



Australian  
Automobile  
Association

# OUR JOURNEY TO GREENER MOBILITY

2022



# Supporting Australia's transition to zero and low emission vehicles

Helping Australians into more fuel-efficient vehicles is a high priority with obvious benefits.

The fuels and technologies driving the global car fleet are changing rapidly and they have the potential to offer Australians greater vehicle choices, cleaner air, improved fuel security, and cheaper household bills. Furthermore, the Australian Government has committed to a target of net zero emissions by 2050.

This is why the Australian Automobile Association (AAA) is a technology-agnostic advocate committed to ensuring Australia's light vehicle fleet meaningfully contributes to Australia's decarbonisation.

The AAA and its members want Australians in the best possible position to adopt these new technologies and choose the transport technology options that best suit their lifestyle, household budget, and commuting needs.

The Australian mobility landscape of the future will be determined by a wide array of factors: global manufacturing trends; industrial advancements by car makers and the tech giants; shifting consumer demand; regulatory change in Australia and/or regulatory changes by those countries still possessing a vehicle manufacturing base.

In the Australian context, our challenge is to ensure we have national leadership to best manage our environmental challenges; to ensure motorists are given maximum choice and information; and to ensure funding models can sustainably pay for safer and less congested roads, and more public transport and active transport options.

We also want to ensure owning and operating a car in our vast country with its unique driving conditions is affordable for all Australians.

Our Journey to Greener Mobility, and precisely when and where we arrive, will be heavily shaped by Australian Government decisions regarding the various public policy areas to complement the transport and energy transition.

While Australia no longer has a car manufacturing industry, there are many policy areas where the Australian Government can play a leading role in planning for change.

Our Journey to Greener Mobility outlines a series of policy positions the AAA is putting forward at a national level which aim to:

- support the transition to zero and low emission vehicles
- reduce carbon and noxious gas emissions to improve air quality and public health
- ensure Australians have the clean fuel needed to run latest-generation engines
- better inform motorists and provide benefits at least cost
- guarantee long-term sustainable road funding models.

In Australia, we live and work in one of the most unique environments on our planet with all the challenges and opportunities that our vast distances; disparate populations; and diverse landscapes bring.

With national leadership, we can better protect and better enjoy Australia's natural environment with policies that secure greener mobility into the future.



# Reducing carbon and noxious emissions

## **The AAA supports the introduction of a fuel efficiency standard for light vehicles.**

The AAA calls on the Australian Government to introduce a CO2 standard for new light vehicles as a vital measure to incentivise the supply of cleaner cars to our market and reduce Australia's carbon footprint.

New vehicle models with improved fuel consumption, lower tailpipe emissions, and those utilising alternative energy sources are not currently being prioritised for the Australian market. A CO2 standard designed for the Australian market, along with improved fuel quality standards to facilitate the introduction of the current international noxious emission regulation (Euro 6), would provide an incentive for vehicle manufacturers to offer models with the latest engine technologies that are more fuel efficient and produce less tailpipe emissions.

Achieving lower emissions is also dependent on efficient fuel consumption. Motorists have a right to know that the advertised fuel consumption rates of vehicle manufacturers are accurate and that is why the Australian Government's commitment to a 'real-world' test program is so important (more details on page 6).

The Australian Government can never be confident of a framework to reduce emissions for light vehicles, unless its policy is based on accurate fuel consumption rates, rather than relying on the lab results promoted by manufacturers in their advertising.

Australia should also investigate technologies such as alternative fuels (including biofuels) and synthetic fuels (also known as e-fuels) that can use green electricity, hydrogen from water and CO2 from the atmosphere to produce fuels for internal combustion engines that are net-zero CO2 emissions. The CO2 taken from the atmosphere to produce the fuel is returned to the atmosphere after combustion.

The use of e-fuels offers the opportunity to reduce emissions from the existing internal combustion engine light vehicle fleet.

## The AAA supports Australia's transition to zero and low emission vehicles.

Standards for CO2 and noxious emissions are an effective and responsible market-based mechanism to improve the environmental performance of the Australian light vehicle fleet. The AAA supports a CO2 standard for new light vehicles that is designed for the Australian light vehicle fleet. This standard must be implemented as a package of measures addressing noxious emissions (Euro 6 standards) and fuel quality.

