RAC Response to the Climate Change in Western Australia Issues Paper

December 2019
About RAC

RAC is a voice for more than one million Western Australians and speaks out on the road safety, transport, land use and air quality and climate challenges facing WA. Since our foundation almost 115 years ago, RAC has existed to be a driving force for a Better WA by championing change that will deliver safe, easier and more sustainable transport.
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Time is running out on responding to climate change. If the current situation continues, it is expected that regions will variably become hotter and drier (and in other places, warmer and wetter), there will be more extreme weather events, ocean temperatures and sea levels will rise, and wildlife populations and habitats will shift - irrevocably.

RAC welcomes the release of the Issues Paper entitled Climate Change in Western Australia (the Paper) and is eager to work towards a bold and ambitious State Climate Policy (the Policy) and roadmap that will minimise, and seek to reverse, the devastating impact of climate change on WA’s current and future generations.

RAC supports the development of the State’s first Climate Policy and the State Government’s goal to transition to a thriving, resilient, low carbon future is of critical importance to the economy and wellbeing of the State. This will require an integrated and urgent inter-governmental, industry and community response.

In a recent environmental sustainability survey conducted by RAC, 87 per cent of Western Australians said they believe the world’s climate is changing, and 72 per cent think that it is caused by human activity. Further, one in two agree they have a great deal or a lot of personal responsibility to help address it.

As noted in the Paper, transport emissions currently contribute 17 per cent of Western Australia’s (WA’s) total greenhouse gas emissions (having increased steadily by more than 50 per cent between 2005 and 2017), and the average number of vehicle kilometres travelled (VKT) per capita for car travel in WA has increased by 14 per cent in the past 10 years. With these current challenges, and as demand for travel increases with our growing population, acting to reduce harmful vehicle emissions must be a priority in developing the Policy, roadmap and WA’s broader response to climate change.

As an overarching comment, RAC believes a clear strategic direction for Australian and WA transport energy policy, backed by appropriate investments, is essential to reduce harmful vehicle emissions. This will need to include alternative technologies and fuels, initiatives targeting vehicle purchasing decisions, congestion management and promoting active and public transport, as well as urban planning practices that enable reduced reliance on the car.

RAC’s response is therefore framed around key themes which we believe are of crucial importance in reducing the impact of harmful vehicle emissions on the environment, and public health:

- driving the transition to cleaner transport with low and zero emissions vehicles;
- creating connected communities through better planning and design, and
- enabling travel choice through enhanced public and active transport.

RAC Environmental Sustainability Survey undertaken in 2019 (results yet to be publicly released). The survey was completed by 805 respondents (63 per cent were RAC members and 37 percent were non-members) from across Perth and regional areas (72 per cent and 28 per cent respectively). Data was weighted by age and gender to reflect the overall population. Sample size equates to a margin of error of +/- 3 per cent.
Driving the transition to cleaner transport with low and zero emissions vehicles

The challenge:

- In 2018, the average Australian passenger vehicle CO₂ emission intensity was 169.8g/km, compared to 171.5 g/km in 2017 (a one per cent decrease) and the rate of reduction has been steadily decreasing since 2012.
- European emissions intensity in 2017 ranged from 133 g/km in Estonia to 105 g/km in Portugal, meaning Australia’s average is between 29 per cent and 64 per cent higher.
- Australia is the only developed nation without a CO₂ emissions standard for new light vehicles and is falling behind other developed nations. Europe mandated a CO₂ emissions target of 95g/km from 2021 (phased in from 2020) and have a proposal to reduce emissions by a further 15 per cent by 2025 and another 15 per cent by 2030.
- Australia has not realised the same level of emissions reductions as seen overseas and even with the current trend in vehicle efficiency improvement, the growth in transport sector emissions will still increase by 15 per cent, adding approximately 14 million tonnes of greenhouse gas emissions by 2030.
- Australia’s uptake of low and zero emission vehicles has been slow – in 2017, there were 4,000 electric and plug-in hybrid vehicles registered in Australia, and only three per cent of Western Australians own an electric or hybrid as their primary vehicle (an additional one per cent own a hybrid as their second vehicle).
- Uptake has been hampered by cost, lack of charging infrastructure and range anxiety, as well as the low number of new electric or hybrid vehicles available to buy in Australia (particularly those under $60,000), a small second-hand market of affordable low emission vehicles and the lack of financial incentives to assist the uptake of low emission vehicles.
- Only one in four Western Australians have confidence in the State and Federal governments to address vehicle emissions (two-thirds believe government should be doing more).

