SUBMISSION TO THE FUEL EFFICIENCY STANDARD CONSULTATION

From the

Smart Energy Council

The **Smart Energy Council** welcomes the opportunity to provide a submission to the Australian Government's fuel efficiency standard consultation, responding to The Fuel Efficiency Standard - Cleaner, Cheaper to Run Cars for Australia Consultation Paper ('The Consultation Paper').[1]

The Smart Energy Council is the peak independent body for Australia's smart energy industry, representing around 1,000 residential, commercial and large-scale renewable generation and storage companies, smart transport firms, as well as the renewable hydrogen and ammonia industry.

The Government's commitment to introduce fuel efficiency standards is welcome and a much-needed step to drive down transport emissions. Fuel efficiency standards will reduce cost of living by saving drivers money, increase the uptake and availability of electric vehicles, lower fuel use and carbon emissions and drive efficiency improvements in the vehicle fleet.

Yet since the commitment was made in August 2022 (at the National Electric Vehicle Summit co-hosted by the Smart Energy Council) there has been limited progress. Any further delays to implementing strong mandatory fuel efficiency standards will lock Australians into substantially higher fuel costs and carbon emissions, given cars sold today will stay on our roads for more than a decade (the average age of vehicles across Australia).[2]

The Smart Energy Council's analysis suggests strong fuel efficiency standards could save Australian motorists up to $875 a year in fuel costs.[3]

We urge the Federal Government to introduce strong mandatory fuel efficiency standards, to be legislated by the end of 2023. Australia has spent decades exploring the potential introduction of fuel efficiency standards – there is no more time to waste.

We support strong fuel efficiency standards, but note they are only one component of a national smart transport strategy, that should include:

- policies to encourage a shift to active and public transport away from personal car use,
- policies to decarbonise freight, heavy vehicle, and non-road transport emissions,
- and accelerate the local electric vehicle, battery, charging and component part industry.

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[1] DITRDCA (2023) 'The Fuel Efficiency Standard – Cleaner Cheaper to Run Cars for Australia', https://www.infrastructure.gov.au/sites/default/files/documents/fuel-efficiency-standard-cleaner-cheaper-run-cars-australia-consultation-paper-april2023.pdf

[2] ABS (2021) https://www.abs.gov.au/statistics/industry/tourism-and-transport/motor-vehicle-census-australia/latest-release

[3] Based on the the Ministerial Forum on Vehicle Emissions Draft Regulation Impact Statement, estimating consumer fuel saving in 2025 at a fuel price of $1.30/litre could save $519 per year in fuel costs for the average petrol passenger vehicle if a target of 105gCO_2/km was phased in from 2020. Figure updated with the current Sydney petrol price of $1.90/litre. https://www.infrastructure.gov.au/sites/default/files/migrated/vehicles/environment/forum/files/Vehicle_Fuel_Efficiency_RIS.pdf

The Australian Government comprehensive response to the United States Inflation Reduction Act should include mechanisms for supporting Australian smart transport manufacturing and encourage more efficient transport choices.

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Summary of recommendations

The Smart Energy Council ('SEC') recommends strong fuel efficiency standards (FES):

Be introduced as soon as possible:

- Standards should be legislated by the end of 2023 and in force 1st January 2025.
- All efforts should be made to meet this timeframe, including consideration of a phase-in period, where financial penalties are reduced for the first year.
- Details and key design parameters of the proposed standards should be released before the end of 2023 to assist with early adoption.

Be strong and ambitious:

- Vehicle emissions targets should reach zero emissions from new vehicles by 2035 at the latest, and ideally before.
    - Standards should be compatible with the Paris Agreement target of limiting global temperature rise to below 1.5°C. A target of 100% zero emissions vehicles sales by 2035 is necessary to reach net zero emissions economy-wide by 2050.[4]
- Start strong – set ambitious vehicle emissions targets early on, similar to New Zealand's Clean Car Standard.[5]
- Catch Australia up to other car markets by 2030. Set vehicle emissions targets that put Australia on track to matching the vehicle fleet emissions performance of other jurisdictions including New Zealand, the European Union and the United States (California) by 2030.
    - Consider implementing standards based on the International Council for Clean Transportation's ('ICCT') world-class standards-aligned pathway.[6]
    - Comparison with other jurisdictions should be based on fleet emissions performance rather than annual rate of improvement, to avoid locking Australia into a comparatively higher emissions intensity fleet.
- Manage the risk of incentivising a shift to the supply of heavier vehicles.
    - Set individual supplier targets using a footprint-based emissions limit curve. Limit curves adjust a suppliers' emissions targets based on vehicle attributes to reflect the types of vehicles they sell.
    - Adopt one emissions target for all vehicles to avoid incentivising a shift to the supply of heavier vehicles.

