



Australian Electric Vehicle Association
www.aeva.asn.au

**The Fuel Efficiency Standard:
Response by AEVA to the Consultation Paper
30 May 2023**

1. About the Australian Electric Vehicle Association

The Australian Electric Vehicle Association Ltd (AEVA) is a volunteer-run, not-for-profit organisation dedicated to switching Australia's transport networks to electric drive as quickly as possible. We are electric transport advocates, and primarily represent the consumers and end-users of electric vehicle (EV) technology through dissemination of knowledge through lived experience. Formed in 1973, AEVA continues to serve as a vital public forum for Australians to learn about EVs and the enormous benefits the technology provides. We thank the Government for the opportunity to provide a response to the Consultation Paper.

2. Summary of our policy positions

Around the world, vehicle emissions standards (or fuel efficiency standards; FES) have been implemented with the express purpose of limiting the sale of polluting vehicles in that jurisdiction. In most cases, the emissions standard is steadily tightened, compelling vehicle manufacturers to continuously improve their offerings, driving down the overall emissions intensity of their fleet. In the European Union (EU), a fleet average emissions intensity of 95 g CO₂-e/km is currently set for passenger vehicles and 147 g CO₂-e/km for light commercial vehicles (vans and utes under 4.5 ton). This has had the impact of motivating manufacturers to produce more fuel efficient vehicles and EVs for sale in those markets. Crucially, it has steadily increased competition for specific vehicle segments, putting downward pressure on new EV prices. However, it has also somewhat perversely motivated certain manufacturers to redirect their more polluting models into markets which do not have these restrictions, like Australia. A mandatory emissions standard for Australia would close this loophole.

AEVA fully supports the introduction of a mandatory vehicle emissions standard, and improved access to a greater diversity of low- and zero emissions vehicles for a wide range of market segments. AEVA is supportive of extending the scheme to other vehicle classes including heavy goods vehicles, buses and motorcycles. Considering that the emissions from an internal combustion engine (ICE) motorcycle currently ranges from 60 to 130g CO₂-e/km it seems entirely feasible to include L-class vehicles in the scheme, in an effort to drive innovation in efficiency and eventually full electrification across the fleet¹.

AEVA believes a single standard covering both passenger vehicles and light commercial vehicles should be employed. In our view, creating two standards risks manufacturers redefining their passenger vehicle offerings as light commercial vehicles, and taking advantage of the less stringent emissions standard for their more popular models. In [the USA](#), this has fuelled substantial growth in less efficient, heavier, and ultimately [more dangerous](#) vehicles.

AEVA advocates for the adoption of the EU standard; 95 g CO₂-e/km for all new light vehicles. Our preference is for an easy to follow, yet ambitious standard with few exceptions. Light commercial vehicles such as dual-cab, four-wheel drives are serving as Australia's most popular family vehicles, meaning manufacturers are tending towards only offering heavier, more polluting options. We do appreciate the Government may encounter resistance to this position from certain sections of the automotive industry, but we simply point to the **current New Zealand standard**; its trajectory, timeline and framework are already in use. Being a closely related market with similar consumer trends, it **may serve as a useful template**.

By requiring automakers to achieve a *fleet average*, rather than a prescribed value for all new vehicles, manufacturers are still able to sell vehicles for key segments (such as utes, minibuses and vans) concurrently with zero emissions vehicles as they make the necessary transition to low and zero emissions vehicles. The higher profitability of larger and generally more polluting vehicles remains a significant impediment to reducing emissions, so a trajectory of increasingly stringent emissions targets should be employed to motivate change.

¹ We note that Suzuki Motorcycles [has discontinued sales of their flagship sports](#) motorcycle in Japan and the EU, in part due to tighter emissions regulations.

This standard may serve as a valuable timetable for the eventual phase-out of ICE vehicles. Several jurisdictions around the world have set a goal of [banning the sale of new ICE vehicles](#) by 2035. Clear targets like this create an unambiguous timeline for manufacturers to adjust. In Australia, the [ACT Government](#) has committed to not permitting the registration of new ICE passenger vehicles in the Territory from 2035.

