



Nissan Australia's submission to the Australian Government's Fuel Efficiency Standard consultation paper

May 31, 2023

To whom it may concern,

I am writing in response to the Federal Government's recent call for submissions regarding the development of a Fuel Efficiency Standard for Australia. We support and recognise the efforts made by the Federal Government to date, culminating in the recent release of its National Electric Vehicle Strategy and set of policy measures, headlined by a Fuel Efficiency Standard to drive the Australian market forward in the transition to a more electrified, lower emission transport sector.

Nissan Australia welcomes the opportunity to provide input into the development of both the National Electric Vehicle Strategy and now the Fuel Efficiency Standard, and looks forward to working collaboratively with the Government in order to provide Australian consumers with the vision, certainty and right mix of products to support the uptake and transition to electrified vehicles moving forward.

Nissan are long term advocates and early innovators in the EV space with the Nissan LEAF being sold globally since 2010 and launched locally in 2012. It is through this experience that Nissan has been leading the market in developing a strong local EV ecosystem including;

- Enabling and driving several Australian first Vehicle-to-Grid projects to demonstrate the opportunity electric vehicles like the Nissan LEAF can represent to both the transport and energy sectors alike (see [here](#) for more information),
- Being the only mainstream brand maintaining a local manufacturing presence with our Nissan Casting Australia Plant (NCAP) located in Dandenong South, Victoria. NCAP provides component design input for high-pressure die-casting and manufacture of electric vehicle components for the world's first mass-market EV, Nissan LEAF, and other global EVs and hybrid vehicles.
- Supporting and nurturing 2nd life EV battery opportunities for industrial applications, such as the Nissan NODE project currently underway at NCAP (see [here](#) for more information).

Given this extensive and long-standing experience, we are very aware of how gradual the EV transition has been to date, however there is strong momentum building and with aligned market and government efforts - we are extremely buoyant about the future.

Nissan supports a clear national strategy that provides required market direction to spur on greater model availability and market investment.

A missing piece for Australia has been the lack of clarity around vehicle emissions / transition targets. Such targets are critical as they provide the market with certainty on which to base future product decisions.

But it is a balancing act to get right for Australia and will take time initially to generate momentum due to product development cycles.

The auto industry works on long planning lead times, so we need to consider that decisions taken today do not impact the product that is in market/launching soon, rather they impact planning cycles for vehicles that are still 5+ years out from launch.

With clear long-term emissions targets, we can then ensure we are delivering the vehicle range that both meets the market objective and suits the needs of Australian drivers.

Not all segments of the market will move at the same pace, and Australia has unique vehicle requirements that must be carefully considered.

Whilst there is a clearer path for vehicles/segments that are also popular in other Right Hand Drive jurisdictions, such as UK with passenger vehicles, small/medium SUV's and vans, vehicle tastes, usage and requirements of Australian buyers are different to other markets with respect to prevalence of Utes and large diesel SUVs. This is an important point to consider – with the LCV / Large SUV market likely to be the hardest (and therefore latest) segment to decarbonise.

This is primarily due to technical limitations in the EV technology of today, which does not provide customers with a comparable product performance at an accessible price point, specifically in the space of Utes and Large SUVs.

At Nissan, we see the solution to this challenge as being the development of All-Solid State Battery (ASSB) technology. The breakthrough battery technology will provide the required flexibility, energy density and charging performance to support the rigors and demands of a truly capable and practical off road SUV and/or Ute - particularly in areas of driving range, charging speeds, towing/load carrying capacity and price.

In our long-term global vision, Nissan Ambition 2030, we announced that, by FY2028, we aim to launch an electric vehicle (EV) with all-solid-state batteries (ASSBs) that have been developed in-house.

ASSBs are expected to be a game-changing technology for accelerating the popularity of EVs. They have the potential for energy densities approximately twice that of conventional lithium-ion batteries, significantly shorter charging time due to superior charge/discharge performance, and lower cost realized by using less expensive materials. With these benefits, Nissan expects to use ASSBs in a wide range of vehicle segments, including pickup trucks, making its EVs more competitive.