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[4] IEA (2022), page 55 https://iea.blob.core.windows.net/assets/ad8fb04c-4f75-42fc-973a-6e54c8a4449a/GlobalElectricVehicleOutlook2022.pdf
Transport and Environment (2018) https://www.transportenvironment.org/wp-content/uploads/2021/07/2018_11_2050_synthesis_report_transport_decarbonisation.pdf
[5] Waka Kotahi (2023) https://www.nzta.govt.nz/vehicles/clean-car-programme/clean-car-standard/importers/for-importers-how-the-ccs-works/data-values-and-formulas/
[6] ICCT (2023) https://theicct.org/publication/pv-australia-co2-standards-dec22/

        - In the case that two emissions targets are adopted, SUVs should be classified as passenger vehicles for the purposes of fuel efficiency & emissions standards rather than light commercial vehicles (as recommended by the ICCT) to avoid suppliers shifting from lighter SUVs to heavier SUVs.[7] Additionally, consider classifying utes/pickups with more than 2 doors as passenger vehicles to avoid suppliers shifting from passenger vehicles to light commercial vehicles.
- Review and update the standards every 3 years, with the first review in 2026 for revisions to apply in 2027, to ensure targets remain ambitious and aligned with Australia's emissions reductions targets and a 1.5°C pathway.
    - Targets should be able to be ratcheted up (made more ambitious), but not down.
- Include strong penalties (similar to the European Union's fuel efficiency standards, where the penalty is €95 per g/km target exceedance, or $197 expressed in Purchase Power Parity).
    - Penalties should be indexed to CPI annually & use a points system.
    - Non-financial penalties could also be considered, including excluding egregiously non-compliant vehicle suppliers from Government fleet purchases.

Have integrity:

- Implement and fund a robust and independent compliance regime based on random audit sampling with tiered responses.
- Avoid loopholes that could be used by suppliers or manufacturers to meet or exceed targets in ways contrary to the guiding principle of emissions reduction.
- Provide flexibility in how manufacturers and suppliers meet their targets, including credit banking, transferring and pooling.
- Exclude technology multipliers ('super credits'), and instead incentivise electric vehicles through direct subsidies, which can be targeted at particular groups (eg. those on lower incomes), particular vehicles (eg. second hand vehicles or vehicles with minimum local content) or particular vehicle segments (eg. utility vehicles).
    - In the case that super credits are used, they should be limited to zero emissions vehicles segments with limited availability in the Australian market or technologies at a nascent stage of development. The total benefits available from super credits should be capped, and the use of super credits should be sunsetted 3 years from implementation at the latest.
    - Any use of supercredits should consider incentivising local industrial development as well as zero emissions vehicles, by awarding credits based on local content and domestic manufacturing.
- Exclude the use of off-cycle credits and air-conditioning credits.
- Use the Worldwide Harmonised Light Vehicle Test Procedure (WLTP) and shift to international best-practice test procedures as they become available, to reduce the gap between reported emissions and real world emissions.

[7] ICCT (2023) https://theicct.org/publication/size-or-mass-the-technical-rationale-for-selecting-size-as-an-attribute-for-vehicle-efficiency-standards/

- Make emissions data publicly available and managed by the Department of Climate Change, Energy, the Environment and Water (DCCEEW). Collection, tracking and disclosure of emissions data should be undertaken independently from industry. The use of compliance flexibilities (borrowing, banking and trading of credits) should be made clear alongside the actual average vehicle carbon dioxide emissions of the supplier's vehicles.
    - An obligation could be placed on the Minister for Climate Change to report on FES progress in the Annual Climate Change Statement to Parliament.

Encourage innovation and local production:

- Extend the application of the standards to aftermarket conversions registered as zero emissions vehicles in Australia for the first time, as well as vehicles entering the Australian market for the first time and second-hand vehicles imported and registered in Australia for the first time.
- Ensure that small volume domestic electric vehicle manufactures can benefit from the standards and are not excluded or made to face unnecessary barriers.

Promote equity and broader transport decarbonisation:

- Complement the FES with other policies to decarbonise light vehicles and make the transition to electric vehicles more equitable - particularly, targeted subsidies and no-interests-loans for low-income households and individuals, made available for second hand vehicles.
    - Complimentary policies should seek to encourage local content production, for example though grants to build and expand domestic manufacturing of electric transport, component parts, charging infrastructure and batteries.
- Ensure standards are part of a broader transport decarbonisation plan with policies to encourage modal shift to active and public transport away from personal car use, and policies to decarbonise freight and non-road transport emissions.
- Consider introducing a separate fuel efficiency standard for medium and heavy vehicles.
- Regularly review the effectiveness and equity implications of the standards every 3 years.
- Provide information and education to suppliers and manufacturers to assist them to navigate the standards and systems. For example, the Clean Car Standard forecasting tool, provided by the New Zealand Government, allows importers to forecast the effect of potential vehicle purchases on their fleet emissions.[8]

Other Comments

We also recommend removing subjective and misleading language from the design assumptions of the Consultation Paper. Particularly, we recommend removing the sentence

[8] Waka Kotahi (2023) https://www.nzta.govt.nz/vehicles/clean-car-programme/clean-car-standard/importers/for-importers-how-the-ccs-works/data-values-and-formulas/

"continued sale of vehicles Australians love, including utes and 4-wheel drives", and modifying the language used throughout the Consultation Paper that suggests heavy utility vehicles are innately part of Australian culture.