3 Ibid.
6 Ibid.
7 Ibid.
8 RAC Environmental Sustainability Survey, undertaken in 2019 (results yet to be publicly released).
9 Ibid.
10 Ibid.
11 Ibid.
12 Ibid.
The opportunity:

As part of a global response to climate change, Australia has committed to reducing the nation’s greenhouse gas emissions by 26 to 28 per cent below 2005 levels by 2030. Globally, emissions standards have been successful in reducing vehicle emissions. Several countries have also banned the sales of new Internal Combustion Engines (ICEs), such as Norway (from 2022), India (from 2030), Germany (from 2030), Scotland (from 2032), France (from 2040) and England (from 2040), with France and England indicating a full ban on ICEs by 2050. At the same time, there is a concerted global effort by international governments and the car industry to introduce vehicles with zero or low emissions and to continuously improve fuel quality standards.

The Australian Government has proposed, but not yet committed to, a CO\textsubscript{2} emissions standard for new light vehicle fleet emissions. The introduction of an impactful national mandatory standard, to align Australia with the rest of the developed world and provide the Australian market with better access to a greater range of low and zero emissions vehicles, has been a long-standing RAC priority. This is something the government should prioritise, not only to meet Australia’s international commitments but also to halt, and where possible reverse, the damaging impacts of climate change on current and future communities.

Leveraging technologies, such as pure battery electric vehicles and plug-in hybrid electric vehicles, partnered with low carbon intensity fuels, has the potential to play a significant role in reducing emissions from vehicles in Australia and globally.

It has been forecast that EVs could account for 70 per cent of new vehicle sales and 30 per cent of the vehicle fleet in Australia by 2040, and a recent RAC survey found almost one in two (46 per cent) of Western Australians would consider buying an electric or hybrid vehicle when they are next in the market for a new car. However, tackling the many reasons for the slow uptake will be crucial to achieve this and realise the benefits.

When asked what actions government should prioritise to address harmful vehicle emissions, Western Australians ranked the top three as the provision of incentives for purchasing low or zero emission vehicles (56 per cent), transitioning the public transport fleet to low or zero emission vehicles (41 per cent) and investing in electric vehicle charging infrastructure (38 per cent).

In 2018, there were 783 charging locations in Australia (less than 10 per cent of which are fast-charging and the average distance between stations nationwide is approximately 200km), this includes the 11 strategically located DC charging stations between Perth and the South West of WA delivered by RAC in 2015 as part of the RAC Electric Highway. Chargefox and its partners, including RAC, will also be installing 21 ultra-fast electric vehicle chargers across Australia, several of which are being planned for WA (providing 400km of range on a 15-minute charge).

The inclusion of the establishment of a national electric vehicle fast-charging network as a High Priority Initiative in Infrastructure Australia’s 2019 Infrastructure Priority List, for delivery in the next five years, demonstrates the national significance and importance of providing such enabling infrastructure. The State Government must play a role in increasing the coverage availability of public fast-charging infrastructure across WA.

Internationally, the countries that provide monetary incentives for EVs are realising the greatest levels of EV uptake. Currently, EVs still have a price differential with a comparable Internal Combustion Engine (ICE), predominantly due to the cost of batteries. Monetary incentives such as subsidies seek to, at a minimum, at least partially offset this difference. There are several different subsidy applications globally, which intend to create price parity and in some countries a price advantage between EVs and ICE and diesel engines. These subsidies or incentives vary by jurisdiction however, they are mainly characterised by tax and/or fee exemptions, rebates and/or subsidies, and tax breaks.

