ TSA, *Submission 16*, p. 21.

- iv. Landfill
- v. Onsite burial
- vi. Burning
- vii. Stockpiling or illegal dumping.⁴⁵

2.40 Each pathway will be further discussed alongside the circular economy in Chapter 6.

⁴⁵ TSA, *Submission 16*, p. 21.



3. Regulatory environment

- 3.1 Australia's tyre regulatory framework is currently divided across federal and state/territory laws, with responsibility for tyre management spread across different levels of government.
- 3.2 At the national level, the *Recycling and Waste Reduction Act 2020* (RAWR Act) provides the framework for product stewardship arrangements and regulates waste tyre exports. The current Tyre Product Stewardship Scheme (TPSS), administered by Tyre Stewardship Australia (TSA), operates as a voluntary accredited product stewardship scheme under this framework.
- 3.3 The TPSS will be discussed in further detail in Chapter 4.
- 3.4 State/Territory and local governments regulate tyre storage, transport, disposal, and recycling, resulting in significant variation in requirements across jurisdictions. Many submitters argued that this fragmented regulatory system creates compliance complexity, discourages investment, and contributes to inconsistent environmental outcomes.

National legislation and regulations

- 3.5 According to the Department of Climate Change, Energy, the Environment and Water (DCCEEW), the DCCEEW is responsible for 'administering and implementing legislation on waste reduction, resource recovery and the safe management of hazardous materials and chemicals, where the Australian Government has constitutional authority to act.'¹ However, 'the regulation of waste and development of policies on resource recovery and recycling is primarily the responsibility of the states and territories.'²
- 3.6 State/Territory and local governments work within these legislative frameworks and are responsible for day-to-day regulation of pollution prevention and contamination management.³

Recycling and Waste Reduction Act 2020 (RAWR Act)

- 3.7 The *Recycling and Waste Reduction Act 2020* (RAWR Act) is the primary Commonwealth legislation to manage waste and resource recovery. It commenced

¹ Department of Climate Change, Energy, the Environment and Water (DCCEEW), *Submission 7*, p. 3.

² DCCEEW, *Submission 7*, p. 2.

³ DCCEEW, *Submission 7*, pp. 2–4.

operation in December 2020, bringing together pre-existing legislation (the *Product Stewardship Act 2011*) with new powers regulating waste exports, including tyres, plastic, paper and glass.⁴

- 3.8 A statutory review of the *RAWR Act* is currently underway. As per the statutory review's Terms of Reference, this includes consideration of limitations of current approaches to product stewardship.⁵ DCCEEW stated that 'the tyre industry has been an active participant in providing feedback for this review', which is expected to be completed shortly.⁶
- 3.9 In a response to a Question on Notice on 24 June 2026, DCCEEW stated that the review report is anticipated to be delivered to the Minister for the Environment and Water in 'coming months.'⁷

Industrial Chemicals Environmental Management (Register) Act 2021

- 3.10 This Act establishes nationally consistent standards to protect the environment by managing import, manufacture, export, use and disposal of industrial chemicals.⁸
- 3.11 The Act aims to support a nationally consistent approach to managing the environmental impacts of industrial chemicals across Australia and to help Australia meet its international obligations relating to chemical management.

National Environment Protection Council Act 1999

- 3.12 This Act allows for the creation of National Environment Protection Measures by a Council of Australia's environment ministers. The measures are national objectives designed to assist in protecting or managing aspects of the environment.⁹

Hazardous Waste (Regulation of Exports and Imports) Act 1989

- 3.13 This Act and associated regulations implement Australia's obligations under the Basel Convention, Waigani Convention, OECD Decision of the Council on the Control of Transboundary Movements of Wastes Destined for Recovery Operations, and Imports from the Democratic Republic of Timor-Leste.¹⁰

Circular Economy Act

- 3.14 The Circular Economy Ministerial Advisory Group (CEMAG) was appointed in 2023 to advise the Australian Government on accelerating the transition to a circular

⁴ DCCEEW, *Submission 7*, p. 3.

⁵ DCCEEW, *Submission 7*, p. 3.

⁶ DCCEEW, *Submission 7*, p. 4.

⁷ DCCEEW, *Submission 7.1*, p. [1].

⁸ DCCEEW, *Submission 7*, p. 4.

⁹ DCCEEW, *Submission 7*, p. 4.

¹⁰ DCCEEW, *Submission 7*, p. 4.

economy by 2030. Its role was to provide expert guidance on policy, investment and innovation to reduce waste, improve resource efficiency and create sustainable markets.¹¹

- 3.15 The CEMAG's final report, 'The Circular Advantage – Unlocking innovation, environmental resilience, productivity and net zero opportunities through a uniquely Australian circular economy transition', made 14 core recommendations and 12 supporting sector-specific recommendations for the Australian Government to accelerate the transition to a circular economy.¹²
- 3.16 The primary recommendation from the report was to establish a new National Circular Economy Policy Framework and to introduce a Circular Economy Act to help meet the goals of the national policy framework.¹³
- 3.17 The CEMAG's call for a Circular Economy Act was echoed in the 2025 report of the Senate Environment and Communications References Committee's inquiry into waste reduction and recycling policies:¹⁴

The committee recommends the Australian Government legislate a Circular Economy Act, in accordance with the recommendation of the Circular Economy Ministerial Advisory Group (CEMAG), to implement a full circular economy framework aimed at effectively supporting Australia's waste management and resource recovery sectors, and improving environmental and economic outcomes. A legislated Circular Economy Act should reflect the findings and recommendations of the CEMAG and Productivity Commission and set a clear framework for imported and local product design, financial incentives, and regulatory enforcement.¹⁵

State/Territory legislation and regulations

- 3.18 Below is a summary of the principal state/territory legislation and regulation regarding waste tyre management, in alphabetical order.

Australian Capital Territory

Environmental Protection Act 1997 (ACT)

- 3.19 This Act is the principal environmental protection law in the Australian Capital Territory. It regulates activities that may cause environmental harm and establishes the environmental authorisation system used for many waste-related operations.

¹¹ DCCEEW, *The Circular Advantage*, December 2024, p. 12.

¹² DCCEEW, *The Circular Advantage*, December 2024, pp. 107–113.

¹³ DCCEEW, *The Circular Advantage*, December 2024, p. 6.

¹⁴ Senate Environment and Communications References Committee, *No time to waste: Waste reduction and recycling policies*, April 2025, p. xi.

¹⁵ Senate Environment and Communications References Committee, *No time to waste: Waste reduction and recycling policies*, April 2025, p. xi.

Under this Act, businesses involved in waste activities, including tyre transport, storage and processing, may require environmental approvals and must prevent pollution and environmental harm.¹⁶

3.20 Key points of the Act include:

- Businesses involved in significant tyre waste activities may require an Environmental Authorisation to legally operate in the ACT.
- Transportation of large quantities of waste tyres, including loads of two tonnes or more, may require Environmental Authorisation and Waste Transporter Registration.
- Provisions for relevant authorities to monitor activities, impose conditions, investigate breaches and take enforcement action where tyre waste activities cause environmental harm.¹⁷

Environment Protection Regulation 2005 (ACT)

3.21 This regulation supports the above Act by establishing environmental standards and controls, defining activities that may cause environmental harm, prescribing offences and penalties, and setting requirements for environmental authorisations and approvals.¹⁸

New South Wales

Protection of the Environment Operations Act 1997 (NSW)

3.22 This Act is the principal environmental protection law in New South Wales. It establishes the state's framework for preventing and controlling pollution, regulating waste, licensing environmentally significant activities and enforcing environmental laws.¹⁹

3.23 Key points of the Act include:

- Large-scale tyre storage, recycling and waste management activities may require an Environment Protection Licence issued under the Act.
- Waste tyres must be transported to a facility that can lawfully receive and manage them, and retailers, transporters and recyclers can be held liable if tyres are sent to an unlawful waste facility. The maximum penalty for this offence (under section 143 of the Act) is \$500,000 for an individual and \$2,000,000 for a corporation.
- The New South Wales EPA has powers to inspect premises, issue notices, impose fines and prosecute offences involving illegal dumping, unlawful waste disposal, pollution incidents and non-compliance with licence conditions.²⁰

¹⁶ *Environmental Protection Act 1997 (ACT).*

¹⁷ *Environmental Protection Act 1997 (ACT).*

¹⁸ *Environment Protection Regulation 2005 (ACT).*

¹⁹ *Protection of the Environment Operations Act 1997 (NSW).*

²⁰ *Protection of the Environment Operations Act 1997 (NSW).*

Protection of the Environment (Waste) Regulation 2014 (NSW)

- 3.24 The *Protection of the Environment Operations (Waste) Regulation 2014* (NSW) is the main regulation made under the *Protection of the Environment Operations Act 1997* (NSW) that sets out the detailed rules for how waste must be managed in New South Wales. It supports the Act by establishing requirements for waste tracking, waste facilities, licensing thresholds, record keeping and the waste levy system.²¹

Northern Territory

Waste Management and Pollution Control Act 1998 (NT)

- 3.25 This Act is the principal legislation governing waste handling, transport, storage, treatment, recycling and disposal in the Northern Territory. The Act regulates activities that may cause pollution or environmental harm and requires approvals for certain waste management operations.²²
- 3.26 Key points of the Act include:
- Businesses that collect, transport, store, recycle, treat or dispose of waste tyres on a commercial or fee-for-service basis may require an appropriate waste management licence. Operating without the necessary licence can constitute an offence under the Act.
 - Provision of enforcement mechanisms to address unlawful storage, disposal and dumping of waste tyres. Landholders who accept tyres without appropriate approvals may face significant clean-up costs and liabilities.
 - Allows the Northern Territory EPA to regulate waste facilities and activities involving waste tyres, including monitoring compliance and taking enforcement action where necessary.²³

Waste Management and Pollution Control (Administration) Regulations 1998 (NT)

- 3.27 The regulation supports the above Act by defining and classifying regulated waste streams, establishing licensing and approval processes, and prescribing fees and administrative requirements.²⁴

Queensland

Environmental Protection Act 1994 (QLD)

- 3.28 This Act is the principal environmental protection law in Queensland. It regulates activities that may cause environmental harm, creates offences relating to unlawful waste disposal environmental contamination and requires businesses to take

²¹ *Protection of the Environment Operations Act 1997* (NSW).

²² *Waste Management and Pollution Control Act 1998* (NT).

²³ *Waste Management and Pollution Control Act 1998* (NT).

²⁴ *Waste Management and Pollution Control (Administration) Regulations 1998* (NT).

reasonable and practicable measures to prevent environmental harm from tyre storage and handling.²⁵

3.29 Key points of the Act include:

- Requires waste tyres to be managed in a manner that prevents environmental harm, transported and disposed of lawfully, stored safely to minimise fire and pollution risks, and handled under the appropriate environmental approvals.
- Certain tyre-related activities, such as waste tyre transport, storage, recycling and processing, may require an Environmental Authority under the Act's environmentally relevant activity framework. It is an offence to undertake an environmentally relevant activity without holding an Environmental Authority, where the maximum penalty for a contravention of section 426 is 4,500 penalty units (\$751,050).
- Provides Queensland authorities the powers to investigate breaches, impose conditions, issue enforcement notices and prosecute unlawful waste management activities.²⁶

Environmental Protection Regulation 2019 (QLD)

3.30 The *Environmental Protection Regulation 2019* (QLD) is the main regulation made under the *Environmental Protection Act 1994* (QLD) that sets out detailed operational requirements. Under this regulation, end-of-life tyres are classified as regulated waste and waste tyres must be tracked using Queensland's regulated waste tracking system.²⁷

South Australia

Environment Protection Act 1993 (SA)

3.31 This Act is the principal environmental protection law in South Australia. It regulates the storage, transport, recycling, processing and disposal of waste tyres to protect land, air and water from pollution and environmental harm. It also establishes the Environment Protection Authority as the primary regulator.²⁸

3.32 Key points of the Act include:

- Tyre-related activities may require South Australian EPA approvals, including environmental licences, works approvals and exemptions. These authorisations allow the South Australian EPA to regulate how waste tyres are managed and impose conditions to minimise environmental risks.

²⁵ *Environmental Protection Act 1994* (QLD).

²⁶ *Environmental Protection Act 1994* (QLD).

²⁷ *Environmental Protection Regulation 2019* (QLD).

²⁸ *Environment Protection Act 1993* (SA).

- Incorporation of the waste management hierarchy, encouraging tyre waste to be avoided where possible, reused, recycled, recovered for resources or energy, and disposed of only as a last resort.
- The Environment Protection (Waste to Resources) Policy 2010 is a mandatory environmental policy made under Part 5 of the Act and carries legal force. Schedule 4 prohibits most tyres from being sent to landfill in South Australia.²⁹

Environment Protection Regulations 2023 (SA)

- 3.33 The *Environment Protection Regulations 2023* (SA) support the above Act and prescribe licensing requirements, fees and operational controls for waste-related activities. Tyre storage, recycling and processing activities may require EPA authorisation depending on the scale and nature of the operation.³⁰

Tasmania

Environmental Management and Pollution Control Act 1994 (TAS)

- 3.34 This Act is the principal environmental protection law in Tasmania. Its purpose is to prevent environmental harm, promote sustainable development, and provide a framework for regulating activities that may cause pollution or environmental impacts.³¹
- 3.35 Key points of the Act include:
- Tasmania considers waste tyres to be controlled waste under this Act and the *National Environment Protection (Movement of Controlled Waste between States and Territories) Measure 1998*.
 - The application of the 'polluter pays' principle, whereby those responsible for pollution bear the costs of managing and remediating it.
 - Certain developments listed in Schedule 2 of the Act are classified as Level 2 Activities (such as large waste tyre storage facilities) and require environmental assessment and approval by the Tasmanian EPA before proceeding.³²

Environmental Management and Pollution Control (Waste Management) Regulations 2020 (TAS)

- 3.36 The regulations allow the Tasmanian EPA to develop Approved Management Methods (AMMs). Tasmania has an AMM covering storage and reuse requirements for waste tyres.³³

²⁹ *Environment Protection Act 1993 (SA)*.

³⁰ *Environment Protection Regulations 2023 (SA)*.

³¹ *Environmental Management and Pollution Control Act 1994 (TAS)*.

³² *Environmental Management and Pollution Control Act 1994 (TAS)*.

³³ *Environmental Management and Pollution Control (Waste Management) Regulations 2020 (TAS)*.

Victoria

Environment Protection Act 2017 (VIC)

3.37 This Act is the primary legislation governing waste tyre management in Victoria. It introduced a preventative, risk-based approach to environmental protection, including the General Environmental Duty, which requires any person or business conducting an activity that may pose risks to human health or the environment to ‘take reasonably practicable steps to eliminate or minimise those risks.’³⁴

3.38 Key points of the Act include:

- Introduction of a tiered EPA permission system based on environmental risk, such as licences for high-risk activities, permits for medium-risk activities and registrations for lower-risk prescribed activities. Storage of tyres is subject to obtaining these permissions.
- Waste may be reportable priority waste for the purpose of transport of that waste, or transactions in connection with that waste.
- Section 142 of the Act requires a person who undertakes a transaction in connection with reportable priority waste to record and provide the prescribed transaction details in the prescribed manner and form. It is an offence to contravene this requirement, and the maximum penalty for a contravention is 240 penalty units (\$48,842.40) for an individual and 1,200 penalty units (\$244,212) for a corporation.

Environment Protection Regulations 2021 (VIC)

3.39 The *Environment Protection Regulations 2021* (VIC) are the primary regulations supporting the above Act and they provide the detailed operational requirements for managing environmental risks, waste, pollution, contaminated land and activities requiring EPA permissions.³⁵

Western Australia

Environmental Protection Act 1986 (WA)

3.40 This Act is the principal environmental protection law in Western Australia and underpins the regulation of controlled wastes, including waste tyres. It also provides the statutory basis for several regulations that govern waste management, including the transport of waste tyres as controlled waste.³⁶

3.41 Key points of the Act include:

³⁴ *Environment Protection Act 2017 (VIC)*.

³⁵ *Environment Protection Regulations 2021 (VIC)*.

³⁶ *Environmental Protection Act 1986 (WA)*.

- A framework for assessing proposals that may have significant environmental impacts before they are approved or developed. The Western Australian EPA assesses major projects and provides recommendations to the Minister for Environment.
- Provides regulators with powers to conduct inspections and investigations, require information and records, issue notices and directions, suspend or revoke approvals, and prosecute offences and impose penalties.
- It is an offence to dump any waste, including tyres. The maximum penalty for this offence (under subsections 49A(2) or 49A(3) of the Act) is \$62,500 for an individual and \$125,000 for a corporation.³⁷

Environmental Protection (Controlled Waste) Regulations 2004 (WA)

- 3.42 Under the controlled waste framework, waste movements must be tracked through the Controlled Waste Tracking System. This system enables the tracking of waste from the waste holder to the receiving facility, verification of lawful disposal or recycling, monitoring of compliance by transporters and facilities, and reduction of illegal dumping and stockpiling.³⁸

Challenges

- 3.43 A consistent theme across submissions was that current legislative and regulatory settings are not keeping pace with the needs of a modern tyre industry. While views differed on specific policy solutions, submitters broadly identified challenges arising from inconsistent regulation between jurisdictions, difficulties in enforcing existing laws, the continued practice of onsite burials and concerns for oversight of tyre imports and exports.
- 3.44 These issues were frequently linked to increased compliance costs, constraints on recycling and resource recovery, continued illegal dumping and stockpiling, and reduced confidence for industry investment.

Jurisdictional fragmentation and lack of national harmonisation

- 3.45 Several submissions highlighted that regulatory requirements vary significantly between states and territories, including differences in licensing thresholds, storage limits, landfill restrictions, transport requirements, fire safety standards, and environmental approvals. This inconsistency increases administrative burdens and compliance costs for collectors, recyclers, and transporters operating across multiple jurisdictions.³⁹

³⁷ *Environmental Protection Act 1986 (WA)*.

³⁸ *Environmental Protection (Controlled Waste) Regulations 2004 (WA)*.

³⁹ See, for example: Tyrenutz Social Enterprise, *Submission 1*, p. [1]; Patco Tyres, *Submission 12*, p. 3; Tyre Stewardship Australia (TSA), *Submission 16*, p. 35; Australian Flexible Pavements Association, *Submission*

- 3.46 TSA wrote in its submission that ‘Australia’s tyre management system is fractured by inconsistent state and territory regulations, creating major challenges for the recycling industry’.⁴⁰

Businesses operating nationally face compliance complexity, navigating a maze of different licensing thresholds, storage limits, fire safety standards, and landfill rules. This patchwork of multiple systems increases administrative burden and costs, making it difficult for recyclers and collectors to expand beyond a single jurisdiction, hampering national competition and market dynamism.⁴¹

- 3.47 Patco Tyres agreed, stating that ‘a nationally consistent regulatory framework is required for the interstate transport of reusable tyres suitable for retreading, tyre-derived fuel, and rubber crumb’.⁴²

While overarching environmental regulations exist at the national level, inconsistent and, at times, conflicting state and territory requirements create unnecessary regulatory complexity, increase compliance costs, and act as a direct barrier to the efficient reuse of tyres within the circular economy. Government must prioritise regulatory harmonisation across jurisdictions to remove these barriers, improve operational efficiency, and support scalable, commercially viable circular-economy outcomes.⁴³

- 3.48 Mr Peter Jones, Interim Executive Director of the Motor Trades Association of Australia (MTAA), told the Committee that ‘the system is fragmented’.⁴⁴

Regulatory settings differ across jurisdictions, infrastructure gaps persist in regional areas, and there is no national tracking framework to ensure tyres are managed appropriately through to final recovery. As a result, leakage continues through illegal dumping, stockpiling and export.⁴⁵

- 3.49 Stakeholders also pointed to inconsistencies in standards governing tyre-derived products, interstate transport requirements, and approval processes for recycling facilities. These differences were seen as barriers to developing national markets for recycled tyre materials and expanding circular economy opportunities.

- 3.50 The Australian Flexible Pavements Association submitted that the lack of national harmonisation ‘prevents the industry from scaling and discourages long-term investment in innovative technologies’.⁴⁶

22, p. [2]; Northern Sydney Regional Organisation of Councils (NSROC), *Submission 25*, p. 3; Austroads, *Submission 35*, p. 2; Cleanaway, *Submission 37*, p. 3.

⁴⁰ TSA, *Submission 16*, p. 32.

⁴¹ TSA, *Submission 16*, p. 32.

⁴² Patco Tyres, *Submission 12*, p. 3.

⁴³ Patco Tyres, *Submission 12*, p. 3.

⁴⁴ Mr Peter Jones, Interim Executive Director, Motor Trades Association of Australia (MTAA), *Committee Hansard*, 1 May 2026, p. 19.

⁴⁵ Mr Peter Jones, Interim Executive Director, MTAA, *Committee Hansard*, 1 May 2026, p. 19.

⁴⁶ Australian Flexible Pavements Association, *Submission 22*, p. [2].

Varied approval processes of rubber-modified products across federal, state, and local levels can lead to increased costs and reduced confidence for contractors.⁴⁷

Enforcement and compliance issues

- 3.51 Many submissions argued that the issue is not a lack of legislation or regulation, but inadequate enforcement and compliance monitoring, especially in relation to stockpiling and illegal dumping and rogue operators.

Stockpiling and illegal dumping

- 3.52 While many tyres are recycled or recovered through approved or appropriate channels, large quantities are still stockpiled or illegally dumped due to disposal costs, limited recycling capacity, or poor waste management practices.

- 3.53 For example, Hume City Council provided disposal costs for tyres in its area, and stated that ‘although a single tyre is not cost prohibitive, a significant number certainly would be’.⁴⁸

A car tyre with a rim is \$20 per tyre. But for a bigger tyre, like a truck tyre with a rim, is \$78 per tyre. So it's a significant cost, once you accumulate it.⁴⁹

- 3.54 S & J Australian Scrap Tyre Disposals expressed that, while Australia has strong tyre recycling regulations and strict controls on stockpiling and illegal dumping, ‘regulation is only as good as its enforcement and this is sadly lacking.’⁵⁰

- 3.55 MTAA was of the view that stockpiling and illegal dumping of end-of-life tyres undermined the integrity of Australia’s tyre management system:⁵¹

[...] weak and inconsistent enforcement across jurisdictions allows non-compliant operators to exploit gaps in regulation, avoid safe disposal costs, and distort the market for responsible recyclers.⁵²

- 3.56 To address this, MTAA advocated for a ‘nationally consistent enforcement approach’:⁵³

Licensing, environmental standards and enforcement of illegal activity should be consistent across states and territories to improve market integrity and support responsible operators. Penalties for illegal dumping, stockpiling, and non-compliance must be substantially increased to exceed the financial benefit of avoiding legitimate disposal costs.⁵⁴

⁴⁷ Australian Flexible Pavements Association, *Submission 22*, p. [2].

⁴⁸ Councillor Carly Moore, Mayor, Hume City Council, *Committee Hansard*, 1 May 2026, p. 39.

⁴⁹ Councillor Carly Moore, Mayor, Hume City Council, *Committee Hansard*, 1 May 2026, p. 39.

⁵⁰ S & J Australian Scrap Tyre Disposals, *Submission 39*, p. [2].

⁵¹ MTAA, *Submission 18*, p. 5.

⁵² MTAA, *Submission 18*, p. 5.

⁵³ MTAA, *Submission 18*, p. 6.

⁵⁴ MTAA, *Submission 18*, p. 9.

- 3.57 Australian Council of Recycling shared a similar view that the ‘lack of visible and timely enforcement creates uncertainty for legitimate operators, distorts market signals, and discourages investment in compliant processing infrastructure.’⁵⁵

Local governments

- 3.58 Many local government submissions raised the issue of stockpiling and illegal dumping across their areas which cause a range of environmental, financial and public safety implications, such as:
- fire hazards from large tyre accumulations and tyre stockpile fires
 - mosquito and vermin breeding and associated health risks
 - potential contamination of soil and waterways
 - visual pollution and reduced community amenity
 - reputational damage to regional communities and tourism areas.⁵⁶
- 3.59 TSA’s *Stockpiling and Illegal Dumping of Tyres: Cost to Local Government and Others* report estimated that local governments collectively spend around \$6.5 million per year cleaning up illegally dumped tyres, while managing legacy stockpiles could cost between \$8.3 million and \$23.2 million.⁵⁷
- 3.60 The Northern Sydney Regional Organisation of Councils submitted that councils ‘experience persistent illegal tyre dumping in industrial and bushland interface areas, requiring clean-up funded by ratepayers.’⁵⁸
- 3.61 Councillor Carly Moore, the Mayor of Hume City, told the Committee that ‘one of the most serious challenges currently facing our community is illegal dumping, including the illegal dumping of tyres’.⁵⁹

Illegal dumping is not a minor amenity issue for Hume. It is a significant, escalating problem with serious social, environmental, financial and health consequences. Each year, council responds to more than 14,000 instances of illegally dumped waste. Around 4,700 of these are in relation to tyres. Illegal dumping places increased pressure on our budget, requiring council to make

⁵⁵ Australian Council of Recycling, *Submission 14*, p. 1.

⁵⁶ See, for example: Western Australia Local Government Association, *Submission 5*, p. [2]; Shire of Serpentine Jarrahdale, *Submission 6*, p. 2; Outback Communities Authority, *Submission 10*, p. 1; Fleurieu Regional Waste Authority, *Submission 11*, p. [1]; The Parks, *Submission 23*, p. 1; NSROC, *Submission 25*, p. 4; Remote Area Planning and Development Board, *Submission 28*, p. 2; Sunshine Coast Council, *Submission 30*, p. [1]; Swan Hill Rural City Council, *Submission 32*, p. [1]; North Queensland Regional Organisation of Councils, *Submission 34*, p. [2]; Western Sydney Regional Organisation of Councils, *Submission 46*, p. 5; Illawarra Shoalhaven Joint Organisation, *Submission 47*, p. 3; Local Government Association of Queensland (LGAQ), *Submission 49*, p. 23; Far North Queensland Regional Organisation of Councils, *Submission 55*, p. 3; Australian Local Government Association, *Submission 59*, p. 2; Hume City Council, *Submission 67*, p. 13.

⁵⁷ TSA, *Submission 16*, p. 62.

⁵⁸ NSROC, *Submission 25*, p. 4.

⁵⁹ Councillor Carly Moore, Mayor, Hume City Council, *Committee Hansard*, 1 May 2026, p. 39.

tough decisions around diverting funding from essential frontline services to act on the issue of illegal dumping. Tyres are a particular problem. They are bulky, difficult to manage, costly to dispose of legally and highly attractive for illegal dumping and stockpiling. Disposal fees, particularly for larger tyres, create an incentive to dump illegally, especially when penalties are inconsistent and enforcement is fragmented across jurisdictions.⁶⁰

- 3.62 The Western Australian Local Government Association stated that tyres are among the most common illegally dumped materials managed by local governments, and regional local governments are 'further disadvantaged by limited collection and recycling opportunities, higher costs to transport tyres to processors, and limited resources to monitor and manage illegal dumping of tyres across large geographic areas.'⁶¹ The Shire of Serpentine Jarrahdale echoed this statement that 'patrolling is largely unfeasible' due to the vast extent of land in the Shire.⁶²
- 3.63 Additionally, the Far North Queensland Regional Organisation of Councils raised a unique challenge to its region, highlighting that 'wet-season closures and flood events interrupt collections, causing stockpiling that elevates fire and mosquito vector risks' along with potential soil and water contamination.⁶³
- 3.64 The Parks submitted that the *Protection of the Environment Operations (Waste) Regulation 2014* (NSW) is 'sound in principle, however, is not enforced to the level required to adequately stop illegal stockpiling and illegal dumping of waste tyres':⁶⁴
- This is not a negative reflection on the regulator, the NSW EPA; it is not practicable or financially feasible to police the clandestine illegal transport and stockpiling of tyres at the time of the offence.⁶⁵
- 3.65 To deter illegal dumping, the North Queensland Regional Organisation of Councils suggested using QR codes or serial numbers to track tyres throughout their life cycle as 'this would significantly deter offenders and assist local governments in their response to instances of illegal dumping.'⁶⁶
- 3.66 The most widely supported solution was the introduction of a mandatory national product stewardship scheme. Local governments argued that a regulated scheme would ensure all tyre manufacturers and importers contribute to the costs of collection, transport, recycling, and enforcement, reducing the burden currently borne by councils and ratepayers.
- 3.67 The product stewardship scheme will be discussed further in Chapter 4.

⁶⁰ Councillor Carly Moore, Mayor, Hume City Council, *Committee Hansard*, 1 May 2026, p. 39.

⁶¹ Western Australia Local Government Association, *Submission 5*, p. [2].

⁶² Shire of Serpentine Jarrahdale, *Submission 6*, p. 2.

⁶³ Far North Queensland Regional Organisation of Councils, *Submission 55*, p. 3.

⁶⁴ The Parks, *Submission 23*, p. 2.

⁶⁵ The Parks, *Submission 23*, p. 2.

⁶⁶ North Queensland Regional Organisation of Councils, *Submission 34*, p. [2].

Rogue operators

- 3.68 A recurring concern in submissions was the issue of rogue operators, who collect waste tyres for a fee and then illegally dump or stockpile them to avoid the costs of lawful transport, processing and disposal.
- 3.69 Submissions noted that unlawful tyre stockpiles can create significant fire, pollution and public health risks, including toxic smoke from tyre fires, contamination of land and waterways, and breeding grounds for mosquitoes and vermin.⁶⁷
- 3.70 According to TSA, rogue operators 'operate outside the industry, shirk regulations or industry norms, and engage in practices such as illegal dumping, stockpiling, or exporting tyres without proper environmental safeguards.'⁶⁸ These actions create significant environmental and public health hazards, along with long-term risks that include 'the collapse of legitimate tyre recycling and circular economy markets.'⁶⁹
- 3.71 The Australian Local Government Association provided anecdotal evidence that 'some communities have experienced extreme cases where private collectors accept tyres for a fee and later abandon them, leaving landowners and councils to manage the consequences.'⁷⁰
- 3.72 Mr Charlie Reading, State Manager of ELT Recycling Australia, told the Committee that 'right now it's just far too easy' for rogue operators to conduct activities 'for months before they're caught':⁷¹

They'll just hire a Budget truck, go to a Tyrepower or Bridgestone down the road and offer the local manager about \$4 cash a tyre, fill up the truck and then go to a creek a few kays away and dump it in there. Then we'll find a massive stockpile in about six months time, and we've got a problem on our hands. Unfortunately, by then, that person's either gone interstate, to another state that has different regulations where they can't be caught, or they've gone elsewhere. That's happening every single day. We get calls from landlords. We're doing a job right now in Dandenong today for a landlord who unfortunately gave the keys to someone he didn't properly investigate. He opened his roller doors two months later and found tyres laced to the very roof of his whole shed. That's happening every single day, and it presents its own challenges for us.⁷²

⁶⁷ See, for example: Shire of Serpentine Jarrahdale, *Submission 6*, p. 2; Outback Communities Authority, *Submission 10*, p. [1]; Fleurieu Regional Waste Authority, *Submission 11*, p. [2]; TSA, *Submission 16*, p. 31; The Parks, *Submission 23*, p. 5; NSROC, *Submission 25*, p. 4; Remote Area Planning and Development Board, *Submission 28*, p. 5; S & J Australian Scrap Tyre Disposals, *Submission 39*, p. [13]; ATRA, *Submission 42*, p. [12]; Local Government Association of Queensland, *Submission 49*, p. 23; Far North Queensland Regional Organisation of Councils, *Submission 55*, p. 3; Business Council for Sustainable Development Australia, *Submission 58*, p. [10]; Australian Local Government Association, *Submission 59*, p. 2; Bridgestone Mining Solutions, *Submission 61*, p. [3]; Hume City Council, *Submission 67*, p. 13.

⁶⁸ TSA, *Submission 16*, p. 57.

⁶⁹ TSA, *Submission 16*, p. 57.

⁷⁰ Australian Local Government Association, *Submission 59*, p. 2.

⁷¹ Mr Charlie Reading, State Manager, ELT Recycling Australia, *Committee Hansard*, 1 May 2026, p. 3.

⁷² Mr Charlie Reading, State Manager, ELT Recycling Australia, *Committee Hansard*, 1 May 2026, p. 3.

3.73 MTAA expressed that current penalties for illegal tyre dumping are ‘far below’ the economic advantage gained from avoiding legitimate collection and processing fees, and as a result, illegal tyre dumping remains a financially attractive option for rogue operators.⁷³

3.74 However, Patco Tyres was of the view that businesses operating within the tyre waste and recycling sector are already subject to stringent environmental, community and workplace health and safety requirements, along with comprehensive licensing, regulatory, monitoring and audit frameworks.⁷⁴

Introducing additional layers of regulation would merely duplicate existing controls, increasing compliance costs for lawful operators without delivering any meaningful improvement in environmental or safety outcomes.

Regulatory effort should instead be directed toward identifying and eliminating rogue operators who continue to operate outside the law and without the required environmental licences. Despite the existence of a robust regulatory framework, these operators continue to access waste tyres, undermining compliant businesses and eroding the integrity of the circular economy.⁷⁵

Mining sector

3.75 Many submissions highlighted the unique challenges associated with mining and remote industrial sites, which generate large volumes of end-of-life tyres but are often located far from recycling and processing infrastructure.⁷⁶ The distance to approved waste facilities can make transport and lawful disposal expensive and logistically difficult, increasing the risk of long-term stockpiling, illegal dumping or on-site accumulation or burial.

3.76 Large mining tyres also present additional challenges due to their size, weight and specialised handling requirements. Stakeholders noted that these factors can discourage recycling and contribute to significant tyre stockpiles at mining sites, creating ongoing fire, environmental and management risks.

3.77 Kal Tire Australia estimated that Australia generates more than 130,000 tonnes of used mining tyres per year and that more than 500,000 tonnes are stockpiled at mine sites, alone. These mining tyres—often weighing more than five tonnes—are the tyres that cannot be landfilled, shredded, exported or repaired.⁷⁷

⁷³ MTAA, *Submission 18*, p. 6.

⁷⁴ Patco Tyres, *Submission 12*, p. 4.

⁷⁵ Patco Tyres, *Submission 12*, p. 4.

⁷⁶ See, for example: MTA Group, *Submission 20*, p. 5; Fortescue, *Submission 21*, pp. [1], 3; GACWheels Australia, *Submission 33*, p. 2; Flextrid Holdings & Alfabs Mining Equipment, *Submission 36*, p. 5; Cleanaway, *Submission 37*, p. 4; Business Council for Sustainable Development Australia, *Submission 58*, p. [3]; Bridgestone Mining Solutions, *Submission 61*, p. [2]; Cement Industry Federation, *Submission 62*, p. [9]; Minerals Council of Australia, *Submission 64*, p. [1].

⁷⁷ Kal Tire Australia, *Submission 43*, p. [37].

- 3.78 Fortescue noted that while several recovery pathways are technically feasible for mining tyres, most are not commercially viable at scale. As a result, disposal and stockpiling remain the lowest-cost options, leading to low recovery rates.⁷⁸

Off-The-Road (OTR) tyres

- 3.79 Mr David Hickey, Project and Public Affairs Manager at Michelin Australia, provided the Committee with a definition for off-the-road (OTR) tyres:

OTR is an enormously broad tyre category, but people use it like it's a car tyre. OTR includes industrial, infrastructure, construction, agriculture, aviation, underground mining and surface mining. Each one of those can be a tyre that's eight inches to a tyre that's 63 inches. It can be a tyre that weighs 15 kilos; it can be a tyre that weighs 6½ tonnes.⁷⁹

- 3.80 While 89 per cent of passenger and commercial used tyres are recovered in Australia, recycling rates are lowest for OTR tyres.⁸⁰ Almost all OTR tyres used in mining are being buried onsite, stockpiled or sent to landfill.⁸¹
- 3.81 The low recovery rate for OTR tyres, primarily from mining and agricultural operations, represent a 'critical system failure' according to the Business Council for Sustainable Development Australia.⁸²
- 3.82 Tyrecycle highlighted that the passenger and truck and bus tyre market is highly developed with collection rates above 96 per cent, whereas OTR tyres have very low recovery rates—for example, although mining and agricultural/forestry vehicle tyres account for 90 per cent of OTR tyres disposed annually, they only have a recovery rate of just two per cent.⁸³
- 3.83 Tyrecycle emphasised the need to distinguish between the passenger and truck and bus tyre market and the OTR tyre market, as 'conflating these sectors obscures the reality of the industry's performance.'⁸⁴
- 3.84 Waste Management and Resource Recovery Association of Australia was of a similar view that there should be separate policies for passenger, bus and truck and OTR tyres:

Current policy and regulatory settings largely treat tyres as a single waste stream, despite vastly different recovery rates, logistics and costs between on road and OTR tyres. WMRR strongly argues that OTR tyres must be treated

⁷⁸ Fortescue, *Submission 21*, p. 3.

