

Sustainable Transport Future for Australia

ITS Australia position paper

October 2023



Executive Summary

Almost a third of all GHG emissions in Australia are caused in large part through transportation of goods and people and without intervention this is projected to be Australia's largest source of emissions by 2030¹. While there is no single solution to reducing emissions and other negative environmental and societal impacts, including health and safety, the transport sector has a range of opportunities to positively impact our environment and transition away from reliance on private vehicles, particularly internal combustion engine vehicles. This transition will however take time, but in the immediate term it is critical that we move fleet purchases to more fuel-efficient vehicles and electric vehicles.

While a range of opportunities are available to deliver more sustainable transport there is no silver bullet and any single top-down approach to reducing the environmental impact would be unlikely to deliver on necessary GHG reduction targets.

A multi-factorial approach to decarbonising transport in Australia requires addressing a range of aspects of the transportation sector and implementing a combination of strategies. These could allow transport to play an important role in reducing our environmental footprint and GHG emissions more generally – by reducing emissions in the available fleet coming into Australia, implementing more efficient and sustainable infrastructure and services, and delivering more sustainable transport systems and networks, enabling increased active and public transport.

A non-exhaustive list of interventions to support the decarbonising of the transport sector include:

- Adoption of more stringent Fuel Efficiency and Vehicle Emission Standards
- LZEV fleet transition
- Circular low-carbon supply chains
- Public and active transport infrastructure and services
- Transport and Road user charging
- Mode shift to more sustainable transport
- Integrated transport planning

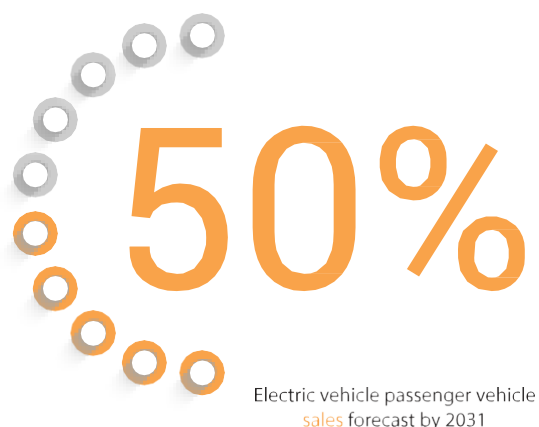
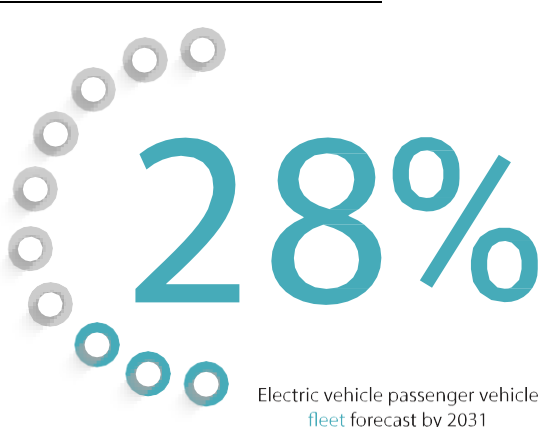
Overall, a shift towards more sustainable transport modes in Australia would require a coordinated effort by governments, industry, and individuals, and a willingness to invest in the necessary infrastructure and policies.

Decarbonising the transport sector through the adoption of more stringent Fuel Efficiency and Vehicle Emission Standards and transitioning from internal combustion engine vehicles to low or zero emission vehicles will provide significant gains given the fleet range currently available in Australia. However these actions will not solve all of the issues that face the transport sector.

The points made by Richard need to be considered here. Maybe a more general statement about the slow uptake of, and availability of Electric Vehicles could be better. While electric vehicles (EVs) hold the promise of cutting petroleum use and improving air quality, that impact will take time. Sales of new electric vehicles more than doubled in 2021, with an increase of 51.8%, yet this only bought sales to about 5% of global passenger car sales in 2021.