At a State level, vehicles are subject to varying levels of stamp duties, vehicle licensing fees, other state-specific fees, and administration fees. Individual states can provide up-front exemptions in the form of stamp duty exemptions and tax and fee exemptions of up-front and ongoing vehicle licensing fees. Any tax exemption considerations should relate to the relative emissions reduction impact of the vehicle. PHEVs, for example, should also be encouraged and have some form of incentive, but pure EVs should be afforded greater incentives.

Internationally, some jurisdictions have also provided non-monetary incentives such as access to high-occupancy vehicle lanes, access to free or convenient parking, manufacturer incentives, EV sales targets, access to charging infrastructure, and/or access to a variety of EVs for sale.

15 An electric vehicle is one which predominantly uses electric motors to drive the road wheels. For the purposes of this submission, this includes battery electric vehicles, which are powered by electricity exclusively and plug-in hybrid electric vehicles, which can be driven by electricity only, but also carry an on-board lead fuelled engine as back-up. Hybrid vehicles are predominantly powered by a petrol or diesel engine and supplemented by battery power.
17 RAC Environmental Sustainability Survey (2019) yet to be published.
18 ibid.
20 For example, thirteen cities in China represent five of the six largest EV markets introducing generous incentives such as EV trading codes for new buildings, licensing restrictions on internal combustion vehicles, zero emission areas, electrification requirements for public and private buses. Source: ICF (2018), “Electric Vehicle Capita: showing the path to a mainstream market” (https://www.icf.com/publications/electric-vehicle-capita-the-world-2019).
RAC recommendations to drive the transition to cleaner transport and encourage the uptake of zero and low emission vehicles:

- Visibly support the introduction of an impactful national vehicle emissions standard, aligning Australia with the rest of the developed world and which provides the Australian market with better access to a greater range of low and zero emissions vehicles;
- Ensure a collaborative, whole of government approach to developing a roadmap for action for the electrification of transport, combined with decarbonisation of the electricity grid/transition to appropriate renewable electricity generation;
- Set out a framework for, and commit funding to, comprehensive monitoring of vehicle emissions in WA;
- Set ambitious targets for WA’s low and zero emission vehicle fleet, uptake and charging infrastructure delivery as part of the development of an EV strategy;
- Investigate and trial a range of incentives which seek to reduce the price differential in favour of low and zero emissions vehicles;
- As a priority, investigate for implementation state tax exemptions such as stamp duty and vehicle registration concessions and/or exemptions for low and zero emissions vehicles, with the discount reflective of level of emissions;
- Plan for, and support, the provision of infrastructure to service electric and hybrid vehicles including the expansion of public electric vehicle charging facilities;
- Ensure only low and zero emissions vehicles (aligned to international good practice) are purchased for government fleets;
- Continue to retire high emissions buses, vastly accelerating the uptake of Euro VI or above standard buses;
- Operate a public transport fleet that uses the most environmentally sustainable energy sources, including using cleaner alternatively powered buses (such as hybrid, all-electric and hydrogen fuel cell), while not hindering future technological advances;
- Champion delivery of an effective national rating system to ensure consumers have access to user-friendly emissions and fuel consumption information when purchasing a new car, and;
- Expand the rollout of eco-driving programs, such as CleanRun EcoDrive, as well as public awareness and education campaigns to inform consumers of the options available to them to reduce their vehicles’ emissions and save money at the same time.

There is also an opportunity for the State Government to demonstrate leadership through its fleet procurement policies that encourage ‘green car’ alternatives. It is understood the WA State Government fleet currently comprises 8,807 passenger and light commercial vehicles, with an estimated average emissions intensity of 193g/km, well over the national average of 180.9g/km. The CO₂ benchmarks set by Government for its passenger and SUV fleet are substantially higher than the national average. Increasing the proportion of low and zero emission vehicles with the Government operated fleet, including public transport, would demonstrate an active commitment to reduce the Government’s contribution to total vehicle emissions.