AEVA would like to see a similar emissions standard applied to heavy goods vehicles. Heavy vehicles (>4.5 ton GVM) like trucks and road trains present a considerable challenge as they are moving variable masses of goods, changing their emissions intensity considerably. Vehicle tare mass also varies considerably, depending on the class of heavy vehicle, so a gross mass component would need to be included to account for variation in loads. The [European Automobile Manufacturers Association](#) found the average emissions intensity of the most common heavy vehicle class (5-axle, long-haul articulated tractor trailers) was 56.5 g CO₂/tonne-km. They also found little deviation from this mean, indicating competition in efficiency measures was already effective. While electrification of heavy vehicles is progressing well, the step changes in battery energy density required for full electrification are yet to be realised. For this reason, a longer timeframe for the total phase-out of ICE heavy vehicles may be necessary. **AEVA believes this highlights a significant opportunity for the decarbonisation of freight logistics by moving more goods by rail in the coming years, preferably using overhead electric power.**

Our key policy recommendations for the Australian vehicle emissions standard:

[1] AEVA believes the elimination of greenhouse gas emissions from the transport sector should be the primary goal of government action, achieved through a suite of measures including improved efficiency, substitution of modes, and full electrification of all transport sectors. These measures should be reviewed annually for progress.

[2] AEVA supports legislated, mandatory vehicle emissions standards for manufacturers of motorcycles, passenger *and* light commercial vehicles. We advocate the use of a fleet average of 95 g CO₂-e/km in 2024, reduced by 8.5 g CO₂-e/km every year until 2035, when all new light vehicles sold must be zero-emission in operation².

[3] AEVA also supports a legislated, mandatory emissions standard for road-going heavy vehicles (>4.5 tonnes GVM) of 56 g CO₂-e/km-tonne in 2024. This standard should be tightened by 2.6 g CO₂-e/km-tonne each year until 2045, when all new heavy vehicles sold must be zero emissions in operation³.

3. Responses to general policy questions

3.1 Guiding principles

The Government's guiding principles are that the standards must be:

- **Effective** in reducing transport emissions from light vehicles
- **Equitable** so all Australians can access the vehicles they need for work and leisure, and not unduly negatively impact any particular group of people or part of Australia
- **Transparent** and well explained to avoid unintended consequences
- **Credible** and **robust** by drawing on expert analysis and experience
- **Enable** vehicles with the best emissions and safety technology to be available to Australians.

[Question 1] Are these the right guiding principles? Are there other principles that you think we should keep in mind?

² Previous AEVA submissions assumed a 2023 commencement date. Assuming a revised 2024 commencement, the necessary step reduction in the target must now be 8.5 g CO₂-e/km per year.

³ Assuming a 2024 commencement date, the necessary step reduction must be 2.6 g CO₂-e/km-ton per year.

[Response]

AEVA broadly agrees with these principles. We note that the popularity of using light commercial vehicles as family cars is mostly enabled by other policies, particularly around taxation, but also culturally - manufacturers tend to extensively promote them ahead of more efficient alternatives. Such vehicles should not be immune to emissions regulations.

3.2 Design assumptions

The Government's assumptions are that an Australian FES will:

- Apply only to vehicles entering the Australian market for the first time, and will not apply to vehicles in the domestic used car market.
- Apply on average to vehicles sold, protecting "the continued sale of vehicles Australians love", providing "good incentives for suppliers to provide more efficient internal combustion engine technology", and "continue to allow the full range of vehicles to be sold on the Australian market".
- Apply to light vehicles, and will not apply to heavy vehicles, vehicles for military, law enforcement and emergency services use, agricultural equipment or motorcycles.
- Apply to vehicle suppliers, not motor vehicle dealers
- Be mandatory
- Be established in Commonwealth legislation
- Consider vehicle affordability, lifetime cost and model availability "to make sure that Australians can still get the cars they need".

[Question 2] Are there any design assumptions that you think will put at risk the implementation of a good FES for Australia?

[Question 3] Are the exclusions for military, law enforcement, emergency services, agricultural equipment and motorcycles the right ones?

[Response]

AEVA believes that the need to reduce transport emissions across all segments outweighs the principle of protecting 'the continued sale of vehicles Australians love'. It even outweighs the principle of 'allowing a full range of vehicles to be sold on the Australian market'. As noted in the introduction, AEVA wishes to see the scope of an Australian emissions standard encompass passenger, light commercial, and heavy vehicles as well as motorcycles. We note that the EU standard covers heavy vehicles, and we also note the recent Advanced Clean Fleets Regulation⁴ in California, under which manufacturers may sell only zero emissions medium- and heavy-duty vehicles from 2036.