Nissan is conducting a wide range of R&D activities, from molecular-level battery material research to electric vehicle development, and even city development using EVs as storage batteries. Utilizing the knowledge gained from past experience, and our own prototype production facilities for all-solid-state batteries, we will be stepping up development with the goal of practical implementation.

Based on this development timeframe, a range of technologies will likely be required to meet the needs of Australian consumers in these segments for some years to come.

Whilst there are some 'headwinds' from both a technical and product availability standpoint today, this should not be a reason to halt progress or ambition, rather it is a factor that requires strong consideration when setting the trajectory at a segment level.

What is required today is a clear roadmap for the future to ensure Australian consumers get access to the right current and emerging vehicles, whilst ensuring that the development of these future technologies is prioritised. This will enable a timely and orderly transition for the Australian market, given the lengthy product planning cycles.

Improved fuel quality and harmonisation of vehicle standards should be an immediate priority to improve both accessibility and affordability of electrified technologies for Australian consumers.

One of the key priorities in the immediate term should be harmonisation of Australia's fuel quality and vehicle type approval standards with other key overseas jurisdictions in order to secure the latest and most efficient vehicles available overseas in a timely manner.

Australia not only misses out on the same depth and breadth of EV products offered in other markets, but we also miss out on the latest and most efficient ICE and hybrid powertrains due to the lower quality of our fuel. This means that the average emissions-intensity for passenger vehicles is significantly higher than equivalent overseas models. Therefore, it is important that fuel efficiency standards be developed in conjunction with a corresponding fuel quality roadmap.

At present, Australia does not accept 'Type Approved Vehicles' from other major markets to be supplied in full volume. This means that Australian bound vehicles require unique development and investment due to unique ADR requirements. Ultimately, this leads to further delays and increased costs to secure models that are available in other comparable right hand drive markets. The presence of unique ADRs results in additional development time and cost which typically results in delays in introducing models to the Australian market or simply the product not being made available for Australia.

The benefits of supporting electric vehicle uptake are numerous and the Fuel Efficiency Standard is the single most important piece to drive this uptake.

Based on our experience from 10 years in the electric vehicle market locally, as well as recent experiences in other comparable overseas markets, it is Nissan's view that Australia's policy framework with respect to electrified cars has been out of step with the world's leading economies to date. The long awaited release of a National Electric Vehicle strategy and this Fuel Efficiency Standard is the opportunity for Australia to set ourselves on a similar path to that of many other OECD nations.

As a manufacturer, we are acutely aware that we play a key role in bringing choice and availability to the market. The private sector can support the build-up of infrastructure and services. However, the industry needs the government as another arm of support by giving direction and confidence to consumers.

Thank you again for the opportunity to submit our response to the Fuel Efficiency Standard consultation paper. We look forward to working with all levels of government and industry in supporting the ongoing transition toward electrified transport and sustainable energy solutions.

For any further questions relating to our submission, please contact [REDACTED]

Kind regards,

[REDACTED]
Adam Paterson
Managing Director
Nissan Motor Co (Australia) Pty Ltd

About Nissan

Nissan is a global full-line vehicle manufacturer that sells more than 60 models under the Nissan and INFINITI brands. As part of the 'Nissan Next' plan, globally the company plans to extend its leadership in electric vehicles, symbolised by the world's first mass market all-electric vehicle in history, the Nissan LEAF and continuing with the Nissan ARIYA SUV – launched into key global markets in 2022.

In January 2021, Nissan announced our goal to achieve carbon neutrality across the company's operations and the life cycle of its products, including raw material extraction, manufacturing, use, and the recycling or reuse of end-of-life vehicles by 2050.