Opportunities presented by the Electric Vehicle Strategy under development by the Federal and State governments (which will build on the work of the Ministerial Forum on Vehicle Emissions and the COAG Transport and Infrastructure Council) should be leveraged in preparing the Policy and roadmap to maximise the benefits for WA.
Creating connected communities through better planning and design

The challenge:

» By 2050, it is expected the Perth and Peel region will be home to 3.5 million people (an increase of 1.5 million people).

» Continued urban sprawl through the development of previously undeveloped sites on the urban fringes will only further exacerbate the limited accessibility to public transport, increase car dependence and the distance that people travel to their main destinations; thus, increasing vehicle kilometres travelled and emissions per capita.

» In 2016, the average commuting distance in Perth was 15.7km (20.7km for the rest of WA, higher than in all other States)24 - driving to work five days a week would generate approximately two tonnes of CO₂ emissions a year25.

» The State Government has a net infill target of 47 per cent for the Perth and Peel region and while a rate of 42.3 per cent was achieved in 2017, the five-year average was only 35.9 per cent23 so an increased focus is required.

» Higher density infill development in established suburbs can be a sensitive issue for existing communities and Perth and Peel residents have concerns about potential negative impacts, with the top concerns being increased local traffic (86 per cent), overcrowding (83 per cent) and increased noise (83 per cent)24.

The opportunity:

How our cities, towns and communities are planned and designed influences where we live, work and socialise, and how we move around by enabling better access to employment and education opportunities, essential services and local amenities.

RAC strongly supports the opportunity identified in the Paper to link transport corridors with places of employment, housing and recreation to provide enhanced travel choices and help reduce the need for private, and particularly single-occupancy vehicle trips. More effective integration presents a long-standing opportunity to optimise the use of existing infrastructure and manage the additional travel demand to be generated by growth.

The importance of this is not lost on the community. In a recent RAC survey exploring community views on the challenges and opportunities in planning for growth25, over half of Perth and Peel residents agreed a greater amount of infill development should be built to better manage congestion and accommodate growth. The survey revealed support for medium density developments, of between one and four storeys, around train stations, shopping centres, smaller suburban activity centres and along high frequency transit corridors. Higher density apartment buildings were considered suitable in and around the Perth CBD and major activity centres. The planning, development and transport infrastructure decisions that are (and are not) being made now, will have implications for current and future communities, including risks associated with climate change, in terms of prevention and preparedness and responding and recovering. Reducing the need to travel so far and so often, particularly by single occupancy car, through better planning and design practices must be a key preventative action by government to support the sustainable growth of our cities, towns and communities while protecting the environment and public health. The mobility and lifestyle choices we make today should not impact negatively on future generations.

The current reform of the WA planning system presents a unique opportunity. It is essential the planning system integrates a clear climate policy framework, so the principles are embedded and there are effective mechanisms to ensure delivery and achieve the best possible planning and community outcomes. It is essential that local communities are fully engaged in the process to better understand their concerns and ensure density is done well – this means planning the right developments, in the right places, at the right scale – to shift thinking from ‘NIMBY’ (‘Not In My Backyard’) to ‘QIMBY’ (‘Quality in My Backyard’).

22 Estimated based on the average CO₂ emissions per kilometre travelled by car (274.58g/km – calculated using data from the Australian Greenhouse Gas Inventory and BITRE Australian Infrastructure Statistics), average commuting distance in Perth of 15.7km each way / 31.4km two-way (from the ABS Census 2016), and average number of working days in 2019 minus 20 days for annual leave (241 days).


