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Infrastructure Sustainability
Council



Geoff Allan
Austroads



Michael Caltabiano
ARRB

Policy Webinar Sustainability and Recycling

THURSDAY 9 SEPTEMBER



ABOUT ROADS AUSTRALIA

[Roads Australia](#) (RA) is the peak body for roads within an integrated transport system, representing an industry that contributes \$207 billion annually to the economy and supports 1.3 million jobs.

RA brings industry, government, and communities together to lead the evolution of Australia's roads, integrated transport and mobility.

Roads Australia's 160+ members include all of Australia's transport agencies, road owners, major contractors and consultants, material suppliers, service and technology providers, and other relevant industry groups.

RA's policy focus extends across five activity streams: Safety; Capacity; Transport Reform; Customer Experience; and Sustainability, with Diversity and Inclusion a commitment across each stream.

Visit our [website](#) for upcoming policy events to contribute to the debate.

BACKGROUND

This Policy Insights follows one of a series of Policy Webinars RA regularly hosts focusing on our four key policy themes:

- Resilience;
- People;
- Place Making; and
- Data & Technology.

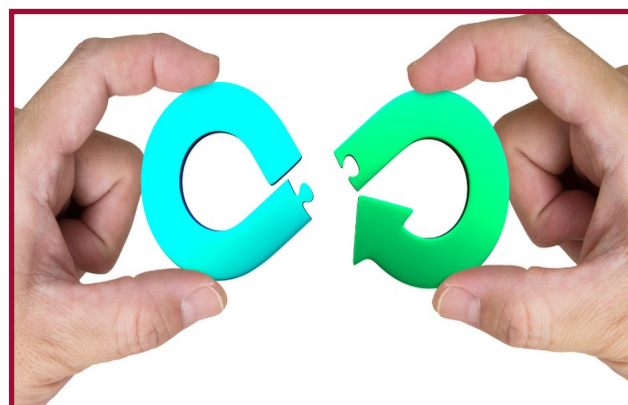
The construction and operation of transport infrastructure requires inputs that can result in significant greenhouse gas emissions every year. As community expectations change and governments set national and global sustainability goals, this webinar highlighted some of the innovations already in use across the transport industry to embrace the circular economy and work towards a net-zero future.

EVENT SUMMARY

Over 400 people registered to join the Policy Webinar to hear from the following speakers:

- [Ainsley Simpson](#), Chief Executive Officer, Infrastructure Sustainability Council
- [Michael Caltabiano](#), Chief Executive Officer, Australian Road Research Board
- [Dr Geoff Allan](#), Chief Executive Officer, Austroads

The discussion was hosted by [Marko Misko](#), RA Sustainability Policy Stream Chair and Partner, HWL Ebsworth.





POLICY INSIGHTS

The organisations represented by the speakers all play a crucial role in assisting the industry shift to a more sustainable basis.

[ARRB](#) – as outlined by **Michael Caltabiano** – has access to global and local knowledge. They already provide advice on the use of reclaimed asphalt, crushed glass, recycled plastics and waste oils to name a few. Their leading research labs allow ARRB to expand on this work including the use of higher volumes of recyclables, supporting innovation for industry and certifying people, products and processes to ensure that there is a pathway for innovation in this recycled material space.

Ainsley Simpson summed up the [Infrastructure Sustainability Council's](#) role supporting industry and government to “measure what matters” using their IS Rating Scheme. Operating across Australia and New Zealand, the Infrastructure Sustainability Council advocates for resilient, inclusive and net-zero infrastructure, something they often do in partnership, like the one they have with [Roads Australia and the Australasian Railway Association](#).

Dr Geoff Allan explained how [Austroads](#) provides guidance to road agencies on the increased use of recycled materials and encourages agencies to adopt them. Austroads is also focussed on other environmental outcomes including reducing emissions embedded and enabled through transport infrastructure. This is driven by the fact that all Australian state and territory governments (and the New Zealand government) are members of Austroads, pledging net zero targets.



National Standards

Recycled products are now prevalent in the transport industry. The sector has been recycling asphalt and crushed concrete for decades. From such activities (like the use of reclaimed crushed glass as a replacement for sand and the reclaimed plastics in asphalt), recycling material for transport infrastructure not only reduces the call on virgin materials but also supports efforts to switch to a more circular economy and reduce greenhouse gas emissions.

A lack of consistent national standards and policy objectives was discussed. **Ainsley** raised the [National Waste Policy Action Plan's](#) call for government to work with industry to identify and act on increasing the use of recycled materials in buildings and infrastructure. Tools like [the IS Rating Scheme](#), can help promote awareness and incentivise others to increase their use of recycled content. Ainsley highlighted the outcomes being achieved through the [Major Transport Infrastructure Authority's recycle first](#) policy.

