

Stage II Report - Tasmanian Waste and Resource Recovery Board

Actions to deliver on HIA Recommendations to improve waste minimisation, waste recovery and circular economy – May 2026

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Executive Summary

The Tasmanian home building industry is a significant contributor to the Tasmanian economy.

It directly employs more than 3,300 persons and engages over 16,100 skilled tradespeople across a range of occupations.

Tasmania's share of the National Housing Accord target is 26,117 homes to mid-2029. This is equivalent to 5,223 homes per year for five years.

Recent commencements remain well below this pace. In 2025, Tasmania commenced fewer than 2,400 homes, and commencements are forecast to rise to just over 3,000 homes in 2028.

Even at the peak of the COVID-19 housing boom when around 4,000 homes were commenced industry output did not reach the level required to meet the Accord target.

Tasmania's share of new home construction is increasing, with a 14 per cent year-on-year rise in residential building approvals in October 2025, reaching a two-year high. This follows a significant increase in building activity in recent years, and the state is seeing positive trends in construction, though it is a relatively small market compared to other parts of Australia.

The Tasmanian building industry is characterised by mostly small to medium sized establishments along with renovators, trade contractors, land developers, related building professionals, and suppliers and manufacturers of building products. This reflects both their strength but also present challenges in capacity and volume of output. Construction waste is one of the priority sectors to reduce waste to landfill and better utilise circularity in design and construction.

One of the key tasks HIA undertook as part of this research included extensive industry outreach and survey of members and key building industry operators in Tasmania.

Our survey revealed that many enterprises in Tasmania are already implementing strategies like waste sorting on-site, reusing salvaged materials (such as timber and concrete), and engaging with waste management companies.

These practices help divert waste from landfills and support the government's broader sustainability goals.

Furthermore, our research for this project highlighted that over the past two decades there has been significant shift in the way building waste and site management is undertaken.

Home builders are playing a key role in helping to reduce waste, though it is also clear that more can be done.

This Stage 2 report draws on findings from the initial report delivered to the Tasmanian WRRB in February 2026. It outlines eight Actions to deliver on the HIA Recomedations both immediate and mid to longer term to improve waste minimisation, resource recovery and the circular economy in Tasmania. It identifies specific needs of the Tasmanian building industry discussing proposed outcomes and a delivery timetable.

As part of developing the Stage 2 report ongoing consideration has been given to the state of play of the Tasmanian building industry in terms of meeting its own waste and resource recovery strategic objectives. Questions around turning strategy into action have been rigorously discussed, such as:

- What does Building Beyond Recycling look like?
- How can the WRRB Vision, Purpose, Pillars and Objectives best be implemented into results driven actions

Most importantly the eight Actions to deliver on the HIA Recomedations have been conceived to promote discussion and guide Tasmania's residential construction industry to learn, embrace and work within a circular economy framework. These actions are also aimed at helping Tasmania become a residential construction waste and resource recovery nation leader.

HIA Recommendations for further work

Ten recommendations have been identified to secure better sustainability outcomes by minimising waste at all stages of the home building process and promoting what is currently a relatively under-developed local resource recovery industry.

These recommendations identify the need for further detailed work and alongside the pillars and objectives identified in the Tasmanian Waste and Resource Recovery Strategy and form the basis for the eight Actions to deliver the HIA Recommendations. They also identify tangible and practical opportunities to drive change and with the ultimate goal of waste reduction and waste minimisation which the home building industry in Tasmania can embrace and take the lead on nationally.

Taken together, these actions will reward and drive behaviours and processes that improve waste minimisation and grow Tasmania's circular economy.

Recommendations:

1. **Opportunities exist to further reduce waste**

   Tasmania home building businesses have come a long way over the past decade in onsite and offsite waste minimisation, but opportunities exist to further reduce waste through both onsite practices and through building and material design and preparation

2. **Industry engagement to drive further change**

   Many enterprises in Tasmania are already implementing strategies like waste sorting on-site, reusing salvaged materials (such as timber and concrete), and there is large scope to better engage with waste management companies and leading enterprises to show case studies, videos and other supporting resources to drive further change in industry.

3. **Embrace construction innovation to improve waste reduction**

   With industry embracing more construction innovation in modular, prefab, construction innovation, AI automation and business practice improvements it can drive greater construction efficiency and waste reduction.