This framing of heavier vehicles as loved, depended on, and demanded fails to acknowledge that policy settings influence consumer buying habits. Australia's current vehicle fleet is a product of the historic lack of fuel efficiency standards and emissions reductions policies. It has been shaped by tax settings that incentivise the purchase of larger vehicles for small business owners and diesel fuel rebates.[9]

It is important that this language is removed from the Consultation Document and that it or similar emotive language not be used in future government documents, as the current framing is at odds with the guiding principle of effectively reducing transport emissions from light vehicles.

[9] Australia Institute (2023) https://australiainstitute.org.au/post/suvs-driving-substantial-transport-pollution-research-report/

Introduction

Australians are being left behind in the drive towards cleaner, more efficient vehicles (EVs). Fuel efficiency standards have been introduced in 85% of the global car market, requiring automakers and local suppliers to improve the average fuel efficiency of the vehicles they sell. Without these standards, Australians have been left driving inefficient cars, paying more for fuel and without access to the range of electric vehicle models available globally.

Strong FES would encourage the supply of EVs to the Australian market, unlocking access to a variety of models.[10] In 2022, 70 electric models were delivered to Australia,[11] just 14% of the 500 EV models available globally. In comparison, nearly 300 models were available in China, and 150 in the United Kingdom.[12] Vehicle company representatives have stated publicly that Australia's lack of FES affects the supply of vehicles to the country, as jurisdictions with mandatory standards are prioritised for electric models in order to avoid penalties.[13] This means that, without fuel efficiency standards, Australians are missing out on some of the cheaper and smaller electric models available elsewhere, as well as electric utility vehicles.

Strong FES would reduce fuel bills across the country by encouraging the sale of more efficient and zero emissions vehicles. In 2016, the Ministerial Forum on Vehicle Emissions estimated that fuel efficiency standards would save motorists over $500 a year on fuel costs by 2025. Since that time, fuel costs have increased substantially.[14] Using the same methodology with current fuel prices suggests that FES could save Australian motorists up to $875 a year in fuel costs. Fuel costs savings would be particularly pronounced for regional communities, where motorists tend to drive longer distances, be more dependent on cars for transport and face higher fuel prices[15].

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[10] Electric Vehicle Council (2022), page 10 https://electricvehiclecouncil.com.au/wp-content/uploads/2022/09/EVC-Briefing_Increasing-the-supply-of-EVs-to-Australia.pdf

[11] Electric Vehicle Council (2022) https://electricvehiclecouncil.com.au/wp-content/uploads/2023/02/AUSTRALIAN-ELECTRIC-VEHICLE-INDUSTRY-RECAP-2022.pdf

[12] International Energy Agency (2023) https://electricvehiclecouncil.com.au/wp-content/uploads/2023/02/AUSTRALIAN-ELECTRIC-VEHICLE-INDUSTRY-RECAP-2022.pdf

[13] Parkinson (2022) https://thedriven.io/2022/08/19/vw-if-we-had-fuel-standards-today-we-could-bring-in-electric-cars-tomorrow/
Allen (2021) https://www.abc.net.au/news/2021-05-30/nissan-says-australia-missing-out-electric-vehicle-market/100173124

[14] Australian Government (2016) https://www.infrastructure.gov.au/sites/default/files/migrated/vehicles/environment/forum/files/Vehicle_Fuel_Efficiency_RIS.pdf

[15] Solar Citizens (2023) https://www.solarcitizens.org.au/roadshow_reports_regions

Australia's transport sector is one of the fastest growing sources of carbon emissions in the country. By 2030, transport is projected to be Australia's highest emitting sector.[16] FES would reduce the emissions intensity of light duty vehicles including cars, vans and utes – the biggest sources of transport emissions. This is absolutely necessary if Australia is to have any chance of reaching its legislated target of 43% emissions reduction by 2030 and net-zero emissions by 2050. Without a significant push to decarbonise the Australian transport sector, a heavier burden will be placed on more difficult to abate sectors such as farming, manufacturing and construction.

FES will also improve Australia's fuel security. Australia currently imports over 90% of its petrol and diesel.[17] Around three quarters of that is consumed by the transport sector and over half is consumed by road transport alone. Mandatory FES will decrease the need for imported fuel and encourage the supply of electric vehicles that can run on domestic renewable electricity.