RAC recommendations to create connected communities:

» Prioritise and resource the work to reform the WA planning system, to ensure it is strategically led, enables the delivery of a compact, connected city and appropriately empowers an engaged community – with climate change as a key consideration;

» Implement effective urban planning practices to reduce the demand for travel by car by ensuring communities are well served by a range of transport options and have good access to key amenities and services, locally;

» Explore and implement appropriate accountability and reporting mechanisms/measures to increase collaboration across government agencies in the achievement of climate change outcomes through urban planning and infrastructure design and delivery processes, and

» Develop and adopt across-government policies, information and tools needed to support sustainable planning outcomes and prevent (as well as prepare, respond and recover from) the community risks associated with climate change.
Enabling travel choice through enhanced public and active transport

The challenge:

- Car (as driver or passenger) is by far the dominant method of travel to work, with only 31 per cent of Greater Perth residents using active modes and 65 per cent using the bus or train.
- Committed major public transport investments in Perth are largely focussed on expanding the reach of the heavy rail network to and beyond the outer suburbs but 13 of Perth’s 34 strategic activity centres, including several within the inner area, exhibit low accessibility by public transport.
- In regional WA there are fewer public transport options and a greater bus network coverage and increase in services are required, as well as alternative operating and funding models, to increase patronage and service viability.
- Transport affordability is a major issue for commuters. Perth is Australia’s most expensive capital city for weekly public transport costs (fourth for total transport costs) and from 2016 to 2019 the cost of a ‘1 Zone’ fare for example increased by 13.8 per cent (compared to a CPI increase of 3.5 per cent).

- Around half of all car trips are less than 5km and many are under 1km – most people can ride 5km in around 15-20 minutes or walk 1km in around 10 minutes.
- With 404,800 Western Australians riding each week, there is latent demand for cycling for commuting purposes but dissatisfaction with existing cycling infrastructure is high and fear of sharing the roads with motorists is the main reason for them not cycling more often.
- Transport agencies currently give insufficient priority, and support, to the reallocation of road space for public and active transport, particularly in providing dedicated lanes and other priority measures to enhance bus service reliability.

The opportunity:

The availability, quality and coverage of public transport services and active transport infrastructure greatly influences usage. Ensuring these options are safe, convenient and attractive enables choice, encouraging mode shift and reducing non-essential private vehicle use.

RAC’s recent Pulse of Perth project has shown that on a typical day, there are around 360,000 boardings on Perth’s public transport system, with the number of people using it during the busiest hour of the day being equivalent to around 50,000 cars or 23 freeway lanes of traffic. While this demonstrates the important role public transport currently plays in moving people around the metropolitan area, there is still a lot of room for improvement to drive patronage and support achievement of the State Government’s infill target. Ensuring that public transport remains affordable is also an important factor:

- The introduction of light rail, which would add a new dimension to the public transport system, presents significant opportunities to enhance accessibility and connectivity through the inner suburbs. Likewise, in urban areas, bus services connect local centres and perform an important feeder service function to the rail network; but buses are often viewed and treated as the poor cousin, despite the bus services in Perth catering for around 50,000 boardings in the morning peak (7 to 9 AM). The introduction of bus priority measures and Bus Rapid Transit (BRT) has the potential to enhance service reliability and provide high-frequency, high-capacity public transport services to meet the growing demand as suburban activity centres develop.

- Around half of all car trips are less than 5km and many are under 1km – most people can ride 5km in around 15-20 minutes or walk 1km in around 10 minutes.
- With 404,800 Western Australians riding each week, there is latent demand for cycling for commuting purposes but dissatisfaction with existing cycling infrastructure is high and fear of sharing the roads with motorists is the main reason for them not cycling more often.
- Transport agencies currently give insufficient priority, and support, to the reallocation of road space for public and active transport, particularly in providing dedicated lanes and other priority measures to enhance bus service reliability.
The availability of high-quality cycling and walking infrastructure providing enhanced amenity, connectivity and safety is of vital importance in encouraging active travel. Over 5,500 cyclists and non-cyclists from across Western Australia responded to RAC's 2015 Cycling Survey, highlighting the importance of cycling to the community. Investment in on-road and off-road cycling infrastructure was viewed as the top priority for Government investment to encourage more people to cycle.