That number is lower in Australia and as this country has a long fleet life-cycle it is anticipated that the forecast of Australian new passenger vehicle sales of EVs will be 50% by 2031² while the full fleet penetration will be just under 30%. This demonstrates the urgency of the Federal Government adopting more stringent Fuel Efficiency and Vehicle Emission Standards as has been discussed recently.

Enabling people to choose more fuel efficient vehicles and use more sustainable public and active transport will have an immediate and beneficial impact in the short and medium term across societal, health and economic measures, as well as emissions reductions. How can policy, technology and infrastructure actions make that transition work for the majority of our cities and communities?

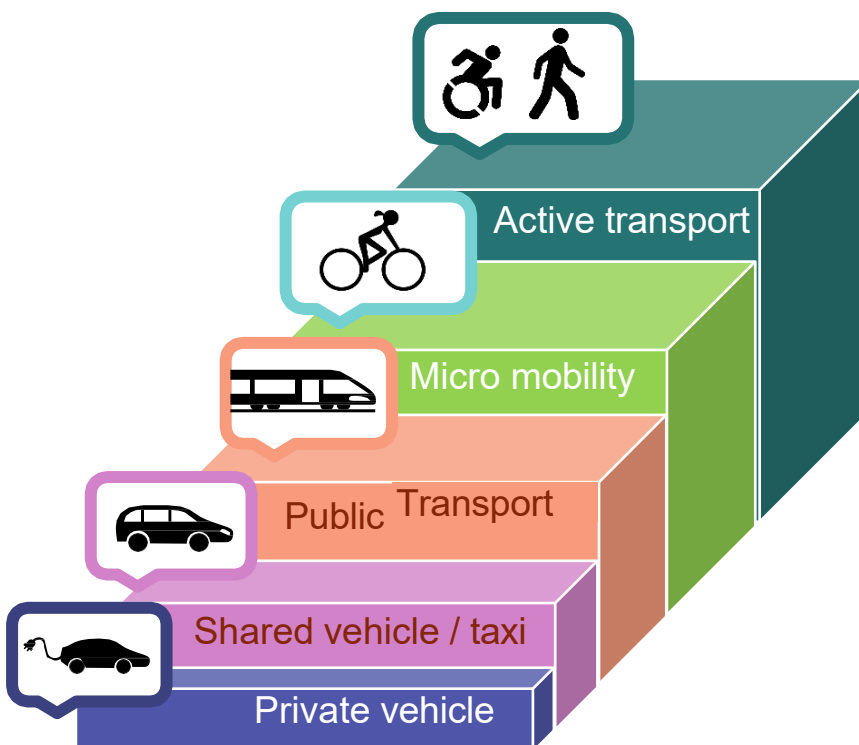


² <https://austroads.com.au/publications/connected-and-automated-vehicles/ap-r654-21>

Working towards a sustainable and inclusive transport future for Australia

ITS Australia is the peak body for the transport technology sector and many of our 140+ member organisations play a role at the leading edge of new and emerging technologies to improve safety and efficiency on our transport networks. A key element of these advances has been the deployment of traditional ITS and development of C-ITS, with over 20 years of steady progress both nationally and internationally building standards and trialling systems to demonstrate the benefits of cooperative intelligent transport systems and connected vehicle technology.

Transport is a fundamental requirement of high-quality, efficient, and sustainable communities. ITS Australia is committed to addressing the challenges of building future transport systems that are safe, sustainable, equitable, and accessible to all Australians.



Facilitating modal-shift from private vehicles to more sustainable transport is a key consideration for reducing GHG emissions and other negative societal and environmental impacts from transport.

Beyond the obvious need to reduce harmful GHG emissions there are a range of other Sustainable Development Goals that the transport sector can play a huge positive role in targeting.

Our industry has focused for decades on safe and efficient transport networks and systems - developing technologies that reduce the social and economic costs of road trauma and enabling more sustainable, inclusive and efficient movement of goods and people.

While these goals underpin the sector through initiatives such as [Toward Zero](#) – and deployment of Cooperative ITS, our organisational aim is also to support members in ethically developing technologies that deliver inclusive and accessible transport for Australia.