⁷⁹ Mr David Hickey, Project and Public Affairs Manager, Michelin Australia, *Committee Hansard*, 1 May 2026, p. 24.

⁸⁰ See, for example: Elan Energy Matrix, *Submission 15*, p. 3; GACWheels Australia, *Submission 33*, p. 2.

⁸¹ See, for example: TSA, *Submission 16*, p. 28; S & J Australian Scrap Tyre Disposals, *Submission 39*, p. [9]; Waste Management and Resource Recovery Association of Australia, *Submission 45*, p. [4].

⁸² Business Council for Sustainable Development Australia, *Submission 58*, p. [3].

⁸³ Tyrecycle, *Submission 19*, p. [2].

⁸⁴ Tyrecycle, *Submission 19*, p. [2].

separately, with the current recovery rates demonstrating that the single “comprehensive” scheme for all tyres has proved impractical and ineffective. Differentiated stewardship obligations targets and compliance pathways for OTR tyres would reflect real-world conditions, enabling effective recovery strategies for each tyre class rather than a one-size-fits-all approach.⁸⁵

- 3.85 Federal Chamber of Automotive Industries agreed that there should be sectoral differentiation in policy responses, due to the ‘stark contrast’ between the collection rate for passenger vehicles and mining and agricultural vehicles.⁸⁶

A one-size-fits-all approach would fail to account for the vastly different logistical challenges, disposal practices, and existing market efficiencies of the light vehicle sector compared to the OTR sector.⁸⁷

- 3.86 Quoting a 2023 TSA study, Flextrid Holdings & Alfabs Mining Equipment’s joint submission raised that the National Waste Policy Action Plan target for 80 percent recovery for tyres will not be met without a significant increase in OTR tyre recovery.⁸⁸ They were of the view that miners disposing tyres onsite is the greatest impediment to OTR tyre recovery, retreading and use, and ‘will inevitably create an unwanted legacy in the landscape.’⁸⁹

- 3.87 Numerous submissions stressed that mining tyres contain large quantities of high-quality natural rubber and steel that could be recovered through recycling, retreading, devulcanisation or other advanced processing technologies.⁹⁰

- 3.88 Fortescue highlighted that OTR tyres ‘typically contain higher proportions of natural rubber than passenger vehicle tyres, making them attractive feedstock for higher-value material recovery’.⁹¹

For the mining sector, potential high-value applications include rubber screens and conveyor belts used in ore processing facilities, and adjacent applications such as asphalt for roads and other construction materials. These offer opportunities to retain material value within industrial supply chains and support domestic secondary rubber markets.

Developing these secondary product markets alongside local processing facilities, particularly in major mining regions, would reduce reliance on imports, lower transport-related emissions and enable these opportunities to scale.⁹²

⁸⁵ Waste Management and Resource Recovery Association of Australia, *Submission 45*, p. [3].

⁸⁶ Federal Chamber of Automotive Industries, *Submission 48*, p. 1.

⁸⁷ Federal Chamber of Automotive Industries, *Submission 48*, p. 1.

⁸⁸ Flextrid Holdings & Alfabs Mining Equipment, *Submission 36*, p. 2.

⁸⁹ Flextrid Holdings & Alfabs Mining Equipment, *Submission 36*, p. 2.

⁹⁰ See, for example: TSA, *Submission 16*, p. 28; Australian Tyre Industry Council (ATIC), *Submission 29*, pp. 11–12; Fortescue, *Submission 21*, p. 3; S & J Australian Scrap Tyre Disposals, *Submission 39*, p. [9]; Bridgestone Mining Solutions, *Submission 61*, p. [3].

⁹¹ Fortescue, *Submission 21*, p. 3.

⁹² Fortescue, *Submission 21*, p. 3.

- 3.89 Additionally, GACWheels Australia submitted that OTR tyre waste is regionally concentrated (Western Australia's Pilbara region contributes nearly half of Australia's mining OTR tyre waste), which also enables for targeted regional solutions.⁹³

Onsite burial

- 3.90 Onsite burial was an issue raised by many submissions.⁹⁴ The practice involves burying end-of-life OTR tyres at mining sites rather than recovering them for reuse, retreading or recycling. Unlike most other sectors, mining operations are often permitted under licence conditions to bury tyres onsite, making burial the cheapest and most convenient disposal option.
- 3.91 S & J Australian Scrap Tyre Disposals asserted that the 'most significant market failure' in the recovery of used tyres was the ongoing onsite burials of used OTR tyres, predominantly from the mining sector.⁹⁵ MTA Group called it a 'crisis' in which 'tinkering around the edges is no longer an option.'⁹⁶
- 3.92 According to TSA, of the 537,000 tonnes of used tyres generated in 2023–24, onsite burial accounted for approximately 20 per cent of all used tyres, with the figure being 'almost entirely mining tyres buried at mining sites.'⁹⁷
- 3.93 The Australian Tyre Recyclers Association (ATRA) put forward that some estimates put the recovery rate of mining tyres at 'an extremely poor 1%', although it 'may be up to around 5%'.⁹⁸
- Either way, it is the case that the vast majority of Australia's used mining tyres are being buried onsite, rather than being recovered for a secondary use.⁹⁹
- 3.94 Submissions to the inquiry identified several concerns with the practice of onsite burials. Firstly, onsite burial removes valuable materials from the circular economy, as it permanently removes these tyres from the stream.
- 3.95 TSA called mining tyres a 'revered commodity in higher-circularity technology and applications' due to the tyres containing significant amounts of natural rubber at their end-of-life and lamented that the low OTR recovery rate is 'a lost opportunity'.¹⁰⁰

⁹³ GACWheels Australia, *Submission 33*, p. 2.

⁹⁴ See, for example: TSA, *Submission 16*, pp. 23, 28, 31–32, 51, 54, 61; MTA Group, *Submission 20*, p. 6; GACWheels Australia, *Submission 33*, pp. 3–4; Flextrid Holdings & Alfabs Mining Equipment, *Submission 36*, pp. 2, 4; S & J Australian Scrap Tyre Disposals, *Submission 39*, pp. [2], [9]; ATRA, *Submission 42*, p. [10]; Kal Tire Australia, *Submission 43*, p. [52]; LGAQ, *Submission 49*, p. 19; Business Council for Sustainable Development Australia, *Submission 58*, pp. [2–3]; Bridgestone Mining Solutions, *Submission 61*, pp. [2], [4].

⁹⁵ S & J Australian Scrap Tyre Disposals, *Submission 39*, p. [1].

⁹⁶ Mr Collin Jennings, Head of Government Relations, MTA Group, *Committee Hansard*, 15 July 2026, p. 15.

⁹⁷ TSA, *Submission 16*, p. 22.

⁹⁸ ATRA, *Submission 42*, p. [10].

⁹⁹ ATRA, *Submission 42*, p. [10].

¹⁰⁰ TSA, *Submission 16*, p. 28.

3.96 In the context of tyre circularity and onsite burial, Mr James Fairweather, Chief Executive Officer of Tyrecycle, told the Committee that recovering buried tyres for reuse is unlikely to be practical at scale:

[...] if you can imagine the difficulty in trying to exhume, if you will, these tyres from the ground and then clean them to a point where they could be used—these are highly refined tyres. They're upwards of \$60,000 per unit. So that would make the argument for recovery. However, these companies have very intricate programs of managing tyre pressures, tyre wear et cetera, so I do think it is possible but very unlikely that you would see, of any scale, the reuse of previously buried mining [tyres].¹⁰¹

3.97 Secondly, onsite burial creates long-term environmental risks. S & J Australian Scrap Tyre Disposals exclaimed that 'free onsite burial' is something that no operator can compete with financially and believed that 'these site conditions need to be grandfathered and or potentially levied to drive better environmental outcomes.'¹⁰²

3.98 Similarly, Tyrecycle argued that they simply 'cannot compete with a hole in the ground' despite having the technology to recycle OTR tyres.¹⁰³

3.99 The practice was also criticised for being inconsistent with modern community expectations regarding mine rehabilitation and responsible resource management.

3.100 Kal Tire Australia raised in its submission how 'Traditional Owner rights [...] are increasingly influencing mine rehabilitation expectations in Australia':¹⁰⁴

Traditional Owners play a central role in land access, approvals and ongoing engagement across Australian mining operations.

There is growing scrutiny of practices that defer environmental impacts to closure, including:

- long-term on-site tyre stockpiling, and
- burial of end-of-life tyres within disturbed areas.

Expectations are shifting toward progressive rehabilitation that visibly restores land condition during operations, rather than deferring impacts to the end of mine life.¹⁰⁵

3.101 Additionally, Kal Tire Australia noted that if a mine fails or goes bankrupt, clean-up costs are borne by the state/territory and taxpayers. Therefore, progressive reclamation and recycling of tyres would help prevent liabilities from accumulating.¹⁰⁶

¹⁰¹ Mr James Fairweather, Chief Executive Officer, Tyrecycle, *Committee Hansard*, 11 March 2026, pp. 4–5.

¹⁰² S & J Australian Scrap Tyre Disposals, *Submission 39*, p. [2].

¹⁰³ Tyrecycle, *Submission 19*, p. [6].

¹⁰⁴ Kal Tire Australia, *Submission 43*, p. [52].

¹⁰⁵ Kal Tire Australia, *Submission 43*, p. [52].

¹⁰⁶ Kal Tire Australia, *Submission 43*, p. [49].

3.102 The most frequently proposed solution by submitters was to prohibit onsite burial of OTR tyres, with some calling for a managed and staged ‘phasing out’ of the practice.¹⁰⁷

3.103 Mr James Fairweather, Chief Executive Officer of Tyrecycle, detailed to the Committee the economic benefits of such a ban:

Tyrecycle's analysis indicates that such a ban applied to New South Wales, Western Australia and Queensland would direct another 112,000 tonnes per annum to existing recycling infrastructure. By our modelling, that single regulatory change would generate \$90 million in gate fees, \$56 million in crumb rubber value, \$6.75 million in recovered steel, approximately 225 new jobs and another \$45 million to \$50 million in new investment. None of that requires a new fund; it requires a regulatory line in the sand.¹⁰⁸

3.104 Big Tyre was of the view that onsite burial of tyres should be made illegal for mining sites ‘just as it already is illegal for any other business or person in Australia to do so.’¹⁰⁹ Mr Daniel Loudon, Chief Executive Officer of Big Tyre, told the Committee that:

[...] it is illegal for any business or person in Australia to bury their end-of-life tyres, with the exception of mining companies, which have acres and acres of land that they use for tyre piles which are then covered over in dirt and perhaps turned into a forestry area or parkland—I don't know—but it certainly would not be suitable to ever build on that land again. Of course, those tyres will exist in the ground for many centuries to come.¹¹⁰

3.105 TSA agreed and expressed concern that ‘mining enjoys special treatment’ and that this dual system of mining/non-mining ‘undermines the opportunity for Australia to achieve a much higher recovery rate for end-of-life OTR tyres’.¹¹¹

OTR tyres can be buried onsite and without the standards applied to other landfill operations; while all other industries are prohibited from onsite burial and must comply with strict landfill, recovery, and transport rules. This exemption gives mining companies a cost advantage, creates an environmental standards gap, and removes incentives for mining to priorities more circular recycling solutions – solutions that would also create more investment and jobs, particularly in regional and remote areas.¹¹²

¹⁰⁷ See, for example: Big Tyre, *Submission 2*, p. [2]; MTA Group, *Submission 20*, pp. 5, 7; GACWheels Australia, *Submission 33*, pp. 3, 5; Flextrid Holdings & Alfabs Mining Equipment, *Submission 36*, pp. 2, 4; CTS Tyre Recycling, *Submission 38*, p. [2]; S & J Australian Scrap Tyre Disposals, *Submission 39*, p. [12]; TFI (Tradefaire International), *Submission 50*, p. 5; Bridgestone Mining Solutions, *Submission 61*, p. [5].

¹⁰⁸ Mr James Fairweather, Chief Executive Officer, Tyrecycle, *Committee Hansard*, 1 May 2026, p. 13.

¹⁰⁹ Big Tyre, *Submission 2*, p. [2].

¹¹⁰ Mr Daniel Loudon, Chief Executive Officer, Big Tyre, *Committee Hansard*, 12 June 2026, p. 6.

¹¹¹ TSA, *Submission 16*, p. 32.

¹¹² TSA, *Submission 16*, p. 32.

- 3.106 ATRA expressed that current regulatory settings continue to allow in-pit or onsite burial of mining tyres as a common management practice, which must be addressed.¹¹³

Rather than relying on slow site-by-site changes, ATRA considers that governments should adopt coordinated, sector-wide regulatory settings that progressively restrict routine in-pit burial where feasible recovery pathways exist, require assessment of recycling and recovery options, and improve reporting on OTR tyre generation, stockpiling, disposal and recovery.¹¹⁴

- 3.107 Bridgestone Mining Solutions Australia suggested that the government prohibit on-site dumping of OTR tyres in mining leases and could offer cost-sharing arrangements for OTR tyre collection in remote areas.¹¹⁵

- 3.108 Mr Leigh Cometti from CTS Tyre Recycling pointed out that ‘...if a mining tyre or conveyor belt is being delivered to a mine site, the same transport method could return a matching end-of-life product, especially given that the backload transport charge has already been included in the delivery cost of new product.’¹¹⁶

- 3.109 Mr David Christison, also from CTS Tyre Recycling, further explained that these large OTR tyres, which contain the greatest volume of recyclable material, are delivered to mining sites on specially designed trailers. These trailers typically transport only six to eight tyres at a time and are not suitable for carrying other types of cargo. As a result, they would be returning as empty trailers which could have been filled.¹¹⁷

- 3.110 While many stakeholders advocated for an end to onsite burial of tyres, they acknowledged that the infrastructure, logistics, and markets needed to recover all mining tyres are not yet fully established.

- 3.111 Minerals Council of Australia cautioned that it would be ‘premature and counterproductive to mandate tyre recovery in Australia before suitable, scalable, and regionally appropriate end-use pathways are demonstrably available’.¹¹⁸

Evidence from remote communities, mining operations, and national stewardship data shows that without prior market and infrastructure development, recovery mandates risk imposing disproportionate costs, driving unintended non-compliant behaviour, and failing to deliver circular outcomes.¹¹⁹

- 3.112 Mr Ian Bellinge, Managing Director of Elan Energy Matrix, provided evidence at a public hearing that a gradual approach would allow time to develop supply chains and arrangements for tyre recovery:

¹¹³ ATRA, *Submission 42.1*, pp. [3–4].

¹¹⁴ ATRA, *Submission 42.1*, pp. [3–4].

¹¹⁵ Bridgestone Mining Solutions Australia, *Submission 61*, p. [5].

¹¹⁶ Mr Leigh Cometti, Managing Director, CTS Tyre Recycling, *Committee Hansard*, 23 April 2026, p. 1.

¹¹⁷ Mr David Christison, Registered Lobbyist, CTS Tyre Recycling, *Committee Hansard*, 23 April 2026, p. 2.

¹¹⁸ Minerals Council of Australia, *Submission 64*, p. 1.

¹¹⁹ Minerals Council of Australia, *Submission 64*, p. 1.

If we just ban mining tyres in landfill, there would have to be a staged approach, and the previous session identified a way to do that. But this is not just a WA problem. The eastern states have got a big mining sector as well. There's nothing over there at this point in time. To build a facility that can take that sort of level of mining tyres and to introduce a ban, that would have to be a five-year approach because one facility would not be able to do it. The time it takes to process one of those very large tyres is quite extensive. [...] It is a timely process. They're not built overnight. They're not going to get destroyed overnight. They are very difficult to recycle, so there has to be time and an action plan associated with this. I believe the industry can produce that action plan, because we're all invested in this. However, we need feedback from the mines to identify how many tonnes they have on site. That could be done simply by a spot audit on site—a walk around, as it were. How many tonnes are produced within that site? Then we can ascertain how we can get those tyres down from that site in a logistics fashion to process them in our facilities. It creates a conversation across both industries.¹²⁰

- 3.113 Mr Corey Matters from RubberGem was of the view that a reasonable timeframe for mining companies to adjust to a gradual phase-out of onsite burials would be five years:

I think five years for that type of volume is more than enough time. They've done the same type of thing in Chile. How the mining industry in Chile manages this can be referenced. They basically followed that process of a five-year progressive implementation.¹²¹

- 3.114 However, the Cement Industry Federation did not support banning onsite disposal of mining tyres. Instead, it emphasised the importance for 'detailed consideration of what steps would be required to establish a secure, reliable and commercially viable supply chain between mine and kiln for the productive re-use of mining tyres in cement manufacturing.'¹²²

- 3.115 It suggested that the government could consider 'establishing a working group involving environment and industry government officials, mining companies, resource recovery companies and cement manufacturers to design a regionally focussed program of measures and incentives to encourage the supply, processing and use of mining tyres as an alternative fuel in cement kilns':¹²³

This working group could help to build the business case by:

- identifying regions where a viable supply chain could be established
- quantifying whole-of-life cost comparisons (burial vs processing vs transport vs TDF offtake)

¹²⁰ Mr Ian Bellinge, Managing Director, Elan Energy Matrix, *Committee Hansard*, 23 April 2026, p. 10.

¹²¹ Mr Corey Matters, Manager, RubberGem, *Committee Hansard*, 23 April 2026, p. 15.

¹²² Cement Industry Federation, *Submission 62*, p. [10].

¹²³ Cement Industry Federation, *Submission 62*, p. [11].

- model “co-located” economics (reduced haulage, reduced disposal liabilities)
- validate handling logistics (cutting, shredding, storage)
- identifying the financial incentives necessary and relevant funding requirements and sources publish a case study package that can be replicated

The working group could coordinate with regulators to develop:

- a clear, standardised pathway for tyre-derived-fuel (TDF) into cement kilns
- standardised guidance on when tyres are considered “waste” vs “resource”
- a consistent interpretation of environmental compliance for tyre stockpiles and pre-processing

In the end cement kilns will only take TDF if it’s of sufficient quality, and mining companies want to see the clear benefit of any alternative to in-pit disposal. The costs and benefits need to be explored and considered in a holistic manner, and a working group could help to achieve these goals.¹²⁴

Imports and Exports

3.116 Evidence presented to the inquiry indicated that imports and exports are central to both the challenges and opportunities facing the Australian tyre industry. Australia no longer manufactures new tyres domestically and is therefore heavily reliant on imported products. At the same time, a significant proportion of end-of-life tyres continue to be exported, particularly as processed tyre-derived fuel, raising questions about the effectiveness of Australia’s circular economy settings.

Low-cost and poor-quality imports

3.117 A recurring concern across submissions was the increasing volume of low-cost and poor-quality imported tyres and the impact this has on domestic retreading, recycling and waste reduction efforts.¹²⁵

3.118 The Business Council for Sustainable Development Australia warned that ‘loose’ replacement tyres are not systematically subject to minimum performance or durability standards:¹²⁶

A key pressure point is the growing influx of low-cost, short-lifespan “loose” replacement tyres that fall outside the quality controls applied to original

¹²⁴ Cement Industry Federation, *Submission 62*, p. [11].

¹²⁵ See, for example: Vipal Rubber, *Submission 8*, p. [2]; N.B.R. Tyres, *Submission 9*, pp. [2–4]; RubberGem, *Submission 17*, p. [2]; MTAA, *Submission 18*, p. 3; Bridgestone Australia, *Submission 31*, p. [3]; Business Council for Sustainable Development Australia, *Submission 58*, p. [2].

¹²⁶ Business Council for Sustainable Development Australia, *Submission 58*, p. [2].

equipment imports. This trend increases the volume of early failure tyres, accelerating waste generation and reducing opportunities for reuse or high-value recovery.¹²⁷

3.119 As a retreading business, N.B.R. Tyres exclaimed that ‘with the influx of ultra cheap (heavily subsidized) new tyres from China, nobody wants to retread and re-use tyres anymore’, even though ‘often these ultra cheap new tyres do not last very long, thereby generating even more waste tyres.’¹²⁸

3.120 Patco Tyres observed that there are ‘premium tyres, mid-range tyres and economy tyres’ in the marketplace now.¹²⁹

What we're starting to see is market creep, where we're seeing a lot more budget tyres coming into the market. Though they're competitive price point wise, we're actually finding that they don't achieve too many kilometres, they're not as durable and the potential for retreading is actually diminished. That means we're actually getting a lot of waste generation.¹³⁰

3.121 Similarly, Vipal Rubber was ‘concerned about the growing entry of low-cost, low-yield tyres into the country’ and that ‘the volume of waste and generates unfair competition for high-performance retreaded tyres, harming environmental and economic efficiency objectives.’¹³¹

3.122 TSA warned that Australia risks becoming ‘a target for poor-quality tyres not accepted elsewhere’ and a dumping ground for inferior products, if Australia did not strengthen import standards.¹³²

3.123 RubberGem suggested that there should be ‘import quality standards’ to discourage low-grade tyres, as low-cost and low-quality tyres have significantly shorter service lives, are often not retreadable, and enter the waste stream more frequently.¹³³ Mr Corey Matters from RubberGem pointed out that ‘...a lot of these low-grade tyres... cannot be retreaded because their casings are only designed for one use...’¹³⁴

3.124 Elan Energy Matrix was of the view that it ‘must be a requirement for all tyres imported into Australia to be linked to an accredited tyre recycler, as part of improved tracking methods.’¹³⁵

¹²⁷ Business Council for Sustainable Development Australia, *Submission 58*, p. [2].

¹²⁸ N.B.R. Tyres, *Submission 9*, p. 3.

¹²⁹ Mr Justin Boyle, Director, Patco Tyres, *Committee Hansard*, 12 June 2026, p. 9.

¹³⁰ Mr Justin Boyle, Director, Patco Tyres, *Committee Hansard*, 12 June 2026, p. 9.

¹³¹ Vipal Rubber, *Submission 8*, p. [2].

¹³² TSA, *Submission 16*, p. 5.

¹³³ RubberGem, *Submission 17*, pp. [2–4].

¹³⁴ Mr Corey Matters, Manager, RubberGem, *Committee Hansard*, 23 April 2026, p. 15.

¹³⁵ Elan Energy Matrix, *Submission 15*, p. 1.

Australian Design Rules

- 3.125 Several submissions highlighted concerns that the current Australian Design Rules (ADR) were not fit-for-purpose.¹³⁶
- 3.126 The ADR are the national vehicle standards that apply to new vehicles manufactured in Australia and new or second-hand imported vehicles being sold in Australia. The current ADR standards are administered by the Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts under the *Motor Vehicle Standards Act 1989*.¹³⁷
- 3.127 Requirements for tyres are specifically addressed by the following parts of the ADR:
- ADR 23—Passenger Car Tyres
 - ADR 24—Tyre & Rim Selection
 - ADR 71—Temporary Use Spare Tyres
 - ADR 95—Installation of Tyres
 - ADR 96—Commercial Vehicle Tyres.¹³⁸
- 3.128 TSA criticised the government for being ‘...largely inactive on the regulation of tyre imports, including the enforcement of the ADR, creating an “anything goes” operating environment.’¹³⁹
- 3.129 The Australian Tyre Industry Council (ATIC) raised the issue of the standards for imported tyres, stating that they ‘need not adhere to any known standard and no enforcement measures are in place to safeguard any compliance’:¹⁴⁰

This is despite the existence of Australian Design Rules that apply to tyres fitted on new vehicles; no standard is applied or enforced on replacement products and the importation and sale of these is not regulated in any practical way.¹⁴¹

- 3.130 Mr Peter Jones from the MTAA was of the view that the ADR focus on tyre safety rather than recyclability:¹⁴²

Currently there's not regulation around the labelling of tyres in terms of how they're recycled or anything like that. There are fewer regulations on tyres coming in on cars because the car itself is tested. The brakes work, and the tyres

¹³⁶ Department of Infrastructure, Transport, Regional Development, Communications, Sport and the Arts (DITRDCA), *Current Australian Design Rules*, www.infrastructure.gov.au/infrastructure-transport-vehicles/vehicles/vehicle-design-regulation/australian-design-rules/third-edition (accessed 19 June 2026).

¹³⁷ DITRDCA, *Current Australian Design Rules*, www.infrastructure.gov.au/infrastructure-transport-vehicles/vehicles/vehicle-design-regulation/australian-design-rules/third-edition (accessed 19 June 2026).

¹³⁸ DITRDCA, *Current Australian Design Rules*, www.infrastructure.gov.au/infrastructure-transport-vehicles/vehicles/vehicle-design-regulation/australian-design-rules/third-edition (accessed 19 June 2026).

¹³⁹ TSA, *Submission 16*, p. 33.

¹⁴⁰ ATIC, *Submission 29*, p. 6.

¹⁴¹ ATIC, *Submission 29*, p. 6.

¹⁴² Mr Peter Jones, Interim Executive Director, MTAA, *Committee Hansard*, 1 May 2026, p. 21.

work—tick—but there's not a lot of regulation around the make up of those tyres. As we see more and more cars coming from different parts of the world, we're going to see more and more of those cheaper or different quality tyres that we're going to have to deal with ultimately.¹⁴³

- 3.131 One of TSA's recommendations for the inquiry was to change the ADR to include replacement tyres of all types.¹⁴⁴ Currently, the ADR are essential regulations that apply to all imported vehicles to ensure that vehicles meet specific safety, performance, and environmental standards before they can be sold in the Australian market. However, the ADR are only enforceable on vehicle imports and not on replacement tyres.¹⁴⁵ TSA detailed that these changes would provide the following benefits:

Ensures consumers and commercial organisations are consistently replacing tyres with those that meet the ADR and are built for Australian conditions.

Eliminates the harms associated with incorrectly or unsuitably affixed tyres, those which are expired or contain chemicals that amplify harm to the environment.¹⁴⁶

Parallel and grey imports

- 3.132 The Committee received evidence regarding the importation of tyres through parallel and grey import channels. Parallel imports generally refer to genuine products that are imported and sold outside the manufacturer's authorised distribution network, while grey imports may include products intended for sale in overseas markets but subsequently imported into Australia through alternative supply chains.

- 3.133 Michelin Australia explained that while some tyres '...are imported and distributed directly by the brand owner... some retailers and/or wholesalers import tyre products independently of the brand owner (commonly referred to as parallel import).'¹⁴⁷

- 3.134 Mr James Fairweather from Tyrecycle discussed the scale of parallel importers in the Australian market and explained:

...the largest parallel importer that we're aware of... is doing more tyres than the biggest retailers we collect from. The two biggest retailers in terms of volume that we collect from are Bob Jane and Bridgestone. They're significantly bigger than any other chains in Australia. We know that this parallel importer is doing more volume than either of those two national chains.¹⁴⁸

- 3.135 ATIC submitted that these types of imports may not necessarily be suitable for local market conditions:

¹⁴³ Mr Peter Jones, Interim Executive Director, MTAA, *Committee Hansard*, 1 May 2026, p. 21.

¹⁴⁴ TSA, *Submission 16*, p. 10.

¹⁴⁵ TSA, *Submission 16*, p. 10.

¹⁴⁶ TSA, *Submission 16*, p. 10.

¹⁴⁷ Michelin Australia, *Submission 52*, p. [2].

¹⁴⁸ Mr James Fairweather, Chief Executive Officer, Tyrecycle, *Committee Hansard*, 1 May 2026, p. 18.

Challenges sometimes emerge for local commercial organisations when - for example - a warranty claim appears for a tyre that is essentially unsuitable for local conditions and designed for a different climate or road conditions.¹⁴⁹

- 3.136 At the public hearing in Sydney, Mr Silvio de Denaro from ATIC further explained that there have been 'egregious cases of misapplication':¹⁵⁰

Anecdotally, I think somewhere in Queensland recently, someone bought a number of winter tyres for use on their vehicle at temperatures of 40-plus degrees, while those compounds are really only to be used subzero. Going outside established channels always presents risks for the consumer. In terms of quality of the products imported, I put an image in my submission which showed a use-by date. It showed that a certain tyre was produced in the future. I think it was week 22 of 2026, and the submission is actually dated 2025. This was just to suggest that we should not believe everything we see on the sidewall of a tyre. Of course, the manufacturing source remain critical to provide at least a basic guarantee of quality.¹⁵¹

- 3.137 In a response to a Question Taken on Notice, the Australian Competition and Consumer Commission advised the Committee that 'there are currently no specific safety standards under the Australian Consumer Law that apply to tyres, however, state and territory road safety regulations contain requirements relating to the safety of tyres':¹⁵²

The Australian Consumer Law (ACL) provides consumers with automatic consumer guarantees. These include guarantees that products are of acceptable quality and fit for a particular purpose. These obligations apply equally to all businesses that engage in trade or commerce in Australia, including sellers of parallel imports.

Sellers of parallel imports are responsible for providing consumers a repair, replacement or refund if there is a problem with the product they sell. They can't refuse to help the consumer or tell them to contact the manufacturer or any local authorised sellers of the product.

Sellers of parallel imports must also ensure compliance with other responsibilities under the ACL, including being truthful and accurate about the product and its pricing, and making sure the product is safe.¹⁵³

Export statistics

- 3.138 Prior to July 2020, Australia was exporting over 4.2 million tonnes of waste annually. Waste plastic, paper, glass and tyres made up over 30 per cent of this waste. Since

¹⁴⁹ ATIC, *Submission 29*, p. 6.

¹⁵⁰ Mr Silvio de Denaro, Chairman, ATIC, *Committee Hansard*, 15 July 2026, p. 3.

¹⁵¹ Mr Silvio de Denaro, Chairman, ATIC, *Committee Hansard*, 15 July 2026, p. 3.

¹⁵² Australian Competition and Consumer Commission (ACCC), *Submission 69*, p. [5].

¹⁵³ ACCC, *Submission 69*, p. [5].

the commencement of the *RAWR Act* in December 2020, exports such as waste plastic, paper, glass and tyres have become more regulated.¹⁵⁴

3.139 DCCEEW reported that the total volume of Australia's tyre exports in 2024–25 was 166,670 tonnes.¹⁵⁵ In 2025, Australia's main tyre export destinations were India, Malaysia and Japan.¹⁵⁶

3.140 Table 3.1 shows tyre export volumes for the top ten destination countries since 2017–18.¹⁵⁷

Table 3.1 Tyre export volumes (tonnes) to the top 10 destinations

Destination	2017–18	2018–19	2019–20	2020–21	2021–22	2022–23	2023–24	2024–25
India	30 437	52 881	41 187	46 697	44 703	36 061	70 101	102 719
Malaysia	24 322	34 723	23 738	30 766	20 124	15 576	16 416	37 117
Japan	107	1104	225	87	1362	1097	5668	13 274
Korea, Republic of	11 390	8210	3291	5851	6318	177	1340	6621
USA	6783	8170	8753	7657	6706	3074	2019	2545
Spain	1811	896	1115	1476	966	556	747	1560
Singapore	2999	2440	2655	2554	1210	428	371	634
Thailand	487	133	109	215	590	466	684	552
Eswatini			20	16		63	191	395
Panama	793	653	255	196	393			259

Source: DCCEEW, *Submission 7*, p. 4.

3.141 TSA suggested that 'if Australia is to earn and hold a reputation as a responsible exporter it must act to ensure foreign markets are not simply used as dumping grounds. To do so is to abrogate its global responsibilities.'¹⁵⁸

3.142 ELT Rubber commented that the Australian tyre industry '...remains overly reliant on export-based solutions and lacks sufficient domestic end-markets.'¹⁵⁹

3.143 Bridgestone Australia was of a similar view and stated that Australia's tyre recovery system is 'falling short of circular economy principles':¹⁶⁰

¹⁵⁴ DCCEEW, *Submission 7*, p. 3

¹⁵⁵ DCCEEW, *Submission 7*, p. 4

¹⁵⁶ DCCEEW, *Submission 7*, p. 4.

¹⁵⁷ DCCEEW, *Submission 7*, p. 4

¹⁵⁸ TSA, *Submission 16*, p. 61.

¹⁵⁹ ELT Rubber, *Submission 53*, p. [1].

¹⁶⁰ Bridgestone Australia, *Submission 31*, p. [1].

Despite substantial industry investment, the current approach prioritises low-order outcomes, with a significant volume of tyres exported offshore for incineration. This reliance on overseas markets for waste management introduces risk and undermines opportunities to build domestic capability, create jobs, and reduce environmental impact.¹⁶¹

- 3.144 Additionally, Bridgestone Australia cautioned that Australia's long-term ability to rely on export markets for recovered tyre materials may decline:

Australia no longer manufactures new tyres locally, and all significant tyre production and R&D occur offshore. These international manufacturers are already investing heavily in technologies to reuse waste tyres back into new tyres—closing the loop within their own jurisdictions. This means that Australia's ability to export recovered materials for tyre-to-tyre recycling may diminish over time, as global producers internalise their supply chains and reduce reliance on imported feedstock.¹⁶²

Export ban on waste tyres

- 3.145 Australia banned the export of whole baled tyres or tyres in pieces larger than 150 mm in December 2021, under the Recycling and Waste Reduction (Export—Waste Tyres) Rules 2021 (the Rules).¹⁶³ The Rules are made under subsection 188(1) of the *RAWR Act*.

- 3.146 The Explanatory Memorandum accompanying the Rules summarised the ban, which aims to:

...stop the export of whole baled or densely packaged tyres, which are likely to be disposed of overseas in a manner detrimental to human and environmental health. Prohibiting such exports will also maximise the ability of the Australian waste management and recycling sectors to collect, recover, recycle, reuse, and convert waste tyres into new products.¹⁶⁴

- 3.147 In its submission, DCCEEW further detailed that the Rules:

...specifically ban the export of whole or large tyres and restrict exports to:

- processed tyres (shred, crumb, granulate, buffings)
- casings for retreading
- verified second-hand tyres for reuse.

To comply with the regulation, exporters must:

- hold a Waste Export Licence

¹⁶¹ Bridgestone Australia, *Submission 31*, p. [1].

¹⁶² Bridgestone Australia, *Submission 31*, p. [3].

¹⁶³ DCCEEW, *Export of waste tyres*, 2 January 2024, www.dcceew.gov.au/environment/protection/waste/exports/tyres (accessed 12 March 2026).

¹⁶⁴ Explanatory Memorandum, Recycling and Waste Reduction (Export—Waste Tyres) Rules 2021, p. 2.

- meet processing specifications
- demonstrate environmentally sound processing at receiving facilities
- lodge a Pre-Export Declaration for each shipment
- maintain records and comply with DCCEEW and Australian Border Force [ABF] monitoring

Non-compliance may result in licence cancellation, civil penalties, or up to five years' imprisonment.¹⁶⁵

3.148 A few submissions discussed the limitations of the export ban.¹⁶⁶

3.149 For example, the Business Council for Sustainable Development Australia contended that 'while intended to stimulate domestic use, the ban shifted the export format, not the outcome: shredded tyres are still sent offshore for tyre-derived fuel (TDF) with little increase in local remanufacturing.'¹⁶⁷

3.150 TSA noted that 'while the ban on baled-tyre exports reduced the volume exported for several years, shredded tyre exports have largely replaced the previous export tonnage. Arguably, in practice, the export ban has only changed the form of waste tyre exports—from bales to shred—not the volume.'¹⁶⁸

3.151 The Cement Industry Federation argued the ban '...creates domestic supply pressure – exporters must find markets for products such as shredded tyres, potentially encouraging local uptake (e.g., cement kilns) rather than export consumption.'¹⁶⁹

3.152 N.B.R. Tyres queried the export ban and argued that 'the best and most efficient way of exporting surplus waste tyres, that Australia cannot effectively process, is through baling of tyres'.¹⁷⁰

Why is there a distinction between shredded tyres (tyre chips) and baled tyres ?

Why is Australia allowing the export of shredded tyres (tyre chips), but not baled tyres ?

Ultimately both shredded tyres (tyre chips) and baled tyres are going to be "burned" under controlled conditions in order to extract energy.¹⁷¹

¹⁶⁵ DCCEEW, *Submission 7*, p. 5.

¹⁶⁶ See for example: N.B.R. Tyres, *Submission 9*, p. [4]; GACWheels Australia, *Submission 33*, p. 2; Business Council for Sustainable Development Australia, *Submission 58*, p. [3]; Cement Industry Federation, *Submission 62*, p. [10].

¹⁶⁷ Business Council for Sustainable Development Australia, *Submission 58*, p. [3].

¹⁶⁸ TSA, *Submission 16*, p. 28.

¹⁶⁹ Cement Industry Federation, *Submission 62*, p. [10].

¹⁷⁰ N.B.R. Tyres, *Submission 9*, p. [4].

¹⁷¹ N.B.R. Tyres, *Submission 9*, p. [4].