ARRB and Austroads both have roles in providing certification and guidelines in the use of recycled material. **Michael** and **Geoff** also felt there was a need to improve national consistency and noted that both of their agencies were working on this issue.

Michael outlined work that ARRB's National Centre for Transport Certification does to validate the quality of new mixes and prove their durability and long-term benefits. This is a tool that could be used more to provide certainty for those in the industry.

Geoff referred to the work that Austroads is doing to harmonise the roughly 300 standards, working with Chief Engineers from road and transport agencies as a part of the Austroads Technical Advisory Group. While the new standards are there for use, Geoff suggested the conservative nature of engineering, with a very low risk appetite given the potentially catastrophic outcomes should an engineer get it wrong, will affect the adoption of innovation. Austroads has been attempting to assist agencies in balancing this risk, providing advice and guidance to members that would encourage procurement innovation.

Michael also mentioned that ARRB is working to assist this too through knowledge transfer and the training programs it runs. In addition, he added that moving the industry from “recipe-based standards” to looking at performance-based outcomes would also help agencies, who can then define the required outcomes and allow the private sector to innovate to achieve those.

Should there be stronger government mandates?

The panel highlighted Infrastructure Australia's 2021 Australian Infrastructure Plan which calls for governments to support the increased uptake and consistent use of recycled and recyclable materials.



This includes incorporating targets in building and design codes and developing procurement targets and timelines for government infrastructure projects.

Acknowledging the importance of measurement, **Ainsley** also reminded the audience that resilience and circular economy are parts of a wider sustainability story that should extend to mandated adoption levers around areas such as supply chain procurement, policy and planning. She argued that faster, better outcomes and the biggest “bang for buck” require systemic thinking. She said this should encompass a regulatory lens, social procurement targets, volume-based economies and new technologies. **Geoff** suggested incentives to foster the practical, cost-effective innovation that he said will be needed to drive down the cost of recycled materials where they are more costly than virgin material.

Michael acknowledged California’s leadership in mandating a minimum 10% crumbed rubber in all its asphalts. He suggested RA help forge partnerships between government and industry to agree and set such infrastructure recycling measurement. He asserted Australia puts 10-20% recycled content in asphalt with 5% crumb rubber for bitumen in Victoria’s rural and regional network. The panel agreed this contribution to Victoria’s circular economy outcomes should be promoted.

Reframing discussion of ‘waste’ to instead talk about ‘resources’ is also important. Michael noted that the EPAs’ costing and storage lens on the resource should reflect this, with a more logical approach to fees. He said this was facilitated by new legislation that reverses the onus on the EPA, requiring it to get ahead of problems as they arise, rather than take a policing approach.

Parting thoughts

Michael concluded saying stronger circular economy outcomes were essential for Australia’s future, with particular focus this decade on the sustainability, risk and network resilience needed for a thirty-to-forty-year horizon.

Geoff said he expected incentives and pressure to increase, noting that persistence would overcome resistance. He encouraged Roads Australia to continue to advocate and said organisations such as Austroads should continue to respond to the

wishes of members and develop practical, implementable, achievable ways to address the challenges.

Ainsley said the past is only a predictor of the future if you keep doing what you’ve always done. There is now an active, conscious recognition that different decisions are needed to avoid unnecessary industry and community costs. She noted infrastructure exists to serve communities and there is now a much deeper, wider appreciation of “whole of life” benefits.

Sponsor WSP’s **Bernadette Fitzgerald** summed up the event and said there was a big opportunity to accelerate decarbonisation of the economy through the transport sector.

Bernadette thanked Roads Australia, ARRB and Austroads for advocating so strongly for more sustainable outcomes and growing use of more recycled products in road projects in particular. She also thanked the Infrastructure Sustainability Council for working to measure and assure that the outcomes claimed were verifiable.

Marko closed the webinar noting that 400 people had registered to attend, a number that pointed to the strong currency of the topic. He said that, as chair of the Sustainability Stream at Roads Australia and former board member of the Infrastructure Sustainability Council, he is particularly excited about the recently announced [industry partnership](#) that will investigate best practice in Australia and internationally around the environmentally sustainable development and operation of transport infrastructure.

EVENT OUTPUTS & NEXT STEPS

An overview of the event and the broad themes addressed during the webinar was circulated via [RA’s LinkedIn channel](#).

RA, the Australasian Railway Association (ARA) and the Infrastructure Sustainability Council have announced an [industry partnership](#) that will produce a Report showcasing best-in-class initiatives and making policy recommendations that help Australia achieve net zero emissions by 2050.

The Report will be produced later this year.