4. **Incorporate the "Ten R's of Sustainability"**

   There is significant upside opportunities for the government and industry to work on an industry circular economy plan embracing the "Ten R's of Sustainability".
   Also known as the Ten R's of Waste Management: Refuse, Rethink, Reduce, Reuse, Repair, Refurbish, Remanufacture, Repurpose, Recycle, Recover

5. **Improve waste data and accuracy**

   Further work be undertaken by the Waste and Resource Recovery Board in conjunction with industry to establish more timely and accurate information about the level, source and nature of construction waste, along with further research to determine how much is finding its way into landfill and how much is being recycled.

6. **Address renovation waste regulatory challenges**

   Recycling and waste minimisation in renovation projects face several unique challenges both regulatory and practicality. A dedicated construction renovation waste management strategy should be developed and could include industry handbooks and dedicated waste management facilities and grants.

7. **Develop online non- accredited training**

   In consultation with industry develop online non-accredited training to assist all participants in residential building, construction and demolition to understand the shift that is occurring in waste management practices and principles, and how these can be applied.

8. **Create real time, builder focused, waste management App**

   Develop modern online methods, such as a smart phone App, that provide real time meaningful and useful industry information to assist builders and contractors. Features could include online navigation to the nearest facilities, materials received, levies calculator and opening hours.

9. **Analyse regional waste infrastructure gaps and opportunities**

   Undertake a waste infrastructure analysis, with a focus on public and private waste infrastructure in regional areas, to better understand barriers, constraints and opportunities for improvements in waste management behaviour and practice of circular economy principles.

10. **Review regulatory approvals to achive better results**

    Improve the nexus between regulatory approvals to achieve better results - minimise waste and maximise recovery through design and materials specification. Roadmap areas for improvement with actions and timelines.

Actions to deliver on HIA Recommendations

HIA has developed the following eight Actions to deliver on HIA Recommendations.

A: Develop and industry engagement strategy

B: Reviewing the effectiveness of Waste Management Plans

C: Short form videos

D: Industry support program - Low carbon concrete

E: Industry support program - Road building and maintenance

F: Industry support program - Using AI and robotics to improve waste processing

G: "Zero waste" competition

H: App that identifies valuable construction data

These Actions are considered to harmonise with the Tasmanian Waste and Resource Recovery Strategy as well as create tangible projects based on the HIA Recomemndations that can be developed and delivered over three time periods; Short term (within 18 months), Medium term (18 months to 3 years) and Long term (3 years plus).

The past decade has seen significant change in the waste and resource receiovery sector. These Actions are aimed responding to the change we have seen in the past and will continue to see in the future.

The Actions take a number of different approaches to support a strong circular economy that aims to reduce waste and improve the sustainability of Tasmania. Through these different approaches elements of the circular economy, such as diverting products and materials from landfill and recognising the inherent value of products and materials can be achieved.

All of the eight Actions engage and promote the modern approach to waste as they will encourage industry to look beyond recycling and focus on a circular economy to increase the recovery and reuse of products and materials. Each of the Actions will require varying levels of investment to promote and deliver a circular economy.

Shown below in Table 1 (refer Pages 6 and 7), are the HIA Recomendations shown linked with the eight Actions to deliver on the HIA Recommendations

Appendix A provides further detail of the abovementioned Actions to deliver on HIA Recommendations**.**

Appendix B provides Indicative cost and Timeline for implementation of Actions to deliver HIA Recommendations.

HIA Recommendations		Actions to deliver HIA Recommendations
1. Opportunities exist to further reduce waste Tasmania home building businesses have come a long way over the past decade in onsite and offsite waste minimisation, but opportunities exist to further reduce waste through both onsite practices and through building and material design and preparation.	→	A: Develop and industry engagement strategy B:Reviewing the effectiveness of Waste Management Plans
2. Industry engagement to drive further change Many enterprises in Tasmania are already implementing strategies like waste sorting on-site, reusing salvaged materials (such as timber and concrete), and there is large scope to better engage with waste management companies and leading enterprises to show case studies, videos and other supporting resources to drive further change in industry.	→	A: Develop and industry engagement strategy B: Reviewing the effectiveness of Waste Management Plans C: Short form videos D: Industry support program - Low carbon concrete E: Industry support program - Road building and maintenance F: Industry support program - Using AI and robotics to improve waste processing G: "Zero waste" competition H: App that identifies valuable construction data
3. Embrace construction innovation to improve waste reduction With industry embracing more construction innovation in modular, prefab, construction innovation, AI automation and business practice improvements it can drive greater construction efficiency and waste reduction.	→	B: Reviewing the effectiveness of Waste Management Plans G: "Zero waste" competition
4. Incorporate the "Ten R's of sustainability" There is significant upside opportunities for the government and industry to work on an industry circular economy plan embracing the "Ten R's of Sustainability". Also known as the Ten R's of Waste Management: Refuse, Rethink, Reduce, Reuse, Repair, Refurbish, Remanufacture, Repurpose, Recycle, Recover	→	B: Reviewing the effectiveness of Waste Management Plans D: Industry support program - Low carbon concrete
5. Improve waste data and accuracy Further work be undertaken by the Waste and Resource Recovery Board in conjunction with industry to establish more timely and accurate information about the level, source and nature of this waste, along with further research to determine how much is finding its way into landfill and how much is being recycled.	→	H: App that identifies valuable construction data

