

**TOYOTA**

Submission by  
**Toyota Australia**  
to the  
**Improving the Efficiency of New Light  
Vehicles**  
***Draft Regulation Impact Statement***  
March 2017

## **1. Overview**

Toyota Australia welcomes the opportunity to provide further input into the federal government's ministerial forum on vehicle emissions. In our discussion paper submission from April 2016 we recognised the role of the automotive sector in contributing to the 26 – 28 per cent economy wide emission reduction target by 2030 (from 2005 levels) as set by the federal government, and we reaffirm our commitment to assisting the government in developing a vehicle emission regime and associated supporting measures that contributes to the achievement of this goal.

Toyota Australia is also pleased to note that Regulation Impact Statements and a Discussion Paper were released in conjunction in December 2016 covering the establishment of vehicle emissions standards for vehicle efficiency, noxious and particulate emissions from new light vehicles, and fuel quality standards. Toyota Australia, in addition to other automotive brands and the Federal Chamber of Automotive Industries (FCAI), has been consistent in our message that any changes to the future regulatory regime, as well as amendments to associated measures such as the mandated quality of fuel and government measures to support the take-up of more environmentally friendly vehicles, must be simultaneously introduced in order to be truly effective. In light of the remaining milestones still to occur as part of the vehicle emissions review, Toyota Australia reiterates this request for a holistic approach to the introduction timing of all measures included under the review.

In addition to the coordinated introduction timing of all measures confirmed in the vehicle emissions review, Toyota Australia strongly advocates that any mandated emissions regime incorporating standards to limit CO<sub>2</sub> emissions and vehicle pollutants (such as NO<sub>x</sub>, CO & NMHC) must be accompanied with associated changes to fuel quality standards and measures to encourage the further supply and demand of low emission vehicle technology. Toyota Australia also believes that a regulatory system needs to take into consideration the unique conditions of the Australian market, and therefore it is not appropriate to simply apply the same parameters as used in overseas markets. In addition, Toyota Australia proposes that any regulatory regime for new light vehicles is complemented by other measures that aim to reduce emissions from the overall transport sector, including from the in-service fleet of light vehicles and from other modes of transport. We note that average CO<sub>2</sub> emissions from new light vehicles have reduced by 23.4% between 2005 – 2015<sup>1</sup>, indicating the sector is well advanced in its contribution to the 2030 economy-wide emission reduction target, and therefore view additional policies in the transport sector as required in order to ensure an equitable contribution across all transport modes.

In Toyota Australia's April 2016 response to the Ministerial Forum on Vehicle Emissions Discussion Paper, we also highlighted Toyota's global 2050 environmental challenge, of which the first measure includes the objective of reducing global Toyota new vehicle CO<sub>2</sub> emissions by 90 per cent by 2050 (in comparison with 2010 levels). In conjunction with this global approach, Toyota Australia has undertaken a number of significant measures throughout 2016 on this journey. This includes the launch to the Australian market of low emission models such as the 4<sup>th</sup> generation Prius, the introduction of hybrid variant of the Corolla and continued promotion of other Hybrid models such as Camry, Prius C and Prius V. With hybrid models (which can achieve approximately 40% less emissions over their lifecycle compared to standard internal combustion engine<sup>2</sup>) having now been on sale in Australia for almost twenty years, Toyota Australia is also continuing to proactively

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<sup>1</sup> 'Carbon Dioxide Emissions Intensity for New Australian Light Vehicles 2015' Information paper, National Transport Commission, March 2016 (pg.38)

<sup>2</sup> Toyota Motor Corporation 'Environmental Report – Toward the Toyota Environmental Challenge 2050' (pg.18)

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work towards the introduction of the zero emission fuel cell vehicle to the Australian market, and have reinforced this commitment by acquiring three vehicles and a mobile refueller to assist with this strategy. Underpinned by continued emission reduction strategies across all of our vehicles, these developments demonstrate that Toyota, both globally and in Australia, are strongly invested and are striving to achieve a lower emission future.

This submission provides Toyota Australia's response to the overarching direction included in the Regulation Impact Statement 'Improving the Efficiency of New Light Vehicles', as well as a specific response to the individual questions posed. Toyota Australia also broadly endorses the response provided by the FCAI on behalf of the automotive industry to this review. Toyota Australia look forward to participating fully in the RIS submission process and working closely with the inter-governmental working group throughout this period.