Any strategy which seeks to create exceptions or exclusions for certain types of vehicle will risk undermining the intention of the emissions standard. Manufacturers have the engineering skills, expertise and capacity to deliver a zero emissions option for almost all vehicle types; they just need the motivation to do so.

3.3 Design features

In terms of the targets, the Consultation Paper:

- Notes that Australia is starting from behind, in that new vehicles sold in Australia in 2021 have an average CO₂ intensity of 173.6 g CO₂/km.
- Asserts that 'immediately adopting an annual emissions ceiling from another market would likely disrupt the Australian vehicle market by not providing sufficient time for suppliers to establish a pipeline to Australia of vehicles fitted with more efficient ICE technologies and LZEVs'.

⁴ Advanced Clean Fleets Regulation Summary. <https://ww2.arb.ca.gov/resources/fact-sheets/advanced-clean-fleets-regulation-summary>

- And, notes that comparable markets have set ambitious emissions reduction trajectories in their emissions standards, and implies Australia may need to match these trajectories.

[Question 4] Are there any particular FES features that you think we need to take particular care with?

[Response]

AEVA recognises that there are two design imperatives which have potential to conflict. One imperative is to reduce transport emissions rapidly, because the resulting climate impact is determined by the total area under the emissions curve. A second imperative is to create a workable pathway for suppliers to clean up their vehicle offerings. The Australian Government may look to emissions standards as applied in comparable markets like New Zealand – these are standards which international vehicle suppliers are already obligated to meet.

Ambitious targets are necessary considering the current poor standing of the Australian passenger vehicle fleet. An unwillingness by some manufacturers to produce more low- and zero emissions vehicles across all segments should not be rewarded with concessions and carve-outs. Australia should seek to harmonise our transport emissions reduction timeline with international best practice.

3.4 Standards trajectory

The Consultation Paper suggests that there are three options:

- Cautious start - finish strong;
- Start strong; and
- Straight line.

[Question 5] What principles should we consider when setting the targets?

[Question 6] How many years ahead should the Government set emissions targets, and with what review mechanism to set limits for the following period?

[Question 7] How should the Government address the risks of the standard being found to be too weak or too strong while it is operating?

[Response]

Australia must ensure that all new passenger vehicles sold in 2035 are emissions-free in operation. This means steadily tightening the emissions standard over the next 12 years. Adopting anything less than a linear trajectory will compromise the primary objective of eliminating greenhouse gas emissions in the transport sector.

A target of 0 g CO₂-e/km by 2035 sets the necessary course, and all efforts should be made to minimise accumulated emissions (that is, the area under the emissions-time curve). A linear trajectory should really be considered to be the *minimum* effort.

AEVA would support a comprehensive review after five years (as applies in New Zealand) or sooner if justified by market conditions or unexpected implementation issues. Penalties for non-compliance risks increasing the cost of vehicles, which should put further pressure on manufacturers to offer more efficient vehicles.

4. Responses to technical questions

4.1 Targets and trajectory

[Question 8] What should Australia's CO₂ FES targets be?

[Question 9] How quickly should emissions reduce over what timeframe?

[Question 10] Should the Australian FES start slow with a strong finish, start strong, or be a straight line or take a different approach?

[Response]

AEVA believes a fleet-wide average of 95 g CO₂-e/km should commence in 2024, with a straight-line reduction trajectory of 8.5 g CO₂-e/km every year until 2035, when all new light vehicles sold must be zero emissions in operation. A linear reduction pathway should be considered the minimum requirement, as a slow start will only result in higher accumulated emissions overall. We recognise that the Government may experience resistance from industry, particularly manufacturers who have been slow to embrace low- and zero emissions vehicles. We simply point to the New Zealand standard, and its trajectory, as a framework which already applies in a closely related market.

We also note that the current New Zealand trajectory actually decreases more rapidly than would be implied by a straight line approach. Under the NZ scheme, the emissions standard for light vehicles is 145 g CO₂-e/km in 2023, and is scheduled to fall to 63 g CO₂-e/km by 2027. If this were continued in a straight line, the New Zealand standard would be zero operational emissions by 2030.