Australia's mandatory CO2 standard must be:

- designed specifically for the Australian light vehicle fleet
- introduced at the earliest opportunity with targets specified over a timeframe and in a manner that minimises adverse impacts on vehicle choice and disproportionate costs to consumers
- flexible, with options available to manufacturers in achieving targets through several mechanisms
- reviewed regularly during its operation to ensure chosen targets remain appropriate.

The AAA believes that Australian Government support should be aimed at reducing regulatory barriers to uptake and use of low-cost measures to stimulate initial market demand. These measures should also support any vehicle technology that delivers zero and low emission vehicles, as a technology-neutral approach is required if manufacturers are to efficiently bring the most affordable/effective technology to our market.

Australia should also explore the use of alternative fuels and e-fuels to decarbonise the existing internal combustion engine fleet.

Specifically, the AAA believes the Australian Government should:

- implement a mandatory CO2 standard, which will achieve abatement goals and incentivise the supply of cleaner cars to our market, while minimising adverse impacts on vehicle choice and costs
- remove Luxury Car Tax and tariffs on all zero and low emission vehicles to reduce upfront costs. Existing AAA policy supports removing these taxes with the introduction of a road user charge on zero and low emission vehicles.
- work with states and territories to develop a nationally-consistent approach to reducing (or applying short term exemptions to) state-based taxes and charges for zero and low emission vehicles. Reducing or removing these costs will reduce both running costs and payback period
- pursue interoperability initiatives with electric vehicle (EV) recharging stations, such as setting recharging plug standards, ensuring open access to all recharging infrastructure, and single identification/payment methods. This will ensure recharging compatibility across all EVs and maximise the availability of recharging stations.

# 'Real-world' testing

## **Families, individuals and businesses trying to do the right thing by purchasing low emission vehicles need to be protected from misleading statements.**

Currently, Australians are not able to make informed decisions about which car will put the least pressure on the environment or the household budget.

That is why the AAA has developed a 'real-world' test program, supported by a \$14 million funding commitment from the Australian Government. The program will play an important role in supporting future emissions policy, by improving consumer information regarding vehicle fuel consumption and emissions performance.

In the wake of the 2015 Volkswagen diesel emissions scandal, the AAA engaged engineering firm ABMARC to test 30 popular vehicles to quantify the difference between their stated results from standard laboratory testing and the actual emissions they produce in the real world.

The pilot study results revealed that:

- vehicles (not including plug-in hybrids) used up to 59 per cent more fuel than advertised, and 23 per cent more on average
- one plug-in hybrid vehicle used more than four times the reported fuel consumption from the lab test
- vehicles produced up to seven times the legal laboratory limit of some noxious emissions
- 11 out of 12 diesel cars tested exceeded legal laboratory limits for noxious emissions.

## Around the world, research is showing that the gap between lab and real-world test results is widening.

Only a testing program conducted in Australia, testing Australian vehicles on Australian roads and using Australian fuels can provide Australian consumers with the accurate information they deserve.

It will:

- empower consumers to make more informed purchasing decisions
- make choosing a more fuel efficient car easier
- drive down costs to consumers and deliver meaningful environmental benefits
- allow policy makers to ensure emissions regulations are having a real-world impact.

The AAA's 'real-world' vehicle emissions test program will measure the emissions performance and fuel consumption of new vehicles in real-world conditions and publish the results enabling private and fleet vehicle buyers to make vehicle purchasing decisions based on more realistic and reliable information.

Currently, the only information available to consumers about a car's fuel consumption and emissions performance comes from standard laboratory tests undertaken to comply with emissions regulations. However, the laboratory test is conducted under controlled conditions and in most cases does not represent how cars perform under real-world driving conditions.

Around the world, research is showing that the gap between lab and real-world test results is widening. This is because as regulations have become more stringent, manufacturers have optimised vehicle performance to pass laboratory tests, with no requirement for this to translate into real-world driving.