Persisting non-compliant exports

3.153 Evidence to the inquiry suggested that despite the introduction of the Rules, non-compliant exports persisted in the industry.¹⁷²

3.154 S & J Australian Scrap Tyre Disposals and ATRA suggested that non-compliant exports reflected a lack of effective enforcement undermining legitimate operators, rather than a lack of laws.¹⁷³

3.155 Mr Robert Kelman from ATRA described the extent of non-compliant exports at a public hearing:

...we still believe that there are bales being shipped out and there's certainly non-compliant shred. The laws are in place. For instance, an operator must have the requisite equipment to process the material to the standard. But we've been sending videos and photos of operators that we know don't have that equipment. You can see it in their yards. But the federal department haven't done anything yet about that.¹⁷⁴

3.156 Mr Kelman also highlighted the need for audits to improve enforcement of export controls:

It's very hard to know how much is going out. Material gets put into the back of the container and then loaded up at the front... we've been making suggestions around how that compliance can be improved. For instance, there are no on-site audits. So no-one's turning up with a couple of people and reviewing the equipment and reviewing what's going in.¹⁷⁵

3.157 Moreover, Mr Kelman reported 'confusing messages coming from the department' and elaborated:

We were told, 'This is an export program, so we can't nab anyone until they've actually exported it.' That is absurd. There are some very good people in the department who are trying to reform that legislation and make it better, but we're definitely still struggling with those exports. They come in and they charge a cheaper rate because they don't have all the equipment, they often don't have the safety standards and they often pay cash to their staff. All these issues mean they just constantly undermine the market.¹⁷⁶

¹⁷² See, for example: Australian Council of Recycling, *Submission 14*, p. 1; TSA, *Submission 16*, p. 14; Elan Energy Matrix, *Submission 15*, pp. 1, 4; ATIC, *Submission 29*, p. 9; S & J Australian Scrap Tyre Disposals, *Submission 39*, p. [7]; ATRA, *Submission 42*, pp. [5–6].

¹⁷³ See, for example: S & J Australian Scrap Tyre Disposals, *Submission 39*, p. [7]; ATRA, *Submission 42*, pp. [5–6].

¹⁷⁴ Mr Robert Kelman, Executive Officer, ATRA, *Committee Hansard*, 4 March 2026, p. 3.

¹⁷⁵ Mr Robert Kelman, Executive Officer, ATRA, *Committee Hansard*, 4 March 2026, p. 3.

¹⁷⁶ Mr Robert Kelman, Executive Officer, ATRA, *Committee Hansard*, 4 March 2026, p. 3.

- 3.158 The Australian Council of Recycling also expressed concerns about non-compliance and weak enforcement of waste export rules for tyres and suggested it undermines confidence and investment in Australia's domestic tyre recycling capacity.¹⁷⁷

Waste tyre export licences

- 3.159 Those wishing to export regulated waste tyres must apply for and be granted a waste export licence. Waste tyre export licences can be granted for up to three years.¹⁷⁸ According to data provided in DCCEEW's submission, as of 30 June 2025, there were 56 active waste tyre export licences.¹⁷⁹

- 3.160 Patco Tyres reported that 'current regulatory processes remain time-consuming and unnecessarily complex' for waste export licences.¹⁸⁰

At present, it can take three to four months to add a new customer to an existing export licence. Applications of this nature should be assessed and approved within a reasonable timeframe such as five business days, not months. Prolonged approval delays directly undermine business efficiency and commercial relationships and act as a clear barrier to trade.

The scope of information required to add new customers to an existing export licence is also excessive. Much of the information requested relates to proprietary customer processes, not addressing environmental risk. This level of disclosure is unnecessary, increases the compliance burden, and contributes to extended approval timelines without delivering any corresponding environmental benefit.

- 3.161 Mr James Fairweather from Tyrecycle expressed concerns that enforcement of export licensing requirements, particularly those relating to the availability of appropriate processing equipment, may be inadequate.¹⁸¹

There is a part in the export regulations that specifically says that a holder of an export licence must be able to demonstrate that they have plant and equipment that can make an export-compliant product. I highly doubt that that part of the regulation is being enforced. I think there are still veiled tyres going out of Australia under different HS codes or export codes; they're going out as automotive parts or whatever. DCCEEW's ability to process the licensing applications quicker—because it does hold the market up—and DCCEEW's ability to enforce the export regulations harder is paramount in my eyes.¹⁸²

¹⁷⁷ Australian Council of Recycling, *Submission 14*, p. 1.

¹⁷⁸ DCCEEW, *Submission 7*, p. 5.

¹⁷⁹ DCCEEW, *Submission 7*, p. 5.

¹⁸⁰ Patco Tyres, *Submission 12*, p. 2.

¹⁸¹ Mr James Fairweather, Chief Executive Officer, Tyrecycle, *Committee Hansard*, 1 May 2026, p. 16.

¹⁸² Mr James Fairweather, Chief Executive Officer, Tyrecycle, *Committee Hansard*, 1 May 2026, p. 16.

Committee comment

- 3.162 The Committee heard that Australia's regulatory framework for end-of-life tyres is fragmented across Commonwealth, state/territory and local government jurisdictions. Stakeholders described a patchwork of licensing requirements, storage thresholds, landfill restrictions, transport controls and enforcement approaches that create uncertainty for the industry and impede investment in nationally scaled collection and recycling infrastructure.
- 3.163 The Committee notes that while waste regulation is primarily a state/territory responsibility, tyres move across borders through national supply chains. The absence of nationally harmonised regulatory settings creates inefficiencies and undermines circular economy outcomes. The Committee considers that nationally consistent definitions, standards, tracking systems and regulatory expectations are necessary to support market development and improve recovery rates.

Recommendation 1

- 3.164 The Committee recommends that the Australian Government, through the Environment Ministers Meeting and in partnership with state and territory governments, develop a nationally harmonised regulatory framework for end-of-life tyres, including:**
- **nationally consistent definitions and classifications;**
 - **harmonised storage, transport and processing requirements; and**
 - **consistent landfill and disposal controls.**
- 3.165 The Committee received consistent evidence that unlawful stockpiling and illegal dumping, along with other forms of non-compliance, remain as significant challenges across the tyre supply chain. Local governments, recyclers and industry participants reported that rogue operators continue to undercut compliant businesses by avoiding lawful disposal pathways and environmental obligations.
- 3.166 The Committee is concerned that weak or inconsistent enforcement of existing requirements can distort markets, undermine confidence in the sector and impose substantial costs on communities. Evidence indicated that local governments collectively bear significant costs associated with the clean-up of illegally dumped tyres, while stockpiles continue to present environmental and public health risks.
- 3.167 The Committee considers that regulatory frameworks are only as effective as the compliance and enforcement regimes that support them. Effective auditing, data collection, traceability and enforcement are essential to maintaining industry integrity and ensuring that responsible operators are not commercially disadvantaged.
- 3.168 Given the significance of these matters, the Committee has given detailed consideration to product stewardship arrangements in a dedicated chapter of this

report. The Committee's findings and recommendations regarding product stewardship are set out in Chapter 5.

- 3.169 The Committee also heard substantial evidence regarding the treatment of OTR tyres especially used in the mining sector. Numerous submitters highlighted that on-site burial remains a common end-of-life pathway for mining tyres, despite broader policy objectives supporting resource recovery and circularity.
- 3.170 The Committee notes evidence from Kal Tire Australia that expectations regarding mining site rehabilitation are evolving, with Traditional Owners playing an increasingly important role in shaping environmental and land management outcomes across the resources sector. The Committee recognises that Traditional Owners are key stakeholders in decisions relating to land use, rehabilitation and closure planning, and that their perspectives should be meaningfully considered throughout the life of a mining site.
- 3.171 The Committee acknowledges concerns that practices such as the long-term stockpiling or burial of end-of-life tyres may be inconsistent with contemporary expectations for progressive rehabilitation and responsible resource stewardship.
- 3.172 The Committee further notes concerns that current arrangements create a regulatory inconsistency whereby practices permitted on mining sites would not generally be permissible elsewhere. The Committee agrees that, over the long term, greater resource recovery should be the objective of OTR tyre management.
- 3.173 The Committee supports the idea that vehicles delivering tyres to mining operations should, wherever practicable, utilise return journeys to transport end-of-life tyres for recycling or appropriate processing. Evidence received during the inquiry highlighted that the specialised trailers used to deliver large OTR tyres are typically capable of carrying only these products and often return from mine sites empty after delivery. The Committee considers this to be a missed opportunity to improve resource recovery outcomes and reduce avoidable transport inefficiencies.
- 3.174 However, the Committee does not support the immediate ban of onsite burial practices. The Committee is mindful that the capacity of the tyre recovery and recycling sector to process OTR tyres varies considerably across jurisdictions. In some regions, the infrastructure and technologies required to manage these tyres at scale are still developing. An immediate ban on onsite burial risks creating unintended consequences, including stockpiling or increased transportation of tyres over long distances, which may introduce additional environmental, safety and compliance risks.
- 3.175 The Committee therefore considers that a staged and coordinated transition is a more practical and effective approach. Gradually reducing reliance on onsite burial, supported by interim recovery targets and investments in collection, retreading and recycling capability, will provide industry with the certainty and time required to adapt while encouraging the development of sustainable end-of-life management options.

Recommendation 2

- 3.176 The Committee recommends that the Australian Government, in partnership with state and territory governments, the mining sector and relevant stakeholders, develop and implement a nationally consistent framework for off-the-road (OTR) tyre management that prioritises recovery, reuse and recycling over onsite burial.**
- 3.177 The framework should include:**
- **a staged reduction in the use of onsite burial as an end-of-life management practice for OTR tyres over the next 5 years;**
 - **interim OTR tyre recovery targets to support the transition away from onsite burial practices;**
 - **support for regional and remote collection, retreading and recycling infrastructure; and**
 - **public reporting on progress against the interim recovery targets and the staged reduction of onsite burial, to support transparency and accountability, and to inform any additional measures required to achieve long-term resource recovery objectives.**
- 3.178 The Committee received evidence that increasing volumes of low-cost and poor-quality imported tyres are placing pressure on domestic retreading, repair and recycling industries. While cheap tyre imports can be a practical and affordable option for consumers, especially with the ongoing cost-of-living challenges, evidence suggests that short-life, low-quality tyres contribute to higher rates of waste generation and undermine circular economy objectives.
- 3.179 The Committee notes concerns that Australia may become an attractive market for lower-standard products if Australian requirements do not keep pace with evolving international standards. The Committee considers that robust product standards, effective import compliance measures and consistent enforcement are important to ensure consumer safety, support product durability and reduce avoidable waste generation.
- 3.180 Additionally, the Committee recognises concerns raised by stakeholders of parallel and grey imports. The Committee believes that ensuring all imported tyres meet applicable Australian requirements will help maintain confidence in the market. The Committee considers that consumer safety should remain the primary consideration in the regulation of tyre imports and therefore supports measures that would improve transparency, traceability and compliance across the tyre supply chain, while preserving competition and consumer choice.
- 3.181 The Committee agrees with Tyre Stewardship Australia that the current Australian Design Rules are insufficient, as the rules only apply to vehicle imports and not replacement tyres. By expanding the Australian Design Rules, consumers will have

access to replacement tyres which meet specific safety, performance and environmental standards.

Recommendation 3

- 3.182 The Committee recommends that the Australian Government undertake a review of the regulatory framework for replacement tyres, noting that replacement tyres are not currently subject to the Australian Design Rules. The review should identify the most appropriate mechanism to establish and enforce design, performance and sustainability standards for replacement tyres, and consider the adoption, where appropriate, of contemporary international standards. The review should also consider measures to improve tyre durability, retreadability, repairability and resource efficiency.**
- 3.183 The Committee heard diverging views regarding Australia's tyre export arrangements. However, there was broad agreement that export controls must be effectively enforced and that tyres exported from Australia should be managed in accordance with high environmental standards.
- 3.184 The Committee considers that transparent supply chains, traceability mechanisms and robust enforcement are necessary to ensure that export regulations achieve their intended outcomes.

Recommendation 4

- 3.185 The Committee recommends that the Australian Government review its processes for enforcement of the Recycling and Waste Reduction (Export—Waste Tyres) Rules 2021 to ensure non-compliant exports are identified and effectively managed.**



4. Product stewardship

- 4.1 Product stewardship seeks to manage a product's impacts on the environment and the community. It has played an important role in managing the serious impacts of end-of-life tyres in Australia via the voluntary, industry-led Tyre Product Stewardship Scheme (TPSS) for more than a decade.
- 4.2 This chapter discusses evidence received throughout the inquiry about:
- product stewardship in Australia
 - the TPSS
 - calls for a mandatory product stewardship scheme for tyres
 - opposition to a mandatory product stewardship scheme for tyres.
- 4.3 The term 'product stewardship' is sometimes used interchangeably with 'extended producer responsibility' (EPR). As a result, this chapter also reflects evidence received that advocated for an EPR scheme for tyres. While both concepts share similar principles, product stewardship extends responsibility for a product's impacts to everyone involved in its lifecycle. In contrast, EPR places the onus only on the producer.

Product stewardship in Australia

- 4.4 In Australia, product stewardship schemes can be:
- industry-led voluntary arrangements
 - co-regulatory arrangements between industry and government
 - mandatory schemes under the law.¹
- 4.5 In November 2023, Australia's Environment Ministers agreed that:
- [...] product stewardship schemes play a key role in holding producers accountable for managing their waste and driving circularity. However, these schemes are not open-ended, and where industry does not respond sufficiently government – as is happening with photovoltaic systems, electrical and electronic equipment, problematic single use plastics and packaging – including oil containers. Others, such as the clothing textiles industry, are on notice for the

¹ Department of Climate Change, Energy, the Environment and Water (DCCEEW), *Product stewardship schemes and priorities*, 13 March 2026, www.dcceew.gov.au/environment/protection/waste/product-stewardship/products-schemes (accessed 21 May 2026).

need for action: if voluntary product stewardship doesn't work, government will regulate.²

- 4.6 Table 4.1 summarises the current product stewardship schemes that exist in Australia. Most of Australia's product stewardship schemes, including the TPSS, are industry-led voluntary arrangements.³

Table 4.1 Current product stewardship schemes in Australia

Mandatory schemes	Oil
Co-regulatory arrangements	TVs and computers Plastics and packaging
Government accredited industry-led voluntary arrangements	Batteries – B cycle Large plastic bags – Big Bag Recovery Mobile phones – MobileMuster Newspapers – National Environmental Sustainability Agreement Plastics and packaging – Australian Packaging Covenant Organisation Plastic paint pails – Dulux Envirosolutions Recovery Program Power tools and accessories – FUTURE FORWARD Tyres – Tyre Product Stewardship Scheme

Source: Department of Climate Change, Energy, the Environment and Water (DCCEEW), *Product stewardship schemes and priorities*, 13 March 2026, www.dcceew.gov.au/environment/protection/waste/product-stewardship/products-schemes (accessed 21 May 2026).

- 4.7 Mr John Gertsakis, Director of the Product Stewardship Centre of Excellence, described product stewardship as a practical way for governments and businesses to work towards a circular economy and address environmental problems.⁴ He elaborated:

Product stewardship is a strategic approach adopted by governments globally for more than 20 years, where producers and retailers are legally required to take responsibility for the environmental and social impacts of their products across the entire life cycle...⁵

- 4.8 The Product Stewardship Centre of Excellence further outlined the environmental and social benefits of product stewardship in its submission and stated it:

[...] encourages producers to conserve natural resources, prevent pollution, reduce carbon emissions and regenerate the environment by (1) designing more ecologically sustainable products to prevent waste and pollution (2) extending the

² Environment Ministers' Meeting, *Agreed Communique*, 10 November 2023, p. 1.

³ Product Stewardship Centre of Excellence, *Submission 68*, p. [3].

⁴ Mr John Gertsakis, Director, Product Stewardship Centre of Excellence, *Committee Hansard*, 11 March 2026, pp. 6, 8.

⁵ Mr John Gertsakis, Director, Product Stewardship Centre of Excellence, *Committee Hansard*, 11 March 2026, p. 6.

life of products through improved durability and repairability, and (3) recovering materials from used products to keep them circulating in the economy to prevent waste.⁶

Recycling and Waste Reduction Act 2020

- 4.9 Since 2020, the creation of product stewardship schemes in Australia has been enabled by the *Recycling and Waste Reduction Act 2020* (RAWR Act).⁷ The *RAWR Act* is administered by the Department of Climate Change, Energy, the Environment and Water (DCCEEW).
- 4.10 Prior to 2020, product stewardship schemes in Australia were enabled by the *Product Stewardship Act 2011* until it was replaced by the *RAWR Act*.
- 4.11 The objects of the *RAWR Act* are:
- (a) to reduce the impact on human and environmental health of products, waste from products and waste material, including by reducing the amount of greenhouse gases emitted, energy and resources used and water consumed in connection with products, waste from products and waste material;
 - (b) to realise the community and economic benefits of taking responsibility for products, waste from products and waste material;
 - (c) to develop a circular economy that maximises the continued use of products and waste material over their life cycle and accounts for their environmental impacts;
 - (d) to contribute to Australia meeting its international obligations...⁸

Minister's product stewardship priority list

- 4.12 The *RAWR Act* requires a list of products to be prioritised for stewardship action to be published at the end of each financial year.⁹ The latest priority list was published by the Minister for the Environment and Water, Hon Tanya Plibersek MP, in 2023–24. It included clothing textiles, tyres, plastics in health care products in hospitals, mattresses, and child car seats.¹⁰ According to DCCEEW's website, the 2023–24 priority list will remain the same until the review of the *RAWR Act* is completed.¹¹

⁶ Product Stewardship Centre of Excellence, *Submission 68*, p. [3].

⁷ Tyre Stewardship Australia (TSA), *Submission 16*, pp. 50, 56.

⁸ *Recycling and Waste Reduction Act 2020* (RAWR Act), s 3.

⁹ RAWR Act, s 67.

¹⁰ DCCEEW, *Minister's product stewardship priority list*, 22 August 2025, www.dcceew.gov.au/environment/protection/waste/product-stewardship/ministers-priority-list (accessed 21 May 2026).

¹¹ DCCEEW, *Minister's product stewardship priority list*, 22 August 2025, www.dcceew.gov.au/environment/protection/waste/product-stewardship/ministers-priority-list (accessed 21 May 2026).

- 4.13 Mr John Gertsakis from Product Stewardship Centre of Excellence suggested the priority list is not 'proactively managed' and reflected:¹²

We have products that sit on priority lists for years and nothing eventuates. We need to start thinking very carefully and closely about how every product that comes onto the market needs to be stewardship-ready.¹³

Audits

- 4.14 Under the *RAWR Act*, DCCEEW can audit accredited voluntary product stewardship arrangements.¹⁴
- 4.15 As of August 2026, DCCEEW has not conducted any audits into the TPSS.¹⁵

Tyre Product Stewardship Scheme

- 4.16 The industry-led voluntary TPSS was launched in 2014 and is administered by Tyre Stewardship Australia (TSA). The TPSS applies to all automotive and off-the-road (OTR) tyres in Australia.¹⁶
- 4.17 DCCEEW stated that the TPSS aims 'to reduce the amount of end-of-life tyres negatively impacting the environment via landfill, onsite burial, or illegal dumping while increasing the recycling rate of end-of-life tyres.'¹⁷
- 4.18 The TPSS is funded by contributing first importers by a \$0.25 levy per equivalent passenger unit (EPU), capped at \$50 per tyre, which generates approximately \$7 million each year.¹⁸ An EPU is a standardised measure of weight or volume equal to a standard passenger tyre. Therefore, an imported OTR tyre weighing more than 200 EPUs will only attract a capped import levy of \$50.
- 4.19 The TPSS is currently supported by more than 1,700 accredited businesses, including retailers, fleets, collectors and recyclers.¹⁹
- 4.20 TSA reported that the TPSS has helped:
- [...] to transform used tyres into valuable resources and created new industries and jobs by investing over \$11 m in 70+ market development projects. It has also

¹² Mr John Gertsakis, Director, Product Stewardship Centre of Excellence, *Committee Hansard*, 11 March 2026, p. 9.

¹³ Mr John Gertsakis, Director, Product Stewardship Centre of Excellence, *Committee Hansard*, 11 March 2026, p. 9.

¹⁴ DCCEEW, *Product stewardship schemes and priorities*, 13 March 2026, www.dcceew.gov.au/environment/protection/waste/product-stewardship/products-schemes (accessed 21 May 2026).

¹⁵ DCCEEW, *Supplementary Submission 7.1*, p. [1].

¹⁶ TSA, *Submission 16*, p. 56.

¹⁷ DCCEEW, *Submission 7*, p. 5.

¹⁸ TSA, *Submission 16*, p. 56.

¹⁹ TSA, *Submission 16*, p. 56.

provided resources for consumer education and engagement, and the audit of Scheme participants and verification of foreign end markets.²⁰

- 4.21 The TPSS is accredited under the *RAWR Act* and authorised by the Australian Competition and Consumer Commission (ACCC). ACCC also has a role in setting TPSS guidelines and metrics and undertaking regular reviews of its effectiveness.²¹

Tyre Stewardship Australia

- 4.22 TSA is a not-for-profit organisation that was established to implement the TPSS.²² It is accountable to its board, the ACCC and TPSS participants.²³ Ms Lina Goodman, Chief Executive Officer of TSA, told the Committee that TSA's work covers the entire supply chain 'from the point a tyre enters Australia, through its working life to the point its material is given a productive second life':²⁴

We make evidence based decisions grounded in research, industry experience, global practice and the daily reality of what our collectors and recyclers are seeing on the ground. Our job is to follow that evidence wherever it leads us, including, if it ever came to it, being honest about whether industry could be better served without us.²⁵

- 4.23 TSA also collaborates with industry, government and communities to reduce waste and drive circular outcomes:

While TSA does not physically collect or recycle tyres, it accredits and audits participants across the supply chain, ensuring best practice and ethical standards.

It also leads education, advocacy, compliance programs, and provides national data insights valued by government and industry.²⁶

ACCC authorisation

- 4.24 The ACCC first authorised TSA to implement the TPSS in 2013.²⁷ TSA was re-authorised to continue implementing the TPSS in 2018 and 2024.²⁸ The current ACCC authorisation for the TPSS expires in September 2027.²⁹

²⁰ TSA, *Submission 16*, p. 56.

²¹ TSA, *Submission 16*, p. 50.

²² TSA, *Submission 16*, p. 67.

²³ Ms Lina Goodman, Chief Executive Officer, TSA, *Committee Hansard*, 1 May 2026, p. 33.

²⁴ Ms Lina Goodman, Chief Executive Officer, TSA, *Committee Hansard*, 1 May 2026, p. 33.

²⁵ Ms Lina Goodman, Chief Executive Officer, TSA, *Committee Hansard*, 1 May 2026, p. 33.

²⁶ TSA, *Submission 16*, p. 67.

²⁷ TSA, *TPSS Guidelines and ACCC Authorisation*, www.tyrestewardship.org.au/tools-and-resources/accc-authorisation (accessed 25 May 2026).

²⁸ TSA, *TPSS Guidelines and ACCC Authorisation*, www.tyrestewardship.org.au/tools-and-resources/accc-authorisation (accessed 25 May 2026).

²⁹ TSA, *Submission 16*, p. 51.

- 4.25 ACCC's initial determination in 2013 imposed annual reporting conditions 'to ensure that robust and transparent annual reporting will be conducted by TSA under the Scheme.'³⁰ The ACCC also imposed a condition requiring TSA to 'appoint an independent, external consultant to conduct a full review of the operation of the Scheme, to commence on the second anniversary of the commencement of the Scheme.'³¹
- 4.26 The ACCC did not impose conditions when reauthorising TSA to implement the TPSS in 2018. The 2018 reauthorisation determination stated:
- Rather than imposing conditions of authorisation [...] the ACCC considers that granting authorisation for a shorter period of six rather than 10 years provides an appropriate mechanism to ensure that the concerns that have been raised are addressed.³²
- 4.27 However, in 2024, the ACCC revoked the existing authorisation, and granted a new conditional authorisation in substitution to TSA for a further three years (until September 2027).³³ In a media statement, the ACCC announced:
- In response to government and industry feedback, the ACCC has exercised its discretion to authorise the Scheme subject to a condition which requires TSA to report on specified metrics in its Annual Report each year. The ACCC considers there is a need for TSA to publish more comprehensive data with consistent methodologies to ensure sufficient transparency and clarity of outcomes and has imposed a condition to this effect.³⁴
- 4.28 The ACCC granted authorisation subject to one condition, detailed at paragraph 5.9 in the Final Determination—that TSA must report certain KPIs for the previous five years, each year in its Annual Report.³⁵
- 4.29 TSA complied with this condition by publishing the required KPIs in its 2024–25 Annual Report and has stated in a response to a Question on Notice from the Committee regarding the matter that the 2025–26 Annual Report will also contain the required KPIs.³⁶
- 4.30 At the time this report was prepared, the 2025–26 Annual Report had not yet been published.

³⁰ Australian Competition and Consumer Commission (ACCC), *Final Determination*, 11 April 2013, p. 34.

³¹ ACCC, *Final Determination*, 11 April 2013, p. 35.

³² ACCC, *Final Determination*, 24 May 2018, p. 39.

³³ ACCC, *Final Determination*, 2 September 2024, p. 2.

³⁴ ACCC, *ACCC reauthorises Tyre Product Stewardship Scheme*, 2 September 2024 (accessed 3 March 2026).

³⁵ TSA, *Supplementary Submission 16.3*, p. 4.

³⁶ TSA, *Supplementary Submission 16.3*, p. 4.

2025 Independent Review of the TPSS

- 4.31 Marsden Jacob Associates, an independent economic, policy and strategy advisory firm, was commissioned to undertake an Independent Review of the TPSS and TSA's administration of the TPSS in 2025 (the Review).
- 4.32 The purpose of the Review was to answer two key questions:
- 1 Is the Scheme working, meeting its objectives and aims, and ultimately making progress against targets for participation and environmentally sound disposal of EOL tyres?
 - 2 Is the TSA administering the Scheme with good governance, adequate industry representation and consultation, and encouraging and driving engagement and participation by all stakeholder groups?³⁷
- 4.33 Based on the stakeholder consultation and data analysis undertaken as part of the Review, TSA was assessed as 'performing very well within the current scope of the Scheme.'³⁸
- 4.34 The Review found that, while there are opportunities for further improvement, these gains are likely to be limited due to the voluntary nature of the TPSS. Achieving substantial advances in tyre recycling and circular economy outcomes will require broader market incentives, government regulation, and technological innovation beyond TSA's current remit. The success of the TPSS has also been supported by favourable market conditions and regulatory measures, including the ban on baled tyre exports and stronger enforcement against illegal dumping and stockpiling.³⁹
- 4.35 The Review made six recommendations:
- Recommendation 1: Provide greater clarity on objectives of the Scheme as the TSA moves toward supporting a mandatory/co-regulatory Scheme
 - Recommendation 2: Clearly articulate (such as through a program logic) how TSA activities and outputs result in intermediate and final outcomes for the Scheme and the improved EOL tyres
 - Recommendation 3: Prioritise positive relationships and engagement with recyclers to help improve recycling data and its use; and inform research priorities and design to help achieve practical research outcomes
 - Recommendation 4: Enhance engagement with retailers and car manufacturers and articulate the value proposition of the TSA and the Scheme

³⁷ Marsden Jacob Associates, *Independent Review of the Tyre Stewardship Scheme*, Final report, November 2025, p. 18.

³⁸ Marsden Jacob Associates, *Independent Review of the Tyre Stewardship Scheme*, Final report, November 2025, p. 31.

³⁹ Marsden Jacob Associates, *Independent Review of the Tyre Stewardship Scheme*, Final report, November 2025, p. 31.

- Recommendation 5: Clearly articulate an overarching research (and where relevant, R&D within market development) and innovation strategy; including priorities for investment and the key outcomes expected
- Recommendation 6: Robust ex ante and ex post evaluation of market development and research projects along with guidelines used within the wider R&D community.⁴⁰

4.36 Since the Review, TSA has addressed these recommendations and detailed its actions since the report was released in a response to a Question on Notice from the Committee regarding the matter.⁴¹

Concerns for TSA's board representation

4.37 Some evidence to the inquiry raised concerns for TSA's board representation as there are no representatives from the recycling sector.⁴²

4.38 Mr Josh Hayes, Managing Director of S & J Australian Scrap Tyre Disposals told the Committee that he had concerns for the composition of the board:

I see the TSA really as driven by manufacturers rather than driven by the collection and recycling industry. [...] there's not a tyre recycling representative on the TSA board. It's a manufacturers body.⁴³

4.39 Similarly, Elan Energy Matrix stated that 'Tyre Stewardship Australia does not represent the tyre recycling industry' and believed there should be representatives from the tyre recycling industry on the board:⁴⁴

At present, it still does not have a representative of the tyre recycling industry on its board. Among other things, this prevents the tyre recycling industry from having an adequate voice around the TSA [Tyre Stewardship Australia] table.⁴⁵

4.40 Additionally, the Motor Trades Association of Australia (MTAA) and the Australian Council of Recycling recommended that there be recycler representation in governance,⁴⁶ as their participation would help ensure that decisions are informed by operational experience and the costs and risks are not disproportionately borne by tyre recyclers.

⁴⁰ Marsden Jacob Associates, *Independent Review of the Tyre Stewardship Scheme*, Final report, November 2025, p. 32.

⁴¹ TSA, *Supplementary Submission 16.3*, pp. 4–8.

⁴² See, for example: Australian Council of Recycling, *Submission 14*, p. 2; Elan Energy Matrix, *Submission 15*, p. 5; Motor Trades Association of Australia (MTAA), *Submission 18*, pp. 8–9; Mr Josh Hayes, Managing Director, S & J Australian Scrap Tyre Disposal, *Committee Hansard*, 12 June 2026, p. 26.

⁴³ Mr Josh Hayes, Managing Director, S & J Australian Scrap Tyre Disposal, *Committee Hansard*, 12 June 2026, p. 26.

⁴⁴ See, for example: Elan Energy Matrix, *Submission 15*, p. 5; Mr Ian Bellinge, Managing Director, Elan Energy Matrix, *Committee Hansard*, 23 April 2026, p. 8.

⁴⁵ Elan Energy Matrix, *Submission 15*, p. 5.

⁴⁶ See, for example: Australian Council of Recycling, *Submission 14*, p. 2; MTAA, *Submission 18*, pp. 8–9.

4.41 The current TSA Constitution requires the board to comprise of up to 11 members, including:

(a) A minimum of 4 and up to 5 representatives of member organisations involved in the importation of tyres into Australia...

(b) A minimum of 1 and up to 2 representatives with tyre recycling or circular economy knowledge and experience...

(c) A minimum of 1 and up to 2 representatives from the tyre retail industry with suitable knowledge and experience...

(d) Up to 3 Independent Directors as mutually agreed by a majority of the Directors.⁴⁷

4.42 Ms Lina Goodman, Chief Executive Officer of TSA, discussed the composition of its board and told the Committee 'Our board is an industry led board'.⁴⁸

We don't have an active recycler on our board, and we chose not to do that as a result of an independent study that was conducted that indicated an active recycler on our board could be a conflict of interest, as they'll know firsthand the funding that we're giving to organisations to use tyre derived material...⁴⁹

4.43 In a response to a Question on Notice from the Committee regarding board composition, TSA provided chronological details of the changes since 2013:

When TSA was first established in 2013, the board composition was representative of the TSA stakeholders with an Independent Chair being first appointed in 2016.

Over the first ten years of operation, TSA's board had recycling representatives across two different appointments for at least seven years. The relevant Board Directors were the previous owner of Tyrecycle and the former Executive of the Australian Tyre Recycling Association. It is important to note that neither of these individuals held active roles in the recycling industry during their tenure as a TSA Board Director.

In 2020 and at the request of the Board, TSA engaged a management consultancy specialising in providing probity and governance advisory services (especially in the not-for-profit sector) to assess and make recommendation on the potential or actual conflicts of interest related to board composition and specifically, where a Director has direct commercial interest in the recycling sector.

Recommendations to TSA's Board included:

⁴⁷ Snedden Hall & Gallop, *Constitution Tyre Stewardship Australia Limited*, 19 November 2021, p. 23.

⁴⁸ Ms Lina Goodman, Chief Executive Officer, TSA, *Committee Hansard*, 1 May 2026, p. 38.

⁴⁹ Ms Lina Goodman, Chief Executive Officer, TSA, *Committee Hansard*, 1 May 2026, p. 38.

- recyclers with active commercial interests in the Australian market should not be eligible for membership to the TSA Board. This should be adopted as a formal TSA policy; and
- directors whose organisations or related entities become involved with tyre recycling in Australia should declare the matter as soon as their organisation commences exploring recycling. An appropriate event or point in time can then be identified as a trigger for the Director standing down from the board.

As a result of the review's recommendations, the TSA Constitution was revised to:

- include up to two representatives with tyre recycling or circular economy knowledge (emphasis added) and experience on the Board;
- include other rubber related products allowing for future scheme expansion should they arise e.g. conveyor belts; and
- expand membership categories to cater for the broader tyre industry including; peak bodies, automotive industry, tyre manufacturers in addition to tyre importers; industry partners and retreaders with corresponding changes to member voting rights.⁵⁰

Limitations of the voluntary industry-led model

- 4.44 The Western Australian Local Government Association (WALGA) presented the opinion that the TPSS 'has fallen short of achieving its potential due to its voluntary status.'⁵¹
- 4.45 Other stakeholders expressed similar concerns and identified limitations with the voluntary industry-led model, including issues relating to:
- limited participation and 'free-riding'
 - poor recovery outcomes
 - insufficient scope and coverage.
- 4.46 TSA also identified the ACCC's short-term authorisation periods as a limitation of the current voluntary scheme. TSA submitted that these authorisation periods 'constrain market development and limit investment to short-term projects. Combined with the Scheme's focus on waste recovery, this voluntary framework restricts progress toward genuinely circular outcomes for tyres.'⁵²

⁵⁰ TSA, *Submission 16.3*, p. 1.

⁵¹ Western Australian Local Government Association (WALGA), *Submission 5*, p. [2].

⁵² TSA, *Submission 16*, p. 50.

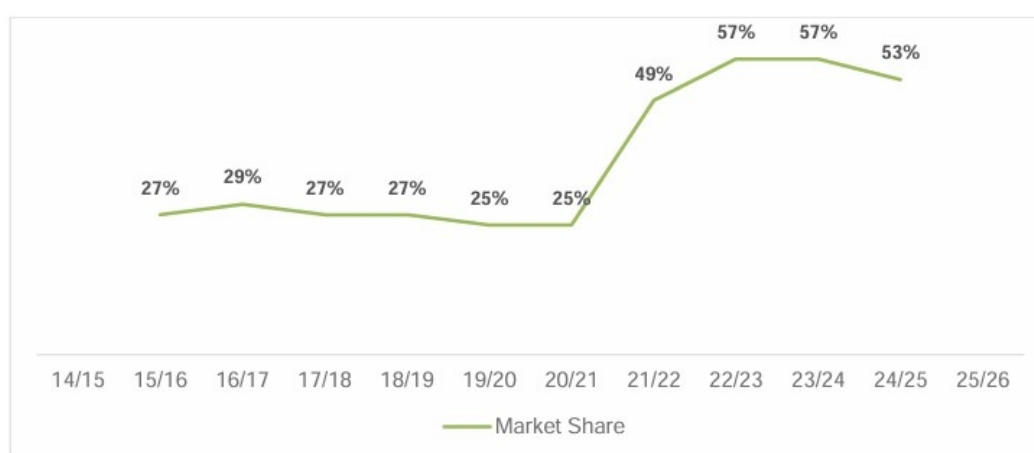
Limited participation and ‘free-riding’

- 4.47 According to TSA, companies that contribute to the TPSS imported 53 per cent of the tyres arriving in Australia as replacement tyres between 2024–25, down from 57 per cent in the previous year:⁵³

If current trends continue, within the next 12 months, at least half of all tyres imports by market share will fall outside the current product stewardship framework as an increasing number of tyres are imported each year.⁵⁴

- 4.48 The figure below shows the market share of contributing tyre importers by year.⁵⁵

Figure 4.1 Market share of contributing tyre importers



Source: Tyre Stewardship Australia, *Supplementary Submission 16.3*, p. 9.

- 4.49 The situation is more alarming for tyres imported affixed to new vehicles, which account for 16 per cent of all tyre imports.⁵⁶ TSA stated in its submission that:

Scheme participation by vehicle importers has remained at an extremely low rate of 3% by market share for several years. Recent departures from the Scheme by Volkswagen and Mercedes-Benz leaves only Porsche contributing - representing around 1% market share contributing to the Scheme at the current time. If Porsche withdraws, participation will be zero.⁵⁷

- 4.50 TSA was of the view that the decline in participation ‘underscores the urgent need for stronger regulation to ensure participation in stewardship schemes—and with it, shared accountability, and collective action on tyre sustainability. Without government intervention, Australia risks losing momentum on tyre stewardship.’⁵⁸

⁵³ TSA, *Submission 16*, p. 18.