Consequently, if the New Zealand standard or similar were adopted in Australia, we suggest the Department work closely with the New Zealand Ministry of Transport, in an effort to harmonise the trajectories of both nations over the coming decade.

4.2 Limit curves

The Consultation Paper notes that overseas markets use limit curves as part of their emissions standard, to avoid penalising a manufacturer which sells heavier and more polluting vehicles. The Consultation Paper notes that the EU, United Kingdom and New Zealand all use a mass-based limit curve.

[Question 11] Should an Australian FES adopt a mass-based or footprint-based limit curve?

[Question 12] If Australia adopts a mass-based limit curve, should it be based on mass in running order, kerb mass, or another measure?

[Response]

Our responses to Questions 2, 3 and 4 also apply here. AEVA would prefer that limit curves were not used at all. Lighter vehicles should be encouraged in general as they are safer for other vulnerable road users, take up less space, require less energy to manufacture, and produce fewer emissions in operation. If a manufacturer still sought to offer a heavier ICE vehicle, they could either a) sell fewer of them at a higher price; b) sell the same number while increasing EV models; c) make the vehicle in question a hybrid, plug-in hybrid or electric vehicle; or d) some combination of the above. The purpose of a clear emissions standard is to drive innovation in cleaner vehicle technologies, and push transport-related emissions towards zero.

AEVA also recognises the other key design imperative is to create a clear, easily understood, and workable pathway for suppliers who specialise in vehicles which are certain to exceed the emissions standard. For guidance, Australia may choose to follow the New Zealand approach of using a mass-based limit curve with a fixed upper limit. A fixed limit at the heavy end (above 2,000 kg) avoids providing concessions to especially heavy vehicles, while at the lightweight end (below 1,200 kg) it avoids being so stringent that non-compliance is likely.

It must be noted, though, that the New Zealand mass limit curve flattens at the heavy end only for passenger vehicles and *not for light commercial vehicles*. This promotes the prevalent use of dual-cab utes and four-wheel drive SUVs as family cars. This flaw should not be replicated in Australia, should the New Zealand approach be adopted. We discuss this further in our response to Questions 13-17.

In response to Question 12, we note that 'running order' is the mass of the vehicle unoccupied and unladen but complete with fuel, coolant, lubricant, tools and spare wheel, if provided as standard equipment. This measure seems least likely to be gamed. A vehicle could be built as a lightweight offering, but engineered to be capable of carrying a considerable load - an approach which should not be penalised.

4.3 Vehicle classes

The Consultation Paper is asking whether there should be different targets for passenger and light commercial vehicles.

[Question 13] 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?

[Question 14] Should an Australian FES adopt two emissions targets for different classes of vehicles?

[Question 15] 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?

[Question 16] Is there anything else we should bear in mind as we consider this design feature?

[Question 17] Are there other policy interventions that might encourage more efficient vehicle choices?

[Response]

AEVA pushes strongly for a single emissions standard for all light vehicles. Exemptions for light commercial vehicles only makes reducing transport emissions harder in the longer term, and pushes the timeframe for widespread adoption of zero-emission vehicles into the 2040s. Vehicles under 1,200 kg generally have competitive tailpipe emissions, so the challenge is primarily for heavier classes of vehicles to achieve lower emissions intensities through new propulsion technologies or by simply making fewer of them.

The unfortunate trend of heavier, less efficient vehicles in the commercial class being used as ordinary passenger vehicles should be discouraged through a single emissions target. However, the Australian model may look to New Zealand for guidance - with the exception that both categories (passenger and commercial) should have the same 1,200 kg and 2,000 kg breakpoints in their limit curves. Indeed, AEVA recommends collaborating with the New Zealand Ministry of Transport to reconsider the light commercial vehicle concessions, and harmonise the standards with a more effective regional model.

While other policy recommendations are beyond the scope of an emissions standard, we continue to advocate for policies which advance zero emissions transport. Stamp duty exemptions, differential treatment for the Luxury Car Tax, Fringe Benefits Tax exemptions and government fleet EV purchasing will all play a large role in driving change. AEVA believes any such incentives should extend to electric motorcycles, scooters, e-bikes and cargo bikes, as these light EVs are cheaper, have substantially lower embedded emissions and further reduce congestion in our cities.

