Australian Government
Climate Change Authority

LIGHT VEHICLE EMISSIONS STANDARDS FOR AUSTRALIA
RESEARCH REPORT SUMMARY

Australia has an opportunity to reduce greenhouse gas emissions and lower fuel bills for Australian motorists by making light vehicles more efficient. A light vehicle emissions standard is the best way to achieve this.

Reducing emissions from all light vehicles (including both passenger and light commercial vehicles) would support Australia's contribution to global efforts to limit the harmful impacts of climate change. Transport accounts for 16 per cent of Australia's greenhouse gas emissions and light vehicles alone account for 10 per cent. Phase one of the proposed standard (2018–25) is projected to avoid 59 million tonnes of emissions over the period to 2030, roughly equal to the current annual emissions of all light vehicles.

Australians would benefit if light vehicles used less fuel and emitted fewer greenhouse gases. Technologies to reduce fuel use and associated emissions are readily available and are relatively inexpensive. Improving light vehicle efficiency is one of the lowest cost emissions reduction opportunities in the Australian economy.

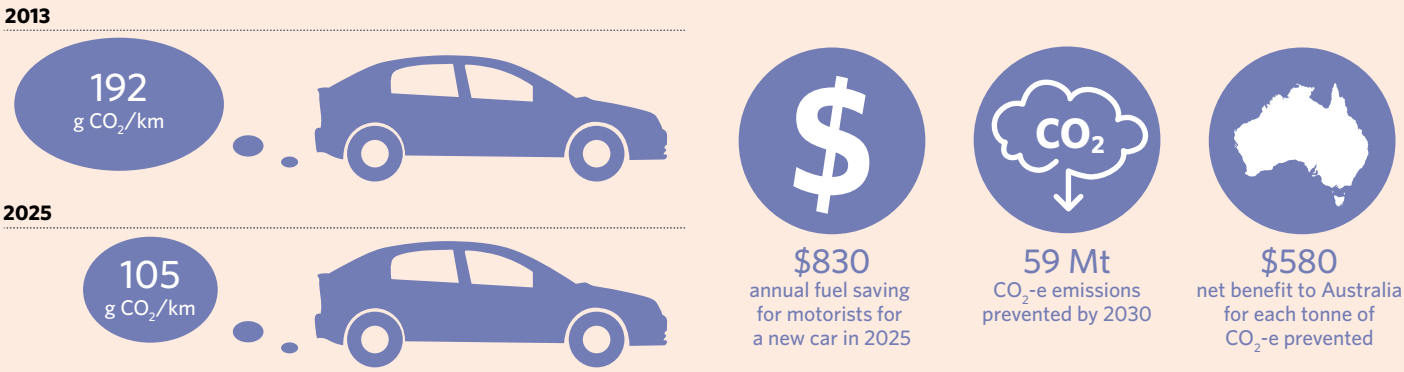
Australia lags behind many other countries in light vehicle efficiency. While the efficiency of Australia's light vehicle fleet is improving over time, more can be done. The Authority's analysis, drawing on international experience and principles of good policy design, shows mandatory standards are a cost-effective policy for reducing light vehicle emissions. A mandatory standard is likely to complement the Emissions Reduction Fund and existing arrangements in the Australian transport sector.

An emissions standard for all new light vehicles sold in Australia from 2018 would deliver clear benefits. A standard that is achievable and would deliver significant benefits to Australia and Australian motorists could:

- set a target to reduce the emissions intensity of the Australian light vehicle fleet from its current level of 192 grams of carbon dioxide per kilometre (g CO_2/km) to 105 g CO_2/km in 2025
- oblige suppliers of new light vehicles to provide more efficient vehicles to the Australian market over time
- build on existing arrangements to minimise any new regulatory burden.