Working with members and advocating for technology and policy advances to improve the sectors environmental impact – both through reducing GHG emissions and transitioning to a more sustainable transport future.

The traditional pillars of our industry have been safety, efficiency and sustainability– developing and deploying transport technology that makes our vehicles, networks and systems safer for all Australians and our networks more efficient and sustainable.

ITS Australia Research Projects:

- [Mobility as a Service in Australia](#): Customer Insights and Opportunities for improving transport outcomes with a multi-modal streamlined approach.
- [Unlocking Shared Mobility](#) – investigating car-sharing and parking policies nationally and internationally.
- [Putting the connectivity in C-ITS](#) - Investigating pathways to accelerate the uptake of road safety and efficiency technologies.
- [Community Transport of the Future](#) – Detailed research into the potential opportunities for technology in the Community Transport sector
- [Integrated Connected Data for Safer More Efficient Transport Management](#) – a major multi-agency undertaking to identify and analyse specific aspects of existing and emergent connected and other vehicle and traffic data, to identify how these could supplement and improve existing network management approaches and be integrated with modern traffic control systems in the near-term.

We consider these material issues through the lens of our strategic targets: Smart Transport Infrastructure, Connected and Automated Vehicles, Transport Data and Intelligent Mobility.

- Improving customer experience and access to inclusive and accessible shared transport through transport technology
- Encouraging sharing data with purpose, developing collaborative and robust systems and partnerships to enable data to build and service improved transport outcomes
- Supporting advancement in AV technology and regulation and the immediate benefits available through connectivity and C-ITS
- Supporting sustainable transport networks and circular economy benefits for GHG emission reduction and a safe, secure transport system. Developing low-carbon supply chains and sustainable infrastructure delivery and maintenance.

Sustainable Development Goals aligned to our identified material issues – across environmental stewardship, social responsibility and governance excellence. Safe transport supports good health and well-being and inclusive and accessible transport reduces inequalities.

There are a broad range of Sustainable Development Goals (SDG) that the ITS Australia strategy align with – these SDG themes are also representative of the goals the majority of our members report against.

SDGs aligned to our identified material issues – across environmental stewardship, social responsibility and governance excellence:

- Safe transport supports good health and well-being and inclusive and accessible transport reduces inequalities.
- Reduced GHG emissions and increased active transport supports sustainable cities and communities – sustainable infrastructure drives innovation
- National harmonisation enables sustainable industry expansion and innovation.

Transport technology can save lives and reduce the environmental impact of moving goods and people in Australia. ITS Australia is working with members to reduce the environmental impact of the transport sector through evidence-based interventions and to increase modal-shift to more sustainable public and active transport.

Addressing transport disadvantage through inclusive and equitable technology deployments targeting the community transport sector and rural and regional communities. Building a diverse workforce and robust and competitive sector through skills development and mentoring to support lifelong learning opportunities and growth. Fostering real measurable safety and efficiency improvements through the application of existing and emerging transport technology and work with member organisations to meet our collective goals.

itsaustralia 
Intelligent Transport Systems

PLATINUM











GOLD











SILVER



































































































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About ITS Australia

ITS Australia is the peak body for advanced transport technology in Australia. For 30 years, we have been a non-profit, membership-based association representing Australian industry, government and research organisations. On behalf of more than 140 members, we promote the development and deployment of Intelligent Transport Systems (ITS) that enable all Australians to move more safely, efficiently and sustainably through the nation's transport networks.

Australia is a global leader in ITS. We offer a highly connected and well-developed marketplace and our country is ideally suited as a testbed for the deployment of new and emergent technologies. ITS Australia, along with its members, works towards the common good of our industry.

Collaboration and partnership across government, industry and academia underpins our approach to fulfil these aspirations. We strive toward a harmonised industry while recognising the importance of delivering technologies and solutions that work for all Australians across urban, rural and regional transport networks. We also work in partnership with our international peers and leaders to ensure we share the best the Australian ITS industry has to offer and to deliver opportunities for our members, industry and community.