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Executive summary

Tyre Stewardship Australia (TSA) has materially contributed to improving the environmental outcomes of end of life tyres.

The Board has governed the Tyre Stewardship Scheme (TSS) such that:

- TSA is solvent and the TSS has widespread industry support;
- the TSS is growing in stature within the tyre industry all major importers of tyres and tyre retailers are involved in and committed to the scheme;
- TSA company members appear to be focussed on ensuring the TSS is a success and solving the problem of end of life tyres.

Although the Board has made satisfactory progress in implementing the TSS, a number of issues relating to operational matters (notably performance against targets and reporting and data collection) and governance arrangements are discussed further below.

Performance targets, reporting and data collection

While participation in the scheme has grown markedly and is exceeding expectations, performance against some specific performance targets has been mixed. This is in part because:

- some targets are ambiguous or are not the most suitable measures of performance;
- some of the targets are overly ambitious; and
- there are substantial difficulties and challenges in measuring and reporting progress against some targets.

Overcoming these shortcomings requires changes to a number of the performance targets including:

- revised outcomes focussed targets (i.e. targets that measure results of TSA's activities relevant to its objectives); and
- revised and new outputs focussed targets (i.e. targets that measure the success of TSA's
 activities and programs), including in particular new targets relating to communications
 activities and R&D programs.

Targets relating to growth of the program via new scheme participants should be aspirational rather than hard targets. This reflects current limitations in measuring performance against these targets and, therefore, defining what is achievable. Taking this into account, TSAs short-term focus should be on improving reporting systems (including compliance with reporting) and setting and implementing well-articulated strategies to identify how growth is to be achieved.

Overcoming these shortcomings also requires changes to reporting and data collection processes to ensure that the data provided through those processes is robust and is suitable for measuring performance against targets.

Governance arrangements

Our view is the TSS and TSA are making important contributions toward addressing the issue of end of life tyres. It is vital the scheme continues to grow and TSA matures as its governing body. To this end we urge the accreditation of the Scheme under the Product Stewardship Act.

This will assist in sharpening and strengthening accountability and credence of the scheme both within the tyre industry but also to key external stakeholders.

Potential issues with governance arrangements for TSA include questions as to whether: the Board is sufficiently representative of industry views and has the full range of appropriate skills; and is impacting broader industry participation and progress in the TSS. We acknowledge the Board has undertaken, and is continuing to move towards reforms that will assist in this regard. These include among others: Constitutional changes; the appointment of new personnel; the development of a strategic plan; and a focus on improving data and data management.

The Constitution of TSA and the ACCC Determination require the Board be appointed with a view to being representative of the tyre industry. During the start-up of the TSS and its early development, representation has been an important mechanism to achieving 'buy in' and 'ownership' of the scheme as an industry scheme. While the Board has undergone a number of compositional changes over the short life of the TSS, the current Board appears to be progressing satisfactorily with a skilled and well respected Chair. We have seen evidence of good relationships, goodwill and common views on planned strategic initiatives that auger well for the future.

Nevertheless, an issue that has been raised consistently throughout this review is the extent and form of representation of views of the tyre recycling sector on the Board. Among those we interviewed during the course of the review there is, on the whole, general agreement that although the Australian Tyre Recyclers Association (ATRA) does not necessarily need to be represented on the Board, further appropriate recycling experience could and should be bought to the Board. Recent changes to Constitution should provide a sufficient pathway for this to occur in a reasonably timely manner.

Further, over time as TSA and the TSS mature, focus needs to be placed on ensuring that the emphasis on a Board that is 'representative of industry' does not evolve to being simply a 'Board of representatives'. Instead, focus needs to be placed on building a skills based board which maintains a close connection to company members by retaining a majority of Board positions made up of company member nominees. This cultural shift appears to be underway but needs to be supported by appropriate rules and institutions to provide transparency and accountability in the selection process for Board members that act in the best interests of the Company.

Continued engagement with key stakeholders is vital to the future success of the scheme we encourage a number of extensions to current communications arrangements to help improve the line of sight of external stakeholders to scheme.

Recommendations

Performance targets, reporting and data collection

- 1. Recommended revised outcomes focussed performance targets include the ambitions:
 - The percentage of end of life tyres that go to an environmentally sound use (ESU), both in Australia and overseas, increases to 50% by 2020;
 - The volume of locally recycled tyre product sold as an input into new products and/or processes is 15% of the volume of end-of-life tyres by 2020.
- 2. Recommended revised outputs focussed targets include the ambitions:
 - The percentage of tyre importers that are participants/members in the scheme increases to 90% by 2020 (measured as market share of total tyre imports).
 - The percentage of vehicle manufacturers/ importers that are participants/members in the scheme increases to 90% by 2020 (measured as market share of total new vehicle sales).
 - The percentage of tyre retailers that are participants/members in the scheme increases to 90% by 2020 (measured as market share of total tyre sales).
 - The percentage of tyre recyclers that are participants in the scheme increases to 90% by 2020 (measured as market share of end of life tyres).
 - TSAs short-term focus should be on improving reporting systems (including compliance with reporting) and setting and implementing well-articulated strategies to identify how growth is to be achieved.
- 3. TSA establish appropriate criteria for ex-ante assessment of proposals for funding through the TSRF. The criteria should be consistent with the objectives of the TSRF. TSA should also undertake an ex-post assessment of funded projects to assess whether they have been successful in furthering the objectives of the TSRF with results of the evaluations being published
- 4. A set of communications outcomes should be developed focussing on further enhancing communications to Scheme members, potential members and consumers and on consumer awareness.
- 5. The following changes to reporting and data collection are recommended:
 - TSA should continue to require accredited TSA importers and vehicle manufacturers and importers to provide data on tyre type and number of tyres imported. This is not expected to be company specific data due to commercial sensitivities and could be consolidated by ATIC where necessary.
 - TSA should continue with current reporting arrangements with respect to obtaining detailed tyre type and end of life destination data from retailers, recyclers and collectors. Ideally, over time this should extend to other market participants such as miners, governments and fleet owners.
 - Where practicable, TSA should expand the reporting categories for end of life tyres that are exported to be consistent with the categories used for end of life tyres that are not exported

- Into the medium term, as participant data continues to develop, TSA should also seek to obtain more comprehensive and granular data from ATRA and all tyre recyclers and collectors on the extent and nature of tyres being recycled.
- TSA should undertake to rectify key system functionality issues as soon as is practicable while also putting in place data integrity processes. Once these are rectified it should move to strictly enforce compliance with reporting.
- TSA should establish data collection systems necessary to report against proposed new R&D and communications targets.
- 6. TSA should immediately devote sufficient ongoing resources to ensure that they can achieve these reporting outcomes.
- 7. A full-time Communications Manager be appointed and report to the CEO.
- 8. A forum be established as a mechanism to gather stakeholder views but also provide stakeholders with information on and progress of the development of the scheme.

Governance

- 9. TSA should list independent Board members on its website.
- 10. Nominating members should be required to clarify which Board position category or categories they are nominating under.
- 11. The term 'representatives' in section 34.1 of the Constitution, as applied to Board positions, be defined in the Constitution but in the longer term, consideration should be given to removing references to representation in the Constitution.
- 12. The terms 'representatives', 'members' and 'participants' should be defined in the Constitution.
- 13. The Board should continue to view State and Commonwealth Ministers accountable for environmental matters as key stakeholders and a key audience of their Annual Report.
- 14. TSA should seek accreditation of the TSS under the Product Stewardship Act and progress processes toward achieving accreditation.
- 15. Through the accreditation process, the Australian Government clarify accountability arrangements and requirements for the Board.
- 16. The Board develop a skills matrix and identify skill requirements for the Board and develop a transparent approach for undertaking a skills assessment for all Board applicants.
- 17. The Board, clarify processes and protocols for managing conflicts of interest.
- 18. The Board should ensure robust ex-ante and ex-post economic evaluations are undertaken to demonstrate value for money of R and D investments.

1. Background and context

In this section, we provide brief context to this review, terms of reference and our approach to undertaking the review.

1.1 The ACCC Determination

In April 2013, the ACCC made a Determination that authorised to the establishment of Tyre Stewardship Australia and the Tyre Stewardship Scheme under strict conditions and specific guidelines. The Determination was in response to a request by the Australian Tyre Industry Council (ATIC).

The Determination is publicly available on the ACCC website and is referenced where appropriate through this report.

1.2 Objectives and commitments

1.2.1 Tyre Stewardship Australia

Tyre Stewardship Australia Limited (TSA) is a not-for-profit company limited by guarantee and is responsible for administering the scheme. It is funded by tyre importers that are participants in the Tyre Stewardship Scheme at a rate proportional to the number of tyres they import into Australia. The objectives of TSA are to:

- implement the Tyre Stewardship Scheme for end of life tyres;
- administer the accreditation of participants in the Scheme;
- monitor, audit and report on the development of the Scheme;
- undertake education, awareness and information activities to promote the Scheme and value of end of life tyre utilisation; and
- support market development and early stage research in utilising end of life tyres for the benefit of the industry.

1.2.2 Tyre Stewardship Scheme

The aim of the Tyre Stewardship Scheme (TSS) is to reduce the amount of end of life tyres damaging the environment via landfill, illegal dumping or undesirable export while increasing the recycling rate of end of life tyres.

The objectives of the TSS are to:

- increase resource recovery and recycling and to minimise the environmental, health and safety impacts of end of life tyres in Australia; and
- develop the domestic recycling industry and markets for tyre derived products.

1.2.3 Guidelines and commitments

The TSS requires participating entities to agree to a set of guidelines. These specific guidelines are tailored for each sector of the tyre industry. Generally, the guidelines require similar generalised commitments including:

- support the objectives of the Scheme;
- deal transparently and ethically with others involved in the tyre supply chain;
- including consumers;
- promote the scheme to the community, other businesses and organisations;
- use the Scheme's branding and logo and adhere to conditions that apply to that use;
- comply with relevant laws and practices, including those that apply to the environment and occupational health and safety; and
- cooperate with surveys that are undertaken from time to time, and with TSA in conducting random audits – this includes retaining and, on request, providing TSA with relevant documentation (as specified in the Guidelines).

Participants in the TSS are required to commit to:

- the environmentally sound use of end of life tyres;
- elimination of the inappropriate export of baled tyres from Australia;
- elimination of the illegal dumping of end of life tyres; and
- elimination of the disposal of end of life tyres to landfill (except where no viable alternative
 is available and subject to state and territory legislation for example, in rural and remote
 areas where appropriate recycling facilities are not available or transportation costs are
 prohibitive.)