Table 1: HIA Recommendations linking to Actions to deliver the HIA Recommendations

HIA Recommendations		Actions to deliver HIA Recommendations
6. Improve waste data and accuracy Further work be undertaken by the Waste and Resource Recovery Board in conjunction with industry to establish more timely and accurate information about the level, source and nature of this waste, along with further research to determine how much is finding its way into landfill and how much is being recycled.	→	G: "Zero waste" competition
7. Develop online non-accredited training In consultation with industry develop online non-accredited training to assist all participants in residential building, construction and demolition to understand the shift that is occurring in waste management practices and principles, and how these can be applied.	→	C: Short form videos D: Industry support program - Low carbon concrete E: Industry support program - Road building and maintenance F: Industry support program - Using AI and robotics to improve waste processing G: "Zero waste" competition
8. Create real time, builder focussed, waste management App Develop modern online methods, such as a smart phone App, that provide real time meaningful and useful industry information to assist builders and contractors. Features could include online navigation to the nearest facilities, materials received, levies calculator and opening hours.	→	H: App that identifies valuable construction data
9. Analyse regional waste infrastructure gaps and opportunities Undertake a waste infrastructure analysis, with a focus on public and private waste infrastructure in regional areas, to better understand barriers, constraints and opportunities for improvements in waste management behaviour and practice of circular economy principles.	→	D: Industry support program - Low carbon concrete E: Industry support program - Road building and maintenance F: Industry support program - Using AI and robotics to improve waste processing
10. Review regulatory approvals to achieve better results Improve the nexus between regulatory approvals to achieve better results - minimise waste and maximise recovery through design and materials specification. Roadmap areas for improvement with actions and timelines.	→	D: Industry support program - Low carbon concrete E: Industry support program - Road building and maintenance F: Industry support program - Using AI and robotics to improve waste processing

Table 1: HIA Recommendations linking to Actions to deliver the HIA Recommednations (cont'd)

Approach

As part of developing the eight Actions to deliver on the HIA Recomedations it was important to align and understand the synergies that exist between the Tasmanian Waste and Resource Recovery Boards four Pillars and Objectives:

- Integrated Planning and Action
- Strategic Investment
- Prioritise Circularity, and
- Engagement and Partnerships

and the 10 HIA recommendations for futher work, provided in the Stage 1 report.

Based on this alignment and understanding, feedback obtained as part of the industry engagement; survey, forums and targeted engagement was considered and means in which these could be developed to meet the Vision: Tasmania – *a place where **nothing** is wasted*, and

Purpose:

- Support strong circular economy to reduce waste and greenhouse gas emissions and improve the amenity, liveability, and sustainability of Tasmania.
- Divert products and materials from landfill and recognise the inherent value of products and materials.
- To invest in circular economy programs to increase the recovery and reuse of products and materials and respond to emerging issues.

Each Action to deliver on HIA Recommendations has been developed with the Tasmanian Waste and Resource Recovery Strategy; Vision, Purpose and Pliiars and Objectives in mind.

In developing the Actions, HIA consulted internally with subject matter experts and key industry contacts. Ideas and proposals that would aide and assist the Tasmanian residential building industry transition to a Circular Economy were rigorously workshopped.

As a means of proof checking the approach to developing the Actions to deliver on the HIA Recomendations links between WRRB Pillars with the Actions was undertaken, this is shown in **Appendix C**.