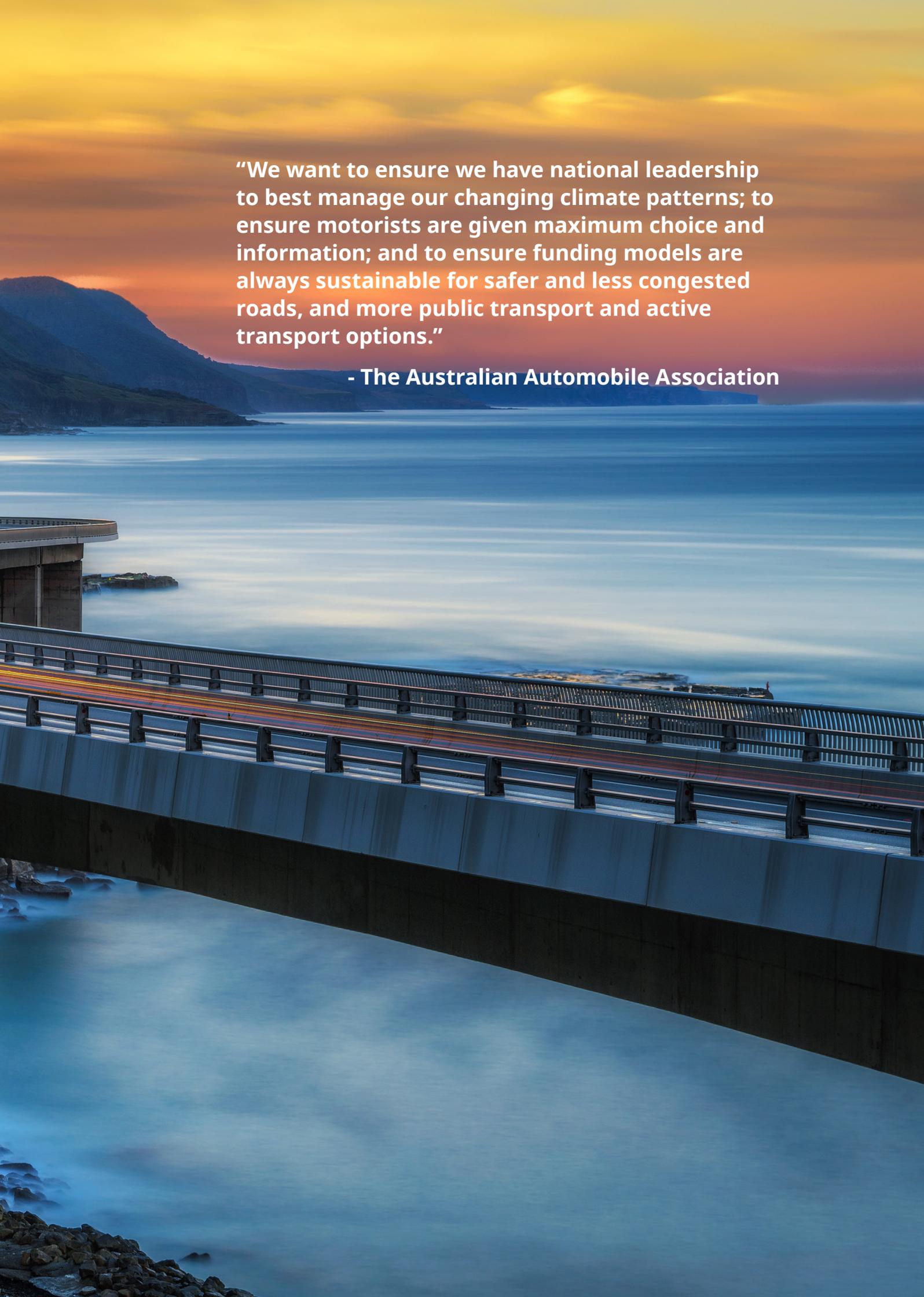
As a result, rather than driving down emissions and fuel bills, more stringent emissions laws appear to be driving motorists into more expensive cars that don't deliver their promised benefits. Both consumers and the environment are increasingly being short-changed.

The AAA is anticipating testing around 60 new vehicle models available in Australia each year with its real-world test program. This would allow a comprehensive database to be built up over time. The AAA expects that if 60 vehicles were to be tested each year, results would be available for approximately 60 per cent of new vehicle sales within two years.