There is ample evidence of the high return on investment (including from health and fitness improvements, air pollution and emission reductions and crash cost reductions) for both active transport infrastructure and travel behaviour change programs. In fact, RAC's Cycling Business Case, released in 2012, highlighted that up to $388 million was needed over 10 years to create continuous, convenient and comprehensive cycle networks in WA's cities and towns. It also showed the economic, social, health and environmental returns for the community on investment in cycling projects are between 3.4 and 5.4 times the costs incurred, higher than for many other urban transport investments.

When it comes to encouraging more people to walk, respondents to RAC's 2016 Walking Survey believed better planning to create more walkable communities, investment in public transport and investment in shared paths should be the Government's top priorities.

To deliver an active and public transport future for WA, there is a need to accelerate delivery of safe and connected active transport infrastructure, sustained and wide-spread investment in public transport, supported by behaviour change programs and better planning of communities to encourage uptake of these travel options.

RAC recommendations to enable greater travel choice:

- Develop a robust transport strategy, building on Perth and Peel@3.5million – Transport Network that considers the long-term strategy being prepared by Infrastructure WA, to provide a clear strategic direction for WA’s transport system and land use integration to achieve ambitious targets for increasing public transport, walking and cycling modes shares, reducing vehicle kilometre travelled and emissions;
- Prepare the next iteration of the Central Area Transport Plan and allocate all Perth Parking Licensing Account funds (closing balance as at 1 July 2018 was $91 million; expected to be $128 million in 2019) to enhance transport connectivity in the central area;
- Plan for and commit funding to enhance mass and rapid transport connectivity and facilitate improved cross-city mobility in the inner areas, and major activity centres with low public transport accessibility including:
  - funding the long-standing Perth Light Rail proposal (UWA/QEI – Curtin/Bentley);
  - undertaking project development activities for a light rail connection to Scarborough Beach / Stirling to Glendalough and the Perth CBD;
  - a connection between the Perth CBD and Morley Strategic Activity Centre; and
  - develop and fund a Bus Rapid Transit (BRT) program, focussing on major activity centres (as well as a bus priority plan to define a network of bus lanes and other facilities such as queue jumps) as a priority to improve service reliability, journey times and the passenger experience.
- Funding the completion, upgrade and maintenance of the Principal Shared Path (PSP) network within 15km of the CBD and on-road cycle routes, particularly to and through activity centres and providing connections to PSPs and public transport stations, as well as plan and progress delivery of a network of new green mode bridges (cycle, pedestrian and bus), including a new pedestrian and cycle bridge adjacent to the Causeway;
- Investigate and implement new funding models that will support the introduction of additional public transport services in regional centres.
- Expand the capacity of the Department of Transport to deliver programs to benefit pedestrians, and plan and implement a network of high-quality pedestrian routes;
- Fund the expansion of existing programs such as Safe Active Streets and the Your Move programs, particularly initiatives which complement investment in the public transport network, to support increased patronage and active transport, and
- Cap any increase in public transport fares at or below the rate of inflation.
Summary

Western Australians value living in safe, sustainable and connected communities and climate change and its impacts is a pressing concern for many.

Addressing this will require an integrated inter-governmental, industry and community approach and RAC, as a member-based organisation, has committed to protecting the natural environment and mitigating the impacts of climate change.

The State Government has an opportunity to lead the way, and lead by example, in taking preventative action on climate change through ensuring a robust Policy and roadmap to effectively reduce impact of vehicle emissions on the environment, and health.

In support of our submission we enclose RAC’s previous responses to the:

» 2018 RAC Response to the Senate Select Committee Inquiry on Electric Vehicles;

» 2018 Better Fuel for Cleaner Air to the Department of Environment and Energy’s Draft Regulation Impact Statement; and

» 2018 RAC Response to the Green Paper Concepts for a Strategically-led System.

We also enclose our Federal Priorities for WA 2019 and State Budget Submission 2019-20 that set out our priorities for improved fuel quality, low and zero emissions vehicles and better public transport, walking and cycling networks that reduce greenhouse gas emissions and our impact on public health and the environment.

All of RAC’s previous submissions and publications are available for viewing and download via https://rac.com.au/about-rac/advocating-change/reports.
For further information please contact advocacy@rac.com.au