



## Climate Council of Australia

Submission to: Cleaner, Cheaper-to-Run Cars: An Australian New Vehicle Efficiency Standard Consultation Impact Analysis

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# About the Climate Council

The Climate Council is Australia's own independent, evidence-based organisation on climate science, impacts and solutions.

We connect decision-makers, the public and the media to catalyse action at scale, elevate climate stories in the news and shape the conversation on climate consequences and action, at home and abroad.

We advocate for climate policies and solutions that can rapidly drive down emissions, based on the most up-to-date climate science and information.

We do this in partnership with our incredible community: thousands of generous, passionate supporters and donors, who have backed us every step of the way since they crowd-funded our beginning as a non-profit organisation in 2013.

To find out more about the Climate Council's work, visit [www.climatecouncil.org.au](http://www.climatecouncil.org.au).

# Introduction

The Climate Council welcomes the Australian Government's announcement of preferred settings for the New Vehicle Efficiency Standard (NVES). This is an important opportunity to improve the efficiency of Australia's cars, utes and vans; cut costs for drivers and reduce harmful carbon pollution from our new car fleet. We welcome the Government's commitment to delivering this reform so that Australians can start sharing in the benefits of cleaner cars that are cheaper to run, which are already being enjoyed by millions of drivers around the world.

Implementing clear policies to address harmful pollution is an urgent priority now. The year 2023 was the world's hottest ever, with July being the first time in which the global average temperature rise spiked 1.5 degrees celsius (°C) above pre industrial levels (WMO, 2024). With an El Niño event underway and unstable weather systems sweeping across the nation, the threat of extreme weather is a stark reality for Australians. The New South Wales Rural Fire Service announced an early start to the fire danger season in August 2023 (ABC, 2023a) and by November 2023, more than 610,000 square kilometres had burnt across north Australia, an area larger than Spain (The Guardian, 2023a). Bushfires were also raging on the east coast in November 2023 - a month before the official start of summer - with lives threatened and more than 50 properties lost in Queensland (ABC, 2023b). By December 2023 and January 2024 the same state was being hammered with cyclonic conditions, severe flooding and storm events, and heatwaves (New York Times, 2023). These storms and flash flooding tragically took ten lives over Christmas (The Guardian, 2023b). Australians are getting climate whiplash - being hurtled violently from one extreme to another (Climate Council, 2024).

These are the consequences of climate change, driven by the burning of fossil fuels, that Australians are already experiencing at 1.2°C of warming (Climate Council, 2023a). Stated climate commitments from global governments have the world on track not only to exceed the 1.5°C goal of the Paris Agreement, but blow past it, with up to 2.7°C degrees of global temperature rise projected (Climate Action Tracker, 2023). Every fraction of a degree of further warming increases the risk of escalating climate impacts. This would mean more families uprooted by fires and floods, more communities wilting under extreme heatwaves, more damage to iconic ecosystems like the the Great Barrier Reef, and escalating risks to our collective safety and security (Climate Council, 2023a).

That is what's at stake as we seek to rapidly cut harmful carbon pollution this decade - and why the proposed New Vehicle Efficiency Standard is so necessary. Fortunately, while

focused action to cut emissions is more urgent than ever, it is also more possible than ever before - particularly in a high-emitting sector like transport.

This is a significant change from 2008 when the first zero emissions vehicle hit the roads in Australia (iMOVE Australia, 2024). Then, low and zero emissions vehicle technologies were genuinely in a nascent stage of development and accessibility was a challenge. Now, there are 500 different zero emission vehicle models on offer worldwide (IEA, 2023) and the share of new vehicle sales being all-electric has reached double digits in places like China and the European Union. The great gear shift to low and zero emission vehicles is well underway, however Australia is being left behind. For example, there are over 300 more Battery Electric Vehicle (BEV) models available in Europe than there are in Australia today (EVC, 2023; European Commission, 2023). Australians are being dumped with highly polluting and expensive vehicles that manufacturers can't sell elsewhere.

An effective fuel efficiency standard will mean Australians gain access to the efficient new cars manufacturers are already selling around the world - where over 85 percent of the market is already covered by similar standards. This will bring cheaper costs and greater choice, while cutting harmful pollution for a safer and cleaner environment for all Australians to enjoy.