A rare benefit of Australia's delayed implementation of FES is that we are now in a position to learn from other jurisdictions that have already implemented standards. New Zealand, particularly, has implemented standards worth replicating. The Clean Car Standard, introduced in New Zealand in 2021, set ambitious targets to reduce the emissions intensity of the New Zealand passenger vehicle fleet quickly. The scheme is simple, avoiding regulatory complexity and loopholes by excluding super credits and off-cycle credits. Additionally, the scheme is supported by transparent and publicly accessible data and support and guidance is provided to vehicle suppliers to help them navigate the system. Polling conducted in 2023 suggests there is strong public support for the scheme, with 62% of New Zealanders agreeing the Clean Car Standard is good policy, and just 12% disagreeing.[18]

There is no time for further delay. According to The Australia Institute, if the Government had introduced fuel efficiency standards in 2016, Australia would have saved more than $6 billion in fuel costs, and avoided 4000 megalitres of imported fuel and nine million tonnes of greenhouse gas emissions – similar to the emissions footprint from domestic aviation.[19]

The longer Australians have to wait for strong mandatory FES, the longer they are locked into substantially higher fuel costs and carbon emissions, with limited access to electric models.

[16] DCCEEW (2022) https://www.dcceew.gov.au/sites/default/files/documents/australias-emissions-projections-2022.pdf
[17] Australia Institute (2022) https://australiainstitute.org.au/wp-content/uploads/2022/04/P1036-Over-a-barrel_liquid-fuel-security-WEB.pdf
[18] Electric Vehicle Council (2023) https://www.miragenews.com/new-zealands-fuel-efficiency-standards-popular-974520/
[19] Australia Institute (2022) https://australiainstitute.org.au/wp-content/uploads/2022/08/P1269-Fuel-Efficiency-Standards-WEB.pdf

General Questions

Guiding principles

- **Are these the right guiding principles? Are there other principles that you think we should keep in mind?**

The SEC recommends explicitly linking the guiding principles to achieving Australia's Paris Agreement commitments. The core guiding principle in the development of FES should be to reduce emissions from light vehicles in line with what is needed to meet national emissions reductions targets and limit global warming to 1.5°C.

Additionally, the guiding principles should acknowledge the necessary role of renewable energy generation in decarbonising passenger vehicles, and the guiding principle of transparency should be expanded to include data transparency, noting that a FES should be based on granular, transparent, and publicly accessible data.

Design assumptions

- **Are there any design assumptions that you think will put at risk the implementation of a good FES for Australia?**
- **Are the exclusions for military, law enforcement, emergency services, agricultural equipment and motorcycles the right ones?**

Design Assumptions

The SEC welcomes the design assumption that second hand electric vehicles would be included under a FES. According to the Consultation Document, standards would apply to vehicles entering the Australian market for the first time, including second hand vehicles imported and registered in Australia for the first time.[20] This would include used vehicles imported for immediate sale, thus allowing importers of second-hand electric vehicles to benefit from the scheme, potentially increasing access to affordable electric models.

We recommend extending the application to include converted electric vehicles. Standards should apply to vehicles converted to zero emissions and registered as zero emissions vehicles in Australia for the first time, so organisations specialising in electrification of near new vehicles can similarly benefit from the FES system, accelerating local production and retrofitting of the existing vehicle fleet.

We also recommend removing subjective and misleading language from the design assumptions of the Consultation Paper. Particularly, we recommend removing the sentence

[20] Page 12, Consultation Document.

"continued sale of vehicles Australians love, including utes and 4-wheel drives", and modifying the language used throughout the Consultation Paper that suggests heavy utility vehicles are innately part of Australian culture. For example:

- “vehicles Australians love, including utes, SUVs and 4-wheel drives”[21]
- “our market is unique and the mix of vehicle types demanded by Australian consumers differs from more densely populated countries with right hand drive vehicles”[22]
- “We are highly dependent on the types of cars, including the utes and 4-wheel drives that we drive in our day-to-day lives and, in many cases, to earn a living”[23]

This framing of heavier vehicles as loved, depended on, and demanded fails to acknowledge that policy settings influence consumer buying habits. Australia’s current vehicle fleet is a product of the historic lack of fuel efficiency standards and emissions reductions policies. It has been shaped by tax settings that incentivise the purchase of larger vehicles for small business owners and diesel fuel rebates.[24]

It is important that this flowery and irrelevant language, similar to the marketing approach taken by car manufacturers to sell their products, is removed from the Consultation Document and that it or similar emotive language not be used in future government documents, as the current framing is at odds with the guiding principle of effectively reducing transport emissions from light vehicles. The National Transport Commission has noted that the increase in sales of dual-cab utes and heavy SUVs in Australia has been eroding the emissions benefits of increased electric vehicles sales.[25]

Exclusions

Strict definitions of excluded vehicle types should be provided to prevent these provisions being exploited (for example, by falsely claiming a vehicle is ‘agricultural equipment’ in order to benefit from this exemption). Exclusions should be regularly evaluated (every 3 years) as specialised zero emissions vehicles become available.