AEVA is a strong supporter of the parallel import scheme for near-new used electric vehicles, and the specialist and enthusiasts vehicles scheme (SEVS). Used EVs from Japan, UK or any other right-hand-drive market represent some of the most affordable, practical EVs for Australians. All vehicles imported into Australia under these schemes should also be subject to the same, current emissions standard as those entering the country by regular channels.

We also note that instant asset write-off arrangements for eligible businesses are perversely subsidising heavy, and often inefficient, commercial vehicles which invariably get used as family cars. These arrangements should be stopped, or at the very least only apply to zero emission light commercial vehicles where a clear operational requirement exists, such as for tradespeople and mobile workshops.

Finally, a universal, federally collected, mass-multiplied road user charge (RUC) should be enacted for all road-going vehicles once EVs hit 30% of all new vehicle sales. This will enable ongoing revenue for land transport infrastructure and maintenance, while sufficiently motivating passenger vehicle buyers to reconsider heavier, less efficient vehicles. [AEVA has long advocated](#) for more accurately costing roads and the often externalised impact they have on society, be it air and waterway pollution, habitat loss or traffic crashes. Such an RUC does not discriminate based on fuel source, but does ensure those who drive heavier vehicles further are charged commensurately.

4.4 Other flexibility mechanisms

The Consultation Paper notes that some markets adopt flexibility mechanisms such as:

- Allowing suppliers to form a pool to meet the fuel efficiency targets collectively
- Allowing suppliers to accrue credits if they do better than required by the standard, and then allowing overachievers to sell credits to under-achievers or to bank the surplus credit for future years.

[Question 18] To what extent should the Australian FES allow credit banking, transferring and/or pooling?

[Question 19] Should credits expire? In what timeframe?

[Response]

AEVA believes the penalty for underachievement and reward for overachievement should be sufficient to motivate both technological and cultural change. The final structure of the mechanism should allow an unambiguous pathway for manufacturers to improve the emissions intensity of their fleet. This might mean a significant penalty in the first few years, but the opportunity to improve over the coming decade as their low- and zero emissions offerings become available.

Overachievement credits should be valid for only one year, and inter-year banking of credits should not be permitted. Underachievement penalties should persist, requiring settlement within 12 months. This would provide additional flexibility for firms still scaling up their low- and zero emission offerings.

AEVA has no strong views on whether suppliers should be able to pool and trade credits with other brands. An exclusively EV brand might sell credits to an underachieving ICE brand, just as they would if they were manufacturing both ICE vehicles and EVs. Such transferred credits could still be valid for only one year; all that changes is who uses them.

4.5 Bonus credits

The Consultation Paper notes that some markets allow suppliers to reduce their reported average emissions through the use of new and innovative technologies. Such “bonus credits” may include:

- “Super credits” for powertrains such as battery electric, plug-in hybrid and hydrogen fuel cells
- Credits for technologies that improve fuel efficiency or reduce the global warming impact of the vehicle in real world conditions not captured in official lab tests, called ‘off-cycle credits.’
- Credits for low global warming potential air conditioning refrigerant.

[Question 20] Should an Australian FES include multiplier credits for LZEVs?

[Question 21] 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?

[Question 22] Should the total benefit available from these credits be capped?

[Question 23] If not, should the Government consider another approach to incentivising the supply and uptake of LZEVs?

[Response]

AEVA recommends that ‘multiplier credits’ not be used in the Australian FES. The use of super credits in the EU standard had a specific purpose, which was to encourage early EV production and to bring those vehicles to market. That objective has been achieved and EVs are now being manufactured at scale. The continued use of multiplier credits risks distorting the scheme, allowing participants to stack their model lineup with a small number of EVs to offset a larger number of more polluting models. Offsets in general should not be used, as these rarely result in *actual* emissions reductions, just a deferral of responsibility.

4.6 Off-cycle credits

The Consultation Paper notes that some markets allow ‘off-cycle credits’ to provide credit for approved technologies which reduce the vehicle’s overall CO₂ emissions in a way that is not measured in the regulated fuel consumption test. Examples are high efficiency exterior lights, active aerodynamic improvements, engine stop start, active seat ventilation and solar reflective paint, among others.

[Question 24] Should an Australian FES include off-cycle credits for specified technologies?

[Question 25] If so, should the per-vehicle benefit be capped and how should an Australian FES ensure that off-cycle credits deliver real emissions reduction

[Question 26] Should the Government consider any other form of off-cycle credits for an Australian FES?