The Climate Council supports the key common features outlined in options B and C for Australia's NVES (DITRDCA, 2024) as minimum starting points for unlocking Australia's low and zero emissions vehicle market as soon as possible. In summary, the features from these options we support and strongly recommend be included in the final scheme design include:

- An average annual emissions ceiling trajectory which seeks to deliver significant improvements in average fleet efficiency and reductions in pollution this decade - catching up to the USA as a minimum before the end of this decade;
- A simple and transparent approach to crediting which does not make use of 'super credits', 'off cycle credits' or other manufacturer flexibility arrangements which can distort and undermine the scheme's outcomes;
- Appropriate categorisation of vehicle types into the two proposed categories, ensuring all passenger vehicles including SUVs are treated as such;
- Inclusion of penalties at a sufficiently strong rate to encourage positive compliance;
- Commencement at the earliest possible opportunity, being 1 January 2025.

Below we have provided further comments on these priority policy settings with reference to the Government's guiding principles for this reform and proposed settings in the Impact Analysis (DITRDCA, 2024).

## **A New Vehicle Efficiency Standard can set us on the path to cut petrol bills and pollution**

Tackling transport emissions will help keep Australians safe from escalating climate harm. The cars we drive are responsible for around 13 per cent of Australia's greenhouse gas emissions and are the biggest contributor in the transport sector (DITRDCA, 2024). Our lack of fuel efficiency standards has meant Australia has become a dumping ground for polluting, expensive cars as the cleanest, cheapest versions are diverted to countries with strong standards in place. Passenger cars in Australia currently use on average 20 per cent more fuel than passenger cars in the US (DITRDCA, 2024). This is costing Australians at the petrol pump, harming our health and fuelling dangerous climate change. A New Vehicle Efficiency Standard (NVES) can reverse this trajectory and deliver genuine relief to all Australians, no matter what car they choose to drive.

A fuel efficiency standard that is effectively designed to achieve its purpose of attracting greater supply and range of low and zero emission vehicles will:

- slash the annual fuel bill for Australian drivers,
- cut the national air pollution death toll and save the health system billions,
- improve national security and provide Australians with a wider choice of modern, safe vehicles,
- drive down transport emissions and put Australia on a clear path to zero emissions in the transport sector.

### **Cutting the cost of living and unlocking job opportunities**

Australian drivers have long commutes and are paying high prices for fuel, yet currently drive highly inefficient vehicles because we do not have mandated fuel efficiency standards. One of the immediate benefits of making cars more fuel efficient is that the average new car will consume less fuel to drive the same distance, lowering fuel bills and helping Australians tackle cost of living pressures.

The fuel savings add up quickly. If the Government were to legislate either option B or C outlined in the Impact Analysis, Australians would collectively experience a baseline of around \$108 billion in fuel savings, and another \$5.5 billion in health savings (DITRDCA,

2024). Individually, Australians could be saving \$1,000 or more on their annual fuel bills before the end of this decade. Money saved will create more economic opportunities in our local communities by reducing the amount of money flowing offshore to fossil fuel giants. In this way, delivering these policy settings as a minimum starting point will keep more money here at home, supporting the community and local businesses, and providing important cost of living relief to Australian families. The financial benefits of low and zero emission vehicles will also be greatest for regional drivers due to longer average commutes, higher regional fuel prices and higher rates of car ownership.

Low and zero emission vehicles also bring with them a range of job opportunities for Australians. There are already around 1,000 apprentices (WIN News, 2024) from across the country on a waiting list to learn how to work with electric vehicles, with more to come as further courses open as our transition accelerates. The rollout of new vehicle charging infrastructure and opportunities in battery manufacturing and recycling will similarly open job opportunities for Australians in both our cities and our regions.

## Healthy air, healthy people

Research from the University of Melbourne has shown that air pollution from cars, trucks and fossil-fuel powered buses kills 11,105 Australians every year and results in 12,210 cardiovascular hospitalisations, 6,840 respiratory hospitalisations and 66,000 asthma cases annually (Melbourne Climate Futures, 2023). By improving access to low and zero emission vehicles, Australia can lock in significant health benefits and lower the national healthcare spend through a reduction in harmful air pollution in our cities and towns. This can be achieved through the design and implementation of a fuel efficiency standard that is effective in cutting harmful carbon pollution this decade, such as the policy settings proposed in options B and C.