Nissan will pursue further innovations in electrification and manufacturing technology to make progress on the company's carbon neutrality goal in the following strategic areas:

- Battery innovations including solid-state and related technologies to develop cost-competitive and more efficient electric vehicles;
- Further development of Nissan's e-POWER electrified powertrains to achieve greater energy efficiency;
- Development of a battery ecosystem to support decentralised, onsite power generation for buildings with renewable energy sources. Nissan anticipates increased collaboration with the energy sector to support the decarbonisation of power grids;
- Manufacturing process innovations to support higher productivity in vehicle assembly, starting with the Nissan Intelligent Factory initiative. The company will also strive for greater energy and material efficiencies to support longer-term carbon neutrality ambitions.

Nissan's global headquarters is in Yokohama, Japan, and has a global workforce of 247,500.

Nissan Australia's response to questions raised in consultation paper:

General questions

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

Nissan agrees with the governments proposed guiding principles that a FES needs to be Effective, Equitable, Transparent, Credible and Robust, whilst also Enabling the best globally available emissions reducing technologies to be made available in Australia.

In addition to the above, it is important that a scheme maintain a strong consumer focus to ensure that all Australian's are able to access a range of products that are both fit for purpose and accessible.

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

Nissan aligns with the design assumptions outlined in the paper overall. In particular, Nissan highlights the importance to the FES being;

- considerate of vehicles Australian consumers 'love',
- incentivising more efficient technologies across the board and
- considerate of affordability, lifetime costs and model availability.

These key points are of critical importance in the design of a successful scheme and ensures strong progress can be achieved whilst recognising the unique factors within the Australian market.

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

Given the particular use cases for these vehicles, Nissan has no objection to such exclusions. However, for government fleets; it would be prudent that due consideration should be given to the emissions weighting where there are fit for purpose solutions available (for example, general duty vehicles for law enforcement).

From a longer-term viewpoint, there are likely to be ongoing edge use-cases across these segments, as well as within certain customer groups (e.g. remote communities) where further exclusions may need to be considered in the future. We would suggest this be a dimension considered in the periodic review and updates of a FES scheme.

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

All FES Design elements are individually complex, and as such require careful consideration. More details on our views regarding specific features are covered within relevant subsequent questions in our response below.

What principles should we consider when setting the targets?

There are 3 key principles that must be considered when setting targets in the context of the Australian market;

1. Product planning lead times are considerable for vehicles.

The auto industry works on long planning lead times, so we need consultation with OEMs now to develop the long-term national objective in order to impact planning cycles for vehicles that are still 5+ years out from launch. The time required to adjust product cycles will need to be considered. For example, if mandated targets were legislated in 2024, the first year of materially accelerated emission reductions would logically be 2028/2029.

Example: Nissan has just launched the all new X-TRAIL and QASHQAI (2 of our top selling models). This means this product line up is largely fixed for the next 5-6 years. Whilst small changes may be feasible within the product line-up, there is little opportunity for substantial overhaul. However it is important that a roadmap actually be confirmed in the near term in order to inform and influence the next version of these models that would launch late in the decade and run through to the next.

2. All segments of the market are not the same, and Australia has unique vehicle requirements that must be carefully considered;

Whilst there is a clearer path for vehicles/segments that are also popular in other Right Hand Drive jurisdictions, such as UK with passenger vehicles, small/medium SUV's and vans, we also know that vehicle tastes, usage and requirements of Australian buyers differ, particularly with respect to prevalence of Utes and large diesel SUVs. That needs to be taken into consideration – with the LCV / Large SUV market likely to be the hardest (and therefore latest) segment to decarbonise. This is largely due to technical constraints, meaning the EV technology of today will not provide customers with a comparable product performance (e.g. driving range whilst carrying loads/towing) at an accessible price point for these segments.

3. Improved fuel quality and harmonisation of vehicle standards should be an immediate priority to improve both accessibility and affordability of electrified technologies for Australian consumers.

Australia not only misses out on the same depth and breadth of EV products offered in other markets, but Australian consumers also miss out on the latest and most efficient ICE and hybrid powertrains due to the lower quality of our fuel – this needs to be rectified ahead of a CO₂ scheme.