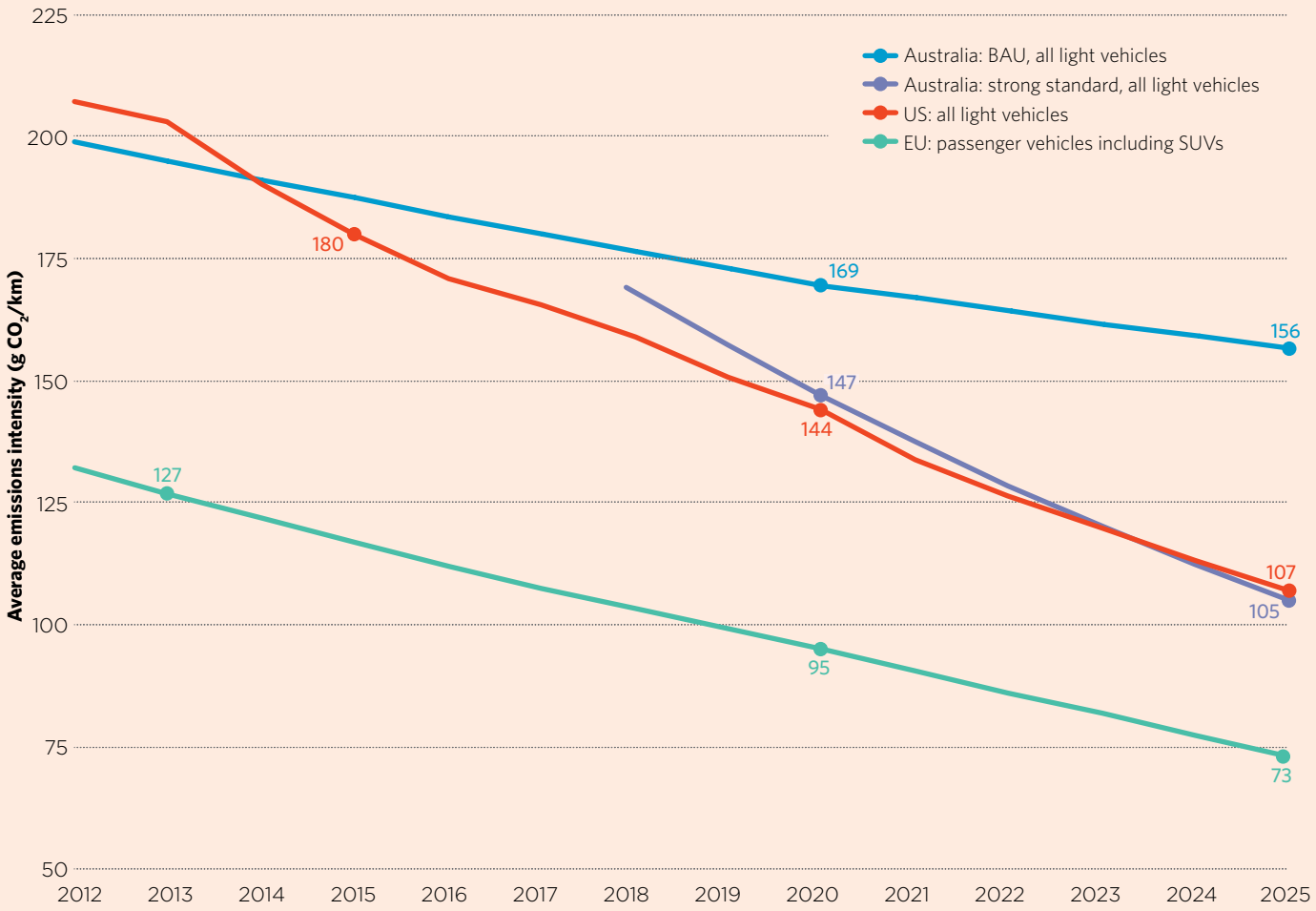
The benefits of a light vehicle emissions standard substantially outweigh the costs at both private and national levels. A 105 g CO_2/km target could increase the average cost of a new car in 2025 by about $1,500, but this would be more than offset by fuel savings of $830 in the first year and $8,500 over the life of the vehicle, leaving motorists better off. A standard would also prevent emissions and save Australia $580 for each tonne of CO_2 avoided (Figure 1). Of the standards examined by the Authority, the strongest standard delivered the largest net benefits.

FIGURE 1: BENEFITS OF A LIGHT VEHICLE EMISSIONS STANDARD



Source: Climate Change Authority

FIGURE 2: EMISSIONS INTENSITY OF NEW LIGHT VEHICLES IN AUSTRALIA UNDER A 'STRONG' STANDARD COMPARED WITH US AND EU TARGETS



Note: See Chapter 4 for information about this chart. BAU is business as usual. SUV is sports utility vehicle.
Source: Climate Change Authority using Reedman and Graham 2013b, ICCT 2014 and EC 2014

Early adoption of a standard maximises the benefits, because it takes time for changes to new vehicles to improve the fleet as a whole. Of the standards examined by the Authority, a standard starting in 2018 and reaching 105 g CO_2/km by 2025 generates the greatest emissions reductions and financial benefits for Australian motorists. It is broadly aligned with the targets introduced in the United States and trails the stronger European Union targets (Figure 2). The Authority believes it is a sensible first step in improving Australia's light vehicle fleet.

Light vehicle emissions standards should be designed to promote environmental goals, policy stability and equity, and minimise regulatory burden. This suggests the following features:

- Coverage of new passenger and light commercial vehicles under a single light vehicles standard.
- Commencement in 2018, with annual obligations defined to 2025. Australian vehicle manufacturers have announced that they will cease local operations by 2018, and would therefore be unaffected by a light vehicle emissions standard commencing in 2018.
- An obligation to comply with the standard on all suppliers of new light vehicles to the Australian market who sell more than 2,500 vehicles each year, with financial penalties for failure to comply.
- Flexible compliance mechanisms, including a fleet averaging approach with banking and limited borrowing allowed during the first phase.
- Adoption of the existing emissions test under the Australian Design Rules for motor vehicles.
- A review in 2021 to consider the operation and design of the scheme and recommend new national average targets for phase two, after 2025.