In some cases, certain types of participants are required to provide regular reporting data to TSA.

1.2.4 Timeline of key events

Following the ACCC determination, TSA was established in mid-2013 and the TSS was launched in January 2014.

Some key dates in the development of TSA and the TSS were:

- May 2010 Tyre Implementation Working Group was formed;
- December 2012 Conference of Interested Parties;
- April 2013 ACCC Determination in response to the ATIC request;
- October 2013 scheme details finalised by establishment Board and independent Chair;
- December 2013 TSA registered as a Company Goodyear/Dunlop, Yokohama, Michelin, Toyo, Pirelli and Continental join TSA as members of the Company;
- January 2014 Chair and Board appointed;
- January 2014 Official launch;
- July 2015 CEO Appointed;
- September 2015 First Annual Report;

- January 2015 Bridgestone Australia Ltd joins TSA;
- February 2015 update to ACCC on progress to establish the TSS and TSA;
- January 2016 Letter of Addendum to Annual Report sent to ACCC;
- April 2016 Resignation of Inaugural Chair;
- August 2016 Inaugural CEO departs TSA Caretaker CEO appointed;
- September 2016 Appointment of new Chair and additional Independent Board member;
 and
- January 2017 Appointment of a new CEO.

1.3 Priority actions to implement TSA and the TSS

Since the ACCC determination, TSA has worked to implement the Determination and has now achieved a point where the Scheme has wide reach and influence within the industry. A short summary of priority activities by TSA over the life the TSS are summarised below.

1.3.1 2013-2014

In the Determination, the ACCC noted ATIC had stated:

'The initial focus of the Scheme will be to address the lack of recycling of Passenger Car, Light Truck and Medium and Heavy Truck Tyres. The Scheme covers all vulcanised rubber tyres entering the Australian market for the first time. The Scheme applies to tyres that are loose replacements for use on, or already fitted to, motorised vehicles and non-motorised trailers towed behind motor vehicles.'

Between the Determination in April 2013 and the launch of the Scheme in January 2014, TSA focussed on establishing basic organisational working arrangements and infrastructure.

In February 2015, TSA advised the ACCC that the three initial priorities for action had been:

- communication with industry TSA developed a website as the primary point of communication about the TSS, and focussed advertising and editorial content in trade magazines.
- establishment and commencement of the accreditation regime Design of the accreditation scheme was finalised in October 2014 and applications for accreditations commenced on November 2014. By February 2015, TSA had accredited seven importers, 88 retailers, two fleet operators, one collector and one recycler. In addition, the Australia Tyre Recyclers Association (ATRA) members which represent a large proportion of collection and recycling began submitting applications for accreditation.
- continuing dialogue with key organisations not in the Scheme note Bridgestone joined the scheme in early 2015.

1.3.2 2015-2016

In the 2015-2016 Annual report, TSA identified three priority areas for action:

 Recruitment and accreditation — continue to build the number of tyre retail outlets with TSA accreditation to over 1,500. Continue to bring tyre manufacturers, retailers and recyclers into the Scheme, but focus on expanding accreditation activities to incorporate fleet operators, local government and the mining industry.

- Audit and compliance —Deliver a best practice audit and compliance function to ensure the TSA logo is recognised by industry and consumers, as representing best practice in the management of end-of-life tyres. Work closely with industry and government stakeholders to identify key industry challenges and target education and awareness activities that support appropriate action. Develop partnerships with relevant groups and agencies on strategies to improve management of end-of-life tyres in regional and rural communities.
- Investment and market development launch the Tyre Stewardship Research Fund, investing more than \$1.5 million in research and development projects supporting the emergence of new products and markets to utilise tyre-derived commodities. Provide support for relevant and innovative research and study by PhD candidates. Become a central information hub for local and international trends in tyre recycling, product development and research work. Build a best practice governance framework, supported by policies and procedures around procurement, investment and financial management.

1.3.3 2016-2017

In the 2016-2017 Annual Report, TSA identified a number of priority areas for action:

- appoint a new Chief Executive Officer commenced 23 January 2017;
- establish a new strategic plan The Plan will move TSA from the initial establishment
 phase to the one of increasing recognition of both its verification and market development
 roles. TSA is working to ensure that it is regarded as the principle industry and consumer
 information and education body;
- ACCC review requirement meet the ACCC requirement to complete an independent review of TSA progress;
- expand reporting systems build on the work to-date to facilitate maximum reporting and information capture across all groups participating in the scheme;
- increase local government participation recruiting and accredit more local governments;
 and
- build on market development actions conclude a number of the currently funded market development projects and initiate new funding agreements for further projects.

1.4 Terms of Reference

In this report, the performance of both the TSS and TSA are reviewed. This review is a requirement of the conditions of the ACCC Determination.

This review includes assessing the:

- the success of the Scheme in meeting the TSS performance targets;
- whether the composition of the Board has been sufficiently representative of all participants;
- the level of industry participation in the Scheme;
- quality of data collection under the Scheme; and
- recommendations for any improvements to the Scheme's operation.

We are also required to establish if the performance of TSA has resulted in positive steps being taken to achieve the Scheme's objectives. This requires assessing if TSA has positively contributed toward increasing the participation in and success of the TSS.

We are also required to assess performance against the following indicators set down by the ACCC in their Determination:

- the number of participants in the scheme;
- the percentage of tyre importers and vehicle manufacturers and importers that are participants in the TSS the aim being to achieve greater than 90 per cent (%) of vehicle and tyre importers in the TSS within five (5) years of commencement;
- the resource recovery and recycling rates of end-of-life tyres that can be attributed to the Scheme;
- the national resource recovery and recycling rates of end-of-life tyres;
- the increase in the percentage of end-of-life tyres that are not going to an environmentally sound use the TSS's performance target is to increase this percentage from 16% (at time of Determination) to 50% of tyres going to an environmentally sound use by the end of five (5) years;
- the volume of tyre derived products sold or otherwise provided for an environmentally sound use; and
- the number of users of TSA's website.

As part of the review we are also be required to assess TSA's conduct and reporting of:

- the total levy funds collected under the Scheme;
- a breakdown of how levy funds were spent during the period;
- how spent funds are contributing to the achievement the Scheme's objectives, to increase resource recovery and recycling and to minimise the environmental, health and safety impacts of end-of-life tyres in Australia; and to develop the domestic tyre recycling industry and markets for tyre derived products; and
- data on the volume of end-of-life tyres not going to an environmentally sound use (broken down into the proportion of end-of-life tyres being illegally stockpiled, going into landfill and inappropriately exported).

1.5 Approach of this review

This is an independent review whose scope was agreed in consultation with TSA.

The review focuses on assessing the performance of the TSS and TSA with reference to the performance criteria identified by the ACCC determination. This review is not a review of the merits of the TSS and TSA per se. While this review considers indicators of the potential social benefits of the TSS and TSA, this review does not consider the potential social costs associated with the arrangements.

Marsden Jacob undertook a due diligence document discovery and had access to all available data and any TSA documents including Board Papers that we requested. We also reviewed key documentation relating to the TSS and TSA including:

Tyre Product Stewardship Scheme Guidelines;

- Australian Competition and Consumer Commission Determination for TSA (Numbers A91336-A91337), and all other correspondence associated with the Determination as listed on the ACCC website;
- Product Stewardship Act 2001;
- TSA Annual Reports since inception;
- Relevant ACCC reviews; and
- Governance of similar Schemes.

Marsden Jacob undertook extensive consultation internal and external to TSA (Attachment 1). This included:

- all current and key previous TSA staff;
- a selection of current Board Members;
- the current Chair and past Chair; and
- selected government organisations, including the ACCC and the Department of Environment.

We also interviewed some members of TSA that are not members of the Board. Our consultations also covered the range industry representative categories.

Late in this review Marsden Jacob received correspondence from the Boomerang Alliance expressing concerns about the resourcing, auditing and governance capacity of TSA, including in their view that, resourcing of the TSS is inadequate to the scale and scope of the problem, auditing has been insufficient to ensure compliance to the TSS standards and governance has not sufficiently robust and representative of industry perspectives. While we discussed these matters in the late stages of this report with the Boomerang Alliance, our references to stakeholders do not expressly include the Boomerang Alliance. However, within the terms of reference of this report, these issues have been considered and discussed at length and we note a number of recommendations within this report go towards addressing the perceived weaknesses that were raised with us.

We also note our focus is on whether TSA and the TSS are performing within the scope of the Determination. We note that the scope of TSA and TSS is not to address legacy issues associated with the past stockpiling of end of life tyres.

1.6 Structure of this report

The remainder of this report is structured as follows:

- Section 2 examines performance targets and associated reporting and data collection issues.
- Section 3 discusses board composition.
- Section 4 discusses other governance issues.
- Section 5 examines TSA revenue and expenditure.

2. Performance targets

The stated objectives of the Tyre Stewardship Scheme (TSS), as set out in paragraphs 15 and 16 of the ACCC's determination (ACCC 2013), are as follows:

- 15. ATIC submits the objectives of the Scheme are to:
 - a. increase resource recovery and recycling and to minimise the environmental, health and safety impacts of end of life tyres in Australia; and
 - b. develop the domestic recycling industry and markets for tyre derived products.
- 16. These objectives are proposed to be achieved through:
 - the establishment of the Scheme to be joined by businesses and organisations that commit to seek optimal recycling of end of life tyres
 - an active communication program targeting industry associations and individual businesses to:
 - a. recruit participants to the Scheme
 - b. develop recycling programs members will be given access to technical advice, tools and networks to assist them to participate in the recycling industry and to identify and pursue opportunities that become available through changes in technology
 - the promotion of innovative use of materials from end of life tyres for example, in explosives and asphalt and Determination A91336-A91337 4
 - implementation of a promotional and recognition strategy to highlight the commitments and achievements of members of the Scheme.

As detailed in paragraph 38 of the determination, the success of the Scheme in meeting these objectives will be measured as follows:

- 1. the number of participants in the Scheme;
- 2. the percentage of tyre importers and vehicle manufacturers and importers that are participants in the Scheme the aim being to have 90 per cent of tyre and vehicle importers in the Scheme within 5 years;
- 3. the resource recovery and recycling rates of end of life tyres that can be attributed to the Scheme;
- 4. the national resource recovery and recycling rates of end of life tyres;
- 5. the increase in the percentage of end of life tyres that are going to an environmentally sound use the Scheme's performance target is to increase this percentage from 16 per cent (currently) to 50 per cent of tyres going to an environmentally sound use by the end of 5 years;
- 6. the volume of tyre derived products sold or otherwise provided for an environmentally sound use; and
- 7. the number of users of TSA's website.