The better a vehicle's efficiency, the less CO<sub>2</sub> emissions it produces. If all cars sold in 2021 were 'best in class' for emissions, Australia's total 2021 emissions would have been 91 percent lower for passenger vehicles and small SUVs, and 47 percent lower for larger SUVs and utes (National Transport Commission, 2022). More efficient vehicles also pump out fewer other pollutants caused by the burning of petrol and diesel, such as nitrogen oxides (NO<sub>x</sub>); particulate matter (PM<sub>2.5</sub> & PM<sub>10</sub>) - tiny particles ranging in size from 2.5 to 10 micrometres that can penetrate into the lungs and bloodstream causing a range of health problems; carbon monoxide (CO), sulphur oxides (SO<sub>x</sub>) and other volatile organic compounds (VOC) (Grattan Institute, 2021; Clean Vehicle Guide, 2023).

Electric vehicles contribute even less particulate matter than petrol or diesel cars, and have zero toxic tailpipe pollution (NOx, hydrocarbons and carbon monoxide) (European Public Health Alliance, 2021). Driving more efficient cars reduces the quantity of NOx and VOC released into the air which contribute to ground-level ozone pollution (such as smog). Ozone is most likely to reach unhealthy levels on hot sunny days and can lead to respiratory problems, especially in children and the elderly (Environment Protection Agency, 2023). Fewer emissions from our cars means fewer pollutants released into the air and better health for all Australians.

## Boosting energy security

Improving the supply and range of low and zero emission vehicles through an effective NVES can help strengthen Australia's energy security by reducing our reliance on foreign oil and vulnerability to oil supply chain disruptions.

Australia consumed more than 57 billion litres of fuel in 2022 (Australian Petroleum Statistics, 2022). More than 90 percent of this was either imported from overseas or refined from imported crude oil (The Australia Institute, 2022). The transportation of oil and other petroleum products can be risky, with potential for spills, accidents, supply shocks and risks to international shipping lanes. By reducing the overall demand for oil and the need for transportation of petrol products, unlocking access to more low and zero emission vehicles can help to mitigate these risks and improve our national security.

Australia is particularly vulnerable to petroleum supply chain shocks. We are vulnerable because only two local refineries remain and they produced less than 15 billion litres of fuel in 2023, far below total demand. Domestic storage is limited too: as of November 2023 Australia has only enough reserves to meet 21 days of diesel use and 23 days of petrol use on average (Australian Petroleum Statistics, 2023).

Reducing the amount of fuel Australian cars use by delivering an effective NVES will see us take more control of our energy security and improve Australia's resilience to price shocks and supply disruptions.

## **Proposed policy settings are the minimum needed to deliver these benefits**

This is the critical decade for climate action (Climate Council, 2023). At the same time, Australians are facing high cost of living pressures and looking for rapid relief. A New Vehicle Efficiency Standard (NVES) that delivers genuine and necessary emission reductions this decade is a two-for-one solution to these challenges. The policy settings indicated in options B and C of the Impact Analysis are the minimum necessary settings for an effective fuel efficiency standard. The Climate Council urges the Australian Government to legislate nothing less than these proposed settings, to ensure the standard achieves its stated objective of delivering cleaner, cheaper to run cars for Australians.

### **Effective annual average emission ceiling trajectories**

Most new cars sold today will stay on Australia's roads for the next 15-20 years. For Australians to quickly see the benefits of cleaner cars that are cheaper to run, the NVES should set out declining average annual emissions ceilings which achieve significant improvements in efficiency this decade. The trajectory proposed in option B is considered the minimum viable trajectory to achieve this, because it brings Australia into alignment with another major global market. Anything less than this will see us continue to languish at the back of the queue for more efficient low and zero emissions vehicles.

Option B would see Australia catch up to the US average vehicle emissions intensity by 2028 (68g/km for passenger vehicles, and 94g/km for light commercial vehicles). This is a necessary baseline for Australia's NVES to commence at, but manufacturers may be able to achieve tighter targets as the market continues to move rapidly towards low and zero emissions vehicles. For this reason, the Climate Council recommends legislation establishing the fuel efficiency standard state that adjustments to the average annual emissions ceiling can be made at statutory review periods. The legislation should also state that any future adjustments to the average annual emissions ceilings may increase the stringency of these, but may not reduce it. This is to ensure the policy remains competitive in the global market and continues achieving its purpose of delivering the best new cars to Australians. For Australians to genuinely be able to access the cleanest, cheapest to run cars consistently over the coming years, our regulatory standards must continue to match at a minimum, and ideally improve upon, international market competitors.