[21] Page 19, Consultation Document
[22] Page 37, Consultation Document
[23] page 7, Consultation Document
[24] Australia Institute (2023) https://australiainstitute.org.au/post/suvs-driving-substantial-transport-pollution-research-report/
[25] National Transport Commission (2022) https://www.ntc.gov.au/sites/default/files/assets/files/Carbon%20Dioxide%20Emissions%20Intensity%20for%20New%20Australian%20Light%20Vehicles%202021.pdf

Technical Questions

Starting emissions level limit and approach

- **What should Australia's CO_2 FES targets be?**
- **How quickly should emissions reduce over what timeframe?**
- **Should the Australian FES start slow with a strong finish, start strong, or be a straight line or take a different approach?**

Australia's FES target should reach zero emissions from new vehicles by 2035 at the latest, and ideally before. Standards should be compatible with the Paris Agreement target of limiting global temperature rise to below 1.5°C and reaching net zero emissions economy-wide by 2050, which requires a target of 100% zero emissions vehicles sales by 2035 at the latest.[26]

The SEC recommends setting relatively ambitious targets early on then targeting close to linear rates of CO_2 emissions reduction. This approach recognises that Australia is starting from behind in terms of fleet emissions intensity, so ambitious short-term targets are necessary to achieve the primary objective of emissions abatement.

To achieve this, the Government could consider adopting the similar targets to New Zealand's Clean Car Standard[27] or following the International Council for Clean Transportation's world-class standards-aligned pathway.[28]

The FES targets should aim to catch Australia up to other car markets by 2030, putting Australia on track to match the vehicle fleet emissions performance of other jurisdictions including New Zealand, the European Union and the United States (California). In setting Australia's FES targets, we recommend the Federal Government focus on achieving similar fleet emissions performance of other nations, rather than matching their annual rate of improvement to avoid locking Australia into comparatively poor fleet performance.

We recommend FES targets be regularly reviewed and updated every three years to ensure targets remain ambitious and aligned with Australia's emissions reductions targets, our international climate commitments and the global decarbonisation task. The first review would be in 2026 for revisions to apply in 2027.

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[26] IEA (2022), page 55 https://iea.blob.core.windows.net/assets/ad8fb04c-4f75-42fc-973a-6e54c8a4449a/GlobalElectricVehicleOutlook2022.pdf
Transport and Environment (2018) https://www.transportenvironment.org/wp-content/uploads/2021/07/2018_11_2050_synthesis_report_transport_decarbonisation.pdf
[27] New Zealand Government (2021) https://www.beehive.govt.nz/sites/default/files/2021-01/Clean%20Car%20Import%20Standard%20Explainer_0.pdf
[28] ICCT (2022) https://theicct.org/publication/pv-australia-co2-standards-dec22/

Attribute-based emissions limit curve

- **Should an Australian FES adopt a mass-based or footprint-based limit curve?**
- **If Australia adopts a mass-based limit curve, should it be based on mass in running order, kerb mass, or another measure?**
- **Should Australia consider a variant of the New Zealand approach to address incentives for very light and very heavy vehicles? If so, noting that new vehicles that weigh under 1,200 kg are rare, where should the weight thresholds be set?**

The SEC recommends a footprint-based limit to prevent an incentive to supply larger or heavier vehicles and create an incentive for zero emissions vehicles suppliers to provide smaller vehicles.

In deciding which attribute to base a limit-curve on, Government should consider the advice of the ICCT of a footprint-based approach. The ICCT notes that a footprint-based limit curve creates a greater incentive for manufacturers to improve vehicle efficiency by weight reduction through innovative lightweight materials:

“The development of lightweight materials, such as ultra-high-strength steel, aluminium, plastics, magnesium, and carbon fibre, is progressing rapidly. Continued use of mass-based standards will discourage the deployment of these lightweight materials and result in a missed opportunity to significantly reduce fuel consumption and carbon emissions worldwide." [29]

It’s worth noting that, as an exporter of these commodities, Australia could benefit from wider global adoption of footprint-based FES that encourage use of lightweight materials.

Alternatively, if a mass-based limit curve is adopted the Government must address the incentive to supply very heavy vehicles, for instance by setting very high CO_2 targets for very heavy vehicles.

Multiple targets

- **Should an Australian FES adopt two emissions targets for different classes of vehicles?**
- **Is there a way to manage the risk that adopting two targets erodes the effectiveness of an Australian FES by creating an incentive to shift vehicle sales to the higher emission LCV category?**
- **Is there anything else we should bear in mind as we consider this design feature?**
- **Are there other policy interventions that might encourage more efficient vehicle choices?**

[29] ICCT (2010) https://theicct.org/wp-content/uploads/2021/06/ICCTpaper_sizewt_final.pdf

The SEC recommends a single limit curve and emissions target for all vehicle classes to limit the incentive to shift vehicle supply to heavier/larger vehicles, as per the advice of the ICCT. If a separate target for light commercial vehicles is established, SUVs should be classified as passenger vehicles, not light commercial vehicles, to prevent an incentive to shift vehicle supply to heavier SUVs.