The remainder of this section provides a review of these TSA performance targets covering:

an assessment of performance against these targets since the Scheme's inception;

- a review of the suitability of the targets, including recommended revised targets; and
- a discussion of reporting and data issues in the context of the revised targets.

2.1 Assessment of performance against targets

2.1.1 Number of participants in the Scheme

The 2015/16 Annual Report indicates that the numbers of accredited TSS participants has been increasing since inception of the TSS (Table 1)¹. As indicated by the data in the table, there is substantial involvement and growth in involvement of tyre retailers in the Scheme, with available data suggesting that more than 50% of tyres sold in Australia are by TSA accredited retailers. However, as discussed further in the following section, growth in involvement of other parts of the supply chain has not been as substantial.

Table 1: Participation numbers – accredited under the TSS

Category	Dec 2014	30 June 2015	30 June 2016	Total
Importers	6	1	1	8
Retailers	4	434	634	1,068
Collectors	0	2	4	6
Recyclers/collectors	0	2	16	18
Fleet	1	1	1	3
Local Government	0	0	0	0
Mining	0	0	0	0
Total	11	440	656	1,103

Source: TSA Annual Report 2015/16, page 34.

2.1.2 Percentage of tyre importers and vehicle manufacturers and importers that are participants in the Scheme

This performance measure is intended to reflect the number of tyre importers and vehicle manufacturers and importers that are in the TSS as a proportion of the total number of tyre importers and vehicle manufacturers and importers in Australia that operate in the market place.

The TSA 2015/16 annual report reported that this measure is 27 per cent for tyre importers² and 0 per cent for new vehicle importers. Stressing that these numbers are based on less than two full years of Scheme operation, participation rates of tyre importers is below the specified target of having 90 per cent of tyre and vehicle importers in the Scheme within 5 years

This raises the question as to whether the specified target is too ambitious or whether recruitment strategies need to be refined.

These participant numbers have been sourced from the internal TSA Reporting Platform. The TSA Reporting Platform stores information on those organisations that have registered their interest in being a part of the TSS and then become accredited.

The reported value for tyre importers was provided to TSA by the Australian Tyre Industry Council (ATIC), drawing on their market research and internal information.

TSA has also reported that tyre importers in the scheme represent in excess of 50% of the total consumer (passenger) tyre retail market volumes sold. This raises the question as to whether the measure should be expressed as a market share of total tyres or a market share of number of companies (as currently interpreted) – as the 8 importers currently in the scheme make up a much larger proportion of total tyres imported than 27 per cent.

2.1.3 National resource recovery and recycling rates of end of life tyres

The TSA 2015/16 Annual Report provides information about end of life tyre destinations (Table 2)³.

From this data, it appears that around 6 per cent of end of life tyres (as at 2015/16) can be categorised as going to a domestic destination involved in 'resource recovery and recycling'. This includes:

- energy recovery (local);
- material reuse and recycling (local); and
- civil applications (local).

Additionally, around 33 per cent in 2014/15 and 48 per cent in 2015/16 is categorised as exported. However, it is unclear how much of either of these export figures are strictly resource recovery and recycling under the ACCC definition as they include baled tyres for which there is limited transparency as to the end of life destination.

In future, data on end of life destinations is intended to be obtained directly from tyre recyclers though monthly reporting to TSA – as per the ACCC Determination.

Table 2: Destination of End of Life Tyres

End-of-Life Destination	Percentage as at 2014/15	Percentage as at 2015/16
Energy Recovery (local)	0.6%	0.0%
Material reuse & recycling (local)	3.6%	3.5%
Civil Applications (local)	0.8%	2.2%
Exported (Tyre Derived Fuel (TDF), baled & casings)	32.6%	47.7%
Landfilling/Stockpiling	48.7%	36.6%
Unknown Destination	13.6%	10.0%
TOTAL	100.0%	100.0%

Source: TSA Annual Report 2015/16, page 35.

2.1.4 Resource recovery and recycling rates of end of life tyres that can be attributed to the Scheme

This measure is currently not estimated in quantitative terms. One of the issues with this measure is that it requires an understanding of what would have occurred with and without the

The 2014/15 figures in this table are from Hyder (2015). The 2015/16 figures were estimated by TSA using: information provided to it by Australian Tyre Recycling Association (ATRA) relating to ATRA members; and information derived for non-ATRA members from its audits of the TSA accredited sites.

scheme. This is challenging to measure even with a future system in which scheme participants provide the required data.

2.1.5 Increase in the percentage of end of life tyres that are going to an environmentally sound use

This is a very similar measure to the one that measures resource recovery and recycling rates. Therefore, the data in Table 2 currently provides the best available information on the destination of end of life tyres.

The current specified target for increasing the percentage of end of life tyres that are going to an environmentally sound use is from 16% currently to 50% in 5 years. As previously discussed, Table 2 indicates that around 6 per cent of total end of use tyres are currently going to a domestic destination which is an environmentally sound use – by just taking into account the categories of: energy recovery (local); material reuse and recycling (local); and civil applications (local).

However, it is difficult to assess how much of end of life tyre exports is going to environmentally sound uses. Table 2 indicates that 33 per cent is going to export destinations in 2014/15 as per Hyder (2015) while TSA estimates that 48 per cent go to exports in 2015/16. It is unclear how much of either of these estimates is strictly environmentally sound under the ACCC definition as they include baled tyres for which there is sometimes limited transparency as to the end of life destination.

As discussed further in 2.2.2, there are significant problems with how this target is specified which, as indicated above, affects measurement of performance against the target. This indicates a need to amend the wording of the target.

Estimating performance against this measure will become more accurate in future if there is a high degree of reporting by the recycling and collector sector on the end of life destinations to TSA via the TSA Reporting Platform. However, it is noted that the reporting system also needs to evolve to include more detailed reporting for end of life tyres destined for exports.

2.1.6 Volume of tyre derived products sold or otherwise provided for an environmentally sound use

Drawing on Table 2, the TSA 2015/16 Annual Report indicates three destinations that are likely to relate to tyre derived products that involve an environmentally sound use (Table 3). Similar to previous measures, it is difficult to assess how much of the export figure of 48 per cent in Table 3 strictly relates to an environmentally sound use under the ACCC definition.

It will be possible for this performance measure to be reported with a much greater degree of accuracy in the future if there is a high proportion of the recycling and collector market place that reports the end of life destinations to TSA via the TSA Reporting Platform – again noting issues with the limitations in reporting of data destined for exports. A key to this will be to have reporting categories that distinguish tyre derived products from other types of end of life destinations.

Table 3: End of life tyres going to tyre derived products or an otherwise environmentally sound use 2015/16

End-of-Life Destination 2015/16	Percentage	Quantity (Equivalent Passenger Units or EPU)
Material reuse & recycling (local)	3.50%	1.78 million
Civil Applications (local)	2.20%	1.1 million
Exported (TDF, baled & casings) (export)	47.70%	24.3 million

Source: TSA Annual Report 2015/16, page 36.

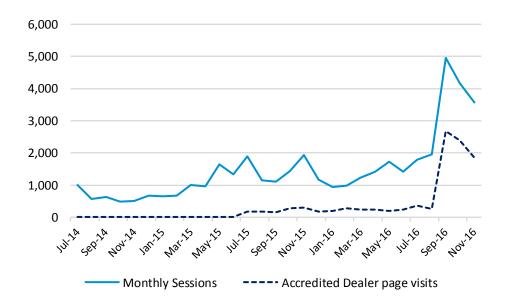
2.1.7 Number of users of TSA's website

The number of internet visits has been increasing over time, with a large increase in the later stages of 2016 (Figure 1). Two measures of internet visits are illustrated in Figure 1:

- Monthly sessions: this is the total number of monthly clicks to the TSA website, as in visits;
 and
- Accredited Dealer page visits: this is the search function whereby visitors to the site can look for an accredited tyre retailer, either by locations, name, state, address or postcode.

This information, while providing a useful information on the numbers of people showing an interest in TSA and the TSS, is probably insufficient of itself to provide insights into the impact of TSA's communications strategy. This is issue is discussed further in section 2.2.2.

Figure 1: Internet visits



2.2 Review of current performance targets

2.2.1 Overview

A review of current performance targets indicates a lack of clarity, inconsistencies and deficiencies in the measures vis-a-vis the scheme's objectives. In particular, we note:

- there needs to be a clearer delineation between <u>outputs</u> focussed targets (i.e. those focussed on membership, R&D and communications) and <u>outcomes</u> focussed targets (i.e. those focussed on rates of resource recovery and recycling of end of life tyres);
- the terms 'resource recovery', 'recycling' and 'environmentally sound use' are not clearly defined and are used interchangeably, creating uncertainty as to what the outcomes focussed targets are seeking to achieve;
- it is not clear whether the outcomes focussed targets are intended to be met through domestic recovery actions only or through domestic <u>and</u> international recovery actions;
- the absence of targets that specifically focus on R&D program outputs; and
- the absence of a broadly focussed communications targets or targets, with 'the number of users of TSA's website' being too specific, in isolation, to provide a useful measure of communications success.

Given these deficiencies, we recommend that significant revisions are made to the performance targets.

2.2.2 Comments on specific performance targets

Number of participants in the Scheme (Target 1)

This is an appropriate high scheme participation target, but it would be useful to refine the wording to reflect the objective of increasing recruitment to the scheme over time.

Percentage of tyre importers, vehicle manufacturers and importers that are participants in the Scheme (Target 2)

The current measures focus on the percentage of participants in the scheme. An improvement on this approach is to focus on market share (i.e. percentage of tyres) as this provides a better reflection of the total number of tyres that are impacted by participants in the TSS.

Performance targets relating to recovery rates, recycling and environmentally sound use (Targets 3, 4, 5, 6)

These performance targets are all outcomes focussed targets and, as such, they are inadequate at present. Specifically:

- The terms 'resource recovery', 'recycling' and 'environmentally sound use' are not clearly defined and are used interchangeably, creating uncertainty as to what targets 3,4, 5 and 6 are seeking to achieve and giving the impression that they are duplicative. It is recommended, therefore, that separate and explicit performance targets be developed for environmentally sound use and recycling (a subset of environmentally sound use), with both terms being clearly defined.
- It is not clear whether the performance targets are intended to be met through actions undertaken domestically only or through actions completed either at the domestic or international levels. It is recommended, therefore, that it be stated explicitly in the targets

whether they are intended to be achieved through domestic actions or through a combination of domestic and international actions.