Finally, the presence of unique ADR requirements will continue to place a barrier to making globally available products no matter what the start date for any emissions scheme ultimately becomes. In order to address both affordability and accessibility of EVs, Nissan suggest updating the Vehicle Type Approval requirements in Australia to allow direct acceptance of type approved vehicles from global major markets in full volume supply under the Road Vehicle Standards Act (RVSA).

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

Annual targets for the initial/first period of the scheme (i.e. 5 years) would show first indication of the desired objective. This will be important to show progression, noting that vehicle changes are generational, so progress in the initial years will not be as drastic.

In addition, it is important for the government to outline a stated ambition (not necessarily a fixed target) for the longer term (i.e. 2035-2040) to provide an indication of the task ahead and some certainty for the longer term product planning processes.

Regular review periods should then be set 3 years into the initial target period to shape the 3-5 years following the initial period. This will provide the flexibility of being able to adjust the trajectory (against the longer-term ambitions) based on market momentum. The forward estimates can form a blend of firm and indicative targets to ensure the market consistently has 3+ years of certainty and a roadmap that has 5 years of visibility at any given time, whilst also providing ability to adjust future outlook in line with any significant market changes or evolutions.

Whilst we recommend review periods be outlined at the announcement of the FES, what will also need to be clearly articulated is the scope and governance of the review. This scope should articulate all the parameters that are applicable within the review process (i.e. target, complimentary measures, penalty amounts, exclusions etc.). This is important to provide transparency to both OEMs and consumers alike as rapid or sudden changes to a scheme without due notice can have significant consequences to manufacturers and consumers. A recent international example of this negative impact was seen in New Zealand, with the change to the consumer facing Clean Car Discount – which resulted in sudden changes to both fees and rebates across the market, affecting customers who had ordered vehicles, where vehicles were built and in transit, but had not yet taken delivery. Putting a clear governance structure in place should provide the balance between flexibility and consistency in order to prevent these types of market ‘shocks’ that impact both customers, vehicle dealerships and OEM operations alike.

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

As per the previous response, regular review periods will provide the government with the flexibility to adjust subsequent targets and provide the right balance of certainty vs. flexibility.

Technical questions

What should Australia’s CO₂ 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?

A roadmap needs to be reflective of the types of vehicles Australian’s like to purchase and drive vs. available product in global markets and pipelines. Because product cycles are locked in for 3-5 years, the scheme needs to have moderate annual rates of CO₂ reduction. From 2028, Australia could match annual rates of reduction of other major markets, like the EU and US. By rates of reduction, we mean YoY reduction. We are not saying Australia’s target for 2028 would equal US or EU’s 2028 target. Rather the annual reduction YoY would accelerate to match that of other markets).

Nissan recommends a cautious start with a strong finish to account for this product cycle challenge, noting there are 3 ways an OEM can improve fleet wide emissions:

1. Expand line-up offered locally to include vehicles offered in other right hand drive markets. However, this is not necessarily an immediate solution as it depends on development;
 - It takes at least 2 years to introduce a new model into Australia where the model exists in RHD overseas due to unique ADR validation and development requirements.
 - If there is additional/more significant development required, this lead-time can be up to 5 years from when the investment is approved.
2. Evolve/update the powertrains offered on the current product line-up in market. These types of changes are significant and expensive to implement mid product cycle and, as such, are usually reserved for full model updates; which for passenger vehicles is on average 5-6 years and 8+ years for a light commercial vehicle.
 - Therefore, if an FES is legislated in 2024, Nissan Australia could potentially influence decisions on product launching from 2028/29 onwards.
3. Restrict or remove products from sale in the market, which would ultimately be a negative outcome for Australian consumers.

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?

Any Australian FES should be based on vehicle mass, specifically mass in running order (MIRO). To this point, Nissan's position is in alignment with the method outlined in the FCAI's voluntary standard including a mass based limit curve for individual brands.

Additionally, Nissan does not support ceilings as they can artificially distort the data. We consider that actual mass should be used in all cases.