A single emissions target that is attribute-based accounts for differences in vehicle type by setting less stringent targets for heavier or larger vehicles. If two emissions targets are adopted to further increase the gap between emissions targets for lighter/smaller and heavier/larger vehicles, there is a risk that suppliers will shift to the heavier/larger vehicle segment to capitalise on more lenient targets.

In the case that two emissions targets for different classes are adopted, SEC recommend that SUVs be grouped with passenger cars rather than light commercial vehicles. This is consistent with advice from the ICCT, that recommends a single emissions target and, in the case that two emissions targets are adopted, "designing one standard curve for all light-duty passenger vehicles under the 'M' category, including MA, MB, and MC, and a separate standard curve for light trucks that fall under the 'NA' category in the Australian Design Rule. This means keeping the same set of targets for all SUVs and passenger cars, including SUVs that are classified as off-road vehicles under the MC category." [30]

The ICCT notes that the classification of SUVs is particularly important in the Australian context, because they make up over half of new vehicle sales and are all imported.[31] In the United States, where SUVs are split between two emissions targets for the purposes of FES, supply has shifted to heavier SUVs, weakening the effectiveness of the standards.[32]

Additionally, if two targets are adopted for different segments, consider classifying utes/pickups with more than two doors as passenger vehicles to avoid suppliers shifting from passenger vehicles to light commercial vehicles, and ensure the difference between the targets is minimised to prevent an incentive to supply larger/heavier vehicles.

In conjunction with a FES, the Government should consider other policies to encourage efficient vehicle choice. Currently, The Electric Car Discount is the only federal EV subsidy. It exempts EVs from a 5% import tax (applicable to vehicles from countries that Australia does not have a free-trade agreement with) and exempts them from the fringe benefit tax where purchased as business fleets or through novating leasing packages/salary sacrifice. It should be noted that this is a regressive policy, benefiting those on higher incomes more, and is only available for

[30] ICCT (2023) https://theicct.org/wp-content/uploads/2023/04/Australia-segmentation_brief_final.pdf
[31] Ibid, page 7
[32] EPA (2022) https://www.epa.gov/system/files/documents/2022-12/420r22029.pdf
Also see: Gordon (2021) https://www.vice.com/en/article/3abk7b/bidens-new-fuel-economy-standards-still-allow-cars-to-pollute-more-if-theyre-not-called-cars

people in workplaces providing novated leasing arrangements - excluding pensioners, retirees, and unemployed persons.

Other policies should be considered, including EV subsidies and no-interest loans targeted at those on low incomes, a feebate scheme, removal of tax incentives for petrol and diesel vehicles (through fringe benefit tax and instant asset write off provisions). These should be accompanied by a broader transport decarbonisation strategy aimed at encouraging modal shift to active and public transport away from personal car use, and policies to decarbonise freight and non-road transport emissions. Additionally, a FES for medium and heavy vehicles should be considered.[33]

Credit banking, transferring and pooling

- **To what extent should the Australian FES allow credit banking, transferring and/or pooling?**
- **Should credits expire? In what timeframe?**

Flexible arrangements for suppliers to meet their targets should be included, including credit banking, transferring and pooling, provided the core goal of emissions reductions and energy efficiency improvement is achieved and potential loopholes are curtailed.

Australia's FES should include inbuilt flexibility in how manufacturers and suppliers meet their targets. Credits earned from over-complying with the standard should be able to be traded between manufacturers/suppliers and banked for future use.

The SEC recommends setting expiring dates for credits of no longer than 3 years (coinciding with review periods), so if any loopholes exist, credits gained by exploiting these loopholes would not continue to affect the standards by being banked indefinitely.

Multipliers for LZEVs (low and zero emissions vehicles)

- **Should an Australian FES include multiplier credits for LZEVs?**
- **If so, what level should the multipliers be, should they apply equally to both classes of vehicle (if adopted) and for how long should they apply?**
- **Should the total benefit available from these credits be capped?**
- **If not, should the Government consider another approach to incentivising the supply and uptake of LZEVs?**

[33] For other EV policy recommendations see: Smart Energy Council (2022) https://smartenergy.org.au/articles/national-electric-vehicle-strategy-submission-summary/

The SEC recommends excluding multiplier credits ('super credits') from an Australian FES to avoid undermining the effectiveness of the scheme in terms of emissions reductions. However, if super credits are used, we recommend they be capped, limited to particular zero emissions vehicle segments, sunsetted, and reported in a clear and transparent way.

Additionally, if super credits are included, we recommend they be designed as a policy lever for local industrial development rather than additional leniency for foreign car companies, by awarding credits based on local content and domestic manufacturing as well as vehicle emissions.