Image 1: Linking WRRB Pillar - Integrated Planning and Action with applicable HIA Recommendations



Image 2: Linking WRRB Pillar - Strategic Investment with applicable HIA Recommendations



Image 3: Linking WRRB Pillar – Prioritise Circularity with applicable HIA Recommendations



Image 4: Linking WRRB Pillar – Engagement and Partnerships with applicable HIA Recommendations



Appendices

Appendix A
Further detail of the eight Actions to deliver the HIA recommendations

Appendix B
Indicative cost and Timeline for implementation of the eight Actions to deliver the HIA Recommendations

Appendix C
Linking WRRB Pillars with the eight Actions to deliver the HIA recommendations

APPENDIX A

Further details of the eight Actions to deliver the HIA Recomendations

A: Develop an industry engagement strategy

It is well known the waste industry across its various streams has many stakeholders and at times this can be fragmented, leading to loss of knowledge sharing and missed opportuntites such as materials not being recovered or recycled as they should be.

The many stakeholders can range from academic and technical experts providing data and innovation and cutting edge scientific technologies, to operations such as service providers and collection facilities and end users of what was once a waste product.

Overall the waste industry is lacking a cohesive and collaborative approach leading to knowledge sharing and improved opportunities to achieve a Circular Economy. An enegagement strategy that goes beyond the why, who, how what and so what would greatly assist in shifting the dial more toward a Circular Economy.

Key components of an industry engagement strategy must be to research and develop the following components:

- Clear Objectives & Purpose
- Stakeholder Identification & Mapping
- Market Knowledge & Analysis
- Collaborative & Inclusive Approach (Information gathering and sharing)
- Defined Engagement Mechanisms (Common goals, Where responsibilities lie for achiving a Circular Economy)
- Transparency & Ethics
- Actionable Feedback Loop (Evaluation)
- Adaptability and Flexibility

Developing an industry engagement strategy specific to the residential construction and demolition sector would enable the sector to have access and clear direction to all services and facilities emerging and currently available. It would form a solid base for the other seven Actions to deliver the HIA Recommendations outlined in this report.

Previous industry engagement undertaken by HIA such as the Industry Forums and Builder Survey (September 2025) can provide valuable input the strategy. Though further research would also be needed. This would involve, but not be limited to a desktop assessment of existing literature, field work and workshops to ensure all stakeholders are consulted.

The purpose and objective of the engagement strategy must be that it is comprehensive and meaningful and able to be relied on as a source of truth to foster collaboration between the various stakeholders. In addition it must explore aligning training requirements, innovation with market needs, and driving efficiency and better outcomes.

Link to WRRB Pillars and Objectives

This proposal would support the following Pillars and Objectives:

- Integrated Planning and Action
- Engagement and partnerships

Link to HIA recommendations

1. **Opportunities exist to further reduce waste**

   Tasmania home building businesses have come a long way over the past decade in onsite and offsite waste minimisation, but opportunities exist to further reduce waste through both onsite practices and through building and material design and preparation

2. **Industry engagement to drive further change**

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4. **Incorporate the "Ten R's of Sustainability"**

   There is significant upside opportunities for the government and industry to work on an industry circular economy plan embracing the "Ten R's of Sustainability". Also known as the Ten R's of Waste Management: Refuse, Rethink, Reduce, Reuse, Repair, Refurbish, Remanufacture, Repurpose, Recycle, Recover

B: Reviewing the effectiveness of Waste Management Plans

Waste Management Plans are a tool commonly used by local government as part of the planning approvals process as a means to try and enforce and regulate an environmental outcome during construction and at times the ongoing operation of the approved development. At times a Waste Management Plan can be an element of a broader Construction Management Plan.

Commonly referred to as WMPs, these plans often do not fulfil the objective and purpose for which they are intended. It is often assumed everyone is aware of the objective and purpose, though often this is not the case leading to very generic and ineffecitve WMPs. Unfortunalety, for this reason, WMPs have become a bit of a tick and flick exercise for the permit applicant in order ot seek their approval.

Seldom are WMPs followed up by the local government agency and if they are leads to dispute between the LGA and permit holder leading to construction delays, increased costs and at times enforcement action that could be avoided.

WMPs often run into two problems a) with some minor amendments they are applied by the LGA as a cut and paste from a previous application and therefore do not relate well to a proposed development at a specific site, b) at the opposite end they are written with to much specificity before construction logistics are able to be fully developed and understood and therefore are difficult and impractical to comply with.

Due to the issues identified above WMPs often do not deliver in their potential to acheive good industry practice innterms of waste and resource recovery outcomes. A review of the effectiveness of this tool that has crept into the planning approvals system over time and evolved without any clear direction would help guide the resdiential construction industry toward a Circualr Economy.

Link to WRRB Pillars and Objectives

This proposal would support the following Pillars and Objectives:

- Integrated Planning and Action
- Engagement and partnerships

Link to HIA recommendations

1. **Opportunities exist to further reduce waste**

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C: Short form videos

While it will be good to have online material and guides, many younger builders are very tech savvy. They are also often visual learners, meaning seeing something is more effective than reading about it.