Should an Australian FES adopt two emissions targets for different classes of vehicles?

It is Nissan's view that an Australian FES should adopt different emissions targets for different classes of vehicles as not all segments of the market will decarbonise at the same rate. Australia is particularly exposed to this due to our unique vehicle requirements from a global context, most notably the volumes within Ute (specifically mid-size RHD) and large SUV.

As such, any roadmap needs to be reflective of the types of vehicles Australian's like to purchase and drive vs. available product in global markets and pipelines. We align with the categorisation methodology defined by the FCAI voluntary standard, being MA and MC/NA combined. This is because of the following reasons;

- Many Utes and Large SUVs are built on common platforms and share common powertrains.
- Vehicles commonly have similar usage/customer requirements in terms of towing, off-road ability etc.
- Vehicles have similar challenges toward electrification due to similarities in vehicle size, diversity of usage etc.

With regards to the previous point around 'challenges' with electrifying vehicles in the MC/NA category, this is largely a technical one in that the EV technology of today does not provide customers with a comparable product performance across the diversity of use cases expected of these products, at an accessible price point. Therefore it is critical the roadmap account for this challenge and recognise that MC/NA category vehicles will have an elongated decarbonisation curve, however we do see a technical solution on the horizon for this segment;

- At Nissan, we see the solution to this challenge as being the development of All-Solid State Battery (ASSB) technology. The breakthrough battery technology will provide the required flexibility, energy density and charging performance to support the rigors and demands of a truly capable and practical off road SUV and/or Ute - particularly in areas of driving range, charging speeds, towing/load carrying capacity and price.
- As announced as part of Nissan's Ambition 2030, Nissan are leading the development of ASSB, aiming to bring this technology to vehicles from 2028. Realistically we do not see this type of product being available in market within this decade; rather it is potential prospect for early 2030's.

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?

There is little evidence to suggest consumers move categories without a strong vehicle usage derived need today (i.e. customers do not buy a ute without a usage reason – work or hobby related, towing requirement etc.).

Therefore, if this were to happen post introduction of a FES then this would be a perverse outcome of a poorly designed scheme, which was overly weak or aggressive in one particular segment over another.

Given any proposed target would be imposed on a manufacturer in totality, the OEM's themselves would need to manage the exposure to penalties vs. market opportunity across their respective portfolios.

In terms of managing this movement, worst case it would result in OEM's restricting supply of certain product categories to market to manage exposure. Alternatively allowing credit banking/transfer between segments could be a solution to allow OEM's to manage across the portfolio without impacting consumer choice i.e. OEM could be more aggressive with EV offer in MA category to lift volumes/credits to offset consumer demand in MC/NA category.

Are there other policy interventions that might encourage more efficient vehicle choices?

In order to address both affordability and accessibility of Zero and Low Emission Vehicles (ZLEVs), Nissan suggest updating the Vehicle Type Approval (VTA) requirements in Australia to allow direct acceptance of type approved vehicles from global major markets in full volume supply under the *Road Vehicle Standards Act* (RVSA). Such vehicles could obtain VTA under the RVSA, and this will remove many of ADR related development barriers for OEMs bringing ZLEVs from major markets that result in increased development time and cost for Australian delivered vehicles.

For absolute clarity, this does not mean further relaxation of the requirements for vehicles to be imported by RAWs under the Specialist and Enthusiast Vehicle Scheme (SEVS). The SEVS should be reserved for genuinely specialist and niche vehicles, which are not available in the Australian market rather than a parallel import of mainstream models.

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

Should credits expire? In what timeframe?

Banking, pooling & trading of credits are an effective method of allowing OEMs to manage their CO₂ performance in line with global product life cycles.

Credits should be time limited to five years and allow carry forward and carry back to account for product development cycles.

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?

Multiplier credits, or 'Super-Credits' as they have been commonly referred to, have been a consistent feature of most global target schemes and as such, should be a feature of any scheme adopted for Australia.