Super credits allow alternative fuel vehicles to effectively count as more than one vehicle, in order to incentivise their supply beyond what is required by the FES system. For FES developed when EVs were a relatively nascent technology, super credits were included to provide a boost to EV sales and encourage investment in alternative fuel technology. However, as noted in the Consultation Document, many major markets are now moving away from super credit arrangements. The EU will move from super credits to a different crediting scheme in 2025,[34] and the New Zealand Clean Standard, which took effect in 2023, does not include super credits.[35]

Including super-credits in FES risks weakening the effectiveness of the scheme. Suppliers that earn super credits can supply less efficient fossil fuel cars than they would otherwise be able to without exceeding their emissions target. They can therefore achieve their target on paper with minimal changes to the real-world emissions intensity of their fleet.

The International Energy Agency notes that "[w]hile separate [fuel efficiency] standards and zero-emission vehicles sales targets can reinforce each other, linking the two in a single regulation carries the risk of creating a regulatory loophole: zero-emission vehicle sales generate compliance credits, relaxing fuel economy standards for a manufacturer's remaining fleet."[36] Transport & Environment (a leading European clean transport think tank) and Greenpeace also warn against the use of supercredits, noting that more generous super credit proposals can reduce the fuel savings benefits of FES for drivers as well as emissions reductions benefits.[37]

The Global Fuel Economy Initiative (a partnership of six of the world's leading transport and energy organisations) also has highlighted the potential for super credits to act as a loophole. To align light-duty vehicle efficiency and greenhouse gas emissions with climate goals, they suggest that "[t]his loophole can be closed by phasing out multiple credits for zero-emission

[34] European Commission (2023) https://climate.ec.europa.eu/eu-action/transport-emissions/road-transport-reducing-co2-emissions-vehicles/co2-emission-performance-standards-cars-and-vans_en
[35] Waka Kotahi NZ Transport Agency (2023) https://www.nzta.govt.nz/vehicles/clean-car-programme/clean-car-standard/overview/
[36] IEA (2021) https://www.iea.org/reports/global-fuel-economy-initiative-2021/executive-summary
[37] Greenpeace and Transport & Environment (2013) https://www.transportenvironment.org/wp-content/uploads/2021/07/Briefing-Effect%20of%20supercredits2.pdf

vehicles as electric vehicle shares grow."[38]

The SEC recommends incentivising the sale of zero emissions vehicles and local content through direct subsidies rather than super credits. These should be targeted at particular groups (farmers, tradies, those on low incomes) or particular vehicle segments (electric utility vehicles, smaller electric vehicles, cheaper electric vehicles). Complimentary policies should seek to encourage local content production, for example though grants to build and expand domestic manufacturing of electric transport, component parts, charging infrastructure and batteries.

However, in the case that super credits are used, we recommend ensuring:

- They are capped
- Multipliers are kept relatively low
- They are not made available to hybrids or plug-in-hybrids, but limited to zero-emissions vehicles. Specifically, limited to vehicles that are not widely available in the Australian market, such as cheaper and smaller electric vehicles, and electric utility vehicles.
- Banking of super-credits is restricted.
- Super-credits are sunsetted no more than three years from the scheme's implementation.
- Super credits are used to incentivise local content, for example through a sliding-scale credit system based on local content/jobs impact, as recommended by Roev.[39]

Off-cycle credits

- **Should an Australian FES include off-cycle credits for specified technologies? If so, should the per-vehicle benefit be capped and how should an Australian FES ensure that off-cycle credits deliver real emissions reduction?**
- **Should the Government consider any other form of off-cycle credits for an Australian FES?**

The SEC recommends excluding off-cycle credits and air-conditioning credits from the FES.

Off-cycle credits are credits awarded for low-emitting or fuel-efficiency technology that is not measured in the vehicle testing cycle. The use of off-cycle credits within fuel efficiency standards risks undermining the goal of light vehicle emissions reductions if credits are awarded but no real emissions reductions occur, and if the use of credits is not transparent.

For example, Australia's voluntary fuel efficiency standards, operated by the Federal Chamber for Automotive Industries award off-cycle credits for all technologies that are already eligible for off-cycle credits in the EU and U.S. However, data is not publicly available on the use of these

[38] Global Fuel Economy (2021) https://www.globalfueleconomy.org/media/792005/wp22-vehicle-fuel-economy-in-major-markets.pdf
[39] See submission from Roev

credits, what they are credited for, or how they are banked or traded. This obfuscates the true emissions intensity profile of the vehicle fleet and has impacted the National Transport Commission's ability to report fuel efficiency comparisons.[40]

The Union of Concerned Scientists has criticised the U.S Fuel Economy Standards for awarding off-cycle credits for technologies that do not yield real emissions reductions.[41]

When should a FES start?

- **When do you think a FES should start?**
- **How should the start date interact with the average annual emissions ceiling?**
- **Should the Government provide incentives for the supply of EVs ahead of a FES commencing? If so, how?**

A FES should be legislated by the end of 2023 and in force by 1st January 2025.
Many of the vehicles sold today will stay on our roads for more than a decade, the average age of vehicles in Australia today.[42] Any delay to strong fuel efficiency standards therefore locks Australia into high fuel costs and emissions.