It is doubtful whether it will be possible to specifically attribute increased resource recovery and recycling rates to the Scheme (Target 3). It is recommended therefore, that this target be removed.

Number of users of TSA's website (Target 7)

As is discussed in more detail in section 5.3, there needs to be a greater focus in the Scheme on the interests and understanding of tyre consumers. Given this, the existing target is too specific, in isolation, to provide a useful measure of communications success. It is likely that a range of performance targets are needed relating to communications to consumers in particular but also to Scheme members and potential members.

Targets relating to R&D

Tyre Stewardship Research Fund (TSRF) provides funds through a competitive process to support the development of markets for Australian tyre derived products⁴.

The specific objectives of the fund, as set out in the Research Fund Guidelines, are to:

- advance innovative technologies in Australia by supporting focused, collaborative research in high priority technologies;
- retain local expertise in, and attract international expertise to, Australia in technologies related to end-of-life tyres;
- support the growth of skills and capacity in Australia in technologies related to end of life tyres for the domestic and international markets; and
- share the results of that research with the wider industry as appropriate whilst respecting intellectual property rights.

At present, there are no targets specifically focussed on these objectives.

2.2.3 Recommended new performance targets

Given the deficiencies in current targets outlined in the previous section and difficulties experienced in collating data for some of those targets, we recommend that significant revisions are made to the performance targets.

Proposed new targets are contained in Table 4. This table also illustrates a comparison of the proposed new targets to the current targets and the rationalise for the new target. As recommended targets only, they will need to be reviewed by TSA management and board, considering their feasibility and suitability, before being adopted in the strategic plan.

The proposed new targets are categorised as either outcome or output targets. Outcomes can be defined as the results of TSA's activities relevant to its objectives as set out in paragraph 15 of the ACCC's determination. Outputs can be defined as activities and programs that TSA undertakes in order to meet its objectives. Those activities are set out in paragraph 16 of the ACCC's determination.

The output targets focus on: tyre importers; vehicle manufacturers/importers; retailers and recyclers. The focus is on these specific participant categories since they are considered

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⁴ This is consistent with an objective of the TSS, as set out in paragraph 15 of the ACCC determination, which states that one objective of the scheme is to *b. develop the domestic recycling industry and markets for tyre derived products*.

important to the success of the scheme and are important to get right in the short to medium term. In time, there is merit in also setting output targets for other participant categories – such as local governments, miners and so on.

While we have been asked to identify appropriate targets, we note the difficulty of doing so in some areas where the targets by their nature are subject to uncertainty. Targets are statements of ambition of outcomes. We have set these at levels to mirror the ambition in the Determination.

We note that there is limited time left in which to achieve them and, for some indicators, baseline data are still being developed in order to understand current levels with greater precision. In our view while it is helpful to have ambitious targets, the focus should be on how improvements in scheme participation will be achieved. We encourage the development of transparent and realistic strategies with measurable intermediate indicators of success and programs that focus on successful attraction, inclusion and retention of new industry sectors into the scheme.

There are two current targets not contained in Table 4 for reasons discussed in section 2.2.2:

- the resource recovery and recycling rates of end of life tyres that can be attributed to the Scheme:
- the number of users of TSA's website.

It is acknowledged that, in the short term, there will be issues in reporting the percentage of tyres that go to a particular end of life destination. This is because the TSA Reporting Platform does not yet collect sufficient data from retailers and recyclers on end of life destinations. In the short term, TSA could use alternative sources such as obtaining aggregate data on end of life destinations directly from ATRA and other recyclers.

In the short term, TSA could instead estimate the percentage of participants in the scheme for retailers and recyclers. However, the target of 90 per cent would need to be revised (probably much lower) as those retailers and recyclers in the scheme likely represent a higher percentage market share of tyres than when measured by the percentage share of participants.

Table 4: Proposed new performance targets and rationale

Proposed target	Current target(s)	Rationale for new target
Outcome targets		
The percentage of end of life tyres that go to an environmentally sound use (ESU) ⁵ , both in Australia and	 The increase in the percentage of end of life tyres that are going to an environmentally sound use – the Scheme's performance target is to increase this percentage from 16 per cent 	The new target is similar to the current target. However, a key change is that the new measure specifically refers to both domestic and export end of life destinations.

⁵ Environmentally sound use (ESU) is defined as:

The following uses are excluded from the definition of ESU:

tyre recycling;

⁻ use of tyres as a fuel to generate power and/or heat (energy recovery); and

⁻ use of tyres in civil engineering projects (e.g. use as in-fill in embankments).

⁻ disposal through dumping, landfill, direct incineration or burning;

stockpiling as an end point;

unsustainable burning for energy recovery (i.e. in a way that does not meet state environmental and OH&S standards); and

⁻ export of baled tyres for the three operations listed immediately above.

Proposed target	Current target(s)	Rationale for new target
overseas, increases to 50% by 2020 ⁶	(currently) to 50 per cent of tyres going to an environmentally sound use by the end of 5 years	
The volume of locally recycled tyre product sold as an input into new products and/or processes is 15% of the volume of end-of-life tyres by 2020. ⁷	 The national resource recovery and recycling rates of end of life tyres The volume of tyre derived products sold or otherwise provided for an environmentally sound use 	The new target is similar to the current targets. However, a key change is that the target focuses on recycling which is a subset of environmentally sound uses as defined by the ACCC Determination. This is consistent with waste hierarchy's that place recycling above energy recovery in terms of general environmental desirability.
Output targets		
The percentage of tyre importers that are participants in the scheme increases to 90% by 2020 (measured as market share of total tyre imports)	The percentage of tyre importers and vehicle manufacturers and importers that are participants in the Scheme – the aim being to have 90 per cent of tyre and	 The new targets are similar to the current targets. The new targets separate out tyre importers from vehicle manufacturers/ importers so there is greater transparency
The percentage of vehicle manufacturers/ importers that are participants in the scheme increases to 90% by 2020 (measured as market share of total new vehicle sales)	vehicle importers in the Scheme within 5 years The number of participants in the Scheme	of changes in participant numbers; and the new target is represented in terms of market share (rather than participant numbers) which better reflects the overall performance impact.
The percentage of tyre retailers that are participants in the scheme increases to 90% by 2020 (measured as market share of total tyre sales)	 The number of participants in the Scheme 	 The new target places a specific focus on retailers. Additionally, the new target is represented by market share of tyre sales (rather than participant numbers) to better reflect the overall performance impact.
The percentage of tyre recyclers and balers that are participants in the scheme increases to 90% by 2020 (measured as market share of end of life tyres)	 The number of participants in the Scheme. 	 The new target places a specific focus on recyclers. Additionally, the new target is represented by market share of end of life tyres (rather than participant numbers) to better reflect

The percentage of tyres going to an ESU was estimated in Hyder (2015) to have been approximately 37% in 2015. There is reason to believe that this number could be overstated however, as the Hyder analysis assumes that all end-of-life tyres sent overseas are either retreated, recycled or used for energy recovery.

The percentage of tyres going to recycling or for civil engineering in Australia was estimated in Hyder (2015) to have been approximately 4.4% in 2015.

Proposed target	Current target(s)	Rationale for new target
		the overall performance impact.

R&D (domestic market development of tyre derived products) recommended targets

Specific R&D targets have not been recommended. However, it is recommended that TSA continue to ensure that appropriate internal criteria are in place to assess proposals for funding through the TSRF⁸. The criteria should be consistent with the objectives of the TSRF. To be consistent with the revised performance targets, a distinction should also be made between funding of R&D projects that fit the broader definition of environmentally sound uses and funding of projects that fit the narrower definition of recycling (including civil engineering).

Additionally, it is recommended that, after a suitable period of time has elapsed after conclusion of funded projects, an ex-post review of the projects be undertaken to assess whether they have been successful in furthering the objectives of the TSRF.

Recommendation:

- TSA establish appropriate criteria for ex-ante assessment of proposals for funding through the TSRF. The criteria should be consistent with the objectives of the TSRF.
- TSA should also undertake an ex-post assessment of funded projects to assess whether they have been successful in furthering the objectives of the TSRF.

Communications recommended targets

Specific communications targets have not been recommended. Instead, it is recommended that a full-time communications manager be appointed and report to the CEO. An early priority of the communications manager will be to develop a set of communications targets focusing on further enhancing communications to Scheme members, potential members and consumers and on consumer awareness.

There was strong feedback from external stakeholders of the need to improve communication on the scheme to key external stakeholders — particularly tyre use sectors where participation in the scheme has been slow or has not commenced consumers, and government.

We recommend a forum be established as mechanism to gather stakeholder views but also provide stakeholders with information on and progress of the development of the scheme.

Recommendations:

- A full-time Communications Manager be appointed and report to the CEO.
- A set of communications outcomes should be developed focussing on further enhancing communications to Scheme members, potential members and consumers and on consumer awareness.
- A forum be established as mechanism to gather stakeholder views but also provide stakeholders with information on and progress of the development of the scheme.

It is acknowledged that in many respects suitable criteria are already in place.

2.3 Reporting and data issues

2.3.1 Reporting requirements specified by ACCC

Under the ACCC determination, two supply chain participants are required to provide regular data:

- Tyre importers and vehicle manufacturers and importers; and
- Recyclers.

The details of these data requirements are described in Box 1. The data requirements are framed to capture information on all tyres that are imported (and hence consumed) and the end use life destinations for consumed tyres.

Box 1: Required data under ACCC determination

Tyre importers and vehicle manufacturers and importers

The ACCC determination requires quarterly reporting on the types and number of tyres imported (by EPUs or weight).

The ACCC suggested a data format:

Туре	No.	EPUs
Motorcycle		
Passenger Car		
Light Truck/SUV		
Truck small (17.5" & 19.5")		
Truck large (20" & 22.5")		
Small Specialty/Ag (skid steer, forklift 8"-15", front tractor & backhoe 15" to 18")		
Medium Specialty/Ag (20" - 30")		
Large Specialty Ag (32" and above)		
Small Earthmover (24" – 25")		
Medium Earthmover (29" – 35")		
Large Earthmover (above 35")		

Retailers

No data requirements (unless also a tyre importer)

Fleet operators

No data requirements (unless also a tyre importer)

Local Government

No data requirements

Collectors

No data requirements (unless also a tyre importer)

Recyclers

The ACCC determination requires that recyclers must report quarterly on the types and numbers of end-of-life tyres received from each participant retailer/fleet operator/local government and from each mining site in each reporting period. Reporting can be in EPUs or weight.