⁵⁴ TSA, *Submission 16*, p. 18.

⁵⁵ TSA, *Submission 16.3*, p. 9.

⁵⁶ TSA, *Submission 16*, pp. 18–19.

⁵⁷ TSA, *Submission 16*, pp. 18–19.

⁵⁸ TSA, *Submission 16*, p. 19.

TSA added that ‘only government regulation can compel full participation of tyre importers into the stewardship scheme.’⁵⁹

4.51 Several stakeholders further suggested the voluntary nature of TPSS participation has led to a ‘free-riding’ problem.⁶⁰

4.52 Mr James Fairweather, Chief Executive Officer of Tyrecycle, told the Committee that free-riding happens when importers and parallel importers choose not to pay the levy:⁶¹

Free riders create an uneven playing field. All the member organisations and tyre importers of TSA [...] They are paying the levy to TSA at the time of import. There are a whole heap of other importers, even parallel importers, who are not paying that money. That, obviously, puts the bill for Michelin, Bridgestone and people like that at multiple millions of dollars every year that they are paying out of their P&L and out of their operating budget that other tyre importers who aren't having to pay that. That's unfair. Therefore, they're termed 'free riders' because they ride on the benefits of what TSA and other recyclers et cetera are doing, and they're not paying for that privilege.⁶²

4.53 TSA described free-riding as ‘an inherent feature of voluntary product stewardship schemes’ and argued that free-riding ultimately ‘undermines stewardship, fails totally to support valuable end markets in Australia, and fundamentally supports an environment where illegal [...] operator tyre collectors are left to flourish.’⁶³

4.54 Australian Automotive Aftermarket Association described the impact that free-riding by non-contributing importers has for tyre retailers:

The tyre industry is a highly price-sensitive and competitive sector; consumers often shop around for the lowest fitted tyre price. Australian tyre retailers typically pay between \$1.50 to \$5.50 per tyre to licensed collectors for disposal. Under the current opt-in scheme, businesses that do the right thing are paying these extra costs (paying accredited collectors for proper disposal), while non-participants save money and can undercut prices.

Compliant businesses face a lose-lose situation, they either absorb the stewardship costs (cutting into their own margin) or pass them on to customers (making their price less competitive), meanwhile, non-participants can capitalise on this. As a result, retailers experience voluntary stewardship as a competitive disadvantage rather than a universal industry norm.⁶⁴

⁵⁹ TSA, *Submission 16*, p. 19.

⁶⁰ See, for example: WALGA, *Submission 5*, p. [2]; TSA, *Submission 16*, pp. 32, 57; MTAA, *Submission 18*, p. 3; MTA Group, *Submission 20*, p. 4; Cleanaway, *Submission 37*, p. 4; Australian Automotive Aftermarket Association (AAAA), *Submission 60*, p. [1]; Ms Lina Goodman, Tyre Stewardship Australia, *Committee Hansard*, 1 May 2026, p. 33; Mr Peter Jones, MTAA, *Committee Hansard*, 1 May 2026, p. 19.

⁶¹ Mr James Fairweather, Chief Executive Officer, Tyrecycle, *Committee Hansard*, 1 May 2026, p. 17.

⁶² Mr James Fairweather, Chief Executive Officer, Tyrecycle, *Committee Hansard*, 1 May 2026, p. 17.

⁶³ TSA, *Submission 16*, p. 56.

⁶⁴ AAAA, *Submission 60*, p. [1].

- 4.55 Mr Henk van Diggle, General Manager of Tyrepower, told the Committee that free-riders reduce the transparency regarding what is entering the Australian market:

With the free riders, we don't have any open paperwork on what they're bringing into the country. At Tyrepower, we report every tyre we buy and report it to the TSA. A collector picks it up. We get a docket and we give it back to the TSA. We are mandated. We're doing the right thing. The free riders, however, don't have any import information to give to the government. We don't know what's coming in. They're just selling it to stores. They don't report it. That's the biggest issue. If it's mandatory and everybody has to report it, we would go a long way towards winning this battle...⁶⁵

Poor recovery outcomes

- 4.56 A few submissions to the inquiry suggested that despite a nationwide TPSS, there has been poor recovery outcomes across the country.⁶⁶
- 4.57 LGAQ reported its 'councils have not observed a decline in the number of tyres being disposed to landfill despite the introduction of a national stewardship scheme.'⁶⁷
- 4.58 Similarly, the Western Sydney Regional Organisation of Councils submitted that recovery outcomes under the TPSS 'remain insufficient' and noted millions of tyres continue to end up in landfill, stockpiled or illegally dumped.⁶⁸
- 4.59 Additionally, WALGA noted that recovery rates for tyres in Australia are far lower than recovery rates reported by regulated schemes in Alberta and British Columbia in Canada:⁶⁹

The Scheme is currently reporting recovery rates of 87% for car, bus and passenger tyres and 20% for off the road (OTR) tyres. In comparison, regulated schemes in Alberta and British Columbia, Canada report rates of 97% for on-road tyres and 78% for OTR tyres.⁷⁰

Insufficient scope and coverage

- 4.60 Although the TPSS applies to all automotive and OTR tyres in Australia, a few stakeholders suggested the scheme's voluntary model is still limited within its scope and coverage.⁷¹

⁶⁵ Mr Henk van Diggle, General Manager, Tyrepower, *Committee Hansard*, 15 July 2026, p. 16.

⁶⁶ See, for example: WALGA, *Submission 5*, p. [3]; Western Sydney Regional Organisation of Councils (WSROC), *Submission 46*, p. 4; Local Government Association of Queensland (LGAQ), *Submission 49*, p. 18.

⁶⁷ LGAQ, *Submission 49*, p. 18.

⁶⁸ WSROC, *Submission 46*, p. 4.

⁶⁹ WALGA, *Submission 5*, p. [3].

⁷⁰ WALGA, *Submission 5*, p. [3].

⁷¹ See, for example: Northern Sydney Regional Organisation of Councils (NSROC), *Submission 25*, p. 4; Porous Lane, *Submission 51*, p. 2; MidCoast Council, *Submission 56*, p. 2.

- 4.61 For example, Porous Lane, a manufacturer of high-performance permeable pavements incorporating post-consumer tyre rubber, said the voluntary nature of the scheme means that it does 'not capture all tyres placed on the market, particularly tyres pre-fitted to imported vehicles.'⁷²
- 4.62 MidCoast Council said the voluntary scheme results in 'inconsistent coverage across the market and limited influence on non-compliant operators.'⁷³ Similarly, Northern Sydney Regional Organisation of Councils (NSROC) noted that the voluntary model 'does not cover the full market cost of tyre recycling and disposal.'⁷⁴

Calls for a mandatory product stewardship scheme for tyres

- 4.63 Evidence to the inquiry largely supported a mandatory product stewardship scheme for tyres.⁷⁵
- 4.64 TSA argued a mandatory scheme would support the Australian Government to achieve its circular economy and advanced manufacturing ambitions.⁷⁶ Specifically, TSA stated that a mandatory scheme would 'address free riders, eliminate rogue operators, and create stable, long-term markets for tyre-derived materials by providing investment certainty and consistent national standards.'⁷⁷
- 4.65 Ms Lina Goodman, Chief Executive Officer of TSA, told the Committee that TSA recognises that a mandatory scheme could involve a different governance or administrative model:

For us, it's not about TSA; it's about fixing the problem. And I believe that if government were to implement a mandatory scheme they may choose to create

⁷² Porous Lane, *Submission 51*, p. 2.

⁷³ MidCoast Council, *Submission 56*, p. 2.

⁷⁴ NSROC, *Submission 25*, p. 4.

⁷⁵ See, for example: TyreNutz Social Enterprise, *Submission 1*, p. [2]; WALGA, *Submission 5*, p. [3]; Outback Communities Authority, *Submission 10*, p. 2; Fleurieu Regional Waste Authority, *Submission 11*, p. [1]; Bitumen Solutions, *Submission 13*, p. [4]; TSA, *Submission 16*, p. 5; MTAA, *Submission 18*, p. 7; MTA Group, *Submission 20*, p. 3; The Parks, *Submission 23*, pp. 1–2; NSROC, *Submission 25*, pp. 2, 4; Eurobodalla Shire Council, *Submission 26*, p. [2]; Australian Tyre Industry Council, *Submission 29*, pp. 1, 16; Sunshine Coast Council, *Submission 30*, p. [1]; Bridgestone Australia, *Submission 31*, pp. 4–5; Swan Hill Rural City Council, *Submission 32*, p. [1]; North Queensland Regional Organisation of Councils (NQROC), *Submission 34*, p. [3]; Flextrid Holdings & Alfabs Mining Equipment, *Submission 36*, p. 2, 5; Cleanaway, *Submission 37*, p. 5; Waste Management and Resource Recovery Association of Australia, *Submission 45*, p. [2]; WSROC, *Submission 46*, p. 5; Illawarra Shoalhaven Joint Organisation (ISJO), *Submission 47*, p. 3; LGAQ, *Submission 49*, pp. 5, 6, 20; Porous Lane, *Submission 51*, p. 2; Lake Macquarie City Council, *Submission 54*, p. [1]; Far North Queensland Regional Organisation of Councils (FNQROC), *Submission 55*, p. 1; MidCoast Council, *Submission 56*, pp. 2, 4; Business Council for Sustainable Development Australia, *Submission 58*, p. [2]; Australia Local Government Association (ALGA), *Submission 59*, p. 3; Bridgestone Mining Solutions Australia, *Submission 61*, pp. [3–4] Product Stewardship Centre of Excellence, *Submission 64*, p. [7].

⁷⁶ TSA, *Submission 16*, p. 5.

⁷⁷ TSA, *Submission 16*, p. 5.

an organisation similar to TSA that implements all the work that they need to do under the stewardship arrangement.⁷⁸

- 4.66 MTAA argued a co-regulated or mandatory scheme is needed to ‘protect industry, support recyclers, and deliver the national consistency required for long-term circularity.’⁷⁹ It also recommended the operator of a mandatory scheme be ‘appointed through an open and transparency competitive tender process to ensure value for money, capability and accountability.’⁸⁰
- 4.67 MTA Group observed that while establishing a mandatory scheme would require broader participation, including from mining companies and local governments, this expansion would deliver both economic and environmental benefits by stimulating new industries, such as heavy vehicle tyre recycling in regional Australia, and reducing environmental harm associated with tyre stockpiling and disposal.⁸¹
- 4.68 Mr Henk van Diggle, General Manager of Tyrepower, told the Committee that a product stewardship scheme that is not mandatory is ‘a toothless tiger.’⁸²
- 4.69 Mr Tom Leuner, Executive General Manager of the Mergers and Exemptions Assessments Division at ACCC, told the Committee that he did not anticipate a mandatory product stewardship scheme for tyres ‘would have a huge impact on competition.’⁸³ He added:
- There are endless regulatory schemes all through the economy that impose various requirements on parties. Some of them might stymie competition to a degree, but... as long as they're applied fairly to everyone and everyone has to pay their levy according to roughly their market share, like the number of tyres they're selling or whatever—as long as the costs are imposed fairly, then, generally, there's not a big impact on competition.
- The thing to watch out for, though, is that you don't stymie new entrants from entering. If, for example, to comply with this regime, it takes a really large investment and it's really hard to set up the recycling of your tyres, then it can favour the incumbents in the industry.⁸⁴
- 4.70 Although stakeholders generally agreed on the need for a mandatory product stewardship scheme for tyres, they shared different ideas about what a mandatory scheme should look like and how it could help their sector.

⁷⁸ Ms Lina Goodman, Chief Executive Officer, TSA, *Committee Hansard*, 1 May 2026, p. 38.

⁷⁹ MTAA, *Submission 18*, p. 3.

⁸⁰ MTAA, *Submission 18*, p. 9.

⁸¹ MTA Group, *Submission 20*, p. 4.

⁸² Mr Henk van Diggle, General Manager, Tyrepower, *Committee Hansard*, 15 July 2026, p. 15.

⁸³ Mr Tom Leuner, Executive General Manager, Mergers and Exemptions Assessments Division, ACCC, *Committee Hansard*, 4 March 2026, p. 9.

⁸⁴ Mr Tom Leuner, Executive General Manager, Mergers and Exemptions Assessments Division, ACCC, *Committee Hansard*, 4 March 2026, p. 9.

- 4.71 Mr Charlie Reading, State Manager of ELT Recycling Australia, told the Committee that he believes a mandatory scheme would ‘change the whole industry into a service industry where the business is won not on price but on service and serviceability.’⁸⁵
- 4.72 TyreNutz expressed support for a mandatory product stewardship scheme, citing its potential to protect the environment, promote responsible industry practices, increase recycling capacity in regional areas, generate employment and training opportunities, reduce illegal dumping, and strengthen Australia’s circular economy.⁸⁶
- 4.73 Porous Lane advocated for a ‘move toward a mandatory product stewardship framework covering all tyres placed on the Australian market, with a clear preference hierarchy that prioritises high-value, onshore reuse and recycling outcomes.’⁸⁷
- 4.74 Cleanaway called for stewardship to fund recycling infrastructure gaps and stated that a ‘formalised national collection and consolidation system—such as the State-based container deposit schemes—would allow consistent recovery of the tyres rather than ad-hoc, opportunistic capture, enabling sustainable operations and opening commercial treatment capacity.’⁸⁸
- 4.75 Mr Azeem Remtulla, Director of Bitumen Solutions, told the Committee that TSA has made a substantial contribution to research, development and market-building initiatives, including funding trials and projects to support the use of tyre-derived materials. He suggested that a mandatory scheme, supported by a broader levy base, could significantly increase available funding and accelerate investment in research, development and end-market creation, drawing parallels with the outcomes achieved through Australia’s waste oil product stewardship arrangements.⁸⁹
- 4.76 Mr James Fairweather, Chief Executive Officer of Tyrecycle, told the Committee that while he was not opposed to a mandatory tyre stewardship scheme, its principal benefit would be addressing the free-rider behaviour and establishing a more secure funding base for the management of end-of-life tyres:⁹⁰

In terms of what it looks like outside that, we have exceptionally strong anti-stockpiling and anti-dumping laws right around Australia. We have an export ban at a federal level, which, I have no doubt, is not being complied with. At a state level, we have state based EPA-style regulators called different things in different states. Generally, I think their illegal dumping and enforcement branches are probably underfunded, and I think they struggle with that. I think they’re all well-intentioned people trying to do the right thing, and I just think it’s hard. [...]

Then comes the federal piece, which is the DCCEEW piece. There is a part in the export regulations that specifically says that a holder of an export licence

⁸⁵ Mr Charlie Reading, State Manager, ELT Recycling Australia, *Committee Hansard*, 1 May 2026, p. 2.

⁸⁶ TyreNutz Social Enterprise, *Submission 1*, pp. [3–4].

⁸⁷ Porous Lane, *Submission 51*, p. 2.

⁸⁸ Cleanaway, *Submission 37*, p. 5.

⁸⁹ Mr Azeem Remtulla, Director, Bitumen Solutions, *Committee Hansard*, 15 July 2026, p. 14.

⁹⁰ Mr James Fairweather, Chief Executive Officer, Tyrecycle, *Committee Hansard*, 1 May 2026, p. 16.

must be able to demonstrate that they have plant and equipment that can make an export-compliant product. I highly doubt that that part of the regulation is being enforced. I think there are still veiled tyres going out of Australia under different HS codes or export codes; they're going out as automotive parts or whatever. DCCEE's ability to process the licensing applications quicker—because it does hold the market up—and DCCEE's ability to enforce the export regulations harder is paramount in my eyes.

It's not just me; it's industry overall. We're not an industry that's anti regulation. We're an industry that is pro regulation. We want things done right. All we're saying is that we don't think we need more regulation; we just need what we've got enforced harder. We have incredibly tight controls placed on us around fire management and stockpile management. They're all good regulations, and we just need to make sure they're enforced.⁹¹

- 4.77 Local governments largely supported a mandatory TPSS.⁹² For example, Lake Macquarie City Council suggested:

Mandatory scheme would reduce public costs for responsible tyre disposal directing costs to tyre consumers and allow councils to more efficiently establish aggregation and transfer points without incurring unsustainable expenses for managing and disposing of EOL tyres.⁹³

- 4.78 Mr Nick Sloan, Chief Executive Officer of WALGA, told the Committee that 'mandatory product stewardship, which fully covers the cost of collecting, transporting and processing tyres for recovery [is] essential to increase resource recovery and minimise illegal disposal.'⁹⁴

- 4.79 WALGA submitted that 'under a mandatory scheme model, TSA would be enabled to deliver key benefits' including:⁹⁵

- Addressing illegal dumping of tyres and empowering Local Governments to proactively manage illegally dumped tyres within their communities.
- Increasing reuse and recovery opportunities for regional/remote areas, keeping waste close to source of generation to limit transport and processing costs.

⁹¹ Mr James Fairweather, Chief Executive Officer, Tyrecycle, *Committee Hansard*, 1 May 2026, p. 16.

⁹² See, for example: WALGA, *Submission 5*, p. [3]; Outback Communities Authority, *Submission 10*, p. 2; Fleurieu Regional Waste Authority, *Submission 11*, p. [1]; The Parks, *Submission 23*, pp. 1–2; NSROC, *Submission 25*, pp. 2, 4; Eurobodalla Shire Council, *Submission 26*, p. [2]; Sunshine Coast Council, *Submission 30*, p. [1]; Swan Hill Rural City Council, *Submission 32*, p. [1]; NQROC, *Submission 34*, p. [3]; WSROC, *Submission 46*, p. 5; ISJO, *Submission 47*, p. 3; LGAQ, *Submission 49*, pp. 5, 6, 20; Lake Macquarie City Council, *Submission 54*, p. [1]; FNQROC, *Submission 55*, p. 1; MidCoast Council, *Submission 56*, pp. 2, 4; ALGA, *Submission 61*, pp. [3–4].

⁹³ Lake Macquarie City Council, *Submission 54*, p. [1].

⁹⁴ Mr Nick Sloan, Chief Executive Officer, WALGA, *Committee Hansard*, 23 April 2026, p. 25.

⁹⁵ WALGA, *Submission 5*, p. [3].

- Greater engagement with and support to Local Government sector to fully cover the cost of tyre collection, transport and recycling
- Greater focus on market development for tyre derived products.⁹⁶

4.80 Sunshine Coast Council submitted that a mandatory tyre stewardship scheme would help alleviate the financial, environmental and social burden of waste tyre management on local governments while creating greater opportunities to return recovered tyre materials to the economy. The Council also highlighted the potential for increased use of tyre-derived products in circular economy applications, including local road infrastructure, parks and gardens, and other end-use markets.⁹⁷

4.81 Similarly, Swan Hill Rural City Council suggested that an 'effective mandatory stewardship scheme would provide more certainty for industry to invest in the necessary infrastructure required to meet the current and future demands for end-of-life tyre management'.⁹⁸

This could see facilities being regionally located, lowering prices and making innovative reuse of tyre waste product a more viable option. These savings could help fund and support other opportunities, such as using crumb rubber in Council road construction sealing projects and reduce this cost restriction and provide an acknowledged and industry accepted alternate use for used tyres.⁹⁹

4.82 Dr Kenneth Parker, Chief Executive Officer of Shire of Wagin, cautioned that a mandatory scheme should not be implemented without sufficient recycling and processing capacity to manage the additional volume of tyres that would be directed into the system:

From our perspective, the product stewardship scheme is fine but the ultimate concern that we would have in Western Australia is the lack of availability of tyre recycling facilities. There are very few tyre recycling facilities, which would make the cost of actually recycling much higher than it should be. Our request of the federal government, prior to the introduction of a mandatory scheme, would be to ensure that the recycling industry is actually able to deliver on the demand that a mandatory scheme would introduce.¹⁰⁰

⁹⁶ WALGA, *Submission 5*, p. [3].

⁹⁷ Sunshine Coast Council, *Submission 30*, p. [1].

⁹⁸ Sunshine Coast Council, *Submission 30*, p. [1].

⁹⁹ Swan Hill Rural City Council, *Submission 32*, p. [2].

¹⁰⁰ Dr Kenneth Parker, Chief Executive Officer, Shire of Wagin, *Committee Hansard*, 3 June 2026, p. 10.

Reports and papers calling for a mandatory product stewardship scheme for tyres

- 4.83 TSA's submission included an alphabetical list of recent relevant reports and papers which discussed the need for a mandatory scheme, the limited effectiveness of the current voluntary scheme, or the need for strengthened regulation.¹⁰¹
- ACCC Determination (September 2024)
 - A mandatory or co-regulatory Scheme may deliver greater public benefits than the current voluntary Scheme.¹⁰²
 - CSIRO: National circular economy roadmap for plastics, glass, paper and tyres (January 2021)
 - The roadmap implies that voluntary arrangements are insufficient to achieve full recovery, especially for OTR tyres and non-metropolitan areas.
 - Calls for stronger national governance, which aligns with a mandatory stewardship approach to ensure all tyres are collected, processed and tracked.¹⁰³
 - CSIRO and Curtin University under the research program of the NESP Sustainable Communities and Waste Hub: Exploring global influences on the tyre industry: Chemicals of concern, microplastics and design – Literature review (July 2024)
 - Voluntary schemes are insufficient; a regulated nationwide stewardship scheme is recommended for consistency, compliance, and effective material recovery.¹⁰⁴
 - CSIRO for TSA: Exploring global influences on the tyre industry: Chemicals of concern, microplastics and design – Literature review (November 2024)
 - Highlights the need for strengthened national tyre stewardship aligned with international trends.
 - Suggests that voluntary measures may be insufficient; consistent national standards and regulated end-of-life management are required.¹⁰⁵
 - Federal Chamber of Automotive Industries and MTAA: The outlook for end-of-life vehicles in Australia (August 2024)
 - Voluntary schemes are inadequate due to fragmented industry, lack of tracking, and poor non-metal recovery.
 - Strong case for a co-regulated, nationally consistent scheme with enforceable standards.

¹⁰¹ TSA, *Submission 16*, p. 71.

¹⁰² TSA, *Submission 16*, pp. 71–72.

¹⁰³ TSA, *Submission 16*, pp. 71–72.

¹⁰⁴ TSA, *Submission 16*, pp. 71–72.

¹⁰⁵ TSA, *Submission 16*, pp. 71–72.

- Mandatory elements (CoD, accreditation, national rules) are positioned as essential to reduce landfill, prevent waste leakage, and improve recycling of materials like tyres.¹⁰⁶
- Government of Western Australia, Department of Water and Environmental Regulation: National End-of-Life Tyres Options project – Project report (August 2025)
 - The project findings strongly support moving towards a mandatory, broad-based product stewardship scheme for end-of-life tyres in Australia. International experience shows voluntary schemes often leave gaps in participation, allow free-riding, and result in lost recovery value, with costs falling on communities and governments. A mandatory scheme could address these issues by ensuring producers and importers bear the costs, incentivising higher-order recovery, and reducing rogue trading.¹⁰⁷
- House of Representatives Standing Committee on Industry, Innovation, Science and Resources: From Rubbish to Resources: Building a Circular Economy (December 2020)
 - The report does not explicitly mandate tyre regulation but establishes a clear policy rationale for mandatory stewardship where voluntary schemes underperform.¹⁰⁸
- Product Stewardship Centre of Excellence: Investing in Intelligent Regulation - The economic benefits to government of regulated product stewardship – White paper (December 2024)
 - Mandatory schemes address the “recovery without reuse” problem seen with tyres and other products. Combined with supporting policies, a mandatory scheme can reduce waste, create jobs, and advance Australia’s circular economy.¹⁰⁹
- Productivity Commission: Australia’s Circular Economy: Unlocking the Opportunities (Final report) (January 2026)
 - Mandatory schemes are justified for high-risk/high-value waste streams; fit-for-purpose regulation enables innovation and market growth.¹¹⁰
- Senate Standing Committee on Environment and Communications: No time to waste (Waste reduction and recycling policies) (April 2025)
 - The Senate inquiry signals a shift toward mandating a tyre stewardship scheme, due to low industry participation, poor recovery rates, and environmental risks. The committee acknowledges the current voluntary TPSS is failing to deliver circular economy outcomes.¹¹¹
- TSA: Tyre Supply Chain Analysis: Opportunities to grow Australia’s circular economy for tyres (November 2025)

¹⁰⁶ TSA, *Submission 16*, pp. 71–72.

¹⁰⁷ TSA, *Submission 16*, pp. 71–72.

¹⁰⁸ TSA, *Submission 16*, pp. 71–72.

¹⁰⁹ TSA, *Submission 16*, pp. 71–72.

¹¹⁰ TSA, *Submission 16*, pp. 71–72.

¹¹¹ TSA, *Submission 16*, pp. 71–72.

- The report strongly advocates for a national or jurisdictional mandatory participation product stewardship scheme for tyres, finding it to be the most effective and comprehensive intervention to address Australia's tyre circular economy constraints. While existing interventions (including the voluntary Scheme) have the capability to improve outcomes, they are inconsistent across jurisdictions, often unenforced, and focused largely on end-of-life rather than the full supply chain.¹¹²

Cost-benefit analysis

- 4.84 Ms Lina Goodman, Chief Executive Officer of TSA, proposed that the Australian Government should fund a cost-benefit analysis to assess the suitability of a mandatory product stewardship scheme for tyres.¹¹³

The submissions to this inquiry are, on the fundamentals, in agreement. Whatever our particular vantage point along the supply chain—whether we import tyres, fit them, collect them, recycle them or turn them into something new—we generally share a common view that Australia stands to gain from an industry-wide approach to change, and that change can only occur if the federal government steps in to support a cost-benefit analysis.

[...]

...a cost-benefit analysis is the logical next step, the step that moves this from an important national conversation into a concrete costed pathway. Australians deserve a system that matches our ambition.¹¹⁴

Tyrewise: New Zealand's product stewardship scheme for tyres

- 4.85 Several submissions and witnesses pointed to New Zealand's 'Tyrewise' scheme as an example of an effective mandatory product stewardship scheme for tyres.¹¹⁵
- 4.86 Tyrewise launched in 2024 to prevent New Zealand's end-of-life tyres from being landfilled, stockpiled or illegally dumped.¹¹⁶ The scheme is funded by a Tyre Stewardship Fee charged on all new, regulated tyres sold in New Zealand.¹¹⁷ The fee is collected by the Ministry for the Environment and passed on to Auto Stewardship New Zealand to operate the scheme.¹¹⁸

¹¹² TSA, *Submission 16*, pp. 71–72.

¹¹³ Ms Lina Goodman, Chief Executive Officer, TSA, *Committee Hansard*, 1 May 2026, pp. 33–34.

¹¹⁴ Ms Lina Goodman, Chief Executive Officer, TSA, *Committee Hansard*, 1 May 2026, pp. 33–34.

¹¹⁵ See, for example: MTAA, *Submission 18*, p. 4; MTA Group, *Submission 20*, p. 4; NSROC, *Submission 25*, p. 4.

¹¹⁶ 3R Group, *Submission 24*, p. [2].

¹¹⁷ The Parks, *Submission 23*, p. 3.

¹¹⁸ 3R Group, *Submission 24*, p. [2].

- 4.87 The Committee received a submission from 3R Group, the organisation which designed and is responsible for managing the Tyrewise scheme. 3R Group said Tyrewise shares a 'productive relationship' with TSA and noted:

Tyrewise and TSA [Tyre Stewardship Australia] share similarities in terms of the tyre market with many of the same brands, outputs for recycled material, and widespread use of tyres across society (private and commercial). While Australia's far larger geographic size creates transport network challenges for a nation-wide scheme, in New Zealand the isolated nature of many communities presents similar challenges.¹¹⁹

- 4.88 In November 2025, Tyrewise and TSA announced the Trans-Tasman Tyre Recycling Alliance.¹²⁰ Mrs Adele Rose, Chief Executive of 3R Group, told the Committee the alliance is:

...in its infancy at the moment, but the goal behind it is that we have many shared brand owners in both countries and that we've also got processors and manufacturers that work across both countries, so it made sense for us to combine our energy around some of the market development research and assistance in both countries through an alliance.¹²¹

- 4.89 3R Group reported that New Zealand's tyre industry considers a regulated scheme essential to ensuring a level playing field, as it would discourage free-riding and non-participation, establish a consistent framework for competition, prevent misconduct, improve data collection, support better outcomes for recovered materials through effective oversight and enforcement, provide greater certainty for investment in research and development, encourage domestic market development, and foster positive industry sentiment.¹²²

- 4.90 In its submission, MTAA reflected on the early achievements of the Tyrewise scheme:

Early implementation of Tyrewise has demonstrated strong collection performance and broad participation across the tyre supply chain. The scheme has established a nationwide network of registered collection points, transporters and processors, providing free or low-cost disposal options for businesses and the public. By removing the reliance on voluntary participation, Tyrewise has significantly reduced free-riding and improved transparency and accountability across the system.¹²³

- 4.91 MTA Group suggested a mandatory, co-regulated scheme in Australia should mirror New Zealand's Tyrewise model.¹²⁴ Similarly, NSROC recommended the adoption of a

¹¹⁹ 3R Group, *Submission 24*, p. [3].

¹²⁰ 3R Group, *Submission 24*, p. [3].

¹²¹ Mrs Adele Rose, Chief Executive, 3R Group, *Committee Hansard*, 1 May 2026, p. 30.

¹²² 3R Group, *Submission 24*, pp. [3–5].

¹²³ MTAA, *Submission 18*, p. 4.

¹²⁴ MTA Group, *Submission 20*, p. 4.

mandatory tyre product stewardship scheme based on New Zealand's Tyrewise model, under which a levy is collected at the point of import. NSROC explained that pre-paying recycling costs into a central fund removes disposal fees at recycling facilities, thereby eliminating the financial incentive for collectors to avoid legitimate recyclers and engage in illegal dumping.¹²⁵

Tyrewise Annual Report 2025

- 4.92 During its initial months of operation between September and December 2024, Tyrewise collected 21,100 tonnes of tyres in total, far exceeding the target of 8,000 tonnes. The scheme also surpassed its initial targets for tyres processed, with over 7,700 tonnes used in tyre-derived fuel and products, exceeding the target of 5,000 tonnes.¹²⁶
- 4.93 In the Tyrewise Annual Report 2025, it is reported that 36,801 tonnes of tyres were collected, equivalent to 4.6 million passenger car tyres.¹²⁷ However, the material flow diagram includes figures for processors, transport hubs, export hubs and end-use pathways that are not clearly identified as either intermediate or final destinations. The report does not provide a complete mass-balance showing how collected material is distributed across each pathway, making it difficult to assess overall system performance and resource recovery outcomes.¹²⁸

Opposition to a mandatory product stewardship scheme for tyres

- 4.94 Some stakeholders opposed a mandatory product stewardship scheme for tyres and argued it would create an unnecessary burden for businesses across the Australian tyre industry.¹²⁹
- 4.95 For example, the Australian Tyre Recyclers Association (ATRA) argued that 'mandatory schemes risk unnecessary disruption and are not directly applicable to an Australian context':¹³⁰

ATRA supports stewardship models where brand owners contribute financially to responsible end-of-life management, and we're assessing options to strengthen this enforcement of existing state and federal regulations. ATRA, however, has been opposed to an anticompetitive and inflationary manufacturer led centralised stewardship scheme that would control collections and control who can collect,

¹²⁵ NSROC, *Submission 25*, p. 4.

¹²⁶ Tyrewise, 'Milestone 1: New Zealand's first tyre recycling scheme exceeds expectations', *Media Release*, 11 March 2025.

¹²⁷ Tyrewise, *Annual Report 2025*, November 2025, p. 5.

¹²⁸ Tyrewise, *Annual Report 2025*, November 2025, p. 5.

¹²⁹ See, for example: Patco Tyres, *Submission 12*, pp. 3–4; Elan Energy Matrix, *Submission 15*, p. [1]; Australian Tyre Recyclers Association (ATRA), *Submission 42*, p. [16]; TFI (Tradefaire International), *Submission 50*, p. 8; Mr Ian Bellinge, Managing Director, Elan Energy Matrix, *Committee Hansard*, 23 April 2026, p. 8.

¹³⁰ ATRA, *Submission 42*, p. [16].

where they can collect and the charging that they can apply, as we see in many overseas models. ATRA supports the Australian Council of Recycling's advocacy to correct stewardship policy settings that marginalise recyclers. Recyclers must be central to the design, governance and delivery of all stewardship schemes.¹³¹

- 4.96 Mr Ian Bellinge, Managing Director of Elan Energy Matrix, was 'strongly opposed' to a mandatory scheme and explained that:¹³²

...mandatory product stewardship will threaten the viability of many small tyre recycling companies, including our company. If companies like ours go out of business, only the very biggest companies are likely to survive, and, if this happens, the percentage of waste tyres recovered will decrease. In turn, this will result in worse outcomes for the environment, and innovation in tyre recycling will nosedive.¹³³

- 4.97 Big Tyre expressed concerns that a mandatory scheme would 'place a further administrative and financial burden on companies that are already doing it tough with Australia's extreme costs of labour, electricity, and rent.'¹³⁴

- 4.98 Tradefaire International raised similar concerns and proposed that a mandatory scheme would 'add another level of rigidity and bureaucracy that may stifle other avenues of disposal...'¹³⁵

- 4.99 Patco Tyres argued that a mandatory scheme would largely duplicate existing processes and increase operating costs, compliance requirements and administrative complexity for businesses that are already meeting their obligations.'¹³⁶ It also highlighted the advantages of a voluntary scheme, which ensures that:

...businesses retain the ability to engage constructively in policy development, express independent views, and support practical, industry led improvements without being forced to finance initiatives that conflict with their own operational realities or sustainability.¹³⁷

Committee comment

- 4.100 The Committee notes that the *Recycling and Waste Reduction Act 2020* provides the Australian Government with oversight mechanisms for accredited voluntary product stewardship arrangements, including the ability for the Department of Climate Change, Energy, the Environment and Water (DCCEEW) to monitor compliance with accreditation requirements and undertake audits where necessary. The Committee

¹³¹ Mr Robert Kelman, President, ATRA, *Committee Hansard*, 11 March 2026, p. 1.

¹³² Mr Ian Bellinge, Managing Director, Elan Energy Matrix, *Committee Hansard*, 23 April 2026, p. 8.

¹³³ Mr Ian Bellinge, Managing Director, Elan Energy Matrix, *Committee Hansard*, 23 April 2026, p. 8.

¹³⁴ Big Tyre, *Submission 2*, p. [3].

¹³⁵ TFI (Tradefaire International), *Submission 50*, p. 8.

¹³⁶ Patco Tyres, *Submission 12*, pp. 3–4.

¹³⁷ Patco Tyres, *Submission 12*, pp. 3–4.

further notes that the Tyre Product Stewardship Scheme, administered by Tyre Stewardship Australia, remains an Australian Government-accredited voluntary arrangement under the Act.

- 4.101 The Committee is concerned that, despite the accreditation framework having been in place since the commencement of the *Recycling and Waste Reduction Act 2020* and its associated Rules in December 2020, no audit of the Tyre Product Stewardship Scheme has been undertaken by DCCEE.
- 4.102 The absence of an audit over a period of approximately six years raises questions as to whether existing oversight arrangements are sufficiently robust and whether Parliament and the public can be assured that the scheme continues to satisfy accreditation requirements and deliver intended environmental outcomes.
- 4.103 The Committee considers that an audit would provide an opportunity to assess the effectiveness, governance, financial management and performance of the Tyre Product Stewardship Scheme, including its contribution to tyre recovery, recycling and market development outcomes. An audit would also assist in identifying any areas for improvement and help ensure that accredited voluntary product stewardship arrangements remain accountable and fit-for-purpose.

Recommendation 5

- 4.104 The Committee recommends the Department of Climate Change, Energy, the Environment and Water to undertake an independent audit of the Tyre Product Stewardship Scheme administered by Tyre Stewardship Australia, and table the findings publicly.**
- 4.105 The Committee notes that evidence received throughout the inquiry overwhelmingly supported the establishment of a mandatory national product stewardship scheme for tyres. Stakeholders from across industry, local government, and the waste and resource recovery sector consistently raised concerns regarding the limitations of the current voluntary arrangements and the ongoing challenges associated with end-of-life management for tyres.
- 4.106 The Committee acknowledges the important role played by the existing voluntary tyre product stewardship scheme in improving industry awareness and supporting tyre recovery efforts. However, the evidence indicates that prospects for further progress has stalled, and voluntary participation has resulted in uneven outcomes across the supply chain, with a significant proportion of tyres remaining outside existing stewardship arrangements. The Committee is concerned that this has created an unlevel playing field, allowing non-participating businesses to avoid contributing to the costs of responsible tyre management while benefiting from the efforts of participating organisations.
- 4.107 The Committee notes that numerous government reviews, independent reports and industry studies have identified similar shortcomings and have concluded that stronger regulatory intervention is required to improve tyre stewardship outcomes.