This is consistent with the approach adopted in Australia's Climate Change Act 2022, under which targets may 'ratchet' up but may not be adjusted lower than the initial settings. This will be important to provide certainty for auto manufacturers, other industry participants and the broader Australian community about the direction of travel and minimum speed for the transformation of our national fleet.

## Appropriate allocation of vehicle class trajectories

Internationally, there is good availability of a wide range of low and zero emission light passenger vehicles, and commercial vehicles like vans and SUVs. The availability of low and zero emissions utes and offroad vehicles is improving rapidly as more manufacturers develop product offerings in these categories. For example, by 2025 there are expected to be approximately 20 different electric ute options available internationally, based on current manufacturer announcements (Climate Council, 2023b). These vehicles are not yet widely available in Australia however; enabling infrastructure such as charging will also need to be rapidly scaled up to ensure people in regional and remote areas across the country can reliably use low and zero emission vehicles.

In this context, it is reasonable to adopt a dual trajectory policy design as proposed in options B and C, at least in the initial years of Australia's NVES. However, including all SUV models within the passenger vehicle category is important to avoid perverse market incentives which could work against the intended objectives of the standard.

International evidence indicates that having two emissions trajectories for different classes of vehicles risks incentivising both production and sales to shift towards larger and heavier vehicles (ICCT, 2023). Australia has already experienced a significant shift towards larger vehicles like utes and SUVs in recent years. For example, new ute sales have risen from 16 percent of all new car sales in 2012, to nearly 23 percent in January 2024 (FCAI, 2013; FCAI, 2024). Heavier and larger vehicles are more expensive to run, and produce more emissions both in manufacturing and on the road. Further, they are more dangerous for pedestrians and other road users, and exacerbate issues with congestion and shared use of public spaces compared with smaller vehicles. The design of Australia's NVES can help mitigate this risk by delivering the vehicle classifications as proposed in options B and C as a minimum.

## Simple and transparent crediting arrangements

A transparent and effective fuel efficiency standard is one that delivers real-world outcomes aligned with the target annual average emissions ceiling. That is, the average emissions intensity of each manufacturer's fleet sold in Australia must genuinely align

with the ceiling set out by government. International experience has shown that the use of crediting arrangements and other flexibility mechanisms can significantly undermine the achievement of real-world emissions reduction. That is why the Climate Council strongly supports the proposed settings in options B and C, with no use of super credits, off-cycling credits, air conditioning credits or credit pooling.

Every time a manufacturer receives an additional credit within the fuel efficiency standard, the overall effectiveness of the policy is watered down to some extent. For example, super crediting arrangements are highly distortionary to the overall effectiveness and transparency of a fuel efficiency standard. They are also clearly self-serving as they would allow manufacturers to meet their average annual emissions ceiling on paper with relatively minimal real-world change to the composition of their vehicle fleets. Australians would lose out, as the actual emissions reduction and improvement of Australia's vehicle fleet achieved would be far less than indicated by the headline average annual emissions ceiling.

Off-cycle credits notionally reward fuel saving technologies and other vehicle improvements that reduce emissions which are not captured in the formal emissions testing process. However, many of the technologies which were once eligible for these credits in other schemes internationally are now standard within manufacturers' production cycles. As proposed in options B and C of the Impact Analysis, Climate Council agrees that manufacturers should not be eligible for off-cycle credits of any kind to maintain the integrity of Australia's NVES.

The Impact Analysis also indicates that options B and C include no air conditioning credits. This aligns with the Climate Council's recommendation that the use of high global warming refrigerants be banned outright in Australia if they are of sufficient concern to warrant policy intervention. Manufacturers should not be able to earn credits by avoiding their use; this will simply mean they are able to increase the amount of harmful carbon pollution produced by their vehicles while still appearing to meet their average annual emissions ceiling on paper.

Finally, any banking or transferring of credits should only be permitted within each legislated review period. The smaller the review period, the more effective the standard to ensure compliance remains genuine and up to date. Similarly, credits should not be able to be pooled amongst car manufacturers. This risks creating perverse incentives among companies, reducing real-world changes in fleet composition. Preventing companies from

exploiting loopholes in the legislation ensures Australians will see real-world benefits from an effective fuel efficiency standard.

Regardless of the final model adopted, the Climate Council reiterates that the following settings are essential to ensure the simplicity, transparency and effectiveness of the NVES:

- No super credits
- No off-cycle credits
- No air conditioning credits
- No credit pooling.