The ACCC suggested a data format:

Tyre type	Participant retailer/fleet operator/local government			Non- participants
	Name:	Name:	Name:	Total
				
	Scheme identifier:	Scheme identifier:	Scheme identifier:	
Motorcycle				
Passenger				
Light Truck				
Truck				
Super Single				
Solid small (up to 0.3m high)				
Solid medium (>0.3m up to 0.45m)				
Solid large (>0.45 m up to 0.6m)				
Solid extra large (> 0.6m)				
Tractor small (up to 1m high)				
Tractor large (>1m up to 2m)				
Fork lift small (up to 0.3m high)				
Fork lift medium (>0.3m up to 0.45m)				
Fork lift large (>0.45m up to 0.6m)				
Grader				
Earth mover small (up to 1m high)				
Earth mover medium (>1m up to 1.5m)				
Earth mover large (>1.5 up to 2m)				
Earthmover extra large (>2m up to 3.0m)				
Earthmover giant (>3 up to 4m)				
Bobcat				
Total				

The ACCC determination also requires that recyclers must report quarterly on the fate of end-of-life tyres received. Reporting can be in EPUs or weight.

The ACCC determination states that in providing data to TSA on the fate of end-of-life tyres received from scheme participants and non-participants, the following classification should be used:

Product description	Examples of fate	Weight (kgs) or EPUs
Part tyres (> 200mm) - cut tyres and rough shred	Civil engineering, domestic/export market for further processing	
Part tyres (< 200mm) - nominal 6" chip	Civil engineering, domestic/export market for further processing and tyre derived fuel	
Part tyres (< 60mm) - nominal 2" chip	Civil engineering, domestic/export market for further processing and tyre derived fuel	
Part tyres (< 20mm) - coarse granulate (steel removed)	Playgrounds and equestrian surfacing	
Part tyres (< 10mm) - fine granulate (steel removed)	Sports surfaces and carbon input for steel manufacture	
Part tyres (< 1mm) - powder or crumb (steel removed)	Adhesives, roads, moulding, carpet underlay, brake pads and paints. Potential future use as fuel in explosives and blending with virgin rubber &/or plastics	
Whole tyres	Civil engineering	
Whole tyres	Use as fuel (e.g. cement kilns)	
Whole tyres	Landfill	
Whole tyres	Export	
Steel	Steel manufacture	
Carbon black	Pigment, reinforcement in rubber and plastic products	
Silicon carbide	Abrasives, cutting tools	
Other tyre components	Textiles	
Fuel (oils and gases)	Energy generation	

2.3.2 Current status of TSA reporting system

As discussed in section 2.1.1, participant numbers have been steadily increasing. However, there have been a number of issues with the reporting of data by TSA accredited participants as required by the ACCC determination.

In terms of importers, ATIC has provided TSA with aggregate data on the type and number of tyres. This has not been individualised for each tyre importer as required by the ACCC determination. We understand aggregate data has been provided because of commercial sensitivity issues with import data for each TSS participant.

In terms of recyclers, the current reporting system collects the following monthly information:

- the name of the retailer that they sourced tyres from;
- the type of tyres. There are currently five categories (e.g. passenger car, light truck and RV, truck and bus small, truck and bus large and motorcycle).
- the type of destination. There are currently three destinations (disposal, export and offshore).

However, as at October 2016, only two recyclers have provided data. Notably, the reporting frequency set up by TSA is monthly rather than quarterly as specified by the ACCC Determination.

Although not required under the ACCC Determination, TSA is requiring retailers to provide the following information on end of life destinations:

- the name of the recyclers to which the retailer is sending tyres;
- the type of tyres. There are currently five categories (e.g. passenger car, light truck and RV, truck and bus small, truck and bus large and motorcycle).
- the type of destination. There are currently three destinations (disposal, export and offshore).

Based on information provided by TSA up to October 2016, around 130 of the 1,068 retailers (12% of total) have provided monthly data on the number of EPUs that have been delivered to collectors or recyclers.

In terms of collectors, reporting data includes information on source and recycler destinations. Information provided by TSA indicates that only one of the six accredited collectors is providing monthly data.

2.3.3 Key issues with current system

Drawing on the current status of TSA's reporting system, there are two key issues we have considered when assessing whether the current TSA systems and processes are efficient and effective in measuring the end life destination of tyres:

- What data is essential for TSA to collect and from whom in order for it to be able to monitor the tyre supply chain and report on the percentage of tyres going to an environmentally sound use?
- What are the impediments to TSA collecting this essential data and ensuring it is robust?

Defining essential data

The integrity of the TSS is dependent on transparent and robust measurement of its performance in increasing the number and proportion of tyres that go to environmentally sound uses. This

forms the basis for a number of the current performance measures proposed by the ACCC in their Determination and our newly proposed scheme outcome measures.

In order to assess the proportion of tyres going to environmentally sound uses, essential scheme data includes:

- Total Australian tyre consumption that reaches an end of life i.e. the total number of EPUs of all tyres that achieve an end of life each period; and
- End of life destinations: the total number EPUs each period that go to alternative end of life destinations.

Australian tyre consumption

The ACCC Determination requires that accredited TSA importers and vehicle manufacturers and importers must provide quarterly data on tyre imports (and by type of tyre). If this information is provided, when combined with data from the Australian Bureau of Statistics (ABS) on tyre imports (loose and fitted), it could provide a reasonably holistic picture of total Australian tyre consumption that reaches an end of life.

Currently, tyre import data by tyre type and number of tyres is available to TSA from ATIC. In order to provide a complete picture of tyres being consumed, this could be complemented with data from vehicle manufacturers and importers when they become accredited.

It is noted that the data currently provided by ATIC is aggregated and is not individualised to each importer. In our view this does not appear to be a constraint to establishing the total number of Australian tyres that reaches an end of life.

The ACCC determination (Box 1) specifically defined essential data as including information on the tyre type. The benefit of this data is that it can assist in reconciling the number of tyres of a particular type that are imported (e.g. passenger) with the number of tyres of a particular type for which there is reported end of life data from recyclers. It may also provide insights into the rate of accreditation for particular segments of the market.

Recommendation:

TSA should continue to require accredited TSA importers and vehicle manufacturers and importers to provide data on tyre type and number of tyres imported. This is not expected to be company specific data due to commercial sensitivities and could be consolidated by ATIC where necessary.

End of life destinations

In implementing the scheme, TSA has requested that retailers, collectors and recyclers provide information on the destination of their end of life tyres and the TSA Reporting Platform has been developed with this in mind. The inclusion of retailers and collectors was not prescribed in the ACCC Determination, although there was a requirement for receipts to be kept by retailers and collectors.

The benefit of TSA collecting retail data on end of life destination (including by tyre type) is that it will be possible to match up the retailer end of life data with the recycler end of life data. This has the potential to allow TSA to assess the integrity of data that is provided by different supply chain participants. It should also enable TSA to assess which retailers and segments of the market are not sending end of life tyres to accredited recyclers and whether retailers are switching from non-accredited to accredited recyclers over time.

These benefits appear to add to the integrity of the scheme and provide a case for retaining reporting for retailers and collectors. However, it should not detract from the urgent importance of collecting comprehensive and granular data from recyclers as well.

In the short term, and in the absence of meaningful reporting data from the TSA Reporting Platform, TSA undertook for its 2015/16 Annual report to collect data on end of life destinations directly from ATRA and some key recyclers. Obtaining this type of data from ATRA in the short to medium term should continue as it will take time for participant reporting data to be useful for analysis.

There is a clear gap in understanding the end of life use of tyres that are exported. This is an important issue as approximately 48 per cent of tyres consumed are currently exported (Table 3).

Recommendations:

TSA should continue with current reporting arrangements with respect to obtaining detailed tyre type and end of life destination data from retailers, recyclers and collectors. Over time this should extend to other market participants such as miners, governments and fleet owners.

Where practicable, TSA should expand the reporting categories for end of life tyres that are exported to be consistent with the categories used for end of life tyres that are not exported.

Impediments to collecting essential data and ensuring it is robust

There are currently some process and system issues that are constraining TSA from collecting the essential data and ensuring it is robust. Key issues that have been identified are:

- system functionality issues;
- processes for ensuring data integrity; and
- compliance with reporting requirements.

System functionality issues

Discussions with TSA staff reveal that they are hesitant to begin the process of persuading recyclers to begin monthly reporting because there has been a variety of issues with the current reporting system, including:

- there are three categories for end of life destinations currently available in the TSA Reporting System: disposal, export and offshore. As indicated in Box 1, the ACCC Determination outlined 15 categories and, while TSA should be allowed some flexibility on the appropriate categories, the current two types fall well short of providing transparency on the different types of end of life destinations.
 - Importantly, expanding the limited categories for type of destination should be an immediate priority as it is critical to reporting on the key scheme outcomes. Discussions with a key recycler indicate that this information is currently available to be collected across many recyclers. Expanding categories should be undertaken for end of life types destined for both domestic and export locations.
- limitations on the ability for a recycler with multiple facilities to easily upload data. This is a functionality issue with the current TSA Reporting Platform.

• the inability to extract data from the TSA Reporting Platform for analysis. There is currently no functionality that allows for data to be extracted.

There are also issues with the categorisation of tyre types for retailers, collectors and recyclers as the categories for type of tyre in the TSA Reporting Platform do not have alignment with the ACCC categories in Box 1. While this categorisation issue is not currently constraining TSA from encouraging more retailers to begin reporting, it does materially impact the quality of information that is being collected since it does not currently allow for a distinction to be made for the different types of off-road tyres.

Processes for ensuring data integrity

There are currently limited processes in place to ensure the integrity of the information of data in the TSA Reporting Platform. Some key processes that should be put in place, include:

- ensuring that if a participant does not meet a reporting deadline that they are informed of their non-compliance. This is particularly relevant for those that are currently reporting;
- ensuring that the data in the TSA Reporting Platform is sensible and not incorrectly specified
 for a reporting period by a participant. This includes examining movements in tyre numbers
 and end of life destinations over time for each participant.
- examining whether data from retailers is consistent with data from recyclers. For example, a
 retailer may indicate they have delivered to a recycler which means that the same recycler
 should have corresponding reporting data.

Compliance with reporting requirements

A requirement of ongoing accreditation is that TSS participants provide required monthly data. However, this has not been enforced by TSA to date. Rather, TSA has encouraged retailers to report with some success while it has not done the same for recyclers. The reason for this approach is twofold: TSA has initially been focused on getting new participants into the scheme; and recyclers have not been encouraged to report due to system functionality issues.