Idea would be to develop, with the Tasmanian government, a set of short form video's on simple ways to reduce waste, opportunities for reducing, re-using and recycling materials. At present and in the foreseeable future (searchable) on demand products are popular and could apply to this KPPP. Builders could also be encouraged to upload their own ideas and solutions. This could also work well with existing waste recovery centres, NFP and others in the sector.

Would be mix of entertaining and educational materials. 30 second short form as well as slightly longer form videos. If successful can also do weekly longer video's/VLOG's on latest developments and interviews. Could then link these to more in-depth material - both video and written as well as relevant websites.

Videos could cover:

- Example's of how to set up a worksite for easy waste collection
- Ideas about how to minimise waste – e.g. ordering to size, using cut-offs and other "waste" materials
- Alternate use of waste materials

Resources required

To make this work would needed the following resources:

- Initial funding (HIA/TasGov't/grants)

- Dedicated YouTube, TikTok and Instagram accounts (maybe LinkedIn)
- Resources to plan, script, shoot, edit and post material
- Video and other equipment
- Find members with ideas and willing to be on camera – better to have real builders than HIA heads or a combination of both.

Link to HIA recommendations

2. **Industry enegagement to drive further change**

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7. **Develop online non-accredited training**

   In consultation with industry develop online non-accredited training to assist all participants in residential building, construction and demolition to understand the shift that is occurring in waste management practices and principles, and how these can be applied.

Link to WRRB Pillars and Objectives

This proposal would support the following Pillars and Objectives:
- Integrated Planning and Action
- Engagement and partnerships

Examples of existing material

Some of the material available does lack relevance or substance. Below are links to some of the more engaging material.

- Breaking it Down: The Sustainable Power of Deconstruction
- Can't Believe They Can Recycle Buildings!
- Waste Matters - Solutions to Reducing Waste
- Waste is abundant in our construction industry – that's no secret.

Actions D, E and F Industry support programs

A lot of the issues surrounding waste management are your typical structural dependency problem – that is what does or should come first. To improve waste reduction and reuse requires materials/products/solutions to encourage update, however, to warrant investment in such materials/products/solutions requires a ready market. Australia's home construction sector is notoriously conservative in the adoption of new ideas and processes and wary of additional cost and complexity.

Tesla succeeded in making a market for EV, not just by building good cars, but by addressing the issue of charging networks through building its own. To break the chicken and egg cycle will require the Government to invest in start-ups and provide regulatory support for their growth.

There are potential new industry and job opportunities as well as reduced waste opportunities by these investments.

D: Industry support program – Low carbon concrete

Cement is the foundation of modern building and Roman concrete has led to the preservation of ancient Roman buildings. The downside of concrete is it is a very energy intensive process and contributes around 8% of global CO^2 emissions.

A lot of the energy use relates to the materials that are used in cement making process, in particular mining limestone and creating Klinker, an important component in Portland cement.

The emission intensity of cement can be reduced through replacing a portion of Klinker with aggregate from recycled waste. This can include pulverising old concrete from construction waste, using fly ash from fossil fuel powerplants and including plastic and glass.

However, converting concrete production to use such materials will require costs and changes to processes, as well as convincing a conservative industry to change.

The Tasmanian government can support this transition through:

- Identify promising technology and processes
- Financial support to local cement manufacturing in initial phase
- Mandate % of government projects to use – start small and increase over time, but set realistic and cost-effective targets (not shoot for the moon)
- Connecting universities and research with industry
- Education of industry of benefits of using recycled materials, including cost and effective life
- Connecting industry, local councils and waste management centres to ensure safe and reliable supply of materials
- Work with builders and others in construction sector to identify and properly deal with waste construction materials suitable for road and pavement use.

The Tasmanian government can support local cement production to move to more environmentally friendly production though guided and financial support. This could involve linking cement industry with universities and research centres, linking companies involved in the area with local manufacturers and providing initial funding to pay for any additional tooling and other changes required to bring such concrete to market.

Another way that the government can help is to link the cement producers with waste recovery sites so that there is a regular and suitable supply of materials.

Link to HIA recommendations

2. **Industry enegagement to drive further change**

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9. **Analyse regional waste infrastructure gaps and opportunities**

   Undertake a waste infrastructure analysis, with a focus on public and private waste infrastructure in regional areas, to better understand barriers, constraints and opportunities for improvements in waste management behaviour and practice of circular economy principles.