[Response]

The technologies likely to fall into the ‘off-cycle’ category only have a small impact on vehicle emissions in operation. Manufacturers are already able to sell a standard vehicle with aerodynamic wheels or low-resistance tyres, with the customer free to remove these features post-purchase. For this reason a maximum of 7 g CO₂-e/km is permitted in the EU standard. Credits of a similar magnitude may be considered by Australian regulators if deemed necessary.

4.7 Refrigerants

The Consultation Paper notes that some markets allow credits for the adoption of low global warming potential air conditioning refrigerants.

[Question 27] Should an Australian FES include credits for using low global warming potential air conditioning refrigerants, and if so, for how long should this credit be available?

[Question 28] Could the issue of high global warming potential refrigerants be better dealt with by another policy or legislative framework?

[Question 29] If such a credit is permitted, should the emissions target be lowered to ensure consumers realise the fuel cost savings and EV availability benefits of a FES?

[Response]

As per section 4.6, the emissions associated with refrigerants are negligible in comparison to those due to vehicle propulsion. Regardless, some refrigerants still have a significant global warming potential (GWP) and their use continues to be tightly monitored. AEVA’s preference would be to encourage low GWP refrigerants through mechanisms other than the FES. If refrigerants are already well regulated through the Montreal Protocol, it need not be included in this scheme.

5. Start date, penalties and governance

5.1 When should the FES start?

[Question 30] When do you think a FES should start?

[Question 31] How should the start date interact with the average annual emissions ceiling?

[Question 32] Should the Government provide incentives for the supply of EVs ahead of a FES commencing? If so, how?

[Response]

AEVA understands that a short grace period, perhaps no more than three months after the legislation is tabled, may be necessary to give manufacturers and importers time to understand their obligations and plan their pathway to zero emissions vehicles by 2035. International manufacturers are already selling low- and zero emissions vehicles into major markets where fuel efficiency standards are in place, including the EU, the United States, China, South Korea and New Zealand. Introducing a fuel efficiency

standard in Australia, which is harmonised to an existing international standard such as that of the EU, presents no impediment to rapid compliance. Greenhouse gas emissions will only climb higher unless immediate action is taken to decarbonise the transport sector.

The Australian Government need not provide any specific incentives for manufacturers to offer EVs outside of existing schemes, as manufacturers are unable to keep up with demand currently. International experience demonstrates that the risk of financial penalty, and the reward of a saleable emissions credit should be compelling enough.

5.2 Penalties

The Consultation Paper states that penalties for non-compliance with the FES “can be effective at influencing the average level of fuel efficiency of vehicle models imported into Australia”. It includes a table showing penalty levels which apply in other countries, and observes that “international experience suggests that the penalties should be set between AUD\$90 – AUD\$150 per gram per kilometre: “the number of vehicles they supply multiplied by the fleet CO₂ grams per kilometre of excess emissions, multiplied by the penalty value”. For example, for a supplier that sold 1,000 vehicles, with an average of 2 grams per kilometre of excess emissions, and if the penalty was AUD\$100 per gram, the total penalty would be AUD\$200,000.

[Question 33] 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?

[Question 34] What if any concession arrangements should be offered to low volume manufacturers and why? If so, how should a low volume manufacturer be defined?

[Response]

The penalty should be in line with those imposed in other jurisdictions, such as the EU and New Zealand. It is essential that the intent of the FES not be undermined if vehicle suppliers find paying the penalty preferable to meeting the standard. Accordingly, AEVA suggests the option of a further penalty (such as a loss of a licence to operate or prohibiting the sale of vehicles which exceed the annual target) be imposed in the event of persistent non-compliance over a two or three year period. At the same time, the penalty shouldn't be so high as to force manufacturers out of business. The motivation must be to offer cleaner vehicles into the Australian market.

A penalty of \$100 per gram over AEVA's preferred limit of 95 g CO₂-e/km would see Australia's top three automotive sellers liable for between \$300 million and \$2 billion in penalties in the first year. Conversely, a supplier dealing exclusively in EVs might earn up to \$300 million per year in credits, which may then be sold to underachievers. If an underachiever were to commit to reducing fleet average emissions intensity by about 40% year-on-year, that liability becomes a credit within four years. AEVA believes these penalties are substantial enough to motivate change, while an affordable pathway to zero-emission vehicles is entirely feasible.

