

TOYOTA

Submission by
Toyota Australia
to the
**Review of the National Freight and
Supply Chain Strategy**

September 2023

Introduction

Toyota Motor Corporation Australia Limited (“Toyota”) welcomes the opportunity to provide a submission in response to the Review of the National Freight and Supply Chain Strategy discussion paper.

Toyota supports the goals of the National Freight and Supply Chain Strategy in principle, and welcomes the Review’s focus on incorporating decarbonisation into the Strategy’s policy framework.

Toyota is the number one seller of passenger and commercial vehicles in Australia and has had a presence in Australia since 1959. In recent times our business focus has expanded from traditional light vehicles (passenger cars, SUVs and light commercial vehicles) to broader mobility solutions.

Toyota continues to invest more than \$130m per annum towards innovation projects in Australia. As part of our portfolio approach to decarbonisation, we are exploring fuel cell technology and its potential applications in the Australian context.

Toyota’s hydrogen related initiatives include:

- 20 Mirai FCEVs currently leased across Australia and supported by available refuelling infrastructure, with additional Gen 1 and Gen 2 Mirai examples used internally.
- 4 FC forklift operating in Toyota warehouses in both Melbourne & Sydney (350 bar refuelling).
- 1 H2 City Gold bus (HFCB) registered and stationed at our Hydrogen Centre in Altona, Victoria.
- Toyota has x3 hydrogen refuellers:
 - Altona – complete system including solar panning, electrolyser, H2 storage and 350 & 700 bar dispensing capability.
 - Sydney – self-contained electrolyser/refueller system with solar panning and H2 storage with 350 bar dispensing (forklift only).
 - Mobile refueller – a portable 350/700 bar hydrogen dispensing system, installed on a flatbed truck trailer. Presently stationed in Victoria.



H2 City Gold Bus (available in EU and UK) – approx. 450km range

Toyota Hydrogen Centre and refuelling station (Altona)



KEY PRODUCT FACTS

- Market leader in hybrid technology
 - Introduced the first mass produced hybrid vehicle to the Australian market (Toyota Prius, 2001)
- Pioneer in hydrogen fuel cell vehicle (FCEV) technology
 - Established Hydrogen Centre at the Altona Centre of Excellence; comprising education facilities, hydrogen generation and refuelling infrastructure
 - Introduced the Mirai to the Australian market
 - Currently trialling a fuel cell bus and several types of forklifts
- Toyota hybrid and other zero and low CO2 tailpipe emissions vehicle product range:
 - Hybrid Vehicles (HEV)
 - Yaris
 - Corolla Sedan and Hatch
 - Camry
 - RAV4
 - C-HR
 - Yaris Cross
 - Corolla Cross
 - Kluger
 - Hydrogen Fuel Cell Electric Vehicles (FCEV)
 - Mirai
 - Forklift
 - City Bus
 - Battery Electric Vehicle (BEV)
 - bZ4X (arriving 2024)
- Trialled a broad spectrum of zero and low CO2 tailpipe emissions vehicles comprising of HEV, PHEV, BEV and FCEV in Australia, testing against Australian market conditions in partnership with key target groups (fleets, corporates, etc.)

COMMENTS

1. Do the Strategy's current goals support the needs of the freight and supply chain sector moving forward?

Toyota agrees in principle with the goals of the Strategy as reiterated in the discussion paper and outlined in the earlier 2019 Strategy paper. As discussed below, Toyota recommends that if the Government intends to incorporate decarbonisation into the Strategy's policy framework, it should be included as a separate goal (alongside the Strategy's existing goals). Toyota notes that consistency of regulations around decarbonisation in the freight and heavy transport sector across federal, state and territory jurisdictions will also be key to successfully realising decarbonisation objectives.

2. Should other goals be included in the strategy, and if so, what?

Toyota recommends that the Government consider explicitly including a technology-agnostic goal to decarbonise the freight and supply chain sector within the Strategy's policy framework and believes that a technology-agnostic approach, including trucks and commercial vehicles utilising hydrogen fuel cell technology, will be key to decarbonisation. Toyota notes that a focus on providing targeted refuelling and charging infrastructure support will be essential to realising any decarbonisation goals in the Strategy.

Toyota suggests that the Government consider the National Hydrogen Strategy and other initiatives such as the Hydrogen Headstart program to ensure decarbonisation of the freight and supply chain sector is consistent with other policy programs. For example, a viable hydrogen refuelling infrastructure, suitable for freight and heavy transport, is also dependent on the supply of hydrogen at a market acceptable price and dispensing infrastructure that provides for both 350 and 700 bar refuelling options.

3. Should the National Action Plan focus on a smaller number of targeted national actions, or do you want to retain the existing reporting structure?

No response provided

4. If we focus on a smaller number of targeted national actions, what action areas should be included in the National Action Plan that require national coordination?

Toyota notes that the action areas currently included in the strategy include 'smarter and targeted infrastructure investment' as well as 'better planning, coordination and regulation.'

In order to decarbonise the freight and supply chain sector, Toyota notes that a suitable level of infrastructure must be available, and that relevant regulations e.g. around low and zero-emissions freight transport, must be consistent across all jurisdictions. To achieve this, Toyota suggests development of a strategic roadmap that outlines the growth and timing of freight related decarbonisation infrastructure and other related initiatives, to give industry the confidence to further invest in relevant decarbonisation-related technologies. As mentioned previously, such a roadmap should be aligned with other Government policies such as the National Hydrogen Strategy and Hydrogen Headstart program.

5. What KPIs are useful to measure the success of the Strategy?

From a decarbonisation perspective, ensuring there is a standardised way to calculate and report emissions in the freight and supply chain sector will be crucial to develop and track progress against relevant KPIs.

6. What data do we need from industry, state and territory governments to measure potential KPIs?

No response provided

7. What outcomes, findings or principles should the Review take into consideration from related works?

As noted above, Toyota recommends that from a decarbonisation perspective, the Review consider findings from policies and consultations such as:

- National Hydrogen Strategy
- Hydrogen Headstart program
- Fuel Efficiency Standards
- State Government consultations such as the Queensland Government ZEV Industry Roadmap.

8. Are the current governance arrangements appropriate to support the effective implementation of the Strategy going forward?

No response provided

9. What role, if any, should the Freight Industry Reference Panel have to support the implementation of the Strategy?

No response provided

//end of submission.