10. **Review regulatory approvals to achive better results**

    Improve the nexus between regulatory approvals to achieve better results - minimise waste and maximise recovery through design and materials specification. Roadmap areas for improvement with actions and timelines.

Examples and Resources

Recycling Concrete: A Sustainable and Affordable Waste Solution
Recycling of Concrete
Recycled Concrete Aggregate- How to Make It and What Is It Used for?

Link to WRRB Pillars and Objectives

This proposal would support the following pillars and objectives:

- Integrated Planning and Action
- Strategic Investment
- Prioritise Circularity
- Engagement and partnerships

E: Industry support program - Road building and maintenance

As with cement, road building and maintenance is a carbon intensive process that could benefit from the use of construction (and other recyclables). It can create new industries/businesses and employment opportunities, particularly in regional areas.

Using construction waste and plastics in road construction creates more durable, cost-effective, and sustainable infrastructure by diverting materials from landfills and enhancing bitumen performance. Waste plastics can shredded and mixed with asphalt, while materials like crushed concrete, brick, and glass act as aggregate replacements. These materials improve rutting resistance, water resistance, and fatigue life.

However, like many sectors change can be hard to implement in road construction without government support and direction. Cost uncertainty, new process and other issues can cause those responsible to stick with the tried and true. To overcome these barriers, the Tasmanian government could help to support the implementation of use of construction and other waste products into road construction through:

- Identify promising technology and processes
- Financial support in initial phase
- Mandate % of government projects to use – start small and increase over time, but set realistic and cost-effective targets (not shoot for the moon)
- Education of industry of benefits of using recycled materials, including cost and effective life
- Connecting industry, local councils and waste management centres to ensure safe and reliable supply of materials
- Work with builders and others in construction sector to identify and properly deal with waste construction materials suitable for road and pavement use.

Link to HIA recommendations

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    Improve the nexus between regulatory approvals to achieve better results - minimise waste and maximise recovery through design and materials specification. Roadmap areas for improvement with actions and timelines.

Link to WRRB Pillars and Objectives

This proposal would support the following pillars and objectives:

- Integrated Planning and Action
- Strategic Investment
- Prioritise Circularity
- Engagement and partnerships

Examples and resources:

- Recycled products in pavement construction
- Using waste plastics in road construction
- Plastic Waste in road Construction

F: Industry support program - Using AI and robotics to improve waste processing

One of the problems with waste material management is sorting materials that can be used and those that can't and not mixing different types of materials. It can be time consuming for builders to undertake this on their worksite, and if transported to waste recovery centre, it may then be comingled to save time and costs.

While processes exist to sort and process, they are time consuming and costly and are often not worth the investment or ongoing costs. However, advances in AI, particular image recognition, reduced costs of digital cameras and other equipment as well as a robotics provides an opportunity to revisit what is possible at a commercially viable cost.

However, as noted above, it is important that support be provided, at least in the initial phase to assist industry to understand the benefits and with the costs of implementation. If implemented however, and if linked with proposed App, it could help to better integrate the collection and effective use of construction waste and ensure economically viable sources of usable construction waste.

The idea would be that the Tasmanian government work with industry, universities and other interested parties to identify potential solutions, support research and development and assist in the construction and deployment of a pilot plant/process to validate the technology, iron out teething issues and act as a guide for other locations.

The Tasmanian government can support this transition through:

- Connect construction industry, waste management, universities and others to identify potential solutions
- Fund academic and practical research and development
- Fund pilot plant
- Education program for industry and others
- Develop export potential

Link to HIA recommendations

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Link to WRRB Pillars and Objectives

This proposal would support the following pillars and objectives:

- Integrated Planning and Action
- Strategic Investment
- Prioritise Circularity
- Engagement and partnerships

Resources and examples

Research unlocks potential of robots to revolutionise construction waste recycling
Smart construction waste management with AI and robotics
Veolia unveils Australia's first AI powered robot arm to boost recycling rates

G: "Zero waste" competition

Acknowledging 'zero waste" is aspirational and probably not wanted as it would likely be too expensive to try and achieve but need some kind of catch tag to encourage builders to do the right thing. The idea is to have a State based award showcasing things builders have done to reduce waste.

Builders would submit entries, like other awards, setting out how they have reduced waste on their sites, the percentage of waste on their site vs say state average and any novel ideas they have implemented.

Would have different award categories for different types of builders (size and complexity) and different types of programs such as reuse, reduction and repurpose of materials, waste collection and other ideas.