Recommendations:

- TSA should undertake to rectify key system functionality issues as soon as is
 practicable while also putting in place data integrity processes. Once these are
 rectified it should move to strictly enforce compliance with reporting.
- In the short-term, TSA should devote sufficient resources to ensure that they can achieve these reporting outcomes.

2.3.4 Additional data requirements for proposed new targets

In addition to changes required to meet ACCC reporting requirements discussed above, changed data collection systems are needed to enable data necessary to report against the new outputs focussed targets, in particular R&D and communications targets.

Recommendation:

TSA should establish data collection systems necessary to report against proposed new R&D and communications targets.

3. Representativeness of Board composition

A key question for this review is 'whether the composition of the Board has been sufficiently representative of all participants'.

3.1 Background

Tyre Stewardship Australia (a not-for-profit Company Limited by Guarantee) administers the TSS. ATIC was granted authorisation by the ACCC under the Competition and Consumer Act 2010. TSA was established to administer the TSS. TSA is administered by a Board of Directors.

Members of the company limited by guarantee are:

- Bridgestone;
- Continental;
- Goodyear;
- Michelin;
- Pirelli;
- Toyo Tires;
- Yokohama;
- Kumho;
- Tyrepower;
- ATRA; and
- MTTA.

The membership of TSA has evolved over time and tyre industry companies have requested to join TSA as they commence participation in the Scheme.

External stakeholders are diverse and include:

- the Commonwealth Minister for Environment and Energy and other jurisdictional environment ministers;
- the general public on whose behalf Ministers act; and
- NGOs interested in tyre recycling.

3.2 ACCC Determination

The ACCC determination prescribed some governance arrangements for the TSA Board and also encouraged wider representation.

As noted by the ACCC, prior to the Determination there were concerns by some stakeholders about the representation of the recycling industry and tyre collectors on the proposed Board.

In response, the following Board composition was proposed by industry and included within the Determination:

TSA will be managed by a Board of Directors initially appointed by the parties to this scheme. The Board will comprise:

An Independent Chair

Four directors to reflect the responsibilities of its importers as the product stewards (nominated by ATIC)

One director to reflect the role of the retail sector in the proposed stewardship scheme (nominated by AMIF)

One director with tyre recycling industry experience (to be determined by agreement between ATIC and ATRA), and

Additional directors from time to time with expertise from major industry sectors, to be determined by the Board of Tyre Stewardship Australia, and up to a maximum of ten Directors in total.

In the Determination, the ACCC concluded:

that the recycling industry (including tyre collectors) appear to be adequately represented on the Board of TSA through the appointment of a 'recycling/collector Director' by ATRA and ATIC.

In doing so, the ACCC encouraged the TSA to seek to ensure the Board was 'appropriately representative of all relevant segments of the industry'.

At the time of the Determination, the ACCC noted that further composition changes were being considered by the proponents of the scheme to allow for representation on the board by Government. The ACCC also noted other provisions within the Guidelines allowed for broader involvement of environmental bodies and other industry specialists.

In the Determination, the ACCC observed that these arrangements would:

- go 'some way' toward ensuring various participant views are take into account;
- be 'likely to' promote greater participation in the voluntary Scheme, as well as the effective administration of the Scheme.

In doing so, the ACCC appeared to imply there was not an expectation that the TSA Board membership be structured to fully account for *all* participant views and representation on the Board was seen to be vehicle to encourage participation.

3.3 Evolution of representation

3.3.1 Start up

The Inaugural Board was elected from nominees representing the membership groups including:

- nominees of importers and retailers (we note some importers are also retailers);
- a nominee of ATRA the then ATRA CEO; and
- an Independent Chair;

Our conversations indicate that an allocation of Board position was an important expectation of some stakeholders and helped their decision to join TSA. They also revealed a desire of stakeholders to make the TSS work and that they saw the importance of driving the success of the TSS through active Board engagement.

In a relatively short period after the establishment of the Board, the nominee of ATRA ceased his role with ATRA. Our conversations indicate that the individual then continued to serve on the Board as an independent board member with recycling experience. Together with the Chair this resulted in two Independent Directors being on the Board at that point in time.

As the Board worked on the early development of TSA and the TSS, two members of the Board took on some functions to support the Board and the functioning of TSA. These functions included:

- Treasurer held by a Board member with an accounting background
- Company Secretary and Communications Manager held by the Company Secretary of ATIC.

In August 2016, the inaugural (past) Chair resigned from the Board resulting in the Board operating with one Independent Director. A member of tTSA expressed concern that the Board was operating outside of its charter and had its levy fees held in escrow until the situation was addressed.

Recommendation

TSA should list independent Board members on its website.

3.3.2 Recent changes

In 2016, the current Independent Chair and a third independent Director were appointed to the Board (Attachment 2) and a number of member representations on the Board also changed.

3.3.3 Changes to pathway for representation

At the 2016 AGM, TSA company members ratified changes to the Constitution of the Company that materially affect the way in which future Board members are to be appointed.

The Constitution allows for 'A minimum of 1 and up to 2 representatives from the tyre recycling industry with suitable knowledge and experiences as elected by the Members ...'

Under the inaugural Constitution, the appointment of new Directors required the approval of ATIC. This requirement has been removed from the new Constitution and nominees are elected by the General membership at the AGM. We note casual Board vacancies can be filled between AGMs by appointment of the Board.

3.4 *Sufficiently* representative?

The terms of reference ask us to consider whether the Board is 'sufficiently representative of all participants'. Nominees for Board positions nominate as representatives from defined groups of company members. As such, under the Constitution, the Board is not required to be representative of TSS participants. While the remainder of this section addresses the representation of tyre recyclers, we note the Board membership does not and is not required to comprise nominees from participants such as local government and fleet, or potential participants such as mining.

The Constitution does not define or specify 'sufficiently representative' nor 'sufficiently' or 'representative'. However, there is an implied balance of judgement in the composition of the Board allowing for ranges in the number of Board members from different representative

stakeholders by specifying minimum and maximum limits to numbers within a total cap of 11 Board members.

For example:

- 4-5 tyres importers;
- 1-2 tyre recycling representatives;
- 1-2 tyre retailers; and
- 2-3 independents.

When standing for a Board position we recommend that nominating members clarify which Board position category they are nominating under.

While a nominee to the Board is nominated within a representative member category, an election to the Board is *by the membership of the company*. As such, a Board member is responsible to the membership of the company rather than the nominee representation category.

Recommendation

Nominating members be required to clarify which Board position category or categories they are nominating under.

Unlike tyre importers, Board 'representatives' of tyre recyclers and tyre retailers are *explicitly* required under the Constitution to have suitable knowledge and experience and are not required to be a representative of a member organisation.

'Sufficiently' implies there is an expectation that some balance is desirable or reasonable between *fully* representative and other considerations.

We consider this question in number of contexts:

- sufficiently representative of all stakeholders; and
- sufficiently representative compared to other board selection criteria?

The meaning of 'representatives' is also open to interpretation and could include:

- a formal member of defined stakeholder group;
- undertaking activities within the area of business of the stakeholder group; and
- being able to represent views the area of business.

In this review, we take the view as commonly defined or implied by stakeholders in our conversations with them that 'representatives' in relation to recyclers mean someone who is either engaged as a tyre recycler or is the nominee of a 'Representative member' as defined by the Constitution.

While we recommend that the term 'representatives' in section 34.1 of the Constitution, as applied to Board positions, be defined in the Constitution, the longer-term objective should be a Board that is representative of the tyre industry rather than be a Board of Representatives. The focus should be on finding appropriately skilled Board members to act in the best interests of the Company. In the longer term, consideration should be given to removing references to representation in the Constitution.

Recommendation:

The term 'representatives' in section 34.1 of the Constitution, as applied to Board positions, be defined in the Constitution but in the longer term, consideration should be given to removing references to representation in the Constitution.

The terms 'representatives', 'members' and 'participants' should be defined in the Constitution.

3.4.1 All stakeholders?

Beyond Board independents, the constitution does not require, and the Board does not include, broader stakeholders outside the membership of TSA on the Board. While the ACCC determination references options to broaden the scope of membership beyond the tyre industry, this has not occurred to date. This is appropriate under the start-up conditions of TSA. The focus has been to get base level membership and participation from key industry groups involved in the tyre cycle. There are risks to clarity of accountability in early stages of scheme development by broadening representation beyond key sector groups (importers retailers, and recyclers).

The Board is authorised under the Competition and Consumer Act 2010 by the ACCC Determination and the scheme was launched by the Minister for Environment and Energy. However, as the Board is not legally accountable to the Minister, government representation via observer status or advisory committees could confuse this accountability and potentially imply endorsement of decision making when it may not be the case.

In our view, there is ambiguity about accountability of the Board to Government. For example, we note:

- the ACCC has powers to withdraw authorisation or not renew the authorisation; but
- advice from the Department of Environment is the Board is not *legally* accountable to the ACCC or the Minister (as the TSS is not an accredited scheme under the Product Stewardship Act)

The Minister, nonetheless, has a key interest in performance of the TSS. Indeed, the Board must also view all jurisdictional environment Ministers as key stakeholders.

Accrediting the TSS would improve clarity of accountability of the TSA Board to Government. We note the Board has previously considered accreditation but there has not been a recent round of accreditation under which accreditation could be progressed. Under accreditation arrangements, the Minister could clarify a number of expectations that could assist the Board to continue to improve the performance of the scheme and move toward further maturing of governance arrangements.

Recommendations:

- The Board should continue to view State and Commonwealth Ministers accountable for environmental matters as key stakeholders and a key audience of their Annual Report.
- TSA should seek accreditation of the TSS under the Product Stewardship Act and progress processes toward achieving accreditation.
- Through the accreditation process, the Australian Government clarify accountability arrangements and any reporting requirements for the Board.

3.4.2 Recycling representation

One of the key issues raised in our consultations related to the absence of ATRA presence or formal representation on the Board. While all stakeholders within TSA we interviewed acknowledged ATRA is not formally represented on the Board, there was debate regarding the extent to which recyclers are currently represented and the level of skill and experience within the Board on recycling matters.

In some cases, stakeholders noted that knowledge of the recycling industry is currently sufficiently accounted for through the skills of the independent director previously agreed to by ATRA and by other Directors who are involved in aspects of recycling through their industry roles. Balancing that view were comments from some stakeholders that the independent director had not been involved with ATRA for some time and did not have access to a range of recent intelligence and data relating to the sector and, as such, was not expert in recent and emerging developments in the sector.