FES are in place in 85% of the car market, thus the range of vehicles required to meet these targets already exists and could be imported into the Australian market.

Suppliers and manufacturers will require a lead-in time to place orders. Given this, we recommend a start date of 1st January 2025 to provide time for suppliers to move old stock and place new orders. If absolutely necessary, Government could consider a phase-in/transition period, where penalties for non-compliance are waived or lowered during the first year of the scheme's operation – similar to the approach taken in New Zealand.

Penalties for each gram per kilometre

What should the penalties per gram be? Would penalties of A$100 per gram provide a good balance between objectives? What is the case for higher penalties?

The SEC recommends strong financial penalties for non-compliance. The penalty should significantly exceed the cost to suppliers and manufacturers of complying with the standard, and act as a strong incentive to bring more efficient and zero emissions vehicles to the Australian

[40] National Transport Commission (2021), Page 1, https://www.ntc.gov.au/sites/default/files/assets/files/Carbon%20Dioxide%20Emissions%20Intensity%20for%20New%20Australian%20Light%20Vehicles%202021.pdf
[41] Union of Concerned Scientists (2021) https://blog.ucsusa.org/dave-cooke/epa-cant-let-off-cycle-credits-become-an-off-ramp-for-automakers/
[42] ABS (2021) https://www.abs.gov.au/statistics/industry/tourism-and-transport/motor-vehicle-census-australia/latest-release

market. We recommend penalties similar to those in the EU (€95 per g/km target exceedance, or $197 expressed in Purchase Power Parity).

Penalties should be indexed to CPI annually and use a points system. Non-financial penalties could also be considered, including mandatory public announcement of non-compliance, and exclusion from Government fleet purchases.

As suggested above, financial penalties could be lowered the first year, to provide a transition period for suppliers/manufacturers.

Small volume and niche manufacturers

What if any concessional arrangements should be offered to low volume manufacturers and why? If so, how should a low volume manufacturer be defined?

Concessional arrangements for low volume manufacturers are appropriate, however we recommend the Government monitor and set minimum targets for the proportion of the vehicle fleet covered by the FES (for example, more than 98% of total sales).

Additionally, Government should ensure that concessional arrangements do not preclude low volume zero emissions manufacturers or zero emissions aftermarket conversion specialists from participating in the system (i.e - earning and trading credits for over compliance).

Information that suppliers will need to keep and supply

- **The Government is keen to ensure any regulatory administrative costs are kept to a minimum while ensuring that outcomes are robust. What should the department keep in mind in designing the system for suppliers to provide information and in relation to record keeping obligations?**
- **What should the reporting obligations be? What information should be published and how regularly?**
- **How long should suppliers keep required information?**
- **Is a penalty of 60 penalty units appropriate for this purpose?**
- **Should the regulator be the department? What other options are there?**

Similar to the New Zealand Clean Car Discount, information and support should be provided to vehicle suppliers to help them navigate the FES. The New Zealand scheme requires information to be kept by suppliers and a record of carbon dioxide accounts to be publicly available, including the actual average vehicle carbon dioxide emissions and the supplier's level of achievement (accounting for any credit transfers and deferral) of emissions targets.[43]

[43] New Zealand Legislation (accessed 2023) https://www.legislation.govt.nz/regulation/public/2022/0285/latest/LMS773954.html

Importantly, these are reported separately, making distinct the actual average CO_2 emissions and level of achievement (which includes the use of flexibilities).

Other regulatory mechanisms

- **Should the regulator be the department? What other options are there?**
- **How should the regulated entity be defined in an Australian FES?**
- **What reasons are there to depart from the standard regulatory tool kit for an Australian FES?**
- **Should an Australian FES use WLTP test results in anticipation of the adoption of Euro 6 and if so, what conversion should be applied to existing NEDC test results, or how might such a factor be determined?**

The SEC recommend the Department of Climate Change, Energy, the Environment and Water regulate FES, and an obligation be placed on the Minister for Climate Change to report on FES progress in the Annual Climate Change Statement to parliament.

We recommend the Worldwide Harmonised Light Vehicle Test Procedure (WLTP) be used rather than the New European Driving Cycle (NEDC) to better reflect real world driving conditions and minimise the gap between real-world emissions and the test-cycle/reported emissions.[44]In determining conversion factors Government should utilise existing advice, including the ICCT modelling for New Zealand on conversion factors[45]

[44] Australian Automobile Associate (2017) 'The real world driving emissions test' https://www.aaa.asn.au/wp-content/uploads/2018/03/Real-World-Driving-Emissions-Test-Summary-Report.pdf

[45]ICCT (2020) https://www.transport.govt.nz/assets/Uploads/NZ-conversion-factor-report_20210302_final-1.pdf