Resources required

To make this work the following resources would be required:

- Initial funding (HIA/TasGov't/grants)
- Research and Development (human) resources
- Website & Marketing
- Award committee and selection rules and processes
- Staff time
- Prize?

Link to HIA recommendations

2. **Industry enegagement to drive further change**

   Many enterprises in Tasmania are already implementing strategies like waste sorting on-site, reusing salvaged materials (such as timber and concrete), and there is large scope to better engage with waste management companies and leading enterprises to show case studies, videos and other supporting resources to drive further change in industry.

3. **Embrace construction innovation to improve waste reduction**

   With industry embracing more construction innovation in modular, prefab, construction innovation, AI automation and business practice improvements it can drive greater construction efficiency and waste reduction.

6. **Address renovation waste regulatory challenges**

   Recycling and waste minimisation in renovation projects face several unique challenges both regulatory and practicality. A dedicated construction renovation waste management strategy should be developed and could include industry handbooks and dedicated waste management facilities and grants.

7. **Develop online non-accredited training**

   In consultation with industry develop online non-accredited training to assist all participants in residential building, construction and demolition to understand the shift that is occurring in waste management practices and principles, and how these can be applied.

Link to WRRB Pillars and Objectives

This proposal would support the following Pillars and Objectives:

- Engagement and Partnerships

H: App that identifies valuable construction waste

The idea, that was introduced in Stage One would be to develop an app that:

- Identifies valuable and non-valuable construction waste via phone pictures
    - Need to develop a database of main types of waste, then find out what is valuable
    - Builder takes photo and it identifies the types of waste and tells if valuable
- If valuable/usable then identifies sites where that material can be used
    - Not-for-Profits & Collectives
    - Local Councils (roads and maintenance)
    - Online marketplace to link those with waste and those that need
- If non-valuable/non-reusable
    - Identify nearest disposal sites
    - Informs about fees
- App could also identify building materials that are needed for heritage and building conservation. Often heritage buildings need to be renovated with same or like materials, these are not always easy to find. However, renovations and demolition of older homes may include these materials
    - App would identify those materials that have heritage value
        - Would need to work with heritage architects or heritage societies to identify the types of products that
    - Link with people looking for those products or to a warehouse/site where such material can be collected and catalogued.
- App can track use, could develop points system to reward builders who use it.
- Help to identify quantum of waste

Developing an App with the functionality as outlined above would be a sizeable undertaking. An advantage of this may be once it has been developed and implemented in Tasmania there would be potential for the App to be modified for use in other Australian states and territories.

Resources required

To make this work the following resources would be required:

- Research and development team (Tasmanian government / HIA)
- Initial funding to get off the ground
- App developer (outsourced)
- Photo database of construction waste material that can be used to identify types of waste
- Database – dynamic – on average price for waste materials
- Database on waste collection sites and fees
- Database on heritage/conversation materials
- Agreements with councils, NFP and waste management sites

Examples of similar concepts or groups to work with

There are several similar concepts or groups that already provide an online presence. This may support opportunity to work with existing providers to build upon and improve service offerings. Or alternatively the Tasmanian government may wish to develop their own App, and build in nuances and points of difference that may be absent from those identified below.

The list below is not exhaustive; there may be other providers offering a similar service.

Revival Cooperative - https://revivalprojects.com.au/Cooperative
The purpose of the Revival Cooperative app is to facilitate large scale collective review of this "waste" to see if anyone has a use for it, before a conclusion is reached that landfill is the best outcome. The Cooperative is not a platform for commercial exchange and nothing is bought or sold on this platform.

Click here for further reading

Resource Work Cooperative - https://resourcetipshop.com/

Situated in Sth Hobart, ***Resource*** runs a dedicated service for builders and home renovators. Urban Salvage can offer resource recovery from your site for free, removing any item that is re-usable or recyclable for resale back to the public at an affordable price.

We can offer advice on source separation and what materials are acceptable, we can provide free materials removal from your site, we can drop off and pick up skip bins (fee applies) for different resources and waste items, and we can save you money on your dumping fees!

Superyard - https://superyard.com.au/

Superyard is revolutionising the Australian construction sector by creating a robust online marketplace where businesses can trade and manage unused building and related materials efficiently. This platform not only helps reduce procurement costs but also minimises waste, driving sustainability and profitability across the industry. Our mission is to facilitate smoother operations for all businesses, ensuring that they thrive even in challenging economic climates.