Some stakeholders held the view that the need for further recycling experience on the Board is diminished with current Board composition and appropriate data sharing between ATRA and TSA.

Our view is the gap in ATRA engagement with the Board is not redressed through data sharing between TSA and ATRA. The data collected by TSA via ATRA on recycling performance has occurred only recently and there has been limited exposure of the data to the Board. A key weakness of the TSA reporting systems to date is they have gathered highly granular retail data, but have lacked sufficient connection to the activities of the recycling sectors. Indeed, the data collected on the recycling sector has been relatively limited compared to the data held by ATRA.

As discussed in section 2.3.3, there is therefore an urgent need to improve the TSA data systems to enable more comprehensive and granular data to be collected from or in collaboration with ATRA. Further, it is vital that TSA and ATRA continue to improve their sharing of information and intelligence. Our conversations with stakeholders suggest this would be welcomed and supported by both TSA and ATRA.

Our view is while there has been some relationship issues between ATIC and ATRA over recent years there is a high degree of good will and good intention by the leadership of ATIC and ATRA. In developing and growing this relationship and sharing of data further work is required to improve understanding and recognition of the audit systems employed by TSA and ATRA. We note that the audit company Equilibrium undertake audits for both TSA and ATRA and dual auditing occurs for a TSA member that is also a member of ATRA.

We see ATRA and TSA as complementary rather than substitute organisations. No one we spoke to held that the view that ATRA *proper* must be represented on the Board, rather, most were comfortable (including recyclers we spoke to) that more recycling experience and representation could be brought into the Board without that member being a representative of ATRA.

While most stakeholders also hold this view, a variety of issues were raised that were seen as 'issues' between TSA and ATRA that made an election of an ATRA nominee rather than from other recyclers more problematic:

- TSA audit requirements are perceived by some in the recycling sector as a minimum standard below that established by the ATRA audits;
- TSA currently allows baled tyres to specific export destinations whereas ATRA does not;

- audit protocols of TSA are not publicly documented on the TSA website;
- TSA allowed the entry to the scheme of some potentially non-compliant businesses that had promised an intent to reach compliance and whose compliance is not yet fully verified; and
- concerns exist within some of the TSA company members that ATRA audits are verified by an environmental advocacy group.

The most material issue consistently raised by TSA company members was concerns about potential conflicts of interest for a board member engaged in tyre recycling dealing with research and development ("R and D") deliberations.

The potential for conflict of interest in the Boardroom has been raised as a concern — a board member engaged in tyre recycling could achieve commercial gain by having access to Board information relating to R and D investments. In part, this is because the R and D discussions could involve new and novel technologies that may have first mover advantages or create commercial competition to existing incumbents.

We discussed these issues at length with a number of stakeholders — the general view that emerged was the need to have sound internal Board processes to deal with potential conflicts of interest rather than a prohibition due to perceived conflict of interest risks. We note, as a number of stakeholders we consulted did — there is already potential for conflicts of interest in TSA Board positions with member roles outside the Board. These can be managed through sound disclosure, processes and a strongly functioning independent Chair.

We see developing and articulating appropriate internal Board processes to manage conflict of interests as another element in the development of a mature set of governance arrangements for TSA.

The general views that emerged from our conversations were:

- there is no process impediment to a person engaged in recycling or a nominee of ATRA seeking representation on the Board either through a casual board position or via the AGM process which would be in late 2017;
- while additional recycling representation could occur, there is a desire for the representative to also bring appropriate skills to the Board — at present the expectations of the Board in relation to skills have not been documented and the process for revealing and assessing the applicant skills is unclear.

Our view is that while views within recycling industry have been represented on the Board and skills and experience in recycling is present on the Board there is scope to broaden the representation of recycling industry views (that is, not via an independent board position) and for recycling skills to be broadened.

Moving forward, there is an opportunity to improve governance by:

- extending the scope of representation to include more recyclers and members with recycling experience subject to the wishes of members and appropriate skills and experience. There is sufficient scope within the Constitution for this to occur in a timely manner;
- clarifying skill and experience requirements for all Board membership; and
- clarifying processes and protocols for managing conflicts of interest.

Recommendations:

- The Board develop a skills matrix and identify skill requirements for the Board and develop a transparent approach for undertaking a skills assessment for all Board applicants.
- The Board clarify process and protocols for managing conflicts of interest.

3.5 Towards a maturing of the governance model

We acknowledge the Board has, and is, undertaking positive steps toward reforms that will assist with the maturing of governance arrangements. These include among others: Constitutional changes; the appointment of new personnel; the development of a strategic plan; and a focus on improving data and data management.

We also stress that a representative model of Board composition has been entirely appropriate for the commencement of TSA. In some cases, representative organisations and companies required a high degree of 'ownership' in order to sign on. Additionally, in some cases, the perception was 'they' were funding the scheme and a greater line of sight and accountability was required given the risks to reputation. This is not to say the Board is not sufficiently skilled as under a representative Board model appropriate skills can be brought to bear.

While this is appropriate in the short term, a strongly representative model is not a sufficiently mature governance model in the long term and can create risks of politicisation and factionalism and perception of an industry 'club'. Given the importance of the TSS, this should be avoided. As the performance of the TSS improves and the governance of TSA matures, we encourage a greater focus on a skills based governance system where the scheme is seen as primarily accountable to wider public than to the tyre industry per-se. In the longer term, the number of representative positions should be reduced.

In the medium term — at the end of the 5-year life of TSA, consideration should be given to moving towards a more mature governance model that would shift from primarily representative to a primarily skills based Board which maintains a close connection to company members by retaining a majority of Board positions made up of company member nominees.

This would require a transparent and skills based selection process:

- a skills matrix to be developed for Board positions defining the skills and relative balance of skills required for the Board;
- a nomination committee either of the Board or independent which would assess the suitability of candidates (including nominees from company members) against the skills matrix;
- modifications to a nomination process which would require a skills based assessment to be made by an independent committee which would report to the Board and members before an election

We also encourage other changes to governance arrangements that were at the time a necessary feature of the start-up. These include TSA company member representatives holding the following positions:

- Company secretary and Communications Director performed by a Board member who also holds functional roles with ATIC;
- Treasurer performed by a member of the Board.

The Board should consider changing these functions so that financial and communication accountabilities come under the responsibility of the CEO rather than reporting directly to the Board.

4. Other governance issues

Our review raised a number of issues in relation to governance that could be valuable for the TSA Board to consider.

4.1.1 Clarity of objectives

A key observation is that while TSA has undertaken enormous effort to start up the scheme, TSA will require very clear objectives in order to maintain members and deliver outcomes. While the ACCC Determination has provided relatively clear outcomes that are being sought by the scheme, the Determination does not provide clarity on what to do and how to how to get there.

A significant gap in the past operation of the TSS has been the absence of a strategic plan. We understand that under the new Chair this is being rectified and Strategic Plan is to be released shortly. As part of the establishment of the Strategic Plan, consideration should be given to reviewing the performance targets for the scheme and TSA. Our view is that those in the ACCC Determination should be reformed in light of our assessment. Put simply performance targets need to be measurable and achievable and some at present do not meet these basic criteria and should be discussed with the ACCC. Recommendations in section 2.2 provide guidance on possible revised performance targets.

4.1.2 Transparency

Transparency is vital to the long-term success of TSA. Transparency is the means through which decisions about the Scheme and Scheme activities can be understood and for which the Board can be held to account.

Under the Guidelines referenced in the Determination, TSA is to publish an annual report on its website detailing activity expenditure. TSA also proposed to publish information in the annual report and on its website about progress towards the Scheme's performance targets and measures.

A concern among some stakeholders is the transparency of Board decision making and general TSA activity. Now that a new independent Chair and a CEO have been appointed we encourage the Board and Executive to find ways to more regularly communicate with members (particularly those members that do not have a Director from their organisation). We have made recommendations on a Communications Manager and an Engagement Working Group to assist in this regard.

The transparency of the Board has improved over time. In particular, the quality of the Annual Report has improved — for example there is improving transparency on TSS performance and Board decision making. This should be enhanced further through the development of the Strategic Plan and reporting against the Strategic Plan in the Annual report. However, further investment in compulsory reporting and monitoring systems are essential. At present, they are not robust enough to consistently and reliably report on TSS performance.

In developing these systems, the Board should also give consideration to real time reporting against the performance targets on its website. The Board should also give consideration to how it will report compliance of individual businesses against the Scheme through its audit regime. A key issue for the Board is that while many businesses have signed on under grace periods —

non-compliance past the grace period will need to be robustly enforced for the scheme to have ongoing credibility.

As noted later in the report, we also recommend the Board undertake robust ex ante and ex post evaluations on R and D investments and publish the outcomes regularly. A learning from R and D levies in other sectors is robust ex post evaluation in particular is vital for demonstrating value from levies.

5. Assessing revenues and expenditures

Marsden Jacob has also been asked to assess:

- the total levy funds collected under the Scheme;
- a breakdown of how levy funds were spent during the period; and
- how spent funds are contributing to the achievement the Scheme's objectives to:
 - increase resource recovery and recycling and to minimise the environmental, health and safety impacts of end-of-life tyres in Australia; and to
 - develop the domestic tyre recycling industry and markets for tyre derived products;

5.1 Revenues

In February 2015 TSA advised the ACCC that since commencement in 2013 it had received total revenues of approximately \$660,000 and had repaid five of the original advances from tyre importers.

TSA annual revenues have now risen to just under \$4 million by 2016. Revenues are almost exclusively comprised of levies (Table 5).

Composition of levies paid by individual members remains confidential given commercial sensitivities. As a consequence, the Company Secretary in his role as Company Secretary of ATIC uses ATIC member market data to estimate levies for individual members without revealing to the TSA commercially sensitive data. We understand there is an independent audit of this process to ensure the fees levied meet scheme conditions.

Table 5 TSA revenue

Revenue type	2014	2015	2016
Total Revenue	\$425,000	\$1,456,459	\$3,865,535
Receipts from levies		\$1,453,073	\$3,645,518
Interest		\$1,706	\$34,295

Source: various TSA Annual Reports

Note: Receipts from levies and interest do not add up to total revenue

5.2 Expenditures

Major expenditures by TSA are summarised in Table 6. Major expenditures have risen significantly since start-up.

In February 2015, TSA advised the ACCC that since commencement approximately \$200,000 had been spent to fund communications, website development and design and implementation of the accreditation scheme. It also advised TSA had spent approximately \$236,000 on establishment and management fees.