## Clear provisions for data and regulation

Vehicle manufacturers are significantly penalised in other markets if they do not supply vehicles below the relevant emissions ceiling applying in each market. This means there is a direct financial incentive to prioritising supply of low and zero emissions vehicles. The introduction of an effective fuel efficiency standard in Australia will ensure there is the same regulatory incentive here - as long as the local settings are comparable with those in other markets.

The setting of penalties is an important regulatory lever. If these are set too low there is a risk that manufacturers simply add the penalty to the purchase price of higher emitting vehicles and continue selling these vehicles in Australia. This would be a poor outcome both for Australian consumers and carbon pollution. Penalties therefore need to be set at a sufficient level to drive genuine compliance. The Climate Council supports the proposed penalty rate of \$100 per g/km as a minimum reasonable amount to promote compliance. It is consistent with regulatory practice across government that stronger penalties will better incentivise compliance and therefore support increased supply of lower and zero emission vehicles.

The Climate Council also encourages the Department to consider implementing 'anti-avoidance' rules and associated penalties as part of the NVES' legislation. Manufacturers should not be able to avoid their obligations either by technological means - as seen in the Volkswagen emissions testing issue (BBC, 2015), or by re-classifying vehicles between classes to take advantage of different policy settings. A non-exhaustive list of anti-avoidance provisions for further consideration could include:

- Preventing manufacturers from changing the categorisation of vehicles - e.g. moving from the MA to MC category - except at specific, regulated intervals such as each legislated review period;

- Introducing strong corporate penalties for actions which have the effect of obscuring or misrepresenting the actual emissions performance of a manufacturers' fleet and/or individual vehicle types within this;
- Making nominated company representatives liable for the accuracy of the fleetwide emissions data provided to the regulator.
- Ensure the definition of a 'new vehicle' clearly indicates the vehicle has had no previous owner other than the manufacturer. This protects the intention of manufacturers bringing cars to Australia that are genuinely new, and complying with the legislation as it is intended.

The inclusion of anti-avoidance provisions will both ensure the NVES is effective and transparent, in line with the government's guiding principles, and enforce a level playing field between participants by ensuring everyone is playing by the rules.

Further, the information disclosure requirements underpinning the NVES should be designed with effective implementation of the policy and achievement of positive outcomes for the community in mind. Vehicle manufacturers would be expected to favour minimal information disclosure because this reduces compliance requirements and maintains a degree of opacity both from regulators and the community. However, there are instances where effective implementation of the framework over time will require significant information disclosure by manufacturers, and this should be clearly built in as a requirement from its commencement.

Separately, the transparency and effectiveness of Australia's NVES depends on regulators and the community being able to determine whether the average annual emissions ceiling in any given year is genuinely being met. For this reason, the NVES legislation should include a requirement for manufacturers to report in detail on their use of credits in each compliance period. This reporting should be in a standard format determined by regulators for direct comparability, and cover the use of any credits provided for within the framework, broken down by volume and category. Regulators may then use this reporting to determine how effectively the policy is operating under any given set of policy settings, and release aggregated summary information to inform community discussion.

Finally, at the moment there is no free, transparent and granular data available in Australia on vehicle sales by type and manufacturer. The only high-quality data is from the Federal Chamber Automotive Industries' VFACTS database. This is provided under a very expensive fee-for-service model, and the data is not presented in ways which enable

transparent analysis and reporting of vehicle sales trends. As part of the NVES legislation, the scheme regulator should be tasked with aggregating and making available free, public, frequent, granular and reliable data about vehicle sales on an annual basis. It is unacceptable that at the moment Australians cannot understand what is happening in the vehicle market, without needing to pay vehicle manufacturers for opaque and confusing data.

The Climate Council also welcomes the Government's intention for the majority of the chosen fuel efficiency standard settings be placed in primary legislation for transparency, and to embed ongoing certainty. Making the standard mandatory is critical to the scheme's ability to genuinely deliver what it has promised.

## Efficient commencement

As noted, Australia is starting well behind our international counterparts in legislating a fuel efficiency standard. Because cars also often stay on the road for 15-20 years, it is important we get an effective fuel efficiency standard into place as soon as possible. For that reason, the Government's intention to commence the scheme from 1 January 2025 is welcomed as the minimum viable starting date for Australia's NVES. Every day we do not have a strong fuel efficiency standard in place, Australians are missing out on fuel savings, cleaner air and greater consumer choice.