Evidence to the inquiry demonstrated that the current framework has been unable to consistently achieve national recovery targets, provide adequate market certainty for investment, or ensure comprehensive lifecycle responsibility for tyres.

- 4.108 The Committee considers that a strengthened national tyre stewardship framework has the potential to improve accountability across the tyre supply chain, recovery and recycling rates, reduce inappropriate stockpiling and illegal dumping, and support the development of domestic markets for recovered tyre materials. A more robust stewardship framework could also provide greater certainty for industry and help ensure that participants contribute equitably to the costs of managing end-of-life tyres.
- 4.109 On the previous page, the Committee has recommended that the Department of Climate Change, Energy, the Environment and Water undertake an independent audit of the current Tyre Product Stewardship Scheme. The Committee considers that the findings of this audit should inform future decisions regarding the structure and operation of Australia's tyre stewardship arrangements. Pending the outcome of the audit, the Committee encourages the Australian Government to take steps to strengthen the national tyre stewardship framework, including consideration of a transition to a mandatory Tyre Product Stewardship Scheme, if existing arrangements are found to be insufficient to achieve improved recovery, recycling and stewardship outcomes.
- 4.110 Pending the outcome of the independent audit, the Committee is of the view that any consideration of a mandatory Tyre Product Stewardship Scheme should be carefully designed to address the concerns raised by stakeholders who opposed such an approach. In particular, the Committee is mindful of the need to minimise unnecessary administrative costs and regulatory burdens on businesses that are already demonstrating responsible stewardship practices.
- 4.111 The Committee further considers that a nationally consistent approach is necessary to avoid regulatory fragmentation between jurisdictions and to deliver a clear, effective framework for tyre stewardship across Australia. In the Committee's view, the Australian Government is best placed to lead the development and implementation of such a scheme in consultation with state and territory and local governments, industry participants, recyclers, environmental organisations and other relevant stakeholders.
- 4.112 Additionally, the Committee considers that, despite our geographical, demographic and environmental differences, New Zealand's mandatory Tyrewise scheme provides valuable lessons for Australia. In particular, the scheme has demonstrated an effective approach to addressing the participation and free-rider issues that have continued to limit the effectiveness of Australia's current tyre product stewardship arrangements. The Committee notes the existing collaboration between Tyre Stewardship Australia and Tyrewise through the Trans-Tasman Tyre Recycling Alliance and encourages both countries to continue sharing knowledge and best practice to improve end-of-life tyre management and resource recovery outcomes. Should Australia establish a mandatory national tyre product stewardship scheme, the Committee considers that ongoing trans-Tasman cooperation would support the

scheme's effectiveness and contribute to better environmental and circular economy outcomes.

Recommendation 6

- 4.113 The Committee recommends that, pending the outcome of the independent audit of the Tyre Product Stewardship Scheme, the Australian Government take steps to strengthen Australia's tyre stewardship framework, including consideration of a transition to a mandatory national Tyre Product Stewardship Scheme under the *Recycling and Waste Reduction Act 2020*. The strengthened framework should require tyre manufacturers, importers, retailers, recyclers and other relevant stakeholders to contribute to and participate in the responsible management of tyres throughout its product lifecycle.**
- 4.114 Since 2014, Tyre Stewardship Australia has played a significant role in implementing the Tyre Product Stewardship Scheme, including by supporting research, market development and initiatives aimed at improving end-of-life tyre management. The Committee acknowledges these contributions.
- 4.115 However, the Committee also notes concerns raised by some stakeholders regarding the administration of the Tyre Product Stewardship Scheme and the nature of Tyre Stewardship Australia's relationship with parts of the tyre recycling sector. The Committee considers that these matters should be examined through the recommended independent audit and considered in the design of any future stewardship arrangements.
- 4.116 Pending the outcome of the independent audit, the Committee considers that there is merit in strengthening Australia's tyre stewardship framework, including consideration of a transition to a mandatory product stewardship scheme if existing arrangements are found to be insufficient. The Committee considers that any future scheme should be accompanied by robust governance arrangements that promote transparency, accountability and industry confidence. Such arrangements should effectively represent the interests of participants across the tyre supply chain and be responsive to the needs of stakeholders.
- 4.117 The Committee agrees with evidence provided by the Motor Trades Association of Australia that, if a mandatory tyre product stewardship scheme is established, the scheme operator should be appointed through an open, transparent and competitive tender process. The Committee considers that such an approach would help ensure the selected operator possesses the capability, expertise and industry support necessary to effectively administer the scheme, while also delivering value for money and maintaining accountability to scheme participants and the Australian Government.

Recommendation 7

- 4.118 The Committee recommends that, should a mandatory national tyre product stewardship scheme be established, the Australian Government appoint the**

scheme operator through an open, transparent and competitive tender process.



5. Local government

- 5.1 Local governments play a central role in the management of waste, including end-of-life tyres.¹ Approximately one third of submissions to the inquiry were made by local government representatives.
- 5.2 This chapter discusses evidence received throughout the inquiry from local governments about the initiatives led by various councils, including strategic waste planning, resource recovery and the use of tyre-derived products.
- 5.3 This chapter also explores the challenges facing local governments, including the financial burden on councils, infrastructure constraints, the impacts of stockpiling and illegal dumping, enforcement challenges and the environmental and fire risks posed by end-of-life tyres.

Council initiatives and outcomes

- 5.4 Local governments play a crucial role in end-of-life tyre management in many parts of the country. As explained by MidCoast Council, local governments play a frontline role through:
- Operation of council-owned waste facilities;
 - Acceptance of end-of-life tyres from residents, small businesses and illegal dumping cleanups;
 - Compliance with environmental protection and fire safety requirements; and
 - Funding and managing clean-ups of illegally dumped tyres on public land.²

Waste management

- 5.5 Local governments manage end-of life tyres as part of their broader waste management responsibilities. As the Australian Local Government Association (ALGA) noted, 'Local governments must grapple with, and pay for, the safe management of an ever-expanding list and volume of materials entering the waste and recycling streams.'³

¹ Australian Local Government Association (ALGA), *Submission 59*, p. 1.

² MidCoast Council, *Submission 56*, p. [1].

³ ALGA, *Submission 59*, p. 1.

- 5.6 Some councils have developed plans and initiatives to improve waste management and resource recovery. For example, the Local Government Association of Queensland (LGAQ) developed a Six-Point Plan to reduce Queensland's waste footprint:
- 1 Identify tailored local solutions, as waste management and recycling needs vary across the state,
 - 2 Support the big facilities councils need by leading an audit of gaps, and clear investment plan that matches recycling targets,
 - 3 Invest in education campaigns that are impactful and ongoing to lead a change in behaviour and boost recycling,
 - 4 Incentivise the expansion of end markets,
 - 5 Hold producers to account by implementing Extended Producer Responsibility (EPR) for problem waste streams such as tyres, and
 - 6 Reduce red tape.⁴
- 5.7 LGAQ also advised that, with support from state government funding, 11 Regional Waste Management Plans (RWMPs) were developed across Queensland:
- The key aim of each RWMP was to align relevant funding streams and waste management priorities of these regions ensuring the approaches taken reflect the unique challenges and opportunities respective of the region.⁵
- 5.8 An example of a waste management initiative is Hume City Council's 'Keep Hume Clean' campaign, announced in March 2023. The campaign applies behaviour change strategies to educate residents about the responsible disposal of litter and waste and encourages improved waste management practices.⁶ As part of the campaign, the Council hosts 'Hume Clean Days' four times a year, allowing residents to dispose of waste items, including tyres, free of charge at the Council's Resource Recovery Centres. Hume City Council also introduced a new Waste Response Team to address illegal dumping waste in areas experiencing the highest levels of unlawful waste disposal.⁷
- 5.9 Councils continue to identify opportunities to improve tyre recovery and recycling outcomes. For example, the Outback Communities Authority's 'Strategic Blueprint for Outback SA', released in November 2025, identified the high costs associated with tyre collection, recycling and disposal. The Blueprint included a commitment to work with relevant businesses to develop a cost-neutral model for waste tyre management.⁸

⁴ Local Government Association of Queensland (LGAQ), *Submission 49*, p. 19.

⁵ LGAQ, *Submission 49*, p. 22.

⁶ Hume City Council, *Submission 67*, p. 9.

⁷ Hume City Council, *Submission 67*, p. 9.

⁸ Outback Communities Authority, *Submission 10*, p. 2.

End-of-life tyre initiatives & crumb rubber

- 5.10 Councils are also at the forefront of initiatives specific to end-of-life tyres, supporting tyre collection, recycling and the development of local processing capacity.⁹
- 5.11 Sunshine Coast Council highlighted a tyre recycling partnership in which tyres collected by the council are processed by S & J Australian Scrap Tyre Disposals and subsequently supplied to Chip Tyre¹⁰ for use as feedstock. The initiative diverts approximately 4,800 tyres, equivalent to around 50 tonnes of material, from landfill annually.¹¹
- 5.12 Illawarra Shoalhaven Joint Organisation (ISJO) highlighted the role of tyre crumb processing infrastructure located at Shoalhaven City Council's West Nowra depot, which 'provides local processing capacity, reduces transport distances, and supports trials of recycled rubber products closer to the source.'¹² Ms Yvette Barrs, ISJO's Executive Manager for Environment Waste and Sustainability, told the Committee:
- Shoalhaven City Council's West Nowra tyre crumb processing facility demonstrates what regional capability can look like. Facilities like this reduce transport distances, improve legitimate recovery pathways, support regional jobs and help create local circular economy supply chains.¹³
- 5.13 Local governments also identified several established and emerging applications for tyre-derived products, such as soft fall playground surfaces, synthetic sports field infill and civil works.¹⁴

Crumb rubber in road construction

- 5.14 Road construction was identified by several local government representatives as a high-value use for end-of-life tyres.¹⁵ Applications include crumb rubber modified concrete and bitumen, crumb-rubber modified binders, sprayed seals and asphalt mix.¹⁶
- 5.15 One notable example is the Southern Sydney Regional Organisation of Councils' (SSROC) 'Procure Recycled: Paving the Way' initiative, launched in 2023. The

⁹ See, for example: Sunshine Coast Council, *Submission 30*, p. [2]; Southern Sydney Regional Organisation of Councils (SSROC), *Submission 41*, p. 2; Illawarra Shoalhaven Joint Organisation (ISJO), *Submission 47*, p. 2.

¹⁰ Note: Chip Tyre is no longer in operation as of mid-2026.

¹¹ Sunshine Coast Council, *Submission 30*, p. [2].

¹² ISJO, *Submission 47*, p. 2.

¹³ Ms Yvette Barrs, Executive Manager, Environment Waste and Sustainability, ISJO, *Committee Hansard*, Canberra, 27 May 2026, p. 1.

¹⁴ See, for example: The Parks, *Submission 23*, p. 3; Northern Sydney Regional Organisation of Councils (NSROC), *Submission 25*, p. 3; Remote Area Planning and Development Board (RAPAD), *Submission 28*, p. 5; Western Sydney Regional Organisation of Councils (WSROC), *Submission 46*, p. 3; ISJO, *Submission 47*, p. 2; Lake Macquarie City Council, *Submission 54*, p. [1].

¹⁵ See, for example: RAPAD, *Submission 28*, p. 2; ISJO, *Submission 47*, p. 2; LGAQ, *Submission 49*, p. 16.

¹⁶ See, for example: The Parks, *Submission 23*, p. 3; RAPAD, *Submission 28*, p. 4; SSROC, *Submission 41*, p. 2; LGAQ, *Submission 49*, p. 16.

project involved 12 Sydney councils resurfacing sections of road with recycled rubber-modified asphalt.¹⁷ According to Tyre Stewardship Australia (TSA), the initiative delivered strong results, showing 'promising outcomes, with clear performance benefits reported compared to conventional asphalt.'¹⁸ The project used 28,500 kilograms of crumb rubber and recycled 5,500 tyres.¹⁹

- 5.16 At a public hearing, Ms Helen Sloan from SSROC highlighted the outcomes of the initiative:

The SSROC initiative demonstrated exceptional collaborative efforts of councils, industry associations, asphalt contractors, bitumen suppliers, standards and engineering organisations and product stewardship organisations. I'm pleased to say that it was recognised in the recent 2026 Waste Conference with the award for outstanding collaborative project. But the point here is that every one of those stakeholders played a crucial role in achieving the end results. SSROC's Paving the Way contract enables our member councils to procure a range of different pavement products, including asphalt that's been modified with rubber recovered from end-of-life tyres.²⁰

- 5.17 Following this initiative, SSROC and the Royal Melbourne Institute of Technology released the report *Lifecycle Assessment and Potential Environmental Benefits of Crumb Rubber Asphalt using Field Data* in 2024. The report found recycled rubber for road construction extended pavement service life, reduced demand for raw materials and lowered environmental impacts.²¹

- 5.18 Successful applications of crumb rubber in road construction have also been demonstrated in remote Australia. The Remote Area Planning and Development Board (RAPAD), based in Central West Queensland, reported positive outcomes from the use of crumb rubber sprayed seals on roads exposed to heavy vehicle traffic, extreme heat and temperature fluctuations, and long maintenance intervals.²²

- 5.19 Other examples of council-led projects include:

- Swan Hill Rural City Council's road projects at Perrin Street (Robinvale), Swan Hill Landfill Internal Access Road and Milloo Street boat ramp.²³
- Burdekin Shire Council's \$2 million commitment to use crumb tyre products in its bitumen seal program.²⁴
- City of Greater Geelong's athletics track upgrade, which used more than 50 tonnes of recycled crumbed rubber.²⁵

¹⁷ SSROC, *Submission 41*, p. 2.

¹⁸ Tyre Stewardship Australia (TSA), *Submission 16*, p. 44.

¹⁹ TSA, *Submission 16*, p. 44.

²⁰ Ms Helen Sloan, Chief Executive Officer, SSROC, *Committee Hansard*, 27 May 2026, p. 9.

²¹ SSROC, *Submission 41*, p. 5.

²² RAPAD, *Submission 28*, p. 4.

²³ Swan Hill Rural City Council, *Submission 32*, p. [2].

²⁴ North Queensland Regional Organisation of Councils (NQROC), *Submission 34*, p. [1].

²⁵ ALGA, *Submission 59*, p. 3.

- 5.20 In 2024, Sunshine Coast Council's 'Smarter Roads' demonstration project tested OTR tyre-derived crumb rubber in road construction and repairs. The project demonstrated that OTR tyre-derived crumb rubber could successfully replace traditional crumb rubber in asphalt mixes and bitumen blend while providing valuable performance and durability data.²⁶
- 5.21 Crumb rubber is discussed in more detail in Chapter 6.

Challenges for local councils

- 5.22 According to TSA, in 2022–23 local councils spent an estimated \$6.5 million to remove around 300,000 dumped tyres at an average cost of \$22 per tyre.²⁷
- 5.23 Local governments told the inquiry that managing end-of-life tyres imposed significant burdens on councils, including the costs of the collection, storage, transport and disposal of tyres, as well as the clean-up of stockpiles and illegally dumped tyres.²⁸
- 5.24 These issues are particularly pronounced in rural, regional and remote communities, with many submissions highlighting how these communities are disadvantaged by limited local collection and recycling opportunities, higher costs to transport tyres to processors, seasonal access constraints and limited resources to monitor and manage illegal dumping of tyres across large geographic areas.²⁹

Disposal, transport and processing costs

- 5.25 Several submissions raised concerns that the costs associated with end-of-life tyres are borne disproportionately by local governments.³⁰
- 5.26 For example, the Fleurieu Regional Waste Authority described tyre management as 'an ongoing and costly challenge' and submitted that 'At present, the costs and

²⁶ TSA, *Submission 16*, p. 44.

²⁷ TSA, *Stockpiling and illegal dumping: cost to local governments and others*, 5 April 2024, p. 31.

²⁸ See, for example: Outback Communities Authority, *Submission 10*, p. 1; Fleurieu Regional Waste Authority, *Submission 11*, p. [1]; The Parks, *Submission 23*, p. [1]; Eurobodalla Shire Council, *Submission 26*, p. [1]; TSA, *Submission 30*, p. 30; Swan Hill Rural City Council, *Submission 32*, p. [1]; WSROC, *Submission 46*, p. 2; MidCoast Council, *Submission 56*, p. [1]; ALGA, *Submission 59*, p. 1.

²⁹ See, for example: WA Local Government Association (WALGA), *Submission 5*, p. [2]; RAPAD, *Submission 28*, p. 1; Swan Hill Rural City Council, *Submission 32*, p. [1]; GACWheels Australia, *Submission 33*, p. 4; Cleanaway, *Submission 37*, p. 4; Waste Management Resource Recovery Association of Australia, *Submission 45*, p. [3]; LGAQ, *Submission 49*, p. 5; Porous Lane, *Submission 51*, p. 3; Far North Queensland Regional Organisation of Councils (FNQROC), *Submission 55*, p. 1; MidCoast Council, *Submission 56*, p. 1; ALGA, *Submission 59*, p. 1; Australian Automotive Aftermarket Association, *Submission 60*, p. [2]; Minerals Council of Australia, *Submission 64*, p. 1.

³⁰ See, for example: Fleurieu Regional Waste Authority, *Submission 11*, p. [1]; The Parks, *Submission 23*, p. [1]; NSROC, *Submission 25*, p. 2; RAPAD, *Submission 28*, p. [1]; ISJO, *Submission 47*, p. 3; FNQROC, *Submission 55*, p. 1.

impacts of managing End-of-Life Tyres (EOLT) fall disproportionately on local communities.³¹

- 5.27 Similarly, Sunshine Coast Council observed that ‘Councils bear a disproportionate share of the costs associated with managing end-of-life tyres’ and that ‘these costs divert resources from essential community services and infrastructure projects.’³²
- 5.28 LGAQ noted how end-of-life tyres are a costly burden under a system that defaults responsibility to local government without adequate cost-recovery mechanisms.³³
- 5.29 Recovering the costs associated with tyre management was identified by LGAQ as a particular challenge when tyres are abandoned or illegally dumped.³⁴ MidCoast Council similarly noted that councils have limited capacity to recover the full cost of tyre management where no responsible party can be identified.³⁵
- 5.30 The Parks advised that disposal costs can range between \$11 and \$25 per tyre,³⁶ while the Shire of Serpentine Jarrahdale indicated that disposal charges at approved facilities can reach \$65 per tyre.³⁷
- 5.31 Sunshine Coast Council advised that its resource recovery facilities collect approximately \$47,000 annually through tyre disposal charges but noted that ‘The actual operational cost of managing the receipt and further oncost relating to managing these tyres as a business is much higher.’³⁸
- 5.32 Similarly, LGAQ explained how gate fees for disposal charged by some councils only partially cover the cost of tyre recovery due to the significant cost of handling, storage and transportation.³⁹
- 5.33 Several submissions highlighted transport costs as a significant barrier to effective tyre recovery and recycling.⁴⁰ For example, ALGA stated that:

Many councils must move tyres over extremely long distances to reach a processing facility, with some travelling hundreds of kilometres in a single direction. These transport costs often exceed the value of the tyre-derived material and make lawful disposal financially difficult for both councils and generators.⁴¹

³¹ Fleurieu Regional Waste Authority, *Submission 11*, p. [1].

³² Sunshine Coast Council, *Submission 30*, p. [1].

³³ LGAQ, *Submission 49*, p. 11.

³⁴ LGAQ, *Submission 49*, p. 14.

³⁵ MidCoast Council, *Submission 56*, p. [1].

³⁶ The Parks, *Submission 23*, p. 5.

³⁷ Shire of Serpentine Jarrahdale, *Submission 6*, p. 2.

³⁸ Sunshine Coast Council, *Submission 30*, p. [2].

³⁹ LGAQ, *Submission 49*, p. 11.

⁴⁰ See, for example: WALGA, *Submission 5*, p. [2]; TSA, *Submission 16*, p. 29; Eurobodalla Shire Council, *Submission 26*, p. [2]; RAPAD, *Submission 28*, p. 2; Swan Hill Rural City Council, *Submission 32*, p. [1]; LGAQ, *Submission 49*, p. 11; FNQROC, *Submission 55*, p. 3.

⁴¹ ALGA, *Submission 59*, pp. 1–2.

- 5.34 Similar challenges were identified by Swan Hill Rural City Council, which noted that all end-of-life tyres collected through its resource recovery centres must be transported off-site for processing, creating 'additional cost of labour hire, transport and contract additions for Council.'⁴²
- 5.35 The scale of transport costs was highlighted by the North Queensland Regional Organisation of Councils (NQROC), which reported that transporting tyres from regional areas to processing facilities can cost up to \$1,000 per tonne.⁴³
- 5.36 LGAQ observed how councils are being required to stockpile tyres to 'ensure sufficient tonnages before it is then able to be transported long distances at a significant cost.'⁴⁴
- 5.37 Similar concerns were raised by the Far North Queensland Regional Organisation of Councils (FNQROC), where approximately 3,340 tonnes of tyres generated annually are transported to Southeast Queensland for processing at freight costs of around \$400 per tonne. FNQROC observed that the lack of processing facilities in the region contributes to 'high transport costs, limited competition, and constrained access for remote councils.'⁴⁵

Lack of local and regional processing infrastructure

- 5.38 In its submission to the inquiry, the Department of Climate Change, Energy, the Environment and Water stated that it administers the Recycling Modernisation Fund (RMF). The RMF currently supports 14 tyre recycling facilities in urban, regional and remote locations across Australia.⁴⁶
- 5.39 However, many submissions suggested that some of the costs faced by councils stem from a lack of local and regional processing infrastructure.⁴⁷
- 5.40 Shire of Wagin submitted that in Western Australia, accredited tyre recyclers were located almost exclusively in Perth,⁴⁸ while submitters from Far North Queensland, regional NSW and remote South Australia reported limited access to local processing facilities.⁴⁹
- 5.41 Fleurieu Regional Waste Authority suggested that additional investment is needed to expand processing capacity and develop new recycling pathways:

⁴² Swan Hill Rural City Council, *Submission 32*, p. [1].

⁴³ NQROC, *Submission 34*, p. [2].

⁴⁴ LGAQ, *Submission 49*, p. 20.

⁴⁵ FNQROC, *Submission 55*, p. 3.

⁴⁶ Department of Climate Change, Energy, the Environment and Water, *Submission 7*, p. 6.

⁴⁷ See, for example: TSA, *Submission 16*, p. 60; Eurobodalla Shire Council, *Submission 26*, p. [2]; RAPAD, *Submission 28*, p. [1]; FNQROC, *Submission 55*, p. 3.

⁴⁸ Shire of Wagin, *Submission 4*, p. [1].

⁴⁹ See, for example: Eurobodalla Shire Council, *Submission 26*, p. 2; RAPAD, *Submission 28*, p. 1; FNQROC, *Submission 55*, p. 3.

[...] further investment is urgently needed to support innovation and expand processing capacity within the sector. While our councils actively reuse tyre products where possible, such as crumbed rubber in road resurfacing, playground surfacing, and gym flooring, greater innovation is needed to unlock new recycling pathways and realise the full value of this resource.⁵⁰

- 5.42 LGAQ noted that limited processing leaves councils with few practical alternatives, stating:

Where economies of scale and local processing facilities are lacking [...] some councils are locked into costly disposal and/or transport options that are not in keeping within the principles of a circular economy.⁵¹

- 5.43 The consequences of these infrastructure gaps were particularly evident in remote communities, with LGAQ reporting that councils in one remote Queensland region had resorted to shredding a large tyre stockpile at a cost exceeding \$70,000. This was due to there being no cost-effective recycling or recovery options and licensed processing facilities being located considerable distances away.⁵²

- 5.44 At a public hearing, Ms Margaret Howard, Director of the Outback Communities Authority, provided an example of these infrastructure gaps within outback South Australia:

We have no facilities for recycling anywhere close to us. We're talking about trips that take up to 15 hours driving to get to a recycling centre in Adelaide. So, as you can imagine, the costs of collection and transport of waste tyres are very substantial.⁵³

Calls for regional and place-based solutions

- 5.45 In response to these challenges, some submissions called for greater investment in local and regional processing infrastructure to improve tyre recovery outcomes.⁵⁴
- 5.46 Australian Flexible Pavements Association expressed that there are significant gaps in regional processing capacity and that it sees opportunities for targeted investment for regional processing infrastructure.⁵⁵
- 5.47 Motor Trades Association of Australia (MTAA) was of the view that, to enable higher-value tyre-recovery pathways, Australia requires new and upgraded recycling facilities strategically located across the outer-urban and regional areas, as this would reduce transport emissions and costs, improve compliance by providing

⁵⁰ Fleurieu Regional Waste Authority, *Submission 11*, p. [1].

⁵¹ LGAQ, *Submission 49*, p. 15.

⁵² LGAQ, *Submission 49*, p. 22.

⁵³ Ms Margaret Howard, Director, Outback Communities Authority, *Committee Hansard*, 3 June 2026, p. 7.

⁵⁴ See, for example: Australian Flexible Pavements Association, *Submission 22*, p. [2]; LGAQ, *Submission 49*, p. 21; Lake Macquarie City Council, *Submission 54*, p. [1].

⁵⁵ Australian Flexible Pavements Association, *Submission 22*, p. [2].

accessible and legal disposal locations, and create jobs in recycling, logistics and advanced manufacturing.⁵⁶

- 5.48 Some submissions supported regionally tailored approaches to tyre processing including mobile processing hubs and micro-processing facilities.⁵⁷ RAPAD was of the view that ‘place-based, regionally appropriate solutions are essential to improving tyre recycling outcomes in remote Australia’.⁵⁸

[...] grant-enabled regional processing capability offers the most credible pathway to sustainable improvement. With appropriate capital support and enabling policy settings, regionally based solutions can overcome distance and scale barriers and deliver outcomes that are not achievable through fragmented or partial measures.⁵⁹

- 5.49 RAPAD further explained why such place-based solutions were critical for a structural shift on how tyres are managed, recovered and reused within remote regions:⁶⁰

[...] without targeted intervention, remote councils remain structurally locked into waste management practices that prioritise risk mitigation over resource recovery, such as long-term stockpiling or shredding for landfill disposal. While these practices address immediate safety concerns, they do not deliver landfill diversion, circular economy outcomes, or long-term cost reductions.⁶¹

- 5.50 Some submissions shared this view that limited disposal and recycling options can contribute to non-circular outcomes, including stockpiling and illegal dumping.⁶²

Stockpiling and illegal dumping

- 5.51 Many local government representatives identified stockpiling and illegal dumping of end-of-life tyres as a major issue for their communities.⁶³ ALGA summarised that:

Illegal dumping and stockpiling are pervasive across all jurisdictions. High disposal charges, limited access to lawful facilities, and the behaviour of unscrupulous operators all contribute to significant volumes of abandoned tyres. Councils frequently inherit the cost of cleanup, which imposes further financial

⁵⁶ Motor Trades Association of Australia (MTAA), *Submission 18*, p. 6.

⁵⁷ See, for example: NSROC, *Submission 25*, p. 2; RAPAD, *Submission 28*, p. [1]; FNQROC, *Submission 55*, p. 5.

⁵⁸ RAPAD, *Submission 28*, p. 3.

⁵⁹ RAPAD, *Submission 28*, p. 3.

⁶⁰ RAPAD, *Submission 28*, pp. 3–4.

⁶¹ RAPAD, *Submission 28*, p. 3.

⁶² See, for example: Swan Hill Rural City Council, *Submission 32*, p. [1]; NQROC, *Submission 34*, p. [3].

⁶³ See, for example: WALGA, *Submission 5*, p. [2]; Shire of Serpentine Jarrahdale, *Submission 6*, p. 2; Outback Communities Authority, *Submission 10*, p. [1]; Fleurieu Regional Waste Authority, *Submission 11*, p. [1]; NSROC, *Submission 25*, p. 4; Sunshine Coast Council, *Submission 30*, p. [1]; NQROC, *Submission 34*, p. [2]; WSROC, *Submission 46*, p. 5; LGAQ, *Submission 49*, p. 14; Lake Macquarie City Council, *Submission 54*, p. [1]; Hume City Council, *Submission 67*, p. 9.

strain and creates environmental and fire risks. Some communities have experienced extreme cases where private collectors accept tyres for a fee and later abandon them, leaving landowners and councils to manage the consequences.⁶⁴

- 5.52 According to the most recent data available from TSA, approximately 24,100 tonnes of used tyres were stockpiled or dumped in 2023–24.⁶⁵
- 5.53 At a public hearing, Ms Helen Sloan, Chief Executive Officer at SSROC, told the committee that 61 per cent of councils believe dumped tyres to be worse than other illegally dumped materials.⁶⁶
- 5.54 The scale of illegal dumping was illustrated by Lake Macquarie City Council, which reported a consistently high number of illegally dumped tyres, with around 1,000 tyres recorded each year, accounting for approximately eight per cent of all dumping incidents managed by the council.⁶⁷
- 5.55 Large tyre stockpiles were also reported in remote and regional areas by the Outback Communities Authority, which reported that between June 2024 and September 2025, it collected 15,936 tyres from the Northern Flinders Ranges Region, Andamooka and Barrier Highway.⁶⁸
- 5.56 According to the Australian Automotive Aftermarket Association, rural, regional and remote areas ‘have been a hotspot for tyre dumping incidents’.⁶⁹
- In 2022–23, an estimated 300,000 used tyres were cleaned up by local governments nationwide and on a per-capita basis, rural communities bore double the cost of metro areas. Rural councils picked up around 44 dumped tyres per 1,000 residents, compared to 7 per 1,000 in cities.⁷⁰

Drivers of stockpiling and illegal dumping

- 5.57 Many submissions suggested that stockpiling and illegal dumping is driven by a combination of factors including costs, transport distances, limited disposal options and enforcement challenges.⁷¹
- 5.58 At a public hearing, Mr David Rees, Waste Manager at MidCoast Council, summarised that ‘If lawful disposal is costly, difficult or remote, then the system itself is creating the conditions for illegal dumping.’⁷²

⁶⁴ ALGA, *Submission 59*, p. 2.

⁶⁵ TSA, *Submission 16*, p. 22.

⁶⁶ Ms Helen Sloan, Chief Executive Officer, SSROC, *Committee Hansard*, 27 May 2026, p. 9.

⁶⁷ Lake Macquarie City Council, *Submission 54*, p. [1].

⁶⁸ Outback Communities Authority, *Submission 10*, pp. [1–2].

⁶⁹ Australian Automotive Aftermarket Association (AAAA), *Submission 60*, p. [2].

⁷⁰ AAAA, *Submission 60*, p. [2].

⁷¹ See, for example: WALGA, *Submission 5*, p. [2]; Outback Communities Authority, *Submission 10*, p. [1]; RAPAD, *Submission 28*, p. [1]; NQROC, *Submission 34*, p. [3]; ALGA, *Submission 59*, p. 2.

⁷² Mr David Rees, Waste Manager, MidCoast Council, *Committee Hansard*, 27 May 2026, p. 3.

- 5.59 Dr Bhakti Devi, FNQROC's Regional Coordinator (Waste Management Plan Implementation), shared similar concerns for Far North Queensland, stating at a public hearing that 'Across Far North Queensland we see the same pattern: stockpiling where disposal pathways are limited, dumping where costs are high...'⁷³
- 5.60 Avoidance of disposal costs was identified as a driver of illegal dumping.⁷⁴ Hume City Council advised that disposal fees at its Resource Recovery Centres range from \$10 for a motorcycle tyre to \$125 for a super tyre and reported that disposal charges can discourage lawful disposal and contribute to illegal dumping.⁷⁵ Similarly, MidCoast Council suggested that illegal dumping occurs as offenders try to 'avoid gate fees or regulatory obligations.'⁷⁶
- 5.61 Dr Bhakti Devi of FNQROC acknowledged the trade-offs councils can face, stating that 'Councils are caught in a difficult position: if we charge, we risk dumping; if we don't, councils absorb the costs. This is not a behavioural issue. It's a system design issue.'⁷⁷
- 5.62 Additionally, FNQROC noted that wet-season closures, flooding and other weather events can disrupt tyre collection and transport arrangements, resulting in temporary stockpiling.⁷⁸
- 5.63 When asked about how weather events affect tyre disposal, Mrs Kate Birse, Senior Project Officer at RAPAD, highlighted how large flooding affected access to landfill sites and ability for clean-up.⁷⁹ Ms Hayley Page, Regional Waste and Recycling Manager at NQROC, seconded this and added:
- It is a problem following weather events; they end up in rivers and streams and all those sorts of things. Retrieval is difficult and recycling is hindered by the fact that they're quite filthy and covered in silt.⁸⁰
- 5.64 Mrs Kristina Davidson from Cook Shire Council recounted the council's experience with the flooding after Tropical Cyclone Jasper:
- We saw a lot of tyres in creeks and riverbeds. Once they're silted up, the recovery is hard. It's predominantly done by hand and by volunteers, which is complicated. Washing them before recycling makes it very complex. There's the added value of very extensive road networks that need repairs, and a lot of tyres staying along PDR [Peninsula Developmental Road] and highways that are

⁷³ Dr Bhakti Devi, Regional Coordinator, Waste Management Plan Implementation, FNQROC, *Committee Hansard*, 3 June 2026, p. 1.

⁷⁴ See, for example: Outback Communities Authority, *Submission 10*, p. [1]; NQROC, *Submission 34*, p. [2]; TSA, *Submission 36*, p. 36; ALGA, *Submission 59*, p. 2.

⁷⁵ Hume City Council, *Submission 67*, p. 12.

⁷⁶ MidCoast Council, *Submission 56*, p. [1].

⁷⁷ Dr Bhakti Devi, Regional Coordinator, Waste Management Plan Implementation, FNQROC, *Committee Hansard*, 3 June 2026, p. 1.

⁷⁸ FNQROC, *Submission 54*, p. 3.

⁷⁹ Mrs Kate Birse, Senior Project Officer, RAPAD, *Committee Hansard*, 3 June 2026, p. 4.

⁸⁰ Ms Hayley Page, Regional Waste and Recycling Manager, NQROC, *Committee Hansard*, 3 June 2026, p. 4.

thousands of kilometres away from recycling points. In weather events, road repairs are a big issue.⁸¹

Rogue operators and enforcement challenges

- 5.65 Some submissions indicated how rogue operators contribute to illegal dumping. Rogue operators collect disposal fees from customers, but do not properly dispose the tyres, instead dumping them.⁸²
- 5.66 For example, the Northern Sydney Regional Organisation of Councils (NSROC) cited anecdotal evidence that suggested ‘...some rogue operators collect disposal fees from Northern Sydney residents and then “leak” those tyres into the environment to avoid processing costs.’⁸³
- 5.67 According to the MTAA, penalties for illegal dumping by rogue operators are low relative to potential earnings, which means perpetrators are ‘prepared to take the risk to make the profit.’⁸⁴
- 5.68 Some councils reported that they do not have sufficient staff or resources to adequately monitor, investigate and enforce illegal dumping offences.⁸⁵ The Shire of Serpentine Jarrahdale was of the view that ‘The barrier to encourage enforcement is a lack of resourcing in the sector, specifically those Authorised under the legislation, to regulate unlawful disposal of tyres.’⁸⁶
- 5.69 While local governments are responsible for issuing fines for illegal dumping, ALGA noted that identifying individuals responsible for illegally dumped tyres can be difficult.⁸⁷ Even when an offender is identified, LGAQ said that the regulatory tools under the *Waste Reduction and Recycling Act 2011* (QLD) do not equip councils with a suitable mechanism to recover clean-up costs.⁸⁸
- 5.70 Hume City Council reported that fines for illegal dumping in its community are significantly lower than the actual costs of collection and clean-up. The Council indicated these penalties do not reflect the true cost to the community and ratepayers. It added that local governments are unable to set or adjust infringement amounts to better align with these costs or to effectively deter this behaviour.⁸⁹
- 5.71 The issue of stockpiling and illegal dumping and rogue operators was also covered in Chapter 3.

⁸¹ Mrs Kristina Davidson, Acting Manager Water and Waste, Cook Shire Council, *Committee Hansard*, 3 June 2026, p. 4.

⁸² See, for example: TSA, *Submission 16*, p. 57; The Parks, *Submission 23*, p. 2; ALGA, *Submission 59*, p. 2.

⁸³ NSROC, *Submission 25*, p. 4.