TSA also advised that, at that point in time, priorities for future expenditure were:

- establishment of a small executive team; and
- costs associated with accreditation, auditing, and communications with the majority of revenue going to the Stewardship Fund to support a range of market development initiatives.

Since then, research and development has become the largest expenditure category rising to just over \$0.7 million in 2016. In the January 2016 addendum to the 2015 Annual Report, TSA reported to the ACCC that it had released more than \$1.5 million in research and development funding to support projects aimed and developing new and improved markets for tyre derived products. Projects in development included:

- the use of crumb rubber in road pavement (asphalt) and surfacing;
- applications for truck tyres for sub-surface stabilization beneath rail ballast; and
- the use of rubber modified structural concrete in construction.

After employee benefits, advertising is the next largest expenditure category.

The Annual reports do not provide the costs of TSS audits — we recommend these expenses be separately reported in future annual reports.

Table 6 Major expenditures by TSA

Major expense	2014	2015	2016
Advertising	5,657	124,546	183,422
Research and development and professional fees		564,672*	727,619
Employee benefits		9,166	375,779

^{*}Reported as Professional fees in the 2015 Annual Report

Source: various TSA Annual Reports

5.3 Observations

The financial performance of TSA has significantly strengthened over the life of the scheme. The scheme has been able to recruit a sizeable and stable membership and is appropriately recovering fees to fund future operations.

During the early start-up of the scheme, TSA faced significant cash-flow and operational challenges as it sought to invest in basic program infrastructure such as data and auditing and reporting systems while trying to encourage new members to join the start-up — which according to our conversations proved something of a chicken and egg problem.

The major challenge at present for TSA is achieving operational scale commensurate with its income. Net cash now held has reached \$1.9 million and the TSA urgently needs to confirm a strategic plan and appropriately resource delivery of the plan.

At present, TSA is still working towards this. Our observation of the TSS is the Board should:

- increase staffing to be able to develop and execute the plan;
- increase its focus on increasing national R and D effort on tyre recycling technologies;

- further develop and resource a communications plan to improve public awareness of the TSS: and
- consider boosting the resourcing of the TSS and broadening the scope of activities funded under the TSS to target gaps and address issues impacting on incentives and behaviours affecting the use of end of life tyres.

In the longer term, once appropriate reporting systems are established, and operating well, the major expenditure in the program should be investment in R and D and communications to consumers.

At this point in the draft review, we have not formed a view on the relative balance of expenditure that should go toward these activities.

However, our intuition and the feedback we have received from external stakeholders is that at this early stage of the scheme, more should be spent on communications and gathering data on tyre consumer views. Ultimately the success of the TSS should be driven by consumer preference rather than solely the tyre industry altruism. To date, there has been limited focus on tyre consumers in the program as the program start-up focussed on membership of the tyre industry — granted that more recently a national advertising campaign has emerged. Our conversations indicate a widely-held view in industry of the need to develop more consumer awareness of the TSS and have consumer preference and choice drive tyre industry compliance. We also note putting further resources into communication will assist in improving the 'line of sight' of external stakeholders of the scheme, encouraging their continued support and engender further participation.

While more could be spent on R and D, the challenge is to spend it on the 'right' R and D. TSA should continue to work to identify R and D opportunities needs and capabilities and continue to develop assessment framework to assesses and weigh future investment options. To this end, TSA should look to assessment guidelines in other sectors for both ex ante and ex post evaluation and of R and D projects – such as, the Council of Rural Research and Development Corporations (CRRDC) Impact Assessment Guidelines. In the future, robust ex-ante economic evaluation will help guide the targeting of wider suite of investment choices and robust ex-post assessment will demonstrate the value of the outcomes to stakeholders.

Recommendation:

The Board should ensure robust ex-ante and ex-post economic evaluations are undertaken to demonstrate value for money of R and D investments.

As a final note, we acknowledge:

- the contribution of the current staff to the performance of the TSS and TSA. The overwhelming unsolicited feedback has been the team is highly skilled and motivated and a significant factor in the successes to-date.
- the helpful and open conversation with TSA members and Board. TSA has provided data and information in a timely, open and honest manner and this has greatly assisted with this review.

Attachment 1 — Consultation

The scope of consultation was determined in agreement with the TSA Board and included individual and organisations involved in:

- Tyre manufacturing;
- Tyre and car importing;
- Tyre retailing and repairing;
- Tyre collecting and tyre recycling;
- State and Commonwealth policy and regulatory agencies ACCC, Treasury, and relevant Departments such as Transport and Environment; and
- Environmental advocacy.

Internal and external individual consultations included:

Internal

- Current TSA employees including the Acting CEO and two managers;
- David Spear Chair;
- Silvio de Denaro Company Secretary and Communications Manager
- Peter Krietals Director;
- Andrew Moffatt Director;
- Melissa Holzberger Director; and
- Justin Siebert Director.

External

- Gerry Morvell previous TSA Chair;
- Silvio de Denaro Company Secretary ATIC
- Matt Genever previous TSA CEO;
- Jamie Martin— ACCC;
- Jim Fairweather ATRA and Tyrecycle;
- John Kananghinis InterCapital (provided TSA with communications and data management advice);
- Tony Weber Federal Chamber of Automotive Industries;
- Peter Brisbane Department of Environment;
- Kylie Hughes Queensland Department of Environment and Heritage;
- Michael Rudd Toyo Tyres;
- Henry Moore NSW EPA; and
- Jeff Angel Boomerang Alliance.

Attachment 2 — Board arrangements

Governance and Board arrangements for TSA have evolved over the life of the TSS.

Advice to the ACCC Determination

The industry advised the ACCC at the time of the Determination that the TSA Board will comprise:

- An Independent Chair;
- Four directors to reflect the responsibilities of its importers as the product stewards (nominated by ATIC);
- One director to reflect the role of the retail sector in the proposed stewardship scheme (nominated by AMIF);
- One director with tyre recycling industry experience (to be determined by agreement between ATIC and ATRA), and
- Additional directors from time to time with expertise from major industry sectors, to be determined by the Board of Tyre Stewardship Australia, and up to a maximum of ten Directors in total.

Inaugural Constitution

The Inaugural constitution at the time of establishment of the TSA stipulated the following Board composition:

- a) Up to 4 representatives of the Australia Tyre Industry Council as elected by its members;
- b) Up to 1 representative with tyre recycling experience whose nomination is subject to the agreement of the ATIC and the Australian Tyre Recyclers Association;
- c) Up to 1 representative of the Australian Motor Industry Federation;
- d) 1 independent chair person; and
- e) Any other mutually agreed by Members.

Current constitution

At the 2016 AGM members of TSA agreed to the following new Board composition arrangements:

- a) a minimum of 4 and up to 5 representatives of member organisations involved in the importation of tyres into Australia as elected by the Members in accordance with article 34.2;
- b) a minimum of 1 and up to 2 representatives from the tyre recycling industry with suitable knowledge and experience as elected by Members in accordance with article 34.2;

- a minimum of 1 and up to two representatives from the tyre retail industry with suitable knowledge of and experience as elected by Members in accordance with article 34.2;
 and
- d) at least and up to three independent Directors as mutually agreed by the majority of the Directors.

The Constitution also requires the Secretary under clause 34.2 to 'assess all nominations for their eligibility against the criteria ...'

Board changes

There have been a number of Board changes since the inception of TSA:

- The number of Board members has expanded from an initial 7 in 2013 to 10 in 2014-15 to the current 9;
- The Inaugural Chair resigned and was replaced;
- Australian Tyre Dealers and Retreaders Association are no longer represented;
- ATRA is no longer not formally represented; and
- Three independent of industry Board members were appointed.

Current Board members

Current Board members listed on the TSA website are:

- Chairman David Spear an independent company Director
- Director and Treasurer Justin Siebert is currently responsible for the Motorcycle product line for Oceania and management of Public Affairs at Michelin Tyres,
- Director Melissa Holzberger an independent company director and commercial lawyer She is currently Deputy Chair and a Director of the national motorsport organisation, Karting Australia; and Chair of the company's Governance, Finance and Risk Management Committee.
- Director Lawrie De La Rue remains actively involved in tyre retailing and has spent many years on the VTDA committee, including several years as Vice President was a foundation member of the Australian Tyre Importers Group which later became the Australian Tyre Industry Council.
- Director Peter Kreitals was the Executive Director of the Australian Tyre Recyclers Association for more than 10 years, up until December 2013.
- Director Alan Sutton is Customer Engineering Manager for Goodyear Dunlop Tyres Australia (GDTA) he is the GDTA representative on the Australian Tyre Industry Council (ATIC) and trucking associations ATA ITC and ARTSA.
- Director Steve Clifford worked for Yokohama Tyre Australia for 19 years, as General Manager for the last 14 years.
- Director Andrew Moffatt is Managing Director of Bridgestone Australia and New Zealand.
- Director David Wilson is Chief Executive Officer of Tyrepower.

The Company Secretary and Communication Manager is Silvio de Denaro.

Advisory committees and observers

TSA may also establish committees to provide specialist or expert advice on certain issues.

Current Committees include:

- Research Advisory Committee;
- Accreditation Committee: and
- Remuneration Committee.

Two Working Groups have also operated:

- Data Collection Working Group
- National Market Strategy Working Group

While not set out in the ACCC Determination or Constitution, there has been some ad-hoc use of observers. We understand the President of ATRA was invited by the Inaugural Chair to be an observer at two Board meetings during 2015.

Participant categories

There are seven currently participant categories for organisations wishing to join the TSS:

- Tyre importers and vehicle manufacturers and importers engaged in tyre importing, vehicle importing or vehicle manufacturing and are first to supply a tyre to the domestic Australian market excludes those importing less than 1000 EPU per annum;
- Retailers offers products for sale at retail through any means, including sales outlets, catalogues, or the Internet includes Tyre Retreaders;
- Fleet Operators —owns or operates a fleet of vehicles, including private and Australian and State and Territory government fleet operators;
- Local government operators of vehicles and legal landfill managers and often act as custodians of illegally dumped end-of-life tyres;
- Collectors collects and/or transports end of life tyres in any part of Australia for recycling, reuse or disposal;
- Recyclers recovering rubber, steel, textile and/or other materials and processing it into a
 form whereby it can be used as an intermediate product in the manufacture of tyre derived
 products, or to recover energy from end-of-life tyres; and
- Miners operators of mining vehicles importing more than 1000 EPUs per annum