Any credit-based system should be based on CO₂ reductions against a brands target (% of the limit curve), rather than specific technologies, with distinct priority being given to vehicles that achieve 0g. These multipliers are an important lever to allow OEM's to maximise low emission technologies, whilst also potentially reducing the levels of government incentive required. As such, we do not believe a credit system should be 'capped' as this adds another layer of complexity, whilst also potentially stifling market competitiveness (which ultimately affects consumers).

Credits have been in place in Europe as far back as the 2015 standard, which covered 2013-2015, and remain a feature moving forward. Over time the parameters of these schemes (construct, applicability, weighting etc.) will continue to evolve.

Nissan suggest an Australian scheme would need to confirm the parameters for the initial target period (at least the first 3-5 years of a scheme) and be part of the regular review process as per our earlier response. Additionally, whilst we are suggesting a credit scheme should be clearly defined within each respective target period (i.e. first 5 years), the credits could evolve within that period (i.e. consistent for first 3 years then tapering off in years 4-5 – this would be important to prevent price shock in market).

With respect to defining an end date for credits, this should be linked to EV penetration rates – with the possibility of ceasing them altogether once the market reaches a certain point (e.g. 30% of market). This is a similar construct to the NSW government’s approach to road user charges for EV’s.

**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?**

Off-cycle credits are an effective method of incentivising OEMs to introduce carbon reducing technology which is not recognised on the type approval drive cycle. Internationally, any such credits are generally capped to a maximum and Nissan agrees that such a cap is appropriate.

Off-cycle credits which have been tested and certified for use by major markets should be accepted.

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

A/C credits are an effective method of incentivising OEMs to introduce carbon reducing technology which is otherwise not required. A/C Credits should be available until significant market penetration is achieved. Any mandating of low global warming potential refrigerants risks restricting vehicles from certain regions being sold in Australia. Given the diversity of vehicles offered in Australia, we cannot rely solely on sourcing vehicles from one region (e.g. Europe).

**When do you think a FES should start?
How should the start date interact with the average annual emissions ceiling?**

For maximum effectiveness and to enhance the light vehicle transport sector’s contribution to achieving Australia’ climate change ambition, the FES should start as soon as legislation can be drafted and passed and administrative arrangements put in place to operate the system.

Whilst we are seeking the certainty of a well-designed FES, as outlined earlier in our submission it will not be possible to materially change our product portfolio in the next 3-5 years. Therefore, the first year of target requirement/material reduction should be set for 2028-2029 (assuming legislation is passed in 2024)

Government should start from the current level of average tailpipe CO₂ emissions from the new vehicle market and target an average rate of improvement commensurate with other developed markets post the 2028 timeline as above. However, we note the Federal Government has already ruled out direct support to the consumer in Australia, which has been a key mechanism in most other international schemes.

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

In terms of supporting affordability and driving demand, there has been a consistent approach within the international community of supporting EV uptake in the early stages by providing direct consumer incentives, typically in the form of purchase subsidies or tax concessions. Within Australia, we recognise the recent efforts of the state and territory governments to support this area with various initiatives. However, it should also be noted that demand drivers have been most effective when paired with supply side initiatives and actions.

Additionally, support can extend beyond the vehicle itself. Private charging infrastructure is another avenue to support greater affordability, especially when customers are encouraged and incentivised to install smart/connected devices that optimise locally generated renewable energy consumption and ensures hardware can support the wider grid at a later date. This type of approach has been seen in the UK as part of the UK Government's Electric Vehicle Homecharge Scheme, which has since evolved to become the EV Chargepoint grant. These programs provided direct subsidies for the installation of smart chargers, covering up to 75% of the cost of installing smart charging hardware.

Whilst there have been many positive steps, as described above, there are also government measures that can hinder EV uptake in the early stages - one of these items is Road User Charges. Although road funding reform is important due to declining fuel excise revenue as the market moves to low and zero emission transport, now is not the time to be introducing and collecting road charges. Announcing and deferring the introduction (i.e. approach taken by NSW) is certainly a more balanced approach, although it would be Nissan's preference to set this time frame based on penetration of EV sales only at a National level, or 2030.