⁸⁴ Mr Peter Jones, Interim Executive Director, MTAA, *Committee Hansard*, 1 May 2026, p. 20.

⁸⁵ See for example: Shire of Serpentine Jarrahdale, *Submission 6*, p. 1; NQROC, *Submission 34*, p. [2]; LGAQ, *Submission 49*, p. 14.

⁸⁶ Shire of Serpentine Jarrahdale, *Submission 6*, p. 1.

⁸⁷ Mayor Matt Burnett, President, ALGA, *Committee Hansard*, 11 March 2026, pp. 13–14.

⁸⁸ LGAQ, *Submission 49*, p. 14.

⁸⁹ Hume City Council, *Submission 67*, p. 11.

Clean-up and resource pressures on councils

- 5.72 Local governments indicated that the cost for clean-up activities, including investigating, transporting and disposing of stockpiles and dumped tyres is significant.⁹⁰ ALGA observed how councils often inherit the cost of cleanup, which ‘imposes further financial strain and creates environmental and fire risks.’⁹¹
- 5.73 Similar concerns were raised by MidCoast Council, which identified the challenge of ‘unfunded clean-up liabilities borne by councils and state agencies.’⁹²
- 5.74 LGAQ emphasised that identifying offenders is often difficult due to limited traceability of end-of-life tyres, meaning ‘councils are often left with clean-up costs without adequate mechanisms to recover these costs.’⁹³ LGAQ further advised that clean-up costs can exceed \$30 per tyre.⁹⁴
- 5.75 The scale of these costs was illustrated by examples from councils such as Lake Macquarie City Council, which reported that tyre dumping accounts for approximately 19 per cent of its annual dumping clean-up costs, or around \$52,000 each year.⁹⁵ Hume City Council likewise reported that illegal dumping costs councils nearly \$5 million annually.⁹⁶

Box 5.1 Outback Communities Authority

Outback Communities Authority (the Authority) provides local government tyre services for the unincorporated region of South Australia.

Between June 2024 and September 2025, the Authority spent \$450,100 to clean up 15,936 stockpiled tyres (equating to approximately 365 tonnes) from the Northern Flinders Ranges Region, Andamooka and the Barrier Highway.⁹⁷ Of the 15,936 tyres collected, 9,800 were car or four-wheel drive tyres, 16 were grader tyres, and 6,120 were truck tyres.

The Authority described its cost and collection figures as the ‘tip of the iceberg’ and stated, ‘There are parts of the Outback SA region that have many more waste tyres than we have already collected.’⁹⁸

⁹⁰ See for example: Shire of Serpentine Jarrahdale, *Submission 6*, p. 2; TSA, *Submission 16*, p. 30; LGAQ, *Submission 49*, p. 14; NSROC, *Submission 25*, p. 2; Lake Macquarie City Council, *Submission 54*, p. [1]; FNQROC, *Submission 55*, p. 3; Hume City Council, *Submission 67*, p. 10.

⁹¹ ALGA, *Submission 59*, p. 2.

⁹² MidCoast Council, *Submission 56*, pp. [1]–2.

⁹³ LGAQ, *Submission 49*, p. 14.

⁹⁴ LGAQ, *Submission 49*, p. 14.

⁹⁵ Lake Macquarie City Council, *Submission 54*, p. [1].

⁹⁶ Hume City Council, *Submission 67*, p. 4.

⁹⁷ Outback Communities Authority, *Submission 10*, pp. [1]–2.

⁹⁸ Outback Communities Authority, *Submission 10*, p. [1].

- 5.76 Some councils described dedicating personnel, equipment and resources to manage illegal dumping.⁹⁹ For example, Swan Hill Rural City Council submitted that:

Clean up and appropriate management of illegally dumped tyres has a direct and negative impact on Councils' already limited existing staff levels and resources, placing an unnecessary financial burden upon its residents.¹⁰⁰

- 5.77 LGAQ similarly identified '...instances of illegal dumping that require dedicated resources (including personnel and equipment) to investigate, clean-up and ultimately dispose or recover these materials.'¹⁰¹

Environmental and health risks

- 5.78 Many submissions highlighted the environmental and health risks associated with stockpiled and illegally dumped tyres.¹⁰²

- 5.79 RAPAD suggested long-term stockpiles can present serious risks, including:

[...] fire incidents that are difficult to control in hot, dry environments; air quality impacts from tyre fires; mosquito and vermin breeding following rainfall events; and limited emergency response capacity in remote communities.¹⁰³

- 5.80 Several submissions noted that stockpiled and illegally dumped tyres can collect water and provide ideal breeding conditions for mosquitos, while also creating habitat for vermin and other pests.¹⁰⁴ NQROC highlighted how mosquito breeding grounds can lead to disease transmission such as dengue fever.¹⁰⁵

- 5.81 At a public hearing, Ms Margaret Howard, Director of the Outback Communities Authority, highlighted the public health and safety risks associated with tyre stockpiles, including their potential to provide habitat for pests:

The other thing we see is some really bad public health issues that arise from stockpiles of tyres, such as breeding grounds for unowned cats, which are an increasing problem. They're not very safe if they're breeding in stockpiles of tyres. In townships, when we've got stockpiles of tyres, it's an increased risk of snakebite.¹⁰⁶

⁹⁹ See, for example: Shire of Serpentine Jarrahdale, *Submission 6*, p. 2; Swan Hill Rural City Council, *Submission 32*, p. [1]; LGAQ, *Submission 49*, p. 23.

¹⁰⁰ Swan Hill Rural City Council, *Submission 32*, p. [1].

¹⁰¹ LGAQ, *Submission 49*, p. 23.

¹⁰² See, for example: Shire of Serpentine Jarrahdale, *Submission 6*, p. 2; Outback Communities Authority, *Submission 10*, p. [1]; TSA, *Submission 16*, p. 61; NQROC, *Submission 34*, p. [3]; WSROC, *Submission 46*, p. 5; Hume City Council, *Submission 67*, p. 13.

¹⁰³ RAPAD, *Submission 28*, pp. 5–6.

¹⁰⁴ See for example: Shire of Serpentine Jarrahdale, *Submission 6*, p. 2; TSA, *Submission 16*, p. 61; RAPAD, *Submission 28*, p. 5; LGAQ, *Submission 49*, p. 23; FNQROC, *Submission 55*, p. 3.

¹⁰⁵ NQROC, *Submission 34*, p. [3].

¹⁰⁶ Ms Margaret Howard, Director, Outback Communities Authority, *Committee Hansard*, 3 June 2026, p. 9.

Fire risks

- 5.82 Many councils expressed serious concerns about the fire risks associated with tyre stockpiles.¹⁰⁷ Some submissions highlighted that tyre fires can be difficult to extinguish, generate large volumes of smoke and create significant environmental impacts.¹⁰⁸

Box 5.2 Tyre fires in the Hume City Council area

In January 2016, a large industrial fire occurred at a tyre storage site in Broadmeadows, Victoria, producing a plume of toxic black smoke.

The fire involved more than 150,000 tyres and required the deployment of water bombers and the use of large volumes of water and foam to extinguish the blaze. Air quality monitoring was undertaken to check for hazardous particles, and warnings were issued advising nearby residents to remain indoors with doors, windows and vents closed. Additional environmental impacts were reported, including fire water running into waterways.¹⁰⁹

A further incident occurred in August 2021, when more than 35 Fire Rescue Victoria firefighters responded to a tyre fire at a recycling plant in Broadmeadows involving a 20 metre by 50 metre stockpile. Residents in surrounding areas were again advised to stay indoors due to hazardous smoke.¹¹⁰

- 5.83 Other submissions highlighted the impacts of tyre fires on communities, including toxic emissions and risks to surrounding land and waterways.¹¹¹

Tyre wear

- 5.84 Several submissions viewed tyre wear as an emerging environmental concern that should be addressed as part of a broader circular economy and waste management framework.¹¹²
- 5.85 The Parks stated that ‘microplastics from regular tyre wear present an environmental and sustainability concern.’¹¹³ NSROC argued that ‘Tyre Wear Particles (TWP) are a primary source of microplastics in sensitive waterways.’¹¹⁴

¹⁰⁷ See, for example: Shire of Serpentine Jarrahdale, *Submission 6*, p. 2; Fleurieu Regional Waste Authority, *Submission 11*, p. [2]; The Parks, *Submission 23*, p. 5; NSROC *Submission 25*, p. 4; RAPAD, *Submission 28*, p. 5.

¹⁰⁸ See, for example: LGAQ, *Submission 49*, p. 23; Hume City Council, *Submission 67*, p. 13; TSA, *Submission 16*, p. 31.

¹⁰⁹ Hume City Council, *Submission 67*, p. 13.

¹¹⁰ Hume City Council, *Submission 67*, p. 14.

¹¹¹ RAPAD, *Submission 28*, p. 5; NQROC, *Submission 34*, p. [3].

¹¹² See, for example: The Parks, *Submission 23*, p. 4; NSROC, *Submission 25*, p. 4; WSROC, *Submission 46*, p. 5; ISJO, *Submission 47*, pp. 3–4.

¹¹³ The Parks, *Submission 23*, p. 4.

¹¹⁴ NSROC, *Submission 25*, p. 4

- 5.86 ISJO submitted that it was ‘increasingly concerned’ for the cumulative pollution caused by tyre wear:¹¹⁵

Recent international research indicates that tyres shed millions of tonnes of microplastic particles each year during normal use. These tyre wear particles are transported via air, road surfaces and stormwater systems, accumulating in soils, waterways and marine environments. They contain synthetic polymers, heavy metals (including zinc) and chemical additives, many of which are persistent and bioavailable.

For local government, these impacts are directly relevant. Councils manage:

- over 75 per cent of Australia’s road network, where tyre wear occurs continuously.
- stormwater systems discharging to rivers, lakes and coastal waters; and
- public open spaces, playgrounds and sports fields where recycled tyre materials may compound cumulative exposure risks.¹¹⁶

Committee comment

- 5.87 The Committee thanks all local government organisations, associations and regional councils that contributed evidence to this inquiry. The evidence received consistently highlighted the critical role local governments play in managing end-of-life tyres and responding to the challenges associated with collection, storage, transport and recovery, particularly in regional, rural and remote communities. The Committee acknowledges their ongoing efforts to develop practical, regionally appropriate solutions for the management and recovery of end-of-life tyres.
- 5.88 The Committee notes the strong consensus among local government submitters that significant infrastructure gaps remain across many parts of Australia. Evidence indicated that limited access to collection, storage and processing facilities can increase costs, reduce recovery opportunities and, in some cases, contribute to stockpiling and illegal dumping of waste tyres. The Committee also acknowledges the practical solutions proposed by local governments, including regional recovery hubs, secure storage facilities and smaller-scale processing infrastructure tailored to local circumstances.
- 5.89 The Committee further recognises the evidence regarding the disproportionately high transport and logistics costs faced by regional, rural and remote communities. The Committee heard that distance from processing facilities can represent a significant barrier to the effective recovery and recycling of end-of-life tyres, placing additional financial pressure on local governments and communities that already face limited access to recycling infrastructure.

¹¹⁵ ISJO, *Submission 47*, p. 3.

¹¹⁶ ISJO, *Submission 47*, p. 3.

- 5.90 The Committee considers that addressing these infrastructure and funding challenges will be essential to improving the recovery of end-of-life tyres and supporting a more circular economy. The Committee therefore supports greater collaboration between the Australian Government, state and territory governments, and local governments to expand tyre recovery infrastructure and ensure funding arrangements appropriately reflect the unique challenges faced by geographically dispersed communities. The Committee considers that a strengthened tyre stewardship framework, including any future mandatory national tyre product stewardship scheme, could play an important role in supporting collection, storage, transport and processing infrastructure in areas where market forces alone are insufficient to deliver effective recovery outcomes.
- 5.91 The Committee notes the evidence received from local governments regarding the successful use of tyre-derived products in infrastructure projects. The Committee was particularly encouraged by examples such as SSROC's Procure Recycled: Paving the Way initiative, the use of crumb rubber roads in regional Queensland, and local processing initiatives that have helped create markets for recovered tyre materials. These projects demonstrate the potential for local governments to play a leadership role in advancing tyre circularity while delivering practical community benefits.
- 5.92 However, the Committee recognises that many councils face financial constraints that can limit their ability to trial innovative materials or incorporate tyre-derived products into infrastructure projects. This challenge is often more acute in regional, rural and remote communities, where higher transport costs and limited access to processing infrastructure can increase project costs. Evidence to the inquiry suggested that, despite demonstrated benefits, the upfront costs and perceived risks associated with new products can discourage wider adoption.
- 5.93 The Committee considers that local governments are well placed to drive demand for tyre-derived products and support the development of domestic end markets. Strategic financial support from the Australian Government could assist councils to undertake demonstration projects, build confidence in the performance of tyre-derived materials, and share lessons learned with other local governments. Such support would not only promote greater uptake of recycled tyre products but could also reduce waste, strengthen circular economy outcomes and provide greater value from Australia's end-of-life tyre resource.
- 5.94 The Committee therefore considers that opportunities should be explored to support councils that incorporate tyre-derived products into local infrastructure projects and demonstrate leadership in the procurement and use of recycled tyre materials, including through measures supported by a strengthened tyre stewardship framework.

Recommendation 8

- 5.95 The Committee recommends that the Australian Government ensure that any mandatory national tyre product stewardship scheme provides dedicated and ongoing funding to address gaps in tyre collection, storage, transport and**

processing infrastructure, particularly in regional, rural and remote areas. Funding should support regional recovery hubs, secure storage facilities, mobile and modular processing infrastructure, local processing solutions, and transport and logistics costs associated with end-of-life tyre recovery. The scheme should recognise the higher costs faced by geographically dispersed communities and improve access to viable recovery and recycling pathways across Australia.



6. Circular economy for tyres

- 6.1 The transition from a linear economy to a circular economy has emerged as a critical strategy for improving resource efficiency, reducing waste generation, and supporting sustainable development. In the tyre sector, circular economy principles seek to maximise the value retained in products, materials, and resources throughout their lifecycle through strategies such as reuse, retreading, recycling, and recovery.
- 6.2 Given the significant volume of tyres reaching end-of-life each year and the environmental challenges associated with their disposal, the development of circular systems for tyre management has become an important priority for all stakeholders in the Australian tyre industry.
- 6.3 This chapter examines the application of circular economy principles to the tyre industry, with particular emphasis on:
- retreading
 - crumb rubber
 - tyre-derived fuel (TDF)
 - opportunities for improving tyre circularity.

Circular economy model

- 6.4 According to the Commonwealth Scientific and Industrial Research Organisation (CSIRO), circular economy promotes the continual use, recycling, and regeneration of materials and products, where resources are valued and products are designed for their durability, repairability, and recyclability.¹
- 6.5 In contrast to the traditional linear model of ‘take, make, dispose’, a circular economy aims to retain the value of products and materials within the economy, minimise waste generation, and reduce environmental impacts.²

¹ Commonwealth Scientific and Industrial Research Organisation (CSIRO), *Advancing the Circular Economy*, <https://www.csiro.au/en/research/environmental-impacts/sustainability/circular-economy> (accessed 16 August 2026).

² CSIRO, *Advancing the Circular Economy*, <https://www.csiro.au/en/research/environmental-impacts/sustainability/circular-economy> (accessed 16 August 2026).

National Circular Economy Roadmap and Framework

- 6.6 In 2019, the CSIRO was commissioned by the Australian Government to develop a National Circular Economy Roadmap for key waste streams including plastics, glass, paper and tyres. Published in 2021, the roadmap identified opportunities to increase resource productivity, drive innovation, and develop new markets for recovered materials.³
- 6.7 Since then, Australia's circular economy agenda has progressed substantially, culminating in the release of Australia's Circular Economy Framework (the Framework) in 2024. The Framework provides the overarching policy direction for resource recovery, recycling, product stewardship, and circular economy initiatives across priority sectors of the Australian economy.⁴
- 6.8 The CSIRO estimates Australia's current circularity rate as approximately 4.6 per cent, which remains behind the 7.2 per cent global average.⁵ The Framework defined circularity rate as:
- ...a measure of how much material input into an economy comes from recycled or reused sources. It indicates the proportion of resources that are cycled back into production rather than being disposed of as waste.⁶
- 6.9 Australia aims to double its circularity by 2035, supported by targets to:
- reduce per-capita material footprint by 10 per cent
 - increase material productivity by 30 per cent
 - safely recover 80 per cent of resources.⁷

Waste hierarchy

- 6.10 The waste hierarchy is a framework that ranks waste management options according to their ability to conserve resources, retain material value, and minimise environmental impacts. It prioritises actions that keep products and materials in productive use for as long as possible and discourages disposal options that result in the permanent loss of resources.
- 6.11 Figure 6.1 below shows the waste hierarchy as applied to end-of-life tyres and conveyor belts. For the purposes of this report, the figure is included to illustrate the hierarchy of preferred management outcomes for end-of-life tyres.

³ CSIRO, *A circular economy roadmap for plastics, tyres, glass and paper in Australia*, <https://www.csiro.au/en/research/environmental-impacts/sustainability/circular-economy> (accessed 16 August 2026).

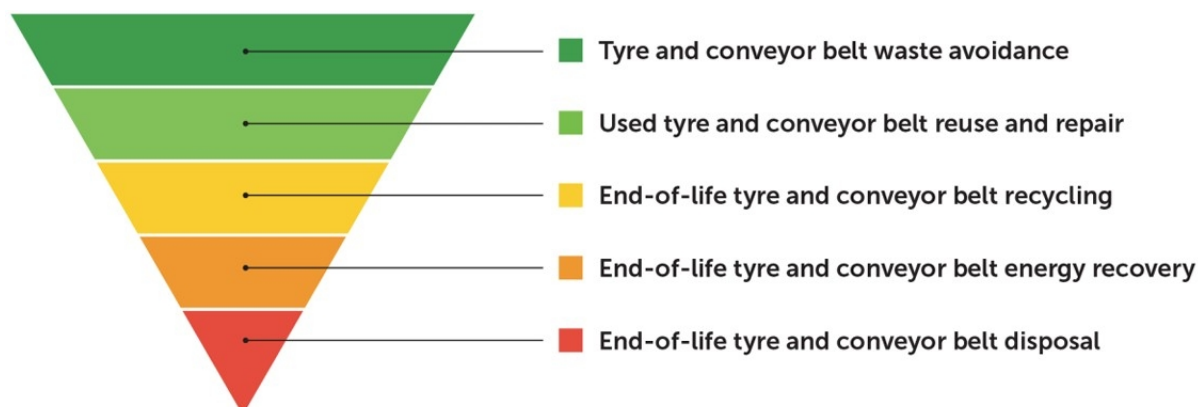
⁴ Department of Climate Change, Energy, the Environment and Water (DCCEEW), *National Circular Economy Framework*, 2024.

⁵ DCCEEW, *National Circular Economy Framework*, 2024, p. [8].

⁶ DCCEEW, *National Circular Economy Framework*, 2024, p. [35].

⁷ DCCEEW, *National Circular Economy Framework*, 2024, p. [6].

Figure 6.1 Waste hierarchy for end-of-life tyres and conveyor belts



Source: Tyre Stewardship Australia, *Submission 16*, p. 24.

- 6.12 In its submission to the Productivity Commission's *Inquiry into the Circular Economy*, the Product Stewardship Centre of Excellence highlighted the importance of prioritising the upper tiers of the waste hierarchy:

An essential requirement of the transition to a circular economy is to maximise opportunities in the top half of the waste management hierarchy to focus on prevention and avoidance through design for durability and reuse as well as increased levels of repair activity. These interventions highlight the relevance and importance of ensuring a strong product focus, in addition to considering singular material streams in isolation.⁸

- 6.13 The Department of Climate Change, Energy, the Environment and Water (DCCEEW) told the Committee that improving tyre circularity involves progressively moving materials up the waste hierarchy:

[...] we see landfill as the bottom of that [the waste hierarchy] because it's just dumping. Above landfill is that pyrolysis energy conversion burning. That still has an emissions profile attached to it. The other thing I should have said about the energy conversion process or the fuel conversion process is, once you do that, it's gone; it doesn't stay in use longer. So what you're trying to do is strip it out. For example, if you move up another level, it is getting the metal back out of the tyres. You start to think about how you can potentially retread and put them back into reuse under certain circumstances. So very much the goal is to maximise both the economic and social outcomes by pushing those streams up that hierarchy. In each step it gets better, so tyre derived fuel is certainly better than landfill.⁹

⁸ Product Stewardship Centre of Excellence, *Submission 68 Attachment 6*, p. 3.

⁹ Mr Cameron Hutchinson, Branch Head, Packaging, Stewardship and Investment Branch, DCCEEW, *Committee Hansard*, 4 March 2026, pp. 4–5; Mr James Tregurtha, Head of Division, Circular Economy Division, DCCEEW, *Committee Hansard*, 4 March 2026, pp. 4–5.

Management of end-of-life tyres

6.14 As introduced in Chapter 2, there are seven different end-of-life ‘fates’ for tyres, according to Tyre Stewardship Australia’s (TSA) *Material Flow Analysis Report* (MFA Report):¹⁰

- Recovered (tyres that have been collected and processed for a second use)
 - i. Reuse
 - ii. Recycling
 - iii. Energy recovery
- Unrecovered (tyres destined for disposal)
 - iv. Landfill
 - v. Onsite burial
 - vi. Burning
 - vii. Stockpiling or illegal dumping.¹¹

Reuse

6.15 Reuse refers to the return of used tyres to their original purpose with little or no processing, including second-hand sales and retreading.¹² According to TSA, reuse accounted for approximately nine per cent of used tyre fates in 2023–24 and is ‘by far the most circular option.’¹³

6.16 While a properly inspected second-hand tyre can safely extend tyre life and support circular economy outcomes, poor-quality second-hand tyres can present significant safety risks. Potential risks include reduced tread depth, hidden structural damage, age-related degradation, and unknown service histories. Proper inspection and testing can allow tyres with adequate remaining life to be reused safely, thereby extending product life and avoiding premature disposal.

Retreading

6.17 Numerous businesses repair or ‘retread’ tyres, enabling them to be used well beyond the life of their ‘first injury.’¹⁴ The retreading process allows for the reuse of the casing (the core structural body of a tyre, encompassing everything except the tread and

¹⁰ Tyre Stewardship Australia (TSA), *Submission 16*, p. 21.

¹¹ TSA, *Submission 16*, p. 21.

¹² TSA, *Material Flow Analysis Report (MFA Report)*, p. 47.

¹³ TSA, *Submission 16*, p. 24.

¹⁴ Big Tyre, *Submission 2*, p. [1].

outer rubber), allowing for an extended service life with performance and safety levels equivalent to those of a new tyre.¹⁵

6.18 TSA stated that there is a ‘significant opportunity’ to extend the service life of high-value off-the-road (OTR) tyres through repair, refurbishment and retreading.¹⁶ TSA was of the view that the aviation sector provides a useful example of this approach, with tyres commonly supplied under a ‘tyres as a service’ model, where operators are charged on a per-landing basis rather than purchasing tyres outright. Under this model, tyre casings are routinely retreaded multiple times before reaching end-of-life, demonstrating that life-extension strategies can be successfully implemented even in highly safety-critical applications.¹⁷

6.19 The Australian Tyre Industry Council (ATIC) similarly stated that ‘especially in the case of large passenger transport aviation tyres for turboprop or jet aircraft, retreading has been a common practice for many years’:¹⁸

In the case of major Australian fleets, tyres are commonly owned by the original manufacturer and sales take place on a per-landing basis with major retreading facilities established in the region, especially in Thailand.¹⁹

6.20 Many submissions and witnesses highlighted the circular economy advantages of retreading practices.²⁰

6.21 For example, Vipal Rubber detailed the multifaceted benefits of retreading and called for the ‘explicit recognition of tyre retreading as a priority practice within the hierarchy of the circular economy’:²¹

The process demands significantly fewer natural resources than the manufacture of new tyres, resulting in estimated savings of up to 70% in inputs such as oil and water. Life cycle studies also indicate reductions of approximately 24% in CO₂ emissions, 21% in air pollution and 19% in water consumption. Each retreaded commercial tyre represents an average saving of 57 liters of oil, while retreaded passenger tyres save about 17 liters, directly contributing to the mitigation of environmental impacts associated with non-renewable resources.

In addition to environmental benefits, tyre retreading generates positive economic and social impacts. For fleet operators, the cost per kilometer driven can be up to 57% lower and the acquisition cost of a retreaded tyre can be up to 70% lower than that of a new tyre. Added to these factors is the positive social impact, with

¹⁵ Vipal Rubber, *Submission 8*, p. [2].

¹⁶ TSA, *Submission 16*, p. 24.

¹⁷ TSA, *Submission 16*, p. 24.

¹⁸ Australian Tyre Industry Council (ATIC), *Submission 29*, p. 8.

¹⁹ ATIC, *Submission 29*, p. 8.

²⁰ See, for example: Vipal Rubber, *Submission 8*, p. [2]; Motor Trades Association of Australia (MTAA), *Submission 18*, p. 4; Tyrecycle, *Submission 19*, p. [5]; MTA Group, *Submission 20*, p. 3; Cleanaway, *Submission 37*, p. 4; Michelin Australia, *Submission 52*, p. [2].

²¹ Vipal Rubber, *Submission 8*, p. [2].

the generation of qualified local jobs and high rates of reuse and recyclability of waste from the production process.²²

- 6.22 Additionally, Vipal Rubber submitted that tyre retreading is ‘a widely proven, safe, and reliable practice’.²³

The process allows for the reuse of the casing—the tyre’s main structural asset—allowing for an extended service life with performance and safety levels equivalent to those of a new tyre. In heavy-duty applications, a retreaded tyre can travel approximately 220,000 kilometers with a single retreading, compared to about 120,000 kilometers for a new, unretreaded tyre.²⁴

- 6.23 Motor Trades Association of Australia (MTAA) submitted that retreading retains approximately 70 per cent of the original tyre casing’s material and embedded energy and offers a cost-effective solution for sectors with high tyre consumption, including freight, mining, public transport and other heavy vehicle fleets.²⁵

- 6.24 However, TSA reported the market share of retreaded tyres declined from 20 per cent to 10 per cent between 2017 and 2025 and expressed concern that ‘this 100-year-old circular economy process... is under threat.’²⁶

- 6.25 Despite providing better longevity and performance, quality retreads are often overlooked in favour of cheaper imports with lower upfront costs.²⁷

- 6.26 Mr Collin Jennings, Head of Government Relations at MTA Group, told the Committee that only nine per cent of recovered tyres are retreaded, due to ‘a flood of low quality, low-cost, single-use imported tyres that lack the structural integrity to be retreaded.’²⁸

- 6.27 Big Tyre submitted that tyre retreading has become less common in Australia due to its cost, ‘compared to the cost of tyre disposal and replacement.’²⁹ However, for solid bonded wheels, retreading or rebuilding is more common due to it being ‘very cost effective compared to buying new wheels.’³⁰

- 6.28 The Business Council for Sustainable Development Australia lamented that ‘the retread market in Australia has collapsed in the passenger vehicle segment due to aggressive price undercutting by imported tyres with short lifespans and low durability.’ However, it was of the view that ‘retreaded tyres—particularly for

²² Vipal Rubber, *Submission 8*, p. [2].

²³ Vipal Rubber, *Submission 8*, p. [2].

²⁴ Vipal Rubber, *Submission 8*, p. [2].

²⁵ MTAA, *Submission 18*, p. 4.

²⁶ TSA, *Submission 16*, p. 25.

²⁷ See, for example: S & J Australian Scrap Tyre Disposals, *Submission 39*, p. [5]; Australian Tyre Recyclers Association (ATRA), *Submission 42*, p. [5]; Business Council for Sustainable Development Australia, *Submission 58*, p. [3].

²⁸ Mr Collin Jennings, Head, Government Relations, MTA Group, *Committee Hansard*, 15 July 2026, p. 15.

²⁹ Big Tyre, *Submission 2*, p. [1].

³⁰ Big Tyre, *Submission 2*, p. [1].

commercial applications—continue to offer superior whole-of-life efficiency’, as shown in the table below.³¹

Table 6.1 Comparison of cost and benefit between retreaded and budget import tyres

Metric	New Budget Import	Retreaded Tyre (Truck)
Average lifespan (km)	30,000 – 40,000	80,000 – 100,000
Unit cost	\$200 – \$250	\$250 – \$300
Cost per km	~6.3 cents/km	~2.9 cents/km
Carbon impact (estimated)	Higher (new rubber, shipping)	Lower (reuse casing, local process)

Source: Boral Logistics internal procurement trial (2024) by Australasian Tyre Retreaders Association in Business Council for Sustainable Development Australia, *Submission 58*, p. [3].

6.29 Mr Chin Han Tan, Director of N.B.R. Tyres, told the Committee about the effect the influx of low-cost imported tyres has had on his business and the retreading industry:

The retread industry has been around for a hundred years. Prior to the influx of cheap new tyres, retreading was and always has been a very vibrant industry. I remember starting out in 1991-92, when there were many retread factories in each city. Brisbane had four or five major retread factories, and Sydney had several. All regions had a lot of retread factories. I think the biggest problem that we face is the price issue coming from cheaper imports. This is the biggest competitive issue for our business. [...] We have no problem with first-tier truck tyres. They sell for \$500, \$600 or \$700, and our retreads for that same size sell for \$200. For example, a cheap imported tyre from China costs \$200. A lot of tyre fitters for many of the fleet operators are going for cheap new tyres rather than retreads, and that has caused many factories to close down. [...] At the core of this is the pricing, with cheap imports coming in at a price that is really incredible.³²

6.30 Several submissions and witnesses suggested ways to improve uptake of tyre retreading.³³ These will be discussed below under the grants and incentives section.

Recycling

6.31 Recycling refers to activities that involve tyres being converted into new products or raw materials that are returned to productive use (excluding for energy).³⁴

³¹ Business Council for Sustainable Development Australia, *Submission 58*, p. [3].

³² Mr Chin Han Tan, Director, N.B.R. Tyres, *Committee Hansard*, 15 July 2026, p. 5.

³³ See, for example: Vipal Rubber, *Submission 8*, pp. [2–3]; N.B.R. Tyres, *Submission 9*, p. 3; TSA, *Submission 16*, pp. 12, 25; RubberGem, *Submission 17*, p. [3]; MTAA, *Submission 18*, pp. 2, 5, 9; MTA Group, *Submission 20*, p. 5; Bridgestone Australia, *Submission 31*, pp. [3–5]; Flextrid Holdings & Alfabs Mining Equipment, *Submission 36*, p. 2; ELT Rubber, *Submission 53*, p. [2]; Business Council for Sustainable Development Australia, *Submission 58*, p. [4]; Bridgestone Mining Solutions, Australia, *Submission 61*, p. 4.

³⁴ TSA, *MFA Report*, p. 47.

Stakeholders identified a range of emerging and established recycled tyre applications, such as:

- crumb rubber for roads and asphalt
- playground and sporting surfaces
- safety barriers
- flooring products
- particleboard and construction materials
- recovered carbon black.³⁵

6.32 According to TSA, recycling accounted for approximately 17 per cent of used tyre fates in 2023–24, representing ‘a significant but underutilised opportunity for material circularity.’³⁶

6.33 TSA submitted that mechanical size reduction processes involving shredders, granulators and milling equipment to physically section and downsize the tyres dominate tyre recycling in Australia. Tyres however are ‘manufactured to be durable and strong, and difficult to pull apart’.³⁷

[...] whilst they are challenging to break down and remanufacture, once they are processed, these extremely high-value materials are of great importance to new engineering markets, such as construction, manufacturing, and commercial sectors.³⁸

6.34 A diagram in the submission from the Australian Tyre Recycler Association (ATRA) shows how a typical tyre (medium-sized, all season passenger tyre) weighing about 10 kilograms is a composite of natural and synthetic rubbers and approximately 40 other materials vulcanised together into one product. ATRA noted that separating the component parts of a tyre ‘is not simple’.³⁹

³⁵ See, for example: TSA, *Submission 16*, p. 63; Tyrecycle, *Submission 19*, pp. [1, 7]; The Parks, *Submission 23*, pp. [1, 3]; Northern Sydney Regional Organisation of Councils (NSROC), *Submission 25*, p. 3; Tasmanian Government | Department of State Growth, *Submission 27*, p. [2]; Remote Area Planning and Development Board (RAPAD), *Submission 28*, p. 4; North Queensland Regional Organisation of Councils (NQROC), *Submission 34*, p. [1]; Austroads, *Submission 35*, p. 4; Midcoast Council, *Submission 56*, p. 3; Business Council for Sustainable Development Australia, *Submission 58*, p. [7]; Western Australian Government, *Submission 63*, pp. 3–4.

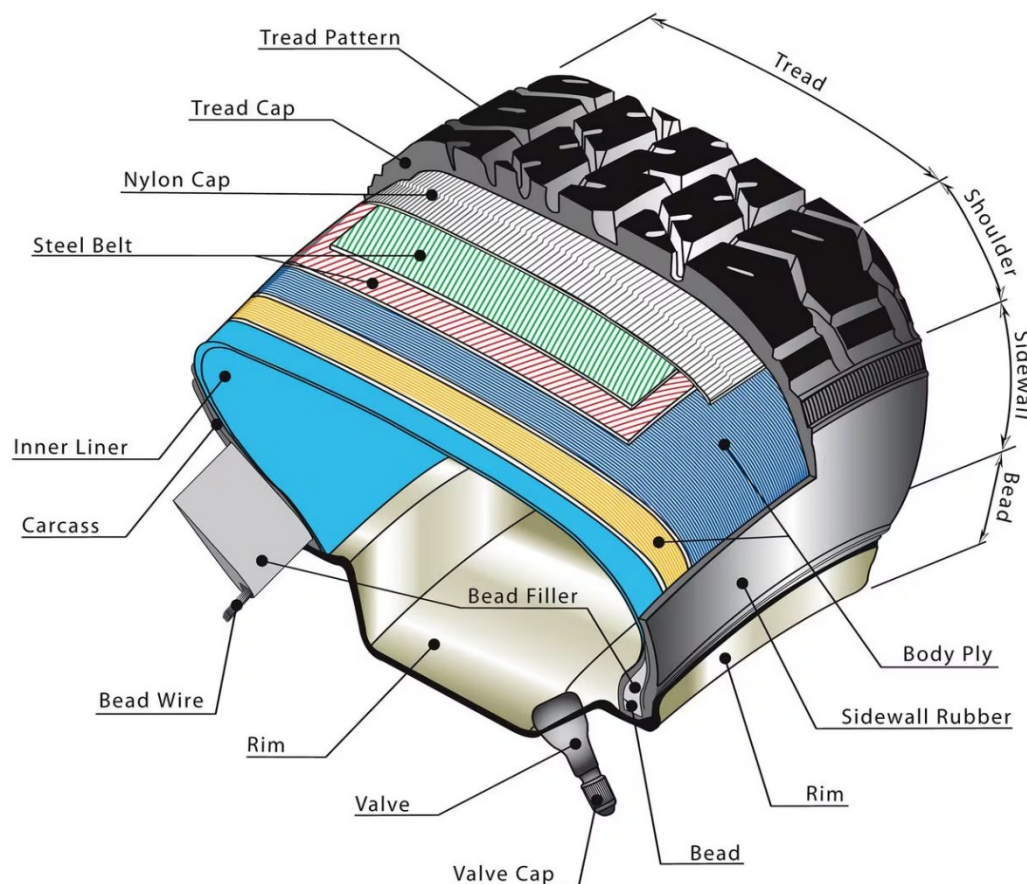
³⁶ TSA, *Submission 16*, p. 26.

³⁷ TSA, *Submission 16*, p. 44.

³⁸ TSA, *Submission 16*, p. 26.

³⁹ ATRA, *Submission 42*, p. [7].

