

# Initial Notes on the Fuel Efficiency Standard Consultation Paper

Dr David Hirst 24 April 2023

## Summary Points

- Australia should aim to phase out all petrol and diesel light vehicles over 10 years (The average lifespan of a car in Australia).
- Australia's emissions standard should begin in 2024 and cover the ten year phase out period to 2034.
- Australia's scheme should start with an aggressive change to help us catch up to the US, Europe and New Zealand. We could adopt New Zealand's emissions targets from 2024 onwards.
- Australia should aim to synchronise with the European/US/NZ standards by 2027 in order to encourage the importation of the variety of Electric Vehicle models and price points being sold overseas.
- The Government needs to consider ALL the costs and benefits of an emissions scheme, including:
  - The current Health and Medical costs without any change, and
  - The Health and Medical benefits (including quality of life and saved medical costs) with the introduction of stricter emissions controls.
- The Government also needs to consider further infrastructure support for those people who won't be able to charge their vehicles from home, i.e. those city dwellers who live in apartments or who don't have off street parking. More inner-city fast chargers and innovative solutions like Kerb chargers, channel and gutter to the street systems that are being used in the UK and trialled in the City of Port Phillip.

## US EPA Revised Vehicle Emissions Standards

In early April 2023, the US EPA published a very long and detailed consultation paper proposing revised vehicle emission standards when the current standards expire in 2026. Some observations:

- Their paper is far more detailed than Australian Government's discussion paper.
- It includes ALL emissions, not just CO2. E.g. greenhouse gases, hydrocarbons, nitrogen oxides (NOx), and particulate matter (PM2.5).
- It is more analytical. E.g. It includes costs and benefit analyses.
- The cost/benefits analyses not only consist of vehicle ownership but they also include the costs and benefits to the Health System and Personal Medical matters. Thus they demonstrate that removing atmospheric pollutants would improve individual health and save billions of dollars of health system, and individual costs.
- The language used is less emotive than the Australian paper which uses terms like "the vehicles Australians LOVE".
- The US EPA paper presents 3 alternative implementation curves for future emissions targets and discusses the merits, or otherwise, of each.

- The new standards would be phased in over model years 2027 through 2032.
- The proposal is a “56% reduction in projected fleet average greenhouse gas emissions target levels relative to the existing Model Year 2026 standards (established in 2021) for light duty vehicles (passenger cars and light trucks).
- For medium-duty vehicles (vans and pickups), the EPA is proposing a reduction of 44 percent in projected fleet average greenhouse gas emissions target levels relative to the current MY 2026 standards
- The EPA projects a pathway to meet these standards could be achieved through the following mix:
  - Nearly 70 percent Battery Electric Vehicle (BEV) penetration in MY 2032 across the combined light-duty passenger car, crossover/SUV, and pickup truck categories
  - About 40 percent BEV penetration by 2032 across the combined medium-duty van and pickup truck categories

## What Are the Current Emission for Australian Vehicles?

The FES Consultation document doesn't show detailed figures for current emissions in Australia, only one averaged figure in brackets. However, the National Transport Commission's website has detailed information for car sales by make and model, plus their emission details for the years 2020 & 2021.

- Passenger Vehicles & Light SUVs (Category MA), 2021: 146.5 g/km
- Light Commercial Vehicles & Heavy SUVs (Category MC&NA), 2021: 212.5 g/km
- The latter category averages Heavy SUVs (198g/km) and Pickups/4x4s (224g/km)

## Australians Are Buying Larger Vehicles

- Sales of 4x4 utes increased by more than 43,000 and large SUVs by 25,000 from 2020 to 2021.
- Half of new car sales were SUVs in 2021, up from a quarter 10 years ago.
- Small vehicles were once 25% are now only 10% of new car sales.
- Emissions from the popular vehicles are now > 210 g/km
- A Word document is available from the National Transport Commission's website that lists all vehicles and their emissions sold in Australia in 2020 and 2021.

## What Should Australia Implement?

- Australia should aim to phase out all petrol and diesel light vehicles over 10 years (The average lifespan of a car in Australia).
- Australia's emissions standard should begin in 2024 and cover the ten year phase out period to 2034.
- Australia's scheme should start with an aggressive change to help us catch up to the US, the UK, Europe and New Zealand. We could adopt New Zealand's emissions targets from 2024 onwards.

- Australia should aim to synchronise with the European standards by 2027 in order to encourage the importation of the variety of Electric Vehicle models and price points being sold overseas.
- The Government needs to consider ALL the costs and benefits of an emissions scheme, including:
  - The current Health and Medical costs without any change, and
  - The Health and Medical benefits (including quality of life and saved medical costs) with the introduction of stricter emissions controls.
- The Government also needs to consider further infrastructure support for those people who won't be able to charge their vehicles from home, i.e. those city dwellers who live in apartments or who don't have off street parking. More inner-city fast chargers and innovative solutions like Kerb chargers, channel and gutter to the street systems that are being used in the UK and trialled in the City of Port Phillip.