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?

We recognise that penalties are a key part of any legitimate CO₂ scheme in order to drive the government's desired outcomes and are a consistent feature within both emerging and existing global schemes. The structure and amount does vary across global jurisdictions and is not a 'set and forget' exercise. In Nissan's opinion the penalties should:

- Begin at a relevant and accepted market rate. The Australian Carbon Credit Unit (ACCU) pricing may serve as a relevant local reference point. Additionally the penalty should be no more than the introductory rates launched in other markets e.g. New Zealand (\$45 NZD)
- Evolve over time, with a clear governance process for change to avoid any sudden or drastic changes. To that end, we suggest penalty pricing be a parameter that is part of the regular periodic review process (as per our earlier response).
- Be at a sufficient level to drive desired outcomes, such as increasing the supply of lower emission technologies and influencing product planning processes. However, caution should be taken to avoid unintended consequences such as product or brand restrictions or market withdrawal due to excessively high penalties, which would impact consumer choice.
- Credits should be tradeable; however, penalty pricing should be a mechanism to bring the market forward and drive emission reduction across the industry, not serve as a pure profit opportunity for brands with excess credits (through exclusive EV line-ups, or selectively participating in certain vehicle segments).

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

Nissan has no strong view one way or the other on concessional arrangements for low volume manufacturers.

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?

In terms of general principles to administering the scheme, Nissan believe that it is important that:

- the administrative burden be minimised for all parties;
- data is accurate and timely; and
- reporting is transparent and easily accessed.

The New Zealand government's system is a good example of these three principles. However, we note that New Zealand does not have the complexity of state and territory based vehicle registration systems.

With respect to sourcing the data, there are existing data sources within the market that should be considered for the source data, and they are;

1. Vehicle registration data. NEVDIS could be a potential solution, although our experience from previous interactions (such as the Takata Airbag recall) has shown there is limitations and holes in this data set.
2. Vehicle Import Register. The Register of Approved Vehicles (RAV) is an existing database that is under the control of the Federal Government would be another potential option. Whilst this does not match to sales date, it does capture all vehicles that are imported into the country.
3. VFACTS. This is an existing industry based reporting source that is well established, however we note that it would require a commercial arrangement to be struck with FCAI.

If the government elects to pursue a new/separate reporting process, in order to minimise the burden on OEMs, Nissan suggests the data feeds/requirements be modelled off that which is already supplied to FCAI as part of the VFACTS reporting. The systems and mechanisms exist for each brand, ensuring minimal development burden as well as maintaining a greater level of consistency across reported figures to both sources.

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 government elect to disregard existing reporting sources and pursue a bespoke reporting process, the minimum reporting obligation would obviously be annual reporting. However if the data feeds were to be aligned with those that exist for current VFACTS reporting, then it is possible to move to monthly – which would provide the ability to track progress throughout the year.

In terms of information access, we note New Zealand is the benchmark in this area by allowing brands to see real time volumes and status against specific targets (including credit and penalty balance).

Should the regulator be the department? What other options are there?

Nissan does not have a strong view on the Regulatory Framework to implement the FES, however it considers that the Department of Infrastructure, Transport, Regional Development and Communications is likely the appropriate regulator

How should the regulated entity be defined in an Australian FES?

In simple terms, the supplier of the vehicle to the Australian market should be the regulated entity. In Nissan Australia's case, we would be the regulated entity for any vehicles imported, distributed and sold by Nissan Australia and our franchised dealer network.

However, Nissan would not be the regulated entity for a Nissan vehicle imported by another entity (under the SEVS model for example). The importer of said vehicle would be the regulated entity in that instance.

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

Nissan does not see any reason to depart from the standard regulatory tool kit.

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?

Nissan support WLTP being the required drive cycle from beginning of the FES period, therefore the Department should develop a conversion factor to apply to existing NEDC test results. This conversion factor must be proven to be robust, repeatable and consistent for all conversions.