## 2. Key facts

<p><b>Facts and Statistics</b></p>	<ul style="list-style-type: none"> <li>▪ Presence in Australia since 1959</li> <li>▪ 14 consecutive years as Australia's best-selling automotive brand with 17.8% market share in 2016</li> <li>▪ 3,900 employees</li> <li>▪ 2016 production and sales:             <ul style="list-style-type: none"> <li>- Toyota domestic sales: 209,610                 <ul style="list-style-type: none"> <li>○ Passenger: 87,572 (42%) <i>Hybrid: (8% of passenger vehicle sales)</i></li> <li>○ SUV: 63,099 (30%)</li> <li>○ Light commercial: 58,939 (28%)</li> </ul> </li> <li>- Lexus domestic sales: 9,028                 <ul style="list-style-type: none"> <li>○ Passenger: 3,523 (39%) <i>Hybrid: 1,430 (41% of passenger sales)</i></li> <li>○ SUV: 5,505 (61%) <i>Hybrid: 1,612 (29% of SUV sales)</i></li> </ul> </li> <li>- Australian vehicle production: 92,766</li> <li>- Vehicles exported: 60,805</li> <li>- Australian engine production: 92,766</li> <li>- Engines exported: 7,343</li> <li>- Export countries: 13</li> </ul> </li> </ul>
<p><b>Product Information</b></p>	<ul style="list-style-type: none"> <li>▪ Market leader in hybrid technology             <ul style="list-style-type: none"> <li>- Introduced the first mass produced hybrid vehicle to the Australian market (Toyota Prius)</li> <li>- Manufactures the only Australian built hybrid vehicle (Camry Hybrid)</li> </ul> </li> <li>▪ Global pioneer in hydrogen fuel cell vehicle (FCV) technology             <ul style="list-style-type: none"> <li>- Commenced fuel cell development in 1992</li> <li>- Launched the Toyota Mirai hydrogen FCV in Japan in 2014 followed by the US and EU in 2015</li> <li>- Currently utilising three Mirai vehicles and a mobile refueller to promote this technology in the Australian marketplace</li> </ul> </li> <li>▪ Toyota Australia green vehicle product range:             <ul style="list-style-type: none"> <li>- Current                 <ul style="list-style-type: none"> <li>○ Toyota (hybrids)                     <ul style="list-style-type: none"> <li>• Prius</li> <li>• Prius C</li> <li>• Prius V</li> <li>• Camry Hybrid</li> <li>• Toyota Corolla Hybrid (launched in mid-2016)</li> </ul> </li> <li>○ Lexus (hybrids)                     <ul style="list-style-type: none"> <li>• CT200h</li> <li>• ES300h</li> <li>• GS300h</li> <li>• GS450h</li> <li>• IS300h</li> <li>• LS600h</li> <li>• NX300h</li> <li>• RX450h</li> </ul> </li> </ul> </li> </ul> </li> </ul>

### 3. Key points

<b>Overarching response</b>	
<p>Toyota Australia strongly recommends a holistic approach towards the development of a fuel efficiency standard, and therefore requests the mandating of a higher quality of fuel and the introduction of a range of accompanying complementary measures to hasten the uptake of more environmentally friendly vehicles so that an effective standard be implemented. Any proposed standard also needs to take into account the uniqueness of the Australian market by tailoring the regime to meet Australian needs, rather than simply applying the same parameters as used in overseas markets. In developing an industry target, due to the requirement for an integrated approach and the product planning cycle of 60 months, Toyota Australia supports a business as usual (BAU) rate of reduction until 2022 to be built into the regime. As a result, Toyota Australia would support the re-evaluation of the scenarios included in the RIS in order to adopt this calculation method, with the study of a more stringent rate of reduction to apply post 2022 in alignment with improved fuel quality, the introduction of Euro 6 emissions standards and associated complementary measures to support the greater uptake of low emission vehicles. In finalising a fuel efficiency standard, Toyota Australia welcomes the opportunity to continue to work collaboratively with the federal government to model the impact this standard will have on the products and features available to local consumers in order to implement a regime that is both effective and achievable.</p>	
<b>Summary Response to RIS Appendix A1 - Implementing a fuel efficiency standard</b>	
<p><i>Q-1: What parameter (CO2 emissions or fuel consumption) should be used for an Australian fuel efficiency standard and why?</i></p>	<ul style="list-style-type: none"> <li>▪ Toyota Australia supports implementing a standard based on CO2 emissions as it is a simple and equitable approach across all powertrains.</li> </ul>
<p><i>Q-2: How should a vehicle's efficiency for the purposes of an Australian fuel efficiency standard be assessed and why?</i></p>	<ul style="list-style-type: none"> <li>▪ Toyota supports harmonising the testing regime with UN regulations (UN-R) – a testing regime such as WLTP can therefore be supported only when incorporated into a UN-R.</li> </ul>
<p><i>Q-3: How should a sales weighted average target be applied in Australia and why?</i></p>	<ul style="list-style-type: none"> <li>▪ Toyota Australia supports an attribute based approach with a limit value curve to determine a target for each individual brand.</li> </ul>
<p><i>Q-4: If an attribute based standard is adopted, which attribute should be adopted in Australia and why?</i></p>	<ul style="list-style-type: none"> <li>▪ Toyota Australia supports a mass based approach.</li> </ul>
<p><i>Q-5: How should a fuel efficiency standard be applied to each light vehicle category and why?</i></p>	<ul style="list-style-type: none"> <li>▪ Toyota Australia supports separate targets for passenger vehicles and light commercial vehicles. As light commercial vehicles face a greater challenge to reduce their emissions, it is appropriate to establish a more lenient target for this segment.</li> <li>▪ In order to ensure the most flexible system for industry to comply with, Toyota Australia also supports offsetting between the two vehicle segments in the case of over-achievement in one segment.</li> </ul>
<p><i>Q-6: If SUVs are subject to a different target to passenger cars, how should SUVs be defined, and why?</i></p>	<ul style="list-style-type: none"> <li>▪ Toyota Australia proposes a vehicle categorization system that reflects the US regime. This would therefore result in SUV's (MC category) being included in the LCV segment.</li> </ul>