Figure 6.2 Cross-section view of a passenger tyre



Source: Australian Tyre Recyclers Association, *Submission 42*, p. [8]

Crumb rubber

- 6.35 Crumb rubber, produced from processing end-of-life tyres into small rubber particles, was identified by multiple submitters as one of the most significant high-value uses of waste tyres within Australia's circular economy.⁴⁰
- 6.36 Evidence suggested that road construction is currently Australia's largest domestic market for tyre-derived materials and could play a much greater role in diverting tyres from landfill and low-value disposal pathways.
- 6.37 According to the National Transport Research Organisation (NTRO), the current value of crumb rubber is approximately \$600 per tonne. Currently, around 30,000 tonnes are used in road construction per annum, putting the size of the market at

⁴⁰ See, for example: Bitumen Solutions, *Submission 13*, pp. [1–2]; TSA, *Submission 16*, p. 44; MTAA, *Submission 18*, p. 6; RAPAD, *Submission 28*, pp. 2, 4; Bridgestone Australia Limited, *Submission 31*, p. [4]; Austroads, *Submission 35*, p. 4; Western Sydney Regional Organisation of Councils (WSROC), *Submission 46*, p. 3; Local Government Association of Queensland (LGAQ), *Submission 49*, p. 16; Lake Macquarie City Council, *Submission 54*, p. [1]; Business Council for Sustainable Development Australia, *Submission 58*, p. [7]; Western Australian Government, *Submission 63*, pp. 3, 6.

approximately \$18 million. NTRO estimates that there is potential for growth to over 70,000 tonnes per annum, which would indicate a potential market size approaching \$50 million.⁴¹

6.38 Bitumen Solutions highlighted that ‘road construction offers a uniquely high-value and scalable use for tyre-derived materials when crumb rubber is incorporated into bituminous binders and asphalt.’⁴² Benefits include:

- improved resistance to cracking and fatigue;
- enhanced deformation and rutting resistance;
- better ageing characteristics of binders;
- increased surface durability under heavy traffic and harsh climates.⁴³

6.39 Dr Azeem Remtulla, Director of Bitumen Solutions, was of the view that ‘traditional paving-grade bitumen, much of which is imported, is no longer sufficient on its own’.⁴⁴

As a result, agencies have relied heavily on modifying the bitumen with synthetic polymers, such as thermoplastic elastomers, which are expensive, largely petrochemical based, and imported. Also, they generally carry higher embodied carbon and recycle alternatives.

Crumb rubber modified bituminous binders produced from end-of-life tyres are a mature, proven alternative. They can deliver comparable or superior performance in many road applications, while supporting the circular economy and emission reduction objectives. By upcycling tyres into high-value road infrastructure, crumb rubber reduces the reliance on imported synthetic polymers, strengthens local recycling and supply chains, and lowers demand for virgin petrochemical materials.⁴⁵

6.40 Dr Mike Shackleton, Chief Research Officer of NTRO, told the Committee that there is evidence for roads which incorporated crumb rubber to be more durable:

There's been a trial that we've been running in Coober Pedy for 17 years, where we've compared different types of surfacing, including crumb rubber surfacings and including polymers and surfacings with just straight-run bitumen. The evidence that is emerging from that is that crumb rubber is doing a really good job in delaying the onset of cracking in those surfacings.⁴⁶

6.41 The Remote Area Planning and Development Board (RAPAD) identified crumb rubber use in road construction and sprayed seals as ‘a high-value, proven application particularly well suited to remote and heavy-vehicle environments’.⁴⁷

⁴¹ National Transport Research Organisation (NTRO), *Submission 70*, p. [1].

⁴² Bitumen Solutions, *Submission 13*, p. [2].

⁴³ Bitumen Solutions, *Submission 13*, p. [2].

⁴⁴ Dr Azeem Remtulla, Director, Bitumen Solutions, *Committee Hansard*, 15 July 2026, p. 11.

⁴⁵ Dr Azeem Remtulla, Director, Bitumen Solutions, *Committee Hansard*, 15 July 2026, p. 11.

⁴⁶ Dr Mike Shackleton, Chief Research Officer, NTRO, *Committee Hansard*, 1 May 2026, p. 9.

⁴⁷ RAPAD, *Submission 28*, p. 2.

For RAPAD councils, crumb rubber applications — particularly in roads — offer a unique alignment between waste recovery and essential infrastructure delivery. Roads represent one of the largest and most consistent areas of capital and maintenance expenditure for remote local governments. The ability to substitute virgin materials with tyre-derived products therefore provides both environmental and economic benefits.

Where local or regional processing capability exists, the use of crumb rubber in road construction and maintenance also reduces transport emissions, supports regional employment, and strengthens supply chain resilience.⁴⁸

- 6.42 The Southern Sydney Regional Organisation of Councils (SSROC) noted that Australian councils manage over 75 per cent of Australia's roads, and therefore, the use of recycled tyres in rubber-modified asphalt mixes for road pavement or other uses would constitute as 'a huge opportunity for sustainable road and community infrastructure development.'⁴⁹
- 6.43 Austroads submitted that when it conducted a demonstration project to test the viability of incorporating crumb rubber from tyres other than trucks into asphalt mixes to assess operational feasibility, it found that there were no significant differences among the mixes, indicating that crumb rubber from tyres other than trucks can be successfully incorporated into asphalt without performance issues.⁵⁰
- 6.44 The Western Australian Government stated that crumb rubber use in road applications should be a key consideration for the Australian Government as there is 'sufficient evidence to show significant whole-of-life costs savings for custodians of road systems':⁵¹

Accordingly, Main Roads Western Australia has made crumb rubber a standard allowable input for road construction and maintenance that it commissions, with crumb rubber included in relevant Main Roads WA specifications.⁵²

- 6.45 Mr Les Marchant, Director of Materials Engineering at Main Roads Western Australia, explained to the Committee that:

There are massive environmental benefits in using crumbed scrap rubber, mostly from tyres. It's not going to landfill and it's not being dumped or burnt. It's going into bitumen. It gives you longer life. It's one of these recycled products that help give us much better long-term sustainability outcomes with whole-of-life-cycle benefits and reduced maintenance intervention, which then reduces your carbon footprint for future maintenance.⁵³

⁴⁸ RAPAD, *Submission 28*, p. 5.

⁴⁹ Southern Sydney Regional Organisation of Councils (SSROC), *Submission 41*, p. 3.

⁵⁰ Austroads, *Submission 35*, p. 5.

⁵¹ Western Australian Government, *Submission 63*, pp. 3–4.

⁵² Western Australian Government, *Submission 63*, pp. 3–4.

⁵³ Mr Les Marchant, Director, Materials Engineering, Main Roads Western Australia, *Committee Hansard*, 23 April 2026, p. 22.

6.46 When asked by the Committee whether using rubber crumb on roads leaches any products into the environment, Mr Marchant stated that although a very thin surface layer of rubber-modified bitumen can gradually wear away from asphalt, the amount of rubber released is negligible compared with the much larger quantity of rubber routinely shed from vehicle tyres using the roads.⁵⁴ This view was echoed by several other witnesses.⁵⁵

6.47 In response to a question from the Committee on why there has not been a higher adoption rate for crumb rubber in new roads, Dr Mike Shackleton, Chief Research Officer of NTRO, was of the view that it is an ‘awareness issue’:⁵⁶

I think it really comes back to the road-engineering industry being a very conservative industry because of the value of the asset they have and the visibility of that asset. They're very reluctant to adopt new things without an evidence base. It's providing that evidence base, I think, that's going to create the biggest change in mindset—to provide the evidence base but also to help them become more familiar with it through training programs and through having documentation that they can read and satisfy themselves that this is a tried and tested material, that they're not the first people to use it and that they are in fact letting benefits go through to the keeper, so to speak, if they don't adopt it and even look to increase the percentages of what they're using in the material.⁵⁷

6.48 SSROC was of the view that crumb rubber-modified asphalt is a proven and promising road construction material that can improve pavement performance, reduce environmental impacts, create a substantial domestic market for waste tyres, and advance circular economy objectives. However, it argued that wider adoption will require government support, technical standardisation, industry investment, and financial incentives to overcome higher upfront costs.⁵⁸

6.49 Several other submissions, especially from local governments, discussed the cost factor for crumb rubber in road construction.⁵⁹ For example, Mayor Shaun Radnedge of Murweh Shire Council told the Committee that councils must weigh up the costs against their limited budget:

[...] I believe it's about 15 per cent more expensive to produce bitumen with crumb rubber in it. For us, we only have X amount of road budget. We need to

⁵⁴ Mr Les Marchant, Director, Materials Engineering, Main Roads Western Australia, *Committee Hansard*, 23 April 2026, p. 24.

⁵⁵ See, for example: Dr Mike Shackleton, Chief Research Officer, NTRO, *Committee Hansard*, 1 May 2026, p. 7; Mr James Fairweather, Chief Executive Officer, Tyrecycle, *Committee Hansard*, 1 May 2026, p. 13; UNSW SMaRT Centre Sustainable Communities and Waste Hub, *Submission 71*, p. [1].

⁵⁶ Dr Mike Shackleton, Chief Research Officer, NTRO, *Committee Hansard*, 1 May 2026, p. 7.

⁵⁷ Dr Mike Shackleton, Chief Research Officer, NTRO, *Committee Hansard*, 1 May 2026, p. 7.

⁵⁸ SSROC, *Submission 41*, pp. 1–9.

⁵⁹ See, for example: NQROC, *Submission 34*, p. [1]; S & J Scrap Tyre Disposals, *Submission 39*, p. [4]; SSROC, *Submission 41*, p. 9; ATRA, *Submission 42*, pp. [4–5]; TFI (Tradefaire International), *Submission 50*, p. 8; Australian Local Government Association (ALGA), *Submission 59*, p. 3.

get the maximum amount we possibly can with that budget. If we were to go and add another 15 per cent, we would get 15 per cent less.⁶⁰

- 6.50 However, Dr Azeem Remtulla, Director of Bitumen Solutions, was of the opinion that 'spending five per cent or 10 per cent more on a road so that it will last twice as long goes to the balance of return on investment'.⁶¹

[...] by using some of these products, such as crumb rubber or modified binders, we are achieving much higher longevity for the roads, and [...] it also reduces maintenance. If you package all of this together, it certainly has to be looked at holistically as an asset, and you need to see what these items are contributing.⁶²

Concerns for the use of crumb rubber

- 6.51 Despite these benefits, some submissions identified a few environmental and health concerns associated with crumb rubber.⁶³
- 6.52 Elan Energy Matrix commissioned a report by JBS&G, an environmental consulting firm, to review public domain literature about the safety of microplastics, focusing on used tyre crumb rubber. The report raised concerns about the environmental and potential health impacts of using crumb rubber derived from end-of-life tyres, particularly in synthetic sports fields, playgrounds, asphalt and road construction. It also highlighted how the European Commission has implemented a ban on the use of tyre crumb rubber as infill for synthetic turf sporting field due to risks to human health.⁶⁴
- 6.53 Additionally, Mr Ian Bellinge, Managing Director of Elan Energy Matrix, told the Committee that crumb rubber should be considered as a microplastic like it has been in the EU.⁶⁵
- 6.54 The Northern Sydney Regional Organisation of Councils submitted that tyre crumb is 'of concern when it is used as soft fall playground surfaces and infill for synthetic sports fields' due to its environmental and health risks.⁶⁶

The NSW Chief Scientist & Engineer's 2022 *'Independent review into the design, use and impacts of synthetic turf in public open spaces'* found that synthetic sports fields that use crumbed rubber infill without suitable measures to reduce infill loss, shed hundreds of kilograms of crumbed rubber per sports field per year, created microplastic pollution to adjacent land and stormwater systems. The stormwater runoff exceeded permissible chemical concentrations, and some

⁶⁰ Mayor Shaun Radnedge, Murweh Shire Council, *Committee Hansard*, 12 June 2026, p. 22.

⁶¹ Dr Azeem Remtulla, Director, Bitumen Solutions, *Committee Hansard*, 15 July 2026, p. 14.

⁶² Dr Azeem Remtulla, Director, Bitumen Solutions, *Committee Hansard*, 15 July 2026, p. 13.

⁶³ See, for example: Elan Energy Matrix, *Submission 15*, p. 6; The Parks, *Submission 23*, p. 4; NSROC, *Submission 25*, p. 3; Mr Gary Pead, Climate Reality Project & Sustainable Renewable Solutions, *Submission 57*, p. 6.

⁶⁴ Elan Energy Matrix, *Submission 15*, p. 6; ALGA, *Submission 59*, p. 2.

⁶⁵ Mr Ian Bellinge, Managing Director, Elan Energy Matrix, *Committee Hansard*, 23 April 2026, p. 12.

⁶⁶ NSROC, *Submission 25*, p. 5.

chemicals could bioaccumulate in aquatic environments. Other studies have found that chemicals from tyre crumbs can cause DNA damage and oxidative stress to aquatic life, and the crumbed rubber in sports fields contained levels of chemicals such as Polycyclic Aromatic Hydrocarbons (PAHs) that exceeded statutory limits.⁶⁷

6.55 The Parks also referenced the NSW Chief Scientist & Engineer's independent review and called for support towards 'applied research and national standards to enable safe, high-value uses of recycled tyre materials, including consistent standards for playgrounds, sports fields, and construction applications, informed by long-term environmental and health monitoring'.⁶⁸

6.56 Ms Yvette Barrs, Executive Manager of Environment Waste and Sustainability of the Illawarra Shoalhaven Joint Organisation, told the Committee that 'councils need clearer guidance on recycled tyre application':⁶⁹

Like with all recycled products, councils are increasingly cautious about tyre crumb use in playground soft-fall, synthetic sport surfaces and high-contact public environments. There is currently insufficient nationally coordinated guidance regarding microplastic shedding, chemical leeching, stormwater pathways and long-term exposure risks.⁷⁰

6.57 Mr Charlie Reading, State Manager of ELT Recycling Australia, believed that there were industry misconceptions about crumb rubber and its sourcing, production and performance, and contended that there needs to a gradual 'brand image change' required for the product.⁷¹

Imported crumb rubber

6.58 S & J Australian Scrap Tyre Disposals submitted that 'the running track surface for the Commonwealth Games on the Gold Coast was produced using crumb rubber from overseas', and provided commentary that it was 'hopeful that the same mistake won't be made for the upcoming Olympics in Brisbane'.⁷²

6.59 Bridgestone Australia cautioned that imported crumb rubber is often 'significantly cheaper than locally manufactured crumb', resulting in some Australian manufacturers using imported "raw materials" rather than using domestically manufactured tyre waste.⁷³

⁶⁷ NSROC, *Submission 25*, p. 3.

⁶⁸ The Parks, *Submission 23*, p. 5.

⁶⁹ Ms Yvette Barrs, Executive Manager, Environment Waste and Sustainability, Illawarra Shoalhaven Joint Organisation (ISJO), *Committee Hansard*, 27 May 2026, p. 1.

⁷⁰ Ms Yvette Barrs, Executive Manager, Environment Waste and Sustainability, ISJO, *Committee Hansard*, 27 May 2026, p. 1.

⁷¹ Mr Charlie Reading, State Manager, ELT Recycling Australia, *Committee Hansard*, 1 May 2026, p. 2.

⁷² S & J Australian Scrap Tyre Disposals, *Submission 39*, p. [5].

⁷³ Bridgestone Australia, *Submission 31*, p. [2].

- 6.60 Porous Lane observed ‘that products using imported rubber crumb are often significantly cheaper than products made from Australian-processed tyre materials’.⁷⁴

This price disparity reflects differences in labour costs, environmental regulation, stewardship obligations and compliance requirements, rather than differences in performance. As a result, products delivering verified Australian circular-economy benefits can struggle to compete on upfront cost alone. This weakens demand for Australian end-of-life tyres and discourages private investment in domestic processing and manufacturing.⁷⁵

Other uses for tyre-derived materials and products

- 6.61 CTS Tyre Recycling told the Committee that it produces acoustic underlay matting, gym tiling and load-restraint matting for the transport industry.⁷⁶

- 6.62 A1 Rubber also told the Committee that it produces a range of commercial flooring such as ‘acoustic underlay to stop noise transfer in high-rise buildings to a thicker acoustic underlay for use in gyms’ but the cost of these products can be a limiting factor to expansion.⁷⁷

There is a price factor, whether we're compared to non-recycled product—like vinyl, which is much cheaper than our product—or a product which is similar to ours but manufactured overseas with a different cost base; that could also be cheaper. We have to compete on the product characteristics and the quality, making sure it's fit for purpose as well as for the price.⁷⁸

- 6.63 Noting tyre-derived material uses in road construction, the Shire of West Arthur suggested tyre-based road barriers be explored as an alternative to concrete and was of the view that modular tyre barriers would reduce the severity of car accidents and enable repeated recycling ‘creating a closed-loop system’.⁷⁹
- 6.64 Big Tyre suggested end-of-life tyres ‘would form a perfect back-drop at a shooting range to absorb bullets’ and that ‘they can be cut in half and filled with water for cattle water tanks on farms that last longer than any concrete tank’.⁸⁰

ReMade in Australia

- 6.65 The ReMade in Australia scheme is Australia’s new dedicated ‘recycled content’ brand. Consumers, businesses and governments can identify genuine, certified

⁷⁴ Porous Lane, *Submission 51*, p. 3.

⁷⁵ Porous Lane, *Submission 51*, p. 3.

⁷⁶ Mr Leigh Cometti, Managing Director, CTS Tyre Recycling, *Committee Hansard*, 23 April 2026, p. 6.

⁷⁷ Mr Timothy Ekert, Chief Executive Officer, A1 Rubber, *Committee Hansard*, 12 June 2026, p. 18.

⁷⁸ Mr Timothy Ekert, Chief Executive Officer, A1 Rubber, *Committee Hansard*, 12 June 2026, p. 18.

⁷⁹ Shire of West Arthur, *Submission 3*, pp. [1–2].

⁸⁰ Big Tyre, *Submission 2*, p. [3].

products and projects that use recycled content and will be made in, or constructed in, Australia.⁸¹

6.66 ReMade in Australia aims to:

- 1 strengthen consumer confidence in, and demand for, Australian made recycled content products
- 2 drive an increase in demand for Australian recycled content and Australian recycled content manufacturing.⁸²

6.67 In its submission, DCCEEW stated that 'as of December 2025, certification rules for the scheme were under assessment by the Australian Competition and Consumer Commission.'⁸³ The full set of proposed rules included tyres under Class 12 of goods and services.⁸⁴

6.68 The Australian Competition and Consumer Commission (ACCC) has since released its initial assessment of the proposed certification rules and raised several concerns.⁸⁵ DCCEEW is currently working with relevant parties to respond to the ACCC's feedback.⁸⁶

Energy recovery

6.69 Energy recovery refers to processes where tyres are treated to extract usable energy, such as heat, steam or electricity generation.⁸⁷

6.70 Evidence received mainly focussed on tyre-derived fuel (TDF), but a few submissions also canvassed other emerging opportunities such as pyrolysis, de-vulcanisation and water jet deconstruction. Other processes such as cryogenics⁸⁸ and gasification⁸⁹ were also raised in submissions, however, the economic benefits and reliability at commercial-scale operations could not be verified.

⁸¹ DCCEEW, *ReMade in Australia*, <https://www.dcceew.gov.au/environment/protection/waste/consumers/remade-in-australia> (accessed 17 August 2026).

⁸² DCCEEW, *Submission 7*, p. 7.

⁸³ DCCEEW, *Submission 7*, p. 7.

⁸⁴ IP Australia, *Trade mark 2505834*, <https://search.ipaustralia.gov.au/trademarks/search/view/2505834?q=ReMade+in+Australia> (accessed 17 August 2026)

⁸⁵ DCCEEW, *ReMade in Australia*, <https://www.dcceew.gov.au/environment/protection/waste/consumers/remade-in-australia> (accessed 17 August 2026).

⁸⁶ DCCEEW, *ReMade in Australia*, <https://www.dcceew.gov.au/environment/protection/waste/consumers/remade-in-australia> (accessed 17 August 2026).

⁸⁷ TSA, *MFA Report*, p. 47.

⁸⁸ Michelin Australia, *Submission 52*, p. [4].

⁸⁹ Mr Gary Pead, Climate Reality Project & Sustainable Renewable Solutions, *Submission 57*, pp. 1–6.

- 6.71 According to TSA, energy recovery accounted for approximately 40 per cent of used tyre fates in 2023–24, making it the largest end-of-life pathway for tyres in Australia.⁹⁰
- 6.72 DCCEEW submitted that ‘while energy recovery can be considered more circular than landfill, burial or dumping, it is not recycling. Once the [...] tyres are burnt for energy recovery, they are removed from the circular economy as that resource is consumed and no longer available.’⁹¹

Tyre derived fuel (TDF)

- 6.73 TDF is a fuel made from end-of-life tyres that have been shredded, chipped or otherwise processed for use as an energy source.
- 6.74 TSA stated that when used for energy recovery, ‘TDF offers clear benefits when it displaces coal, as it has a higher calorific value, and can significantly reduce CO₂ emissions.’⁹² Similarly, Tyrecycle advised that ‘TDF generates approximately 60% fewer emissions than brown coal, providing a high-heat, lower-carbon alternative.’⁹³
- 6.75 The Cement Industry Federation noted that cement kilns are ideally suited to the safe recovery of energy using TDF:
- [...] tyre-derived fuel (TDF) is useful in cement manufacturing because it provides a high-energy, cost-effective alternative to traditional fossil fuels while supporting waste reduction and circular economy goals. Tyres have a calorific value comparable to coal, making them well suited to the extreme temperatures of cement kilns, and the clinkering process benefits from this co-processing because the long residence time and stable heat profile support complete combustion and consistent clinker formation.⁹⁴
- In addition, the mineral content of tyres, including steel and ash, is incorporated into the clinker, leaving no residual waste. By substituting TDF for coal or gas, cement manufacturers can reduce fuel costs, lower reliance on virgin fossil resources, and decrease overall greenhouse gas emissions.⁹⁵
- 6.76 The Tasmanian Government’s Department of State Growth (DSG) detailed in its submission that Tasmania’s tyre-waste recovery has improved through industry consolidation, with the Tyrecycle–Barwicks joint venture now capturing around 90 per cent of the state’s end-of-life tyres (4,000–5,000 tonnes annually).⁹⁶ It highlighted that:

In May 2024, the Tasmanian Government announced a \$1.27 million grant to support an added-value use opportunity for waste tyre reprocessing. This grant

⁹⁰ TSA, *Submission 16*, p. 27.

⁹¹ DCCEEW, *Submission 7*, p. 6.

⁹² TSA, *Submission 16*, p. 28.

⁹³ Tyrecycle, *Submission 19*, p. [7].

⁹⁴ Cement Industry Federation, *Submission 62*, p. [3].

⁹⁵ Cement Industry Federation, *Submission 62*, p. [5].

⁹⁶ Tasmanian Government, *Submission 27*, p. [1].

supported the existing JV [joint ventures] to invest in manufacturing of TDF chips which can be used as a fuel alternative to coal. Because of the high energy content in tyres, TDF can decrease greenhouse gas emissions by about 30 per cent when used as a coal replacement.⁹⁷

- 6.77 Further, the DSG outlined how the upgrades to Cement Australia's alternative fuels kiln are reducing environmental impacts but also extending the life of Tasmania's cement production industry:⁹⁸

As part of a project partly funded by the Australian Government's Powering the Regions Fund, Cement Australia is investing \$106 million to upgrade its kiln at their Tasmanian facility to accept waste tyres. The upgrades will enabling the co-processing of TDF and wood waste-based fuel (WBF). Cement Australia will co-process end-of-life tyres, shredding them to be utilised used as TDF for their upgraded kiln.

The investment will reduce the plant's CO₂ emissions by 107,000 tonnes per year and replace more than 110,000 tonnes of coal with WBF and TDF, while diverting large quantities of tyres from landfill.

The high-temperature rotary kiln manufacturing process is globally recognised as an excellent environmentally sustainable means for eliminating hazardous wastes, while the ash derived via the process is co-processed for cement.⁹⁹

- 6.78 While some submissions spoke highly of TDF as it diverts tyres from landfill and replaces coal and other fossil fuels in industrial processes, others considered TDF a lower-order outcome within the waste hierarchy as it permanently destroys the resource.

- 6.79 For example, the Business Council for Sustainable Development Australia was of the view that 'while TDF may provide short-term diversion from landfill, it destroys material value and removes rubber from future industrial uses'.¹⁰⁰

This approach is increasingly out of step with global circular economy trends that favour value-retention strategies such as reuse, remanufacturing, and feedstock substitution.¹⁰¹

- 6.80 Bridgestone Mining Solutions Australia shared a similar view that recovery pathways should follow the waste hierarchy and prioritise 'reuse, retreading, repair, and high-value material recovery ahead of energy recovery'.¹⁰²

⁹⁷ Tasmanian Government, *Submission 27*, p. [1].

⁹⁸ Tasmanian Government, *Submission 27*, pp. [1 –2].

⁹⁹ Tasmanian Government, *Submission 27*, pp. [1 –2].

¹⁰⁰ Business Council for Sustainable Development Australia, *Submission 58*, p. [7].

¹⁰¹ Business Council for Sustainable Development Australia, *Submission 58*, p. [7].

¹⁰² Bridgestone Mining Solutions Australia, *Submission 61*, p. [4].

6.81 S & J Australian Scrap Tyre Disposals emphasised that ‘as a country we should absolutely look beyond TDF. It is the higher order outcomes that are the future and what an established recycling sector like ours should be moving towards.’¹⁰³

6.82 RubberGem described TDF as a ‘low-value, linear outcome’ that:¹⁰⁴

- Crowds out higher-value material recovery and manufacturing pathways
- Reduces feedstock availability for value-adding recyclers
- Increases commercial risk for investors seeking to manufacture recycled rubber products.¹⁰⁵

Exporting tyre-derived fuel

6.83 Several submissions raised concerns that many end-of-life tyres were being exported as TDF instead of being retained in the domestic circular economy.¹⁰⁶

6.84 According to MTA Group, over 70 percent of recovered tyres in Australia are shipped overseas as TDF to be burned offshore:¹⁰⁷

This situation is a missed economic opportunity. Every tonne sent overseas to be burnt in kilns is a tonne of material that can be used in road building or repair or other purposes across the country.

Modern technology allows for more than 90% of a tyre’s components to be reclaimed, allowing for a broader use of reused tyres in areas including:

- Civil Engineering & Infrastructure including roads (asphalt sprays and seal, acoustic barriers and rail ballast)
- Industrial products (Conveyor belts, acoustic underlay and load restraint matting)
- Recreational surfacing (impact-absorbing flooring for playground, athletic tracks and equestrian surfaces)¹⁰⁸

6.85 Bridgestone Australia stated that the current Australian waste tyre management system prioritises low-order outcomes, with a significant volume of tyres exported offshore as TDF:

Despite significant investment, the current framework delivers low-order outcomes, with the majority of tyres exported offshore for incineration rather than retained in a domestic circular economy. This represents not only inefficient financial commitment but also creates risk through reliance on overseas markets

¹⁰³ S & J Australian Scrap Tyre Disposals, *Submission 39*, p. [8].

¹⁰⁴ RubberGem, *Submission 17*, p. [2].

¹⁰⁵ RubberGem, *Submission 17*, p. [2].

¹⁰⁶ See, for example: TSA, *Submission 16*, p. 28; MTA Group, *Submission 20*, p. 2; Bridgestone Australia Limited, *Submission 31*, p. [5]; WSROC, *Submission 46*, p. 2; Business Council for Sustainable Development Australia, *Submission 58*, [2–3]; Product Stewardship Centre of Excellence, *Submission 68*, p. [5].

¹⁰⁷ MTA Group, *Submission 20*, p. 2.

¹⁰⁸ MTA Group, *Submission 20*, p. 3.

for waste management—a vulnerability that could disrupt disposal pathways and increase costs. At the same time, it is a missed opportunity to create local jobs, support carbon emission reduction targets, and recover valuable resources.¹⁰⁹

- 6.86 The Business Council for Sustainable Development Australia cautioned that the recovery metrics mask low circularity:

Australia's reported recovery rate of ~66% for end-of-life tyres (EOLTs) in 2023–24 obscures the reality that only 26% remained in a material loop via reuse, retreading, or recycling into new products. Approximately 40% of EOLTs were exported as tyre-derived fuel (TDF), predominantly to kilns in Asia, where the rubber is irreversibly destroyed. While this displaces coal overseas, it prevents domestic value recovery and entrenches Australia's reliance on linear, disposal-based outcomes.

This creates a structural misalignment between national circular economy objectives and the actual functioning of the system — a gap that weakens investor confidence and limits sovereign manufacturing capability.¹¹⁰

Pyrolysis

- 6.87 According to ATIC, pyrolysis (the combustion of materials in an oxygen-free environment) has 'been on the radar of tyre recyclers for many years.'¹¹¹ ATIC wrote in its submission that typically, the three major outputs of pyrolysis processes for tyres are:

- 1 steel to be re-used as quality scrap in making new steel
- 2 carbon char with the potential to be upcycled as recycled carbon black (rCb), a significant component used in tyre manufacturing
- 3 pyrolysis oil that can be further refined for several applications in transportation, petrochemical or plastics industries, and in some very specific cases, as a drop-in marine fuel suitable for blending for use in large diesel engines.¹¹²

- 6.88 Kal Tire Australia submitted that 'thermal conversion recovers valuable commodities locked away in scrap tyres' and the 'recovered materials are proven to have less emissions than the production of virgin raw materials.'¹¹³

- 6.89 ATIC expressed that 'reliability of feedstock, consistent quality of outputs and environmental compliance remain the three major critical factors of success for a

¹⁰⁹ Bridgestone Australia, *Submission 31*, p. [6].

¹¹⁰ Business Council for Sustainable Development Australia, *Submission 58*, p. [3].

¹¹¹ ATIC, *Submission 29*, p. 10.

¹¹² ATIC, *Submission 29*, p. 10.

¹¹³ Kal Tire Australia, *Submission 43*, p. [45].

plant.¹¹⁴ GACWheels Australia was of a similar view, submitting that ‘pyrolysis is progressing in Australia, but face market acceptance and quality hurdles.’¹¹⁵

- 6.90 The Business Council for Sustainable Development Australia commented that thermal recovery has circular potential, but there are barriers to scaling up, including high capital costs (approximately \$10 to \$25 million per facility) and carbon black manufacturers requiring consistent purity and particle structure to substitute rCb for virgin inputs.¹¹⁶
- 6.91 Viva Energy and Cleanaway’s submissions described how in early 2025, Viva Energy signed a memorandum of understanding with Klean Industries, a Canadian resource recovery and advanced recycling provider, to study the potential to create a tyre-recycling facility in Australia, capable of processing up to 80,000 tonnes of used tyres annually.¹¹⁷ The proposed recycling facility would extract three products from used tyres—steel, rCb and biogenic pyrolysis oil.¹¹⁸

De-vulcanisation

- 6.92 ATIC explained that de-vulcanisation could almost be defined as ‘un-scrambling of the egg’, whereby permanent sulphur bonds in tyre compounds are reversed through mechanical or chemical processes to generate a semi-finished product, almost like new rubber in its characteristics.¹¹⁹ However, the process is relatively complex and technology intensive.¹²⁰ It is also a process which is still at lab-scale and early commercial adoption, globally.¹²¹

Water jet deconstruction

- 6.93 Used for the recycling of medium to large-size end-of-life tyres, water jet deconstruction refers to the use of equipment that uses the energy of water at extremely high pressure (from 2,000 to 3,000 bar)¹²² to break up the tyres.¹²³ ATIC pointed out that despite its relatively low productivity, high capital and energy inputs, the process shows promise and would ideally be suited for the Australian context, where there are many end-of-life OTR tyres.¹²⁴

¹¹⁴ ATIC, *Submission 29*, p. 10.

¹¹⁵ GACWheels, *Submission 33*, p. 3.

¹¹⁶ Business Council for Sustainable Development Australia, *Submission 58*, p. [5].

¹¹⁷ See, for example: Cleanaway, *Submission 37*, p. 4; Viva Energy, *Submission 40*, p. [1].

¹¹⁸ See, for example: Cleanaway, *Submission 37*, p. 4; Viva Energy, *Submission 40*, p. [1].

¹¹⁹ ATIC, *Submission 29*, p. 11.

¹²⁰ ATIC, *Submission 29*, p. 11.

¹²¹ Business Council for Sustainable Development Australia, *Submission 58*, p. [5].

¹²² Note: Normal atmospheric pressure at sea level is about 1 bar, and a typical car tyre is about 2–3 bar.

¹²³ ATIC, *Submission 29*, pp. 11–12.

¹²⁴ ATIC, *Submission 29*, pp. 11–12.

Landfill

- 6.94 Landfills are legal waste disposal sites. Larger engineered landfills include liners and leachate systems to prevent environmental contamination, while smaller sites may have less robust controls. There are more than 1,000 landfills across Australia.¹²⁵
- 6.95 According to TSA, in 2023–24, approximately 50,000 tonnes of used tyres were disposed of in Australian landfills (around nine per cent of all used tyres). This included 21,000 tonnes of passenger tyres, 26,600 tonnes of truck and bus tyres, and 2,400 tonnes of OTR tyres.¹²⁶
- 6.96 The Western Sydney Regional Organisation of Councils (WSROC) acknowledged the importance of effective circular economy models to address growing waste challenges, particularly as Greater Sydney is projected to exhaust landfill capacity by 2030, without intervention.¹²⁷
- 6.97 The Local Government Association of Queensland (LGAQ) called for improved actions to recover materials from ending up in landfill:
- With 184,000 tonnes of tyres not recovered within the 2023-2024 period across Australia, this potential consumption of valuable airspace within council landfills could be avoided if the appropriate governance for managing end-of-life tyres (EOLT) were in place.¹²⁸
- 6.98 RubberGem believed that due to all tyre types being permitted to be disposed of in landfill in Western Australia, it has several negative consequences:
- Tyre recyclers are forced to compete directly with landfill pricing, which is often artificially low and does not reflect long-term environmental or social costs.
 - Mining and commercial generators have little financial incentive to pursue higher-order recycling options.
 - Long-term investment in recycling infrastructure becomes difficult to justify when landfill remains the cheapest option.¹²⁹
- 6.99 Tyrecycle was of a similar view, arguing that the practice of allowing landfilling of passenger and truck tyres (particularly in Western Australia) and in-pit disposal at mines is the most significant regulatory barrier to circular economy outcomes, and

¹²⁵ TSA, *Submission 16*, p. 29.

¹²⁶ TSA, *Submission 16*, p. 29.

¹²⁷ WSROC, *Submission 46*, p. 4.

¹²⁸ LGAQ, *Submission 49*, p. 4.

¹²⁹ RubberGem, *Submission 17*, p. [1].

advocated for landfill bans for all tyres.¹³⁰ Several other submissions also called for a ban on landfilling whole tyres.¹³¹

6.100 Landfill disposal of tyres remains permitted in some regions of North Queensland as well. ELT Rubber was of the view that ‘allowing landfill while restricting export undermines recycling objectives. Landfilling should be progressively restricted or phased out.’¹³²

6.101 The North Queensland Regional Organisation of Councils (NQROC) called for an introduction of a landfill ban on tyres at the state and territory level, as a means of incentivising reuse and recycling.¹³³

Onsite burial

6.102 Onsite burial covers burial of tyres on a site that is not a formal landfill, whether approved by a regulator or not, so that the tyres can’t be recovered.¹³⁴

6.103 In the 2023 ‘Tipping the balance Research Report’, TSA stated that burying tyres shifts the problem into the future rather than solving it:

The lack of explicit costs associated with onsite burial may also give the illusion of being a cost effective solution, but these costs are merely hidden or postponed. Eventually, someone will bear the burden of managing these stockpiles or addressing the environmental impact of buried tyres – whether it be the original operator, a new landowner, the local community, or the government.¹³⁵

6.104 Evidence to the inquiry consistently framed onsite burial as a linear disposal practice incompatible with circular economy objectives. Stakeholders argued that onsite burial:

- permanently removes valuable rubber, steel and other materials from future use
- suppresses investment in recycling and recovery infrastructure
- undermines retreading, reuse and advanced manufacturing opportunities
- contributes significantly to Australia's poor OTR tyre recovery rates.¹³⁶

¹³⁰ Tyrecycle, *Submission 19*, pp. [3], [5].

¹³¹ See, for example: Elan Energy Matrix, *Submission 15*, p. 4; RubberGem, *Submission 17*, p. [3]; CTS Tyre Recycling, *Submission 38*, p. 1; S & J Australian Scrap Tyre Disposals, *Submission 39*, pp. [3], [13]; ATRA, *Submission 42*, pp. [3], [6], [13]; TFI (Tradefaire International), *Submission 50*, p. 3.

¹³² ELT Rubber, *Submission 53*, p. [2].

¹³³ NQROC, *Submission 34*, p. [2].

¹³⁴ TSA, *Submission 16*, p. 28.

¹³⁵ TSA, *Tipping the balance Research Report*, p. 44.

¹³⁶ See, for example: Big Tyre, *Submission 2*, p. 2; TSA, *Submission 16*, pp. 28, 32; GACWheels Australia, *Submission 33*, p. 4; S & J Scrap Tyre Disposals, *Submission 39*, pp. [2], [9]; ATRA, *Submission 42*, pp. [1–2]; TFI (Tradefaire International), *Submission 50*, p. 4; Business Council for Sustainable Development Australia, *Submission 58*, p. [3].