Over time, as manufacturers respond, it is hoped the program can reduce the divergence between laboratory and real-world performance. Ongoing government support for an Australian real-world test program will be important to ensure future emissions policy development is based on real-world data.



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**“We want to ensure we have national leadership to best manage our changing climate patterns; to ensure motorists are given maximum choice and information; and to ensure funding models are always sustainable for safer and less congested roads, and more public transport and active transport options.”**

**- The Australian Automobile Association**



# Zero and low emission vehicles

## Policy platform

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### A low emissions future requires appropriate infrastructure and the right policy settings.

The AAA believes the Australian Government should support uptake of new vehicle technologies by:

- introducing a fuel efficiency standard for new light vehicles
- continuing to incentivise research and development in EV batteries and other associated technologies through the provision of grant funding and taxation exemptions
- establishing an inter-governmental working group, representing governments, industry and consumers, tasked with establishing a roadmap for the co-ordinated transition to electric road transport, including the deployment of associated infrastructure and coordination of additional government reforms at federal and state level
- establish an inter-governmental working group to develop a national plan for the coordinated roll-out of recharging infrastructure and work with energy suppliers to manage network capacity, minimise network capacity issues and guarantee a consumer-centric approach to pricing and access
- provide low interest loans for EV home chargers, potentially through existing resources such as CEFC and Australian Renewable Energy Agency (ARENA) funding, to assist in reducing upfront cost pressures
- support enabling works and/or provision of low interest loans for installation of highway and destination EV recharging infrastructure, potentially through existing resources such as CEFC and ARENA funding to support private investment in recharging stations
- develop education campaigns about zero and low emission vehicles, including EV home and public recharging infrastructure, managing the impact on electricity supply, and current and future vehicle operating costs.

The AAA considers that research and development incentives could be funded through existing programs/funding mechanisms, for example the Clean Energy Finance Corporation (CEFC) that would have minimal budget impact.

## Electric vehicles

Specifically, in relation to electric vehicles the AAA advocates that the Australian Government:

- work with states and territories to streamline building approvals for EV recharging infrastructure to ensure easy installation of home recharging infrastructure in apartments and in rental homes, as well as recharging infrastructure in car parks and at other public locations

# Fairer and more transparent road funding

## **Australian families are among the largest investors in the roads they use.**

The Australian Government is budgeting to receive \$ 62.5 billion in net fuel excise over the next four years. For the average family, that means a fuel tax bill of about \$1,117 this year.

The Australian Government needs to make sure that all motorists contribute fairly to our roads. The government also needs to make sure that taxes – such as the so-called Luxury Car Tax – do not needlessly hinder Australian families from purchasing vehicles that are not only safer but are equipped with greener technology to drive down emissions.

With the growth in more fuel-efficient vehicles and new technologies – such as electric and hybrid – the government is going to be confronted with declining fuel excise revenue in the future.

That means some motorists will pay a road user charge through fuel excise while other motorists will pay far less or pay nothing at all.

With a move to more environmentally responsible technologies, the Australian Government needs to plan how our roads will be funded into the future given a declining reliance on revenue from the fuel excise.

The AAA advocates for a fairer, more transparent and sustainable nationally consistent model for road funding into the future.

Electric and other zero emission vehicles should be brought into the tax system initially at a discounted rate to avoid disincentivising their take-up. Governments should consider apportioning revenue from any electric vehicle road-user charge to future programs that incentivise development and roll-out of zero and low emission technologies and infrastructure.

## The time has come to shift from the fuel excise to a fairer road-user charging system.

The AAA has long called for a more transparent land transport funding model based on a user-pays system.

Moving to a market-based access system will allow future governments to transparently deliver priority transport outcomes such as safety, cost of living, environmental and health benefits through future pricing mechanisms.

Fuel excise (currently 46 cents per litre) is today a proxy charge for road use.

The Australian Government is budgeting to receive \$62.5 billion in net fuel excise over the next four years. For the average family, that means a fuel tax bill of about \$1,117 this year.

With the growth in more fuel-efficient ICE vehicles and zero and low emission vehicles, the Australian Government needs to plan how our roads will be funded into the future.