Supergroup eliminates material waste by connecting stock across multiple locations.
Stock Visibility: Keep materials within your organisation by listing them privately in Supergroup, hidden from the public marketplace.
Internal Trading: Site teams can request materials from other locations, reducing unnecessary procurement.
Approval Workflow: Material transfers are managed through an order request and approval system, ensuring smooth operations.
Sustainability Tracking: Each product profile includes CO_2e metrics and EPD uploads, providing measurable environmental benefits.

Charitable Reuse Australia - https://www.charitablereuse.org.au/about/

Charitable Reuse Australia collaborates with our member enterprises to:

- Build the capacity and financial sustainability of charity and social enterprise retailers
- Measure the subsequent social, environmental and economic benefits of the charitable second hand economy
- Translate this data-driven impact measurement into a clear, compelling case for circularity in how we produce, consume and dispose of goods
- Advocate for government and community investment in reuse, innovation and the charitable reuse sector
- Educate consumers on how to donate responsibly and how and why they should shop with charity and social enterprise retailers

Link to WRRB Pillars and Objectives

This proposal would support the following pillars and objectives:

- Integrated Planning and Action
- Strategic Investment
- Prioritise Circularity
- Engagement and Partnerships

Link to HIA recommendations

2. Industry enegagement to drive further change

Many enterprises in Tasmania are already implementing strategies like waste sorting on-site, reusing salvaged materials (such as timber and concrete), and there is large scope to better engage with waste management companies and leading enterprises to show case studies, videos and other supporting resources to drive further change in industry.

5. Improve waste dta and accuracy

Further work be undertaken by the Waste and Resource Recovery Board in conjunction with industry to establish more timely and accurate information about the level, source and nature of this waste, along with further research to determine how much is finding its way into landfill and how much is being recycled.

8. Create real time, builder focused, waste management App

Develop modern online methods, such as a smart phone App, that provide real time meaningful and useful industry information to assist builders and contractors. Features could include online navigation to the nearest facilities, materials received, levies calculator and opening hours.

APPENDIX B

Indicative cost and Timeline for implementation of Actions to deliver HIA Recommendations

		Short Term within 18 months	**Medium Term** 18 months to 3 years	**Long Term** 3 years plus
		Timeframe set from July 2026		
Actions	Description			
A	Develop an industry engagement strategy Estimated cost: $30,000	*		
B	Reviewing the effectiveness of WMPs Estimated cost: $30,000	*		
C	Short form videos Estimated cost: $8,000 each	*	*	
D	ISP - Low carbon concrete Estimated cost: $20,000		*	*
E	ISP - Road building and maintenance Estimated cost: $20,000		*	*
F	ISP - Using AI and robotics to improve waste processing Estimated cost: $20,000		*	*
G	"Zero waste" competition Estimated cost: $15,000		*	
G	App that identifies valuable construction waste Estimated cost: $75,000 - $150,000			*

Note:

- Industry Support Programs (ISP)
- All indicative costs in AUD, estimated in May 2026
- Upon agreement to any of the Actions outlined above, prior to proceeding, further detailing and scoping will be required.

Prior to any of the Actions proceeding detailed scoping will be required and agreement reached on matters such as; Timeline & Schedule, Budget & Costing, Resources, Stakeholders & Roles and Outputs / Deliverables.

APPENDIX C

Linking WRRB Pillars with the eight Actions to deliver the HIA Recommendations

WRRB Pillars		Actions to deliver HIA Recommendations
		**A:** Develop and industry engagement strategy **B:** Reviewing the effectiveness of Waste Management Plans **C:** Short form videos **D:** ISP - Low carbon concrete **E:** ISP - Road building and maintenance **F:** ISP - Using AI and robotics to improve waste processing **H:** App that identifies valuable construction data
		**D:** ISP - Low carbon concrete **E:** ISP - Road building and maintenance **F:** ISP - Using AI and robotics to improve waste processing **H:** App that identifies valuable construction data
		**D:** ISP - Low carbon concrete **E:** ISP - Road building and maintenance **F:** ISP - Using AI and robotics to improve waste processing **G:** “Zero waste” competition **H:** App that identifies valuable construction data
		**A:** Develop and industry engagement strategy **B:** Reviewing the effectiveness of Waste Management Plans **C:** Short form videos **D:** ISP - Low carbon concrete **E:** ISP - Road building and maintenance **F:** ISP - Using AI and robotics to improve waste proicessing **G:** “Zero waste” competition **H:** App that identifies valuable construction data

NB: Industry Support Programs (ISP)

You're in good hands

If you would like to know more about HIA Economics
contact us on 02 6245 1393 or visit hia.com.au/economics