## Conclusion

Designing and implementing an effective fuel efficiency standard for Australia's light vehicle fleet is an essential step to drive down carbon pollution, while also cutting the cost of living for Australians, delivering cleaner air for better health, boosting national energy security, and improving vehicle safety. Australians have much to gain from the Government's proposed reform - no matter what type of new car they choose to buy. That is why it is essential we now move quickly to put a strong fuel efficiency standard in place.

The Climate Council supports the Government's preferred policy settings for the New Vehicle Efficiency Standard as the minimum necessary to deliver genuine benefits for Australians and our climate. We urge you to put the interests of the Australian community first and move swiftly to now legislate and deliver this important reform as proposed.

## References

Australian Broadcasting Corporation (ABC) by Jones, A. (2023a) *NSW fire crews work through weekend to contain more than 70 blazes across the state*. Accessed at: <https://www.abc.net.au/news/2023-08-20/nsw-fire-season-starts-as-crews-battle-70-blazes-in-strong-winds/102752616>

Australian Broadcasting Corporation (ABC) by Zillman, S. (2023b) *More than 53 homes destroyed as bushfires continue to rage in Tara*. Accessed at: <https://www.abc.net.au/news/2023-10-31/more-than-53-homes-destroyed-as-bushfires-continue-rage-tara/103046758>

Australian Government, Department of Infrastructure, Transport, Regional Development, Communications and the Arts (DITRDCA) (2024) *Cleaner, Cheaper to Run Cars: The Australian New Vehicle Efficiency Standard Consultation Impact Analysis*. Accessed at: <https://www.infrastructure.gov.au/sites/default/files/documents/cleaner-cheaper-to-run-cars-the-australian-new-vehicle-efficiency-standard-consultation-impact-analysis-february2024.pdf>

Australian Petroleum Statistics (2022) *Full Year Statistics*. Accessed at: <https://www.energy.gov.au/energy-data/australian-petroleum-statistics>

Australian Petroleum Statistics (2023) *Australian Petroleum Statistics 2023 Data Extracts*. Accessed at: <https://www.energy.gov.au/energy-data/australian-petroleum-statistics>

British Broadcasting Corporation (BBC) by Hotten, R (2015) *Volkswagen: The scandal explained*. Accessed at: <https://www.bbc.com/news/business-34324772>

Climate Action Tracker (2023) *No change to warming as fossil fuel endgame brings focus onto false solutions*. Accessed at: <https://climateactiontracker.org/publications/no-change-to-warming-as-fossil-fuel-endgame-brings-focus-onto-false-solutions/>

Climate Council (2023a) *Mission Zero: How Today's Climate Choices Will Reshape Australia*. Accessed at: [https://www.climatecouncil.org.au/wp-content/uploads/2023/09/Mission-Zero\\_Updated-190923\\_IL\\_2.pdf](https://www.climatecouncil.org.au/wp-content/uploads/2023/09/Mission-Zero_Updated-190923_IL_2.pdf)

Climate Council (2023b) *Ute Beauty! The case for lower and zero emissions utes*. Accessed at: [https://www.climatecouncil.org.au/wp-content/uploads/2023/03/CC\\_MVSA0345-CC-Report-Ute-Beauty\\_V6-FA-Screen-Single.pdf](https://www.climatecouncil.org.au/wp-content/uploads/2023/03/CC_MVSA0345-CC-Report-Ute-Beauty_V6-FA-Screen-Single.pdf)

Climate Council (2024) *Climate Whiplash: Wild Swings Between Extreme Weather Extremes*. Accessed at: [https://www.climatecouncil.org.au/wp-content/uploads/2024/02/CC\\_MVSA0392-CC-Report-Mid-Summer-2024\\_V9-FA-Screen-Single.pdf](https://www.climatecouncil.org.au/wp-content/uploads/2024/02/CC_MVSA0392-CC-Report-Mid-Summer-2024_V9-FA-Screen-Single.pdf)

Electric Vehicle Council (EVC) (2023) *State of Electric Vehicles*. Accessed at: [https://electricvehiclecouncil.com.au/wp-content/uploads/2023/07/State-of-EVs\\_July-2023\\_.pdf](https://electricvehiclecouncil.com.au/wp-content/uploads/2023/07/State-of-EVs_July-2023_.pdf)

Environment Protection Agency (2023) *Health Effects of Ozone*. Accessed at: <https://www.epa.gov/ground-level-ozone-pollution/health-effects-ozone-pollution>