AEVA sees no need for exceptional arrangements for low volume manufacturers or suppliers if credit trading is allowed. Importing just one new high-emitting vehicle would require the purchase of sufficient credit from a supplier with surplus emissions credits. Similarly, the importation of a single low- or zero emissions vehicle would attract an emissions credit which could be traded.

5.3 Information disclosure

The Consultation Paper suggests that suppliers would have to report annually the following data to the Government: number of vehicles sold; CO₂ emissions per km for each vehicle; and the specifications of each vehicle (mass, for example).

[Question 35] 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?

[Question 36] What should the reporting obligations be? What information should be published and how regularly?

[Question 37] How long should suppliers keep required information?

[Question 38] Is a penalty of 60 penalty units appropriate for this purpose?

[Response]

AEVA supports annual reporting of sales, emissions testing and other regulatory compliance. The results are currently public knowledge, but the Government may wish to table the results in the annual National Greenhouse Accounts and/or BITRE yearbooks. Penalties for non-compliance with reporting should be consistent with other regulatory requirements imposed on businesses and organisations.

5.4 Governance arrangements

The Consultation Paper proposes that the Department of Infrastructure, Transport, Regional Development, Communications and the Arts be the FES regulator. The Department already has a range of regulatory functions covering land transport, aviation and maritime, and has a deep knowledge of the transport sector.

The paper notes that the regulated entities may be a subsidiary of a global manufacturing group, or an independent distributor that manages the sale of vehicles on behalf of one or more manufacturers. It suggests it may be appropriate to apply the standard to the entity which manages the distribution and sale of vehicles in Australia (that is the manufacturer's Australian distributor, referred to as 'suppliers' in the Consultation Paper).

[Question 39] Should the regulator be the department? What other options are there?

[Question 40] How should the regulated entity be defined in an Australian FES?

[Question 41] What reasons are there to depart from the standard regulatory tool kit for an Australian FES?

[Question 42] 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?

[Response]

AEVA accepts that the Department would be an appropriate FES regulator for the reasons given in the Consultation Paper. Another option is the Clean Energy Regulator given its existing operational role in reducing carbon emissions. Annual data on vehicle emissions should be compiled and presented with BITRE yearbooks, and/or the National Greenhouse Accounts.

AEVA agrees it would be sensible for the Australian distributors of internationally manufactured vehicles to be the regulated entities as opposed to individual dealerships or franchisees. The same should apply to manufacturers in Australia, should they flourish here.

An Australian emissions standard should use WLTP test results. The manufacturers already use WLTP when seeking type approval for sale. NEDC test results are widely regarded as optimistic and should not be used. The Government, through the arm of the Environmental Protection Authority, should also retain the power to conduct additional, or follow-up testing to ensure on-going compliance.

Concluding remarks

The AEVA is pleased to see a concerted effort by the Commonwealth to introduce mandatory vehicle emissions standards for the Australian light vehicle market. The design and implementation of the scheme will have a significant impact on the availability and diversity of electric light vehicles, while reducing the overall transport emissions component of Australia's greenhouse gas accounts.

An ambitious target with unambiguous goals is essential. A target of 95 gCO₂-e/km is in line with that of the European light vehicle standard. The standard must be tightened by 8.5 g/km each year to ensure all new vehicles sold by 2035 operate emissions-free.

The target standard should apply to all light vehicles, rather than set an exclusion for light commercial vehicles. These heavy, polluting vehicles have become Australia's most popular family car through a range of tax incentives as well as aggressive marketing by their manufacturers. If these kinds of vehicles are to remain as popular as they are, they must at least meet the minimum emissions intensity set for that year.

These settings, along with ongoing support for decarbonising the transport sector more broadly, will provide a meaningful shift in Australia's transport emissions profile. The prevention of polluting vehicles from entering the Australian market, and the enhanced competition this allows for will give Australians cleaner vehicle options. By harmonising our vehicle emission standards with those of New Zealand and the EU, Australia can rightfully claim to be doing its part in a global effort to eliminate greenhouse gas emissions.

We thank the government again for the opportunity to contribute to this essential matter.

Sincerely,

A handwritten signature in black ink, appearing to read 'Chris Jones', with a stylized flourish at the end.

Chris Jones
National President, AEVA.