The Australian Government also needs to make sure that all motorists contribute fairly to our roads.

Under the existing system, drivers of older or larger vehicles that use more fuel pay more per kilometre to use the same stretch of road as drivers of newer, smaller, more fuel-efficient vehicles.

Zero and low emission vehicles can also use the road network without paying a national road user tax, as they are outside the fuel excise system.

### Other taxes

The tariffs and other federal taxes applied to new cars make the cost of purchasing new cars more expensive. This then flows through to the cost of second-hand vehicles, making it difficult for people on low incomes to purchase newer, more fuel-efficient and safer vehicles. This leads to poorer road safety and impairs environmental and affordability outcomes.

The AAA calls on the Australian Government to remove these taxes immediately from zero and low emission vehicles, and then from the remaining light vehicle fleet over four years. This would help incentivise the uptake of zero and low emission vehicles by making them more price competitive with traditional vehicles.

The Australian Government should undertake a study to consider how to ensure that the road user charging system is ready for the future, without stifling early adoption of new technology.

In planning a transition to a whole of market road user charging and funding system, government must consider:

- how the reform can be implemented in a staged manner, beginning with the work currently underway trialing different ways to collect road use charges for heavy vehicles
- the impact of current and planned state and territory road user charging and incentive schemes for zero and low emission vehicles; and consistent pricing collection, audit, verification, enforcement and compliance regimes
- how to ensure that all vehicles are captured fairly in the new system
- how to ensure regional and rural Australians are not disadvantaged
- the feasibility of bringing zero and low emission vehicles into the system in the early stages, combined with measures to encourage early uptake of emerging technology through the immediate removal of luxury car tax and tariffs on these vehicles
- the introduction of national incentives until significant market penetration and/or price parity of zero and low emission vehicles has been achieved in Australia
- how to establish a dedicated national transport fund using the revenue raised from the road user charge
- the feasibility of bringing state and territory charges into the scheme in the future.

Any road user charge for zero and low emission vehicles would need to be set at a rate that maintains existing incentives, yet also builds and normalises a new charging system. That is, zero and low emission vehicles currently enjoy an effective road use “subsidy” equivalent to the fuel excise rate. A road user charge for such vehicles could offer the opportunity to transparently maintain and actively promote this relative incentive.

A staged approach could incentivise early adoption, until such time that significant market penetration and/or price parity has been achieved in Australia.

Similar pricing incentives could be considered to deliver other policy imperatives, such as the increased uptake of vehicle technologies that deliver road safety benefits.

# Accessible and efficient public and active transport options

## **We need to ensure Australians are serviced by a public transport and active transport network fit for the 21st century.**

Over the next four years the Australian Government plans to collect \$66.7 billion from motoring taxes. The revenue raised from motorists more than covers the cost of the Australian Government's estimated \$59.6 billion investment in land transport infrastructure over the same period.

This puts the over eight and half million motorists we represent among the leading investors in public transport.

Greater and more affordable public transport and active transport options vastly improve our quality of life, with daily commutes becoming quicker for public transport, active transport and road users alike.

One in eight people in Australian capital cities uses public transport for daily commuting; and our population growth is among the highest in the OECD (a rate more than twice as high as the US and the UK).

The AAA calls on the Australian Government to prioritise public transport and active transport infrastructure in its future funding programs to improve both metropolitan and regional services.

For too long, the country has lacked an overarching land transport strategy that properly integrates the public and active transport needs of today and tomorrow. Australia's last Transport White Paper – the AusLink White Paper was published in 2004.

To ensure Australia has a fit-for-purpose public transport and active transport system into the future, the Australian Government must:

- establish a process for developing and maintaining a fully funded 10-year infrastructure program
- define a pathway for structural reform of the nation's transport taxation and funding arrangements
- clarify and modernise state-federal infrastructure funding and prioritisation arrangements
- identify and plan infrastructure investment to facilitate emerging mobility technology.



**Mailing Address:**  
GPO Box 1555  
Canberra ACT 2601

**P** 02 6247 7311  
**T** @aaacomms  
**W** www.aaa.asn.au

**Address:**  
103 Northbourne Ave  
Canberra ACT 2601