6.105 Enforcement and compliance issues regarding the onsite burial of OTR tyres have been discussed in Chapter 3.

Burning

6.106 Burning covers incineration of tyres in the open environment without recovery of energy. According to TSA, data on the annual tonnage of tyres intentionally burned, particularly on farms or remote sites, is not systematically recorded, so the scale of this practice is difficult to quantify accurately.¹³⁷

Stockpiling and illegal dumping

6.107 Stockpiled and illegally dumped tyres are not recovered and technically ‘in flow’ as their final fate is yet to be determined. Once collected, stockpiled and illegally dumped tyres are typically sent to recyclers, landfills or stored in legal stockpiles, deferring future management costs.¹³⁸

6.108 Evidence to the inquiry indicated that stockpiling and illegal dumping are not merely waste-management issues but manifestations of broader shortcomings in Australia's tyre circular economy, reflecting failures in collection, recovery, market development and stewardship arrangements. Submitters argued that moving tyres into productive reuse, retreading and recycling pathways would reduce stockpiling and illegal dumping while improving environmental, economic and circular economy outcomes.¹³⁹

6.109 Enforcement and compliance issues regarding stockpiling and illegal dumping have been discussed in Chapter 3.

Opportunities for improving tyre circularity

6.110 TSA reported that almost three-quarters of Australia's end-of-life tyres go to ‘end fates that are not circular.’¹⁴⁰ To achieve improved tyre circularity, TSA advocated for:

- well-designed stewardship frameworks driven by circular principles that coordinate across the entire value chain
- addressing regulatory barriers that constrain investment and innovation
- time and investment to achieve innovation.¹⁴¹

¹³⁷ TSA, *Submission 16*, p. 30.

¹³⁸ TSA, *Submission 16*, p. 30.

¹³⁹ See, for example: Big Tyre, *Submission 2*, p. [2]; MTA Group, *Submission 20*, p. 2; RAPAD, *Submission 28*, p. 6; Viva Energy Australia, *Submission 40*, p. [1]; SSROC, *Submission 41*, p. 3; Hume City Council, *Submission 67*, p. 12;

¹⁴⁰ TSA, *Submission 16*, p. 50.

¹⁴¹ TSA, *Submission 16*, p. 51.

- 6.111 Fleurieu Regional Waste Authority stated that ‘a circular model is the most responsible and sustainable path forward.’¹⁴²
- 6.112 Mr Timothy Ekert, Chief Executive Officer of A1 Rubber, told the Committee that ‘Australia should look at end-of-life tyres not only as a waste problem; they should look at them and see a raw material with amazing mechanical properties and an overall domestic manufacturing resource.’¹⁴³

Procurement

- 6.113 Submissions identified procurement as one of the most powerful levers for improving tyre circularity, particularly through government purchasing of recycled tyre products and retreaded tyres. A consistent theme was that Australia's challenge is not a lack of technology, but a lack of demand certainty.¹⁴⁴
- 6.114 DCCEEW highlighted the Commonwealth's Environmentally Sustainable Procurement Policy which requires reporting on recycled content in major construction projects and specifically includes crumb rubber and tyre products. Australian Public Service entities and suppliers are required to comply with this policy.¹⁴⁵
- 6.115 As of 1 July 2025, the policy applies to four high-impact procurement categories, including for Construction Services at or above \$7.5 million.¹⁴⁶

Tyre-derived products

- 6.116 TSA advocated for a mandate on recycled content in government procurement to create demand for Australian tyre-derived materials.¹⁴⁷ Similarly, RubberGem called for procurement preferences for Australian-made recycled rubber products.¹⁴⁸ Several other submissions listed government procurement as a way to create demand for tyre-derived products.¹⁴⁹

¹⁴² Fleurieu Regional Waste Authority, *Submission 11*, p. [1].

¹⁴³ Mr Timothy Ekert, Chief Executive Officer, A1 Rubber, *Committee Hansard*, 12 June 2026, p. 16.

¹⁴⁴ See, for example: Bitumen Solutions, *Submission 13*, p. [3]; Tyrecycle, *Submission 19*, pp. [5–6]; Cleanaway, *Submission 37*, pp. [4–6]; LGAQ, *Submission 49*, p. 12; MidCoast Council, *Submission 56*, pp. [3–4]; Business Council for Sustainable Development Australia, *Submission 58*, pp. [2], [8].

¹⁴⁵ DCCEEW, *Submission 7*, p. 6.

¹⁴⁶ DCCEEW, *Submission 7*, p. 6.

¹⁴⁷ TSA, *Submission 16*, p. 34.

¹⁴⁸ RubberGem, *Submission 17*, p. [4].

¹⁴⁹ See, for example: TSA, *Submission 16*, pp. 9, 34, 55; RubberGem, *Submission 17*, p. [4]; MTAA, *Submission 18*, pp. 5, 7, 9; Tyrecycle, *Submission 19*, pp. [6–8]; MTA Group, *Submission 20*, p. 7; NQROC, *Submission 34*, p. [2]; Cleanaway, *Submission 37*, p. 5; WSROC, *Submission 46*, pp. 3–4; ISJO, *Submission 47*, p. 2; LGAQ, *Submission 49*, p. 14; Far North Queensland Regional Organisation of Councils, *Submission 55*, p. 4; MidCoast Council, *Submission 56*, pp. 3–4; Bridgestone Mining Solutions, *Submission 61*, p. [5]; Product Stewardship Centre of Excellence, *Submission 68*, p. [6].

6.117 Porous Lane suggested that ‘public procurement frameworks give preference or weighting to infrastructure products that use Australian-sourced end-of-life tyres.’¹⁵⁰

6.118 Mr Henk van Diggele, General Manager of Tyrepower, told the Committee that investment in domestic tyre recycling and crumb rubber production must be accompanied by measures to support local demand:

We had a council in Australia, Geelong council, where we had crumb rubber supplied to and they were buying it for \$700 a tonne... [...] The Geelong council went overseas and bought the crumb rubber for \$100 a tonne cheaper. That's an issue we have. I would like to see, if it is mandated, that you actually have a certain amount of Australian crumb rubber used by councils. We're going to have a problem. If we're going to crumb it here and nobody buys it off us, we're going to have an issue.¹⁵¹

6.119 Mr Collin Jennings, Head of Government Relations at MTA Group, spoke to the same issue after Mr van Diggele:

We're exporting when we could be using. If we have the supply, then we go back to procurement methodologies and local governments having procurement processes in place to say, 'We will use X percentage for our bitumen, for our road uses, derived from Australian crumbed tyres.' If you don't have those sorts of procurement methods in contracts, you're barking around the wrong tree.¹⁵²

6.120 Mr Timothy Ekert, Chief Executive Officer of A1 Rubber also shared a similar view:

The most immediate lever available to government is procurement. Where Australian made recycled rubber products meet performance, safety and value-for-money requirements, government funded projects should encourage to specify them. Public infrastructure, playgrounds, schools, sporting facilities, community facilities and other public works are all areas where recycled rubber products can be used.¹⁵³

6.121 Tyrecycle highlighted the success in Victoria whereby VicRoads' standard specification for Section 408—Sprayed Bituminous Surfacing set the parameters for crumb rubber use in Victorian roads.¹⁵⁴ Tyrecycle stated that the policy has achieved the consumption of approximately 750,000 tyres in Victorian roads per annum, and was of the opinion that standardising this practice nationally ‘would ensure significant ongoing consumption, underpinning investment by the recycling sector, supported by government.’¹⁵⁵

¹⁵⁰ Porous Lane, *Submission 51*, p. 3.

¹⁵¹ Mr Henk van Diggele, General Manager, Tyrepower, *Committee Hansard*, 15 July 2026, p. 18.

¹⁵² Mr Collin Jennings, Head, Government Relations, MTA Group, *Committee Hansard*, 15 July 2026, p. 18.

¹⁵³ Mr Timothy Ekert, Chief Executive Officer, A1 Rubber, *Committee Hansard*, 12 June 2026, p. 16.

¹⁵⁴ Tyrecycle, *Submission 19*, p. [7].

¹⁵⁵ Tyrecycle, *Submission 19*, p. [7].

Retreading

- 6.122 The Business Council for Sustainable Development Australia submitted that ‘despite clear whole-of-life performance benefits, retreaded tyres are not consistently recognised in public or private sector procurement frameworks, leading to underinvestment and shrinking capacity.’¹⁵⁶
- 6.123 N.B.R. Tyres suggested that the government ‘lead by example’ and enact a national procurement mandate, requiring ‘all federal, state, and local fleets to use retreads for buses, trucks, and heavy vehicles.’¹⁵⁷ It shared that the use of retreads has proven to be successful for a major Sydney transit bus operator, citing that two-thirds of the tyres installed onto the buses were retreads.¹⁵⁸
- 6.124 Mr Henk van Diggele, General Manager of Tyrepower, agreed that buses and trucks should be getting back onto retreads and commented that ‘if the government mandates that you have to have so much percentage in your Sydney fleet buses, we will reduce the problem we have on the end by three to one.’¹⁵⁹
- 6.125 S & J Australian Scrap Tyre Disposals was in favour of government procurement which prioritised Australian manufactured retreads in bus and trucking fleets.¹⁶⁰
- 6.126 Additionally, N.B.R. Tyres called for tyre retreaders and repairers to be recognised as a separate skill and trade, distinct from motor mechanics:¹⁶¹

The tyre retreading industry in Australia has been in freefall over the years. As a result, skilled labour in this critical industry has become very limited. The highly skilled Tyre Retreader and Repairers in Australia have either retired or are close to retirement.

As such, we will need highly experienced Tyre Retreaders and Repairers from overseas to be allowed to come into Australia, on a temporary visa, to train a new generation of Tyre Retreaders and Repairers in Australia. Currently, it is nearly impossible to bring into Australia highly experienced Tyre Retreaders and Repairers, even on a temporary visa, for training purposes.¹⁶²

Whole-of-life costs

- 6.127 Dr Azeem Remtulla, Director of Bitumen Solutions, told the Committee that ‘government procurement should focus on performance and whole-of-life value and not simply lowest initial cost or recycle content targets.’¹⁶³

¹⁵⁶ Business Council for Sustainable Development Australia, *Submission 58*, p. [3].

¹⁵⁷ N.B.R. Tyres, *Submission 9.1*, p. [1].

¹⁵⁸ N.B.R. Tyres, *Submission 9.1*, pp. [1–3].

¹⁵⁹ Mr Henk van Diggele, General Manager, Tyrepower, *Committee Hansard*, 15 July 2026, p. 17.

¹⁶⁰ S & J Australian Scrap Tyre Disposals, *Submission 39*, p. [5].

¹⁶¹ N.B.R. Tyres, *Submission 9.1*, p. [5].

¹⁶² N.B.R. Tyres, *Submission 9.1*, p. [5].

¹⁶³ Dr Azeem Remtulla, Director, Bitumen Solutions, *Committee Hansard*, 15 July 2026, p. 11.

- 6.128 Similarly, the Australian Flexible Pavements Association submitted that current procurement models may prioritise the lowest upfront capital expenditure, which ignores the long-term performance benefits of rubber-modified products, and called for a shift to procurement settings that recognise whole-of-life cost, sustainability and performance.¹⁶⁴
- 6.129 The Parks reported that there is some ‘progressive work being undertaken by organisations such as Local Government Procurement by using circularity as a metric when undertaking the tender or quotation process.’¹⁶⁵

Grants and incentives

- 6.130 Several submissions, especially from local governments, supported a mix of grants, incentives and subsidies to help overcome the economic barriers to tyre recycling, retreading and circular economy outcomes.¹⁶⁶
- 6.131 3R Group discussed incentives to stimulate domestic markets and offered insights from the New Zealand Tyrewise Scheme:

In the New Zealand scheme, incentives are used to encourage the sale of product to the domestic market over exporting tyres or tyre derived materials. Manufacturers can also claim incentives for products sold in the domestic market, which further helps stimulate domestic investment and market uptake – a vital component of creating a circular economy.¹⁶⁷

- 6.132 Vipal Rubber, Bridgestone Australia and MTAA recommended incentives to improve uptake of retreading.¹⁶⁸ TSA called for incentives to encourage retreading in heavy commercial applications.¹⁶⁹ Flextrid Holdings & Alfabs Mining Equipment advocated for incentives to encourage OTR tyre repair and reuse through tax credits for operators who use retreaded OTR tyres.¹⁷⁰ Business Council for Sustainable

¹⁶⁴ Australian Flexible Pavements Association, *Submission 22*, p. [2].

¹⁶⁵ The Parks, *Submission 23*, p. 3.

¹⁶⁶ See, for example: Shire of West Arthur, *Submission 3*, p. [2]; WALGA, *Submission 5*, p. [2]; Shire of Serpentine Jarrahdale, *Submission 6*, p. 3; Vipal Rubber, *Submission 8*, p. [3]; Patco Tyres, *Submission 12*, p. 3; Bitumen Solutions, *Submission 13*, pp. [1], [4]; Elan Energy Matrix, *Submission 15*, p. 4; TSA, *Submission 16*, pp. 8, 12, 25, 37; RubberGem, *Submission 17*, p. [4]; MTAA, *Submission 18*, pp. 2, 5, 9; MTA Group, *Submission 20*, p. 6; Fortescue, *Submission 21*, pp. 2, 4; Australian Flexible Pavements Association, *Submission 22*, p. [2]; NSROC, *Submission 25*, pp. 2–3, 6; RAPAD, *Submission 28*, pp. 2–3; NQROC, *Submission 34*, p. [2]; Flextrid Holdings & Alfabs Mining Equipment, *Submission 36*, pp. 2, 4; SSROC, *Submission 41*, pp. 8–9; Kal Tire Australia, *Submission 43*, p. [7]; LGAQ, *Submission 49*, pp. 5, 12–13; 15–16; MidCoast Council, *Submission 56*, p. 2; Business Council for Sustainable Development Australia, *Submission 58*, p. [2]; Bridgestone Mining Solutions Australia, *Submission 61*, pp. [4–5]; Western Australian Government, *Submission 63*, p. 9.

¹⁶⁷ 3R Group, *Submission 24*, p. [5].

¹⁶⁸ Vipal Rubber, *Submission 8*, p. [2]; Motor Trades Association of Australia (MTAA), *Submission 18*, p. 9; Bridgestone Australia, *Submission 31*, p. [4].

¹⁶⁹ TSA, *Submission 16*, p. 25.

¹⁷⁰ Flextrid Holdings & Alfabs Mining Equipment, *Submission 36*, p. 2.

Development Australia suggested incentivising high-value reuse and retreading through procurement reform.¹⁷¹

- 6.133 Vipal Rubber provided the example that ‘in the United States, legislative proposals discuss granting tax credits to companies that use retreaded tyres and requiring their partial adoption in government fleets.’¹⁷²
- 6.134 In its submission, Flextrid Holdings & Alfabs Mining Equipment also wrote about the *Retreaded Tire Jobs, Supply Chain Security and Sustainability Act* (H.R.3401, 2025-2026), ‘which aims to support American manufacturing by providing a tax credit for fleets that purchase remanufactured commercial truck tyres.’¹⁷³
- 6.135 The bill would create a temporary federal tax credit for businesses that purchase and use qualifying retreaded tyres. The credit would be the lesser of 30 per cent of the cost of qualifying retreaded tyres or US\$30 per tyre placed into service. To qualify, tyres must be retreaded in the United States and purchased in the United States.¹⁷⁴
- 6.136 Additionally, the bill would require federal executive agencies to give preference to retreaded tyres when purchasing tyres for government fleets. Where a suitable retreaded tyre is available through the General Services Administration schedule, agencies would be expected to choose that option over a comparable new tyre.¹⁷⁵
- 6.137 The bill was introduced in the US House of Representatives on 14 May 2025 and attracted bipartisan co-sponsorship and referred to the House Committee on Ways and Means and the House Committee on Oversight and Government Reform.¹⁷⁶

Research and development

- 6.138 Evidence frequently supported increased funding for innovation and commercialisation.¹⁷⁷
- 6.139 DCCEEW submitted that it supports tyre research through the National Environment Science Program Phase 2.¹⁷⁸ The program’s applied research is delivered through

¹⁷¹ Business Council for Sustainable Development Australia, *Submission 58*, p. [4].

¹⁷² Vipal Rubber, *Submission 8*, p. [2].

¹⁷³ Flextrid Holdings & Alfabs Mining Equipment, *Submission 36*, p. 2.

¹⁷⁴ Govtrack US, *H.R. 3401: Retreaded Tire Jobs, Supply Chain Security and Sustainability Act of 2025*, <https://www.govtrack.us/congress/bills/119/hr3401/text> (accessed 18 August 2026).

¹⁷⁵ Govtrack US, *H.R. 3401: Retreaded Tire Jobs, Supply Chain Security and Sustainability Act of 2025*, <https://www.govtrack.us/congress/bills/119/hr3401/text> (accessed 18 August 2026).

¹⁷⁶ Govtrack US, *H.R. 3401: Retreaded Tire Jobs, Supply Chain Security and Sustainability Act of 2025*, <https://www.govtrack.us/congress/bills/119/hr3401/text> (accessed 18 August 2026).

¹⁷⁷ See, for example: Fleurieu Regional Waste Authority, *Submission 11*, p. [1]; TSA, *Submission 16*, pp. 35, 47, 55; Australian Flexible Pavements Association, *Submission 22*, p. [2]; NSROC, *Submission 25*, p. 3; GACWheels Australia, *Submission 33*, p. 6; Cleanaway, *Submission 37*, p. 5; WSROC, *Submission 46*, p. 3; Business Council for Sustainable Development Australia, *Submission 58*, pp. [6–7].

¹⁷⁸ DCCEEW, *Submission 7*, p. 8.

research hubs, including the Sustainable Communities and Waste Hub at the University of New South Wales.¹⁷⁹ The Hub's research on tyres include:

- Understanding microplastics from tyre wear
- Developing guidance for safe re-use of end-of-life tyres
- Improving the circularity of tyres and exploring opportunities for value recovery.¹⁸⁰

6.140 TSA suggested that the government 'prioritise long-term research and development over short-term initiatives' and 'explore international research and development, as well as experience, including from the global tyre, recycling, mining and stewardship community.'¹⁸¹

6.141 Bitumen Solutions was of the view that, although Australia has strong technical knowledge, 'better connection between research, trials, and delivery is needed.'¹⁸²

6.142 The Business Council for Sustainable Development Australia suggested that research and development (R&D) pilots could be tied to procurement demonstration projects in roads, transport or public construction to validate circular applications:¹⁸³

Australia has a strong R&D base in material sciences, industrial processing, and environmental modelling. However, translation into market-ready, investable solutions remains limited. There is significant opportunity for mission-driven, circular economy R&D investment across the tyre lifecycle.¹⁸⁴

6.143 Patco Tyres argued that the government should provide targeted R&D tax offsets rather than collecting levies and redistributing them through grant programs, as tax incentives would better encourage businesses to invest their own capital in innovation.¹⁸⁵

6.144 WSROC called for stronger research collaboration and government support to move tyre-derived products from trial projects to mainstream use:

There is also positive progress in government procurement, with organisations such as Local Government Procurement (LGP) incorporating circularity criteria into tender and quotation processes to drive industry investment. However, significant gaps remain, particularly in translating innovation into safe, scalable practice. Stronger partnerships between Federal and State Governments, Australian universities and research institutions are required to support applied

¹⁷⁹ DCCEEW, *Submission 7*, p. 8.

¹⁸⁰ DCCEEW, *Submission 7*, p. 8.

¹⁸¹ TSA, *Submission 16*, p. 54.

¹⁸² Bitumen Solutions, *Submission 13*, p. 3.

¹⁸³ Business Council for Sustainable Development Australia, *Submission 58*, p. [9].

¹⁸⁴ Business Council for Sustainable Development Australia, *Submission 58*, p. [8].

¹⁸⁵ Patco Tyres, *Submission 12*, p. 3.

research programs that enhance circular procurement and enable safer, more sustainable and higher-value circular economy outcomes for waste tyres.¹⁸⁶

- 6.145 Speaking from its experience in collaborating with industry to embed widespread usage of 15 per cent crumb rubber bitumen products for spray seals across the State Road Network, the Western Australian Government noted that an important aspect to R&D is the industry take-up of proven products:¹⁸⁷

There is a need for a “technology embedment” step after research and development that needs to provide funding to help industry take up and become comfortable with the new product.¹⁸⁸

Education and awareness

- 6.146 Evidence to the inquiry viewed education as a complementary measure, with many arguing that awareness campaigns are unlikely to achieve substantial change unless accompanied by a mandatory product stewardship scheme, stronger enforcement, improved collection infrastructure and market development for tyre-derived products.
- 6.147 LGAQ identified that there is a ‘need for significant investment and prioritisation of education and behaviour change initiatives as a significant part of the solution for addressing EOL tyre challenges.’¹⁸⁹
- 6.148 Shire of West Arthur called for ‘targeted education campaigns and incentives to discourage on-farm burial and promote recycling’, reflecting concerns that some farmers bury tyres to avoid disposal costs.¹⁹⁰
- 6.149 Shire of Serpentine Jarrahdale proposed a tyre deposit-refund style scheme and drew parallels with the Containers for Change program, suggesting public awareness and financial incentives could encourage tyre returns for recycling.¹⁹¹
- 6.150 The Committee also heard that awareness is required not only for consumers, but also across industry and government procurement, especially in relation to:
- the performance benefits of retreading
 - the performance benefits of crumb-rubber roads
 - overcome perceptions that recycled tyre products are inferior or risky.¹⁹²

¹⁸⁶ WSROC, *Submission 46*, p. 4.

¹⁸⁷ Western Australian Government, *Submission 63*, p. 9.

¹⁸⁸ Western Australian Government, *Submission 63*, p. 9.

¹⁸⁹ LGAQ, *Submission 49*, p. 24.

¹⁹⁰ Shire of West Arthur, *Submission 3*, p. [2].

¹⁹¹ Shire of Serpentine Jarrahdale, *Submission 6*, p. 3.

¹⁹² See, for example: N.B.R. Tyres, *Submission 9.1*, p. [5]; Mr Charlie Reading, State Manager, ELT Recycling Australia, *Committee Hansard*, 1 May 2026, pp. 2, 5; Dr Mike Shackleton, Chief Research Officer, NTRO, *Committee Hansard*, 1 May 2026, pp. 7–8.

Committee comment

- 6.151 The Committee considers that the transition to a circular economy presents a significant opportunity to improve Australia's management of end-of-life tyres while supporting domestic manufacturing, reducing waste, creating jobs and strengthening sovereign capability. Evidence to the inquiry demonstrated that tyres should no longer be viewed as a waste product but as a valuable resource that can be reused, repaired, retreaded, recycled and incorporated into new products and infrastructure. Despite these opportunities, almost three-quarters of Australia's end-of-life tyres continue to end up in pathways that are not circular, representing a substantial loss of material value and economic potential.
- 6.152 The Committee notes that the waste hierarchy provides a useful framework for assessing tyre management outcomes. Consistent with circular economy principles, the Committee considers that reuse and retreading should be prioritised wherever safe and practical, followed by material recycling and recovery. While energy recovery through tyre-derived fuel may provide environmental benefits when displacing coal and is preferable to landfill, burial or illegal dumping, it nevertheless represents the destruction of a recoverable resource and should not be viewed as the preferred long-term outcome for Australia's tyre industry.
- 6.153 Evidence demonstrated that retreading remains one of the most mature and effective circular economy outcomes available to the tyre industry. Retreading preserves a substantial proportion of the original tyre casing, reduces demand for virgin materials, lowers emissions and offers significant whole-of-life cost savings. Submitters emphasised that modern retreading is a proven and highly regulated process that can deliver safety and performance outcomes comparable to new tyres and pointed to the widespread use of retreads in commercial transport and aviation as evidence to their reliability.
- 6.154 The Committee is concerned, however, by evidence that Australia's retreading industry has contracted significantly in recent years due to increased imports of low-cost tyres that are often unsuitable for retreading. The Committee considers that policy settings should recognise the strategic importance of a viable domestic retreading industry and support its ongoing development.
- 6.155 The Committee was particularly encouraged by evidence regarding the use of crumb rubber in road construction. Witnesses and submitters consistently highlighted the technical maturity of crumb rubber applications, their demonstrated performance benefits and their capacity to create substantial domestic demand for recovered tyre materials. The Committee notes that Victoria has already successfully incorporated crumb rubber into its road specifications and considers that broader uptake could deliver significant economic, environmental and circular economy benefits. At the same time, the Committee acknowledges concerns raised regarding some uses of crumb rubber, particularly in playgrounds and synthetic sporting surfaces, and considers that ongoing research, monitoring and standards development are necessary to ensure public confidence and environmental safety.

- 6.156 The Committee received compelling evidence that procurement is one of the most powerful tools available to government to improve tyre circularity. A recurring theme throughout the inquiry was that Australia's challenge is not a lack of technology or recycling capability, but insufficient and inconsistent demand for tyre-derived products. Governments at all levels are major purchasers of transport infrastructure, fleet services and construction materials and are therefore well positioned to provide market certainty that encourages investment in domestic tyre recycling and manufacturing. The Committee considers that government procurement policies should increasingly prioritise products that incorporate Australian recycled tyre materials and recognise the whole-of-life benefits of retreaded tyres and circular products.

Recommendation 9

- 6.157 The Committee recommends that the Australian Government, in partnership with state, territory and local governments, support the increased use of crumb rubber in road infrastructure through national specifications, procurement settings and demonstration projects.**

Recommendation 10

- 6.158 The Committee recommends that the Australian Government support the tyre retreading industry as a priority circular economy activity that extends tyre life, reduces waste and retains valuable materials in productive use.**

Recommendation 11

- 6.159 The Committee recommends that the Australian Government strengthen Commonwealth procurement policies, including the Commonwealth Environmentally Sustainable Procurement Policy, to increase the use of Australian-made products containing recycled tyre materials and retreaded tyres, particularly in government-owned and government-contracted truck, bus and heavy vehicle fleets. This should support the development of domestic markets for end-of-life tyres and improve resource recovery outcomes.**
- 6.160 The Committee welcomes the work being undertaken through the National Environment Science Program's Sustainable Communities and Waste Hub, which is improving understanding of tyre wear particles, supporting the safe re-use of end-of-life tyres and identifying opportunities to improve tyre circularity and value recovery. The Committee considers that this research provides an important evidence base for policy development and contributes to addressing emerging environmental and resource recovery challenges associated with tyres.
- 6.161 However, the Committee believes there is an opportunity to expand the scope of research support beyond understanding tyre impacts and existing recovery pathways to include the development, testing and commercialisation of emerging tyre recycling and recovery technologies such as pyrolysis and de-vulcanisation.

6.162 The Committee considers that stronger partnerships between government, research institutions and industry would help bridge the gap between research and commercial deployment, enabling promising technologies to be trialled, scaled and adopted more rapidly. Such collaboration would support the development of higher-value uses for tyre-derived materials, strengthen domestic recycling capability and help accelerate Australia's transition to a more circular tyre economy.

Recommendation 12

6.163 The Committee recommends that the Australian Government facilitate greater collaboration between industry, universities, CSIRO and other research institutions to accelerate the development and commercialisation of emerging tyre recycling and recovery technologies.

**Mr Rob Mitchell MP
Chair
16 September 2026**



A. Submissions

- 1 TyreNutz Social Enterprise
- 2 Big Tyre
- 3 Shire of West Arthur
- 4 Shire of Wagin
- 5 Western Australian Local Government Association
- 6 Shire of Serpentine Jarrahdale
- 7 Department of Climate Change, Energy, the Environment and Water
 - 7.1 Supplementary to Submission 7
- 8 Vipal Rubber
- 9 N.B.R. Tyres
 - 9.1 Supplementary to Submission 9
- 10 Outback Communities Authority
- 11 Fleurieu Regional Waste Authority
- 12 Patco Tyres
- 13 Bitumen Solutions
- 14 Australian Council of Recycling
- 15 Elan Energy Matrix
 - Attachment 1
- 16 Tyre Stewardship Australia
 - 16.1 Supplementary to Submission 16
 - 16.2 Supplementary to Submission 16
 - 16.3 Supplementary to Submission 16
- 17 RubberGem

- 18** Motor Trades Association of Australia
 - 18.1 Supplementary to Submission 18
- 19** Tyrecycle
- 20** MTA Group
- 21** Fortescue
- 22** Australian Flexible Pavements Association
- 23** The Parks
- 24** 3R Group
- 25** Northern Sydney Regional Organisation of Councils
- 26** Eurobodalla Shire Council
 - 26.1 Supplementary to Submission 26
- 27** Tasmanian Government | Department of State Growth
- 28** Remote Area Planning and Development Board
- 29** Australian Tyre Industry Council
- 30** Sunshine Coast Council
- 31** Bridgestone Australia
 - 31.1 Confidential
- 32** Swan Hill Rural City Council
- 33** GACWHEELS AUSTRALIA
- 34** North Queensland Regional Organisation of Councils
- 35** Austroads
- 36** Flextrid Holdings & Alfabs Mining Equipment
- 37** Cleanaway
- 38** CTS Tyre Recycling
 - 38.1 Supplementary to Submission 38
- 39** S & J Australian Scrap Tyre Disposals
- 40** Viva Energy Australia

- 41** Southern Sydney Regional Organisation of Councils
 - 41.1 Supplementary to Submission 41
- 42** Australian Tyre Recyclers Association
 - 42.1 Supplementary to Submission 42
 - Attachment 2
- 43** Kal Tire Australia
- 44** e2eThermal
- 45** Waste Management and Resource Recovery Association of Australia
- 46** Western Sydney Regional Organisation of Councils
 - 46.1 Supplementary to Submission 46
- 47** Illawarra Shoalhaven Joint Organisation
- 48** Federal Chamber of Automotive Industries
- 49** Local Government Association of Queensland
- 50** TFI (Tradefaire International)
- 51** Porous Lane
- 52** Michelin Australia
- 53** ELT Rubber
- 54** Lake Macquarie City Council
 - 54.1 Supplementary to Submission 54
- 55** Far North Queensland Regional Organisation of Councils
 - 55.1 Supplementary to Submission 55
- 56** MidCoast Council
 - 56.1 Supplementary to Submission 56
- 57** Gary Pead, Climate Reality Project & Sustainable Renewable Solutions
- 58** Business Council for Sustainable Development Australia
- 59** Australian Local Government Association
 - 59.1 Supplementary to Submission 59

- 60** Australian Automotive Aftermarket Association
- 61** Bridgestone Mining Solutions Australia
- 62** Cement Industry Federation
- 63** Western Australian Government
- 64** Minerals Council of Australia
- 65** Confidential
- 66** Confidential
- 67** Hume City Council
- 67.1 Supplementary to Submission 67
- 68** Product Stewardship Centre of Excellence
- Attachment 1
 - Attachment 2
 - Attachment 3
 - Attachment 4
 - Attachment 5
 - Attachment 6
- 69** Australian Competition & Consumer Commission
- 69.1 Supplementary to Submission 69
- 70** National Transport Research Organisation
- Attachment 1
 - Attachment 2
- 71** UNSW SMarT Centre Sustainable Communities and Waste Hub
- Attachment 1



B. Public hearings and witnesses

Wednesday 4 March 2026

Committee Room 2R2, Parliament House, Canberra

Department of Climate Change, Energy, the Environment and Water

- Mr James Tregurtha, Head of Division, Circular Economy Division
- Mr Cameron Hutchison, Branch Head, Packaging, Stewardship and Investment Branch, Circular Economy Division

Australian Competition and Consumer Commission

- Mr Tom Leuner, Executive General Manager, Mergers and Exemptions Assessments Division
- Ms Lyn Camilleri, General Manager, Competition Exemptions

Wednesday 11 March 2026

Committee Room 2R2, Parliament House, Canberra

Australian Tyre Recyclers Association

- Mr James Fairweather, President
- Mr Robert Kelman, Executive Officer

Product Stewardship Centre of Excellence

- Ms Rose Read, Director
- Mr John Gertsakis, Director

Australian Local Government Association

- Mayor Matt Burnett, President
- Ms Amy Crawford, Chief Executive Officer

Thursday 23 April 2026

City West Lotteries House, Conference Room, 2 Delhi Street, West Perth

CTS Tyre Recycling

- Mr Leigh Cometti, Managing Director
- Mr Sunil Kumar, General Manager
- Mr David Christison, Registered Lobbyist

Elan Energy Matrix

- Mr Ian Bellinge, Managing Director
- Mr Hamish Arthur, Consultant

RubberGem

- Mr Corey Matters, Manager

Western Australia Local Government Association

- Mr Nick Sloan, Chief Executive Officer
- Ms Rebecca Brown, Policy Manager, Environment and Waste

Western Australian Government

- Ms Kim Giddens, Parliamentary Secretary to the Minister for Environment; Community Services; Homelessness, Member for Bateman
- Mr Adrian Wiley, Executive Director, Circular Economy, Department of Water and Environmental Regulation
- Mr Les Marchant, Director Materials Engineering, Main Roads Western Australia
- Mr Louis Bettini, Principal Advisor Sustainability, Main Roads Western Australia

Friday 1 May 2026

Gowanbrae Community Centre Hall, 2A Marigold Street, Gowanbrae, Victoria

ELT Recycling

- Mr Charlie Reading, State Manager

National Transport Research Organisation

- Dr Mike Shackleton, Chief Research Officer

Tyrecycle

- Mr James Fairweather, Chief Executive Officer

Motor Trades Association of Australia

- Mr Peter Jones, Interim Executive Director

Michelin Australia

- Mr David Hickey, Project & Public Affairs Manager

3R Group

- Ms Adele Rose, Chief Executive
- Mr Trevor Tutt, Head of Stewardship Schemes

Tyre Stewardship Australia

- Ms Lina Goodman, Chief Executive Officer

Hume City Council

- Cr Carly Moore, Mayor
- Ms Sheena Frost, Chief Executive Officer

Wednesday 27 May 2026

Committee Room 1R5, Parliament House, Canberra

Eurobodalla Shire Council

- Ms Melinda Norman, Waste Services Co-ordinator

Illawarra Shoalhaven Joint Organisation

- Ms Yvette Barrs, Executive Manager, Environment Waste and Sustainability

Lake Macquarie City Council

- Mr Hal Dobbins, Coordinator Waste Strategy

MidCoast Council

- Mr Adrian Panuccio, General Manager
- Mr David Rees, Waste Manager

The Parks

- Mr Jeremy Manion, Regional Waste Coordinator

Southern Sydney Regional Organisation of Councils

- Ms Helen Sloan, Chief Executive Officer
- Dr Vincent Ogu, Program Manager

Western Sydney Regional Organisation of Councils

- Ms Francine Binns, Chief Executive Officer

Wednesday 3 June 2026

Committee Room 1R5, Parliament House, Canberra

Remote Area Planning and Development Board

- Mrs Kate Birse, Senior Project Manager

North Queensland Regional Organisation of Councils

- Ms Hayley Page, Regional Waste & Recycling Manager

Far North Queensland Regional Organisation of Councils

- Dr Bhakti Devi, Regional Coordinator – Waste Management Plan Implementation
- Mrs Kristina Davidson, Acting Manager Water and Waste

Shire of West Arthur

- Mr Gary Rasmussen, Manager of Works and Services

Shire of Wagin

- Cr Phillip Blight, Shire President
- Dr Kenneth Parker, Chief Executive Officer

Shire of Serpentine Jarrahdale

- Mr Matt Sargeson, Coordinator Environmental Health

Outback Communities Authority

- Ms Marg Howard, Director

Fleurieu Regional Waste Authority

- Mr Simon Grenfell, Chief Executive Officer

Friday 12 June 2026

Committee Room 2, Parliament of Queensland, Brisbane

Bridgestone Australia

- Mrs Joanne Hayes, Head of Corporate Affairs

Big Tyre

- Mr Dan Loudon, Chief Executive Officer

Patco Tyres

- Mr Justin Boyle, Director

Kal Tire Australia

- Mr Mauricio Marino, Manager, Technical & Commercial Support

A1 Rubber

- Mr Timothy Ekert, Chief Executive Officer

Local Government Association of Queensland

- Ms Crystal Baker, Manager - Strategic Policy
- Ms Sarah Vogler, Head of Advocacy
- Mayor Shaun Radnedge, Mayor, Murweh Shire Council

S & J Australian Scrap Tyre Disposals

- Mr Josh Hayes, Managing Director

Wednesday 15 July 2026

Bennelong Room, Dexus Place, 1 Farrer Place, Sydney

Australian Tyre Industry Council

- Mr Silvio de Denaro, Chairman

N.B.R. Tyres

- Mr Chin Han Tan, Director

Bitumen Solutions

- Mr Azeem Remtulla, Director

MTA Group

- Mr Collin Jennings, Head of Government Relations
- Mr Henk van Diggele, General Manager

Bridgestone Mining Solutions Australia

- Mr Paul Comninos, Executive Manager Solution Development

Sustainable Communities and Waste Hub (UNSW)

- Dr Mohsen Hajian Foroushani, Research Associate, SMaRT Centre