European Commission (2023) *Electric vehicle model statistics*. Accessed at: <https://alternative-fuels-observatory.ec.europa.eu/policymakers-and-public-authorities/electric-vehicle-model-statistics>

European Public Health Alliance (2021) *Electric vehicles and air pollution: the claims and facts*. Accessed at: <https://epha.org/electric-vehicles-and-air-pollution-the-claims-and-the-facts/>

Federal Chamber of Automotive Industries (FCAI) (2013) *FCAI Annual Report 2012*. Accessed at: <https://www.fcai.com.au/annualreports/index/view/publication/48>

Federal Chamber of Automotive Industries (FCAI) (2019) *Advanced Driver Assistance Systems*. Accessed at: <https://www.fcai.com.au/Safety/advanced-driver-assistance-systems>

Federal Chamber of Automotive Industries (FCAI) (2024). *SUV, Utes Deliver Record January Sales*. Accessed at: <https://www.fcai.com.au/news/index/view/news/820>

Grattan Institute (2021) *The Grattan Car Plan*. Accessed at: <https://grattan.edu.au/wp-content/uploads/2021/10/Grattan-Car-Plan.pdf>

Green Vehicle Guide (2023) *Vehicle Emissions*. Accessed at: <https://www.greenvehicleguide.gov.au/pages/UnderstandingEmissions/VehicleEmissions>

iMOVE Australia (2024) *Electric Vehicles*. Accessed at: <https://imoveaustralia.com/topics/electric-vehicles/#:~:text=Australia%27s%20home%2Dgrown%20Blade%20Electron,Australia%20over%20the%20next%20decade>

International Energy Association (IEA) (2023) *Global EV Outlook 2023*. Accessed at: <https://www.iea.org/reports/global-ev-outlook-2023/trends-in-electric-light-duty-vehicles>

Melbourne Climate Futures (2023) *Health impacts associated with traffic emissions in Australia*. Accessed at:  
<https://www.unimelb.edu.au/newsroom/news/2023/february/vehicle-emissions-may-cause-over-11,000-deaths-a-year-research-shows>

National Transport Commission (2022) *Carbon Dioxide Emissions Intensity for New Australian Light Vehicles 2021*. Accessed at:  
<https://www.ntc.gov.au/sites/default/files/assets/files/Carbon%20Dioxide%20Emissions%20Intensity%20for%20New%20Australian%20Light%20Vehicles%202021.pdf>

PD Insurance (2021) *Car Safety Features: Future and Present*. Accessed at:  
<https://www.pd.com.au/blogs/car-safety-features-2/>

The Australia Institute (2022) *Australia 91% reliant on foreign oil: Research Report*. Accessed at:  
<https://australiainstitute.org.au/post/australia-91-reliant-on-foreign-oil-research-report/>

The Guardian by Evershed, N., Ball, A. and Morton, N. (2023a) *How big are the fires burning in Australia's north? Interactive map shows they've burned an area larger than Spain*. Accessed at:  
<https://www.theguardian.com/news/datablog/ng-interactive/2023/nov/15/bushfires-in-australias-north-this-year-have-burned-an-area-larger-than-the-size-of-spain>

The Guardian (2023b) *'A very tragic Christmas': 10 people dead after a spate of severe storms across eastern Australia*. Accessed at:  
<https://www.theguardian.com/australia-news/2023/dec/27/a-very-tragic-christmas-ten-people-dead-after-spate-of-severe-storms-across-eastern-australia>

The International Council on Clean Transportation (ICCT) (2023) *Passenger vehicle greenhouse gas emissions and fuel consumption*. Accessed at:  
<https://theicct.org/pv-fuel-economy/>

The New York Times (NYT) by Zhuang, Y (2023) *Australia's First Cyclone of Season Nears Amid Rash of Extreme Weather*. Accessed at:  
<https://www.nytimes.com/2023/12/12/world/australia/cyclone-jasper-queensland-australia.html>

WIN News Riverina (2024). Accessed at:  
[https://www.facebook.com/WINNewsCanberra/?locale=el\\_GR](https://www.facebook.com/WINNewsCanberra/?locale=el_GR)

World Meteorological Organization (WMO) (2024) *WMO confirms that 2023 smashes global temperature record*. Accessed at:  
<https://wmo.int/media/news/wmo-confirms-2023-smashes-global-temperature-record>