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<p><i>Q-7: How should targets for a fuel efficiency standard be phased in and why?</i></p>	<ul style="list-style-type: none"> <li>▪ Toyota Australia is of the position that a target should be adopted for the final year of the defined period (similar to the EU approach), therefore providing more flexibility as to how manufacturers achieve their allocated target.</li> </ul>
<p><i>Q-8: If annual targets are adopted, what targets should apply in each year for each segment and why?</i></p>	<ul style="list-style-type: none"> <li>▪ Toyota Australia does not support the implementation of annual targets as it results in less flexibility for manufacturers to achieve their allocated target.</li> </ul>
<p><i>Q-9: If a percentage phase in is adopted, what percentage should apply in each year and each segment, and why?</i></p>	<ul style="list-style-type: none"> <li>▪ Toyota Australia agrees with the concept of percentage phase-in to provide more flexibility for manufacturers. Assuming a final year target is imposed, the phase-in would not commence until after the final year of the standard.</li> <li>▪ Toyota Australia is not in a position to propose actual phase-in figures without clarification on the industry target and the parameters of a CO2 standard.</li> </ul>
<p><i>Q-10: What flexibility arrangements should be allowed under an Australian fuel efficiency standard and why?</i></p>	<ul style="list-style-type: none"> <li>▪ Toyota Australia supports flexibility arrangements similar to those available in the EU and the US, such as exemptions for specific vehicles used by strategic industries and emergency services and the ability for manufacturers to pool emissions</li> </ul>
<p><i>Q-11: What, if any, credits should an Australian fuel efficiency standard adopt to further encourage the supply of more efficient vehicles, and why?</i></p>	<ul style="list-style-type: none"> <li>▪ Toyota Australia supports a range of incentives and credits to encourage the supply of more fuel efficient vehicles and to stimulate consumer demand.</li> <li>▪ It is important that these credits are detailed prior to setting an industry target as they will influence the appropriate rate of reduction.</li> <li>▪ Credits and incentives include super credits; eco-innovative credits; and financial and non-financial incentives.</li> </ul>
<p><i>Q-12: Which entities should be required to comply with a fuel efficiency standard, and why?</i></p>	<ul style="list-style-type: none"> <li>▪ Toyota Australia is of the position that the importer of the vehicle should be responsible for complying with the fuel efficiency standard.</li> </ul>
<p><i>Q-13: What concessional arrangements should be offered to low volume suppliers under an Australian fuel efficiency standard and why?</i></p>	<ul style="list-style-type: none"> <li>▪ Toyota Australia supports a unified standard for all vehicle importers and therefore does not support manufacturer exemptions.</li> </ul>
<p><i>Q-14: What penalties should be applied to entities that failed to comply with a fuel efficiency standard and why?</i></p>	<ul style="list-style-type: none"> <li>▪ Toyota Australia acknowledges the FCAI position and that of the wider industry to initially introduce a penalty system that relies on a 'name and shame' approach.</li> <li>▪ Toyota Australia notes that this is one of a number of available penalty regimes that can incentivise brands to comply with the standard.</li> </ul>