



CLIMATE CHANGE BILL 2022 AND THE CLIMATE CHANGE (CONSEQUENTIAL AMENDMENTS) BILL 2022

SENATE ENVIRONMENT AND COMMUNICATIONS LEGISLATION COMMITTEE

AUSTRALIAN TRUCKING ASSOCIATION SUBMISSION

10 AUGUST 2022

1. About the Australian Trucking Association

The Australian Trucking Association is a united voice for our members on trucking issues of national importance. Together, we represent the 50,000 businesses and 200,000 people who make up the Australian trucking industry.

2. ATA recommendations

The Australian Trucking Association—

- **supports and recommends** the passage of the Climate Change Bill 2022 and the Climate Change (Consequential Amendments) Bill 2022
- **endorses** the 43 per cent emissions reduction target by 2030 and net zero emissions by 2050
- **recommends** that the Australian Government adopt the global memorandum of understanding on zero emission medium and heavy duty vehicles with the ambition of achieving a zero emission truck sales target of 30 per cent by 2030 and 100 per cent by 2040
- **recommends** that the Australian Government implement a zero emission truck incentive plan, including a zero emission truck purchase price incentive, electric truck recharging infrastructure, green hydrogen truck refuelling infrastructure, and regulatory reform to incentivise the introduction of new zero emission truck models to Australia
- **recommends** that the Australian Government expand the use of high productivity freight vehicles (HPFVs) on the National Land Transport Network and reduce the emissions intensity of road freight transport
- **recommends** that the Australian Government mandate the stage C Euro VI emission standard and equivalent US/Japanese standards for new truck models from 1 January 2024 and all new trucks from 1 January 2025 and plan for mass and width amendments to offset the increased weight and complexity of Euro VI emission control systems.

3. Key elements of the proposed climate change bills

The climate change bills include four key elements—

- enshrine Australia's 43 per cent emissions reduction target by 2030 and net zero emissions by 2050
- task the independent Climate Change Authority to provide advice on Australia's progress against those targets, and to advise on new targets under the Paris Agreement (including a 2035 target)
- require the Minister for Climate Change to report annually to Parliament on progress in meeting the targets
- embed the targets in the objectives and functions of government agencies including the Australian Renewable Energy Agency (ARENA), Clean Energy Finance Corporation, Infrastructure Australia and the North Australia Infrastructure Facility.¹

Additionally, the Parliamentary Library has noted that the climate change bills—

- refer to the temperature-based goals of the *Paris Agreement* to hold the increase in the global average temperature to well below 2 degrees above pre-industrial levels and pursuing efforts to limit the temperature increase to 1.5 degrees
- partially implements the *Paris Agreement* into Australian law
- do not exclude or limit state or territory legislation
- do not provide a mechanism by which emissions reduction targets may be updated by legislative instrument. Instead, this will continue by the making and variation of nationally determined contributions (NDC) under the *Paris Agreement* which are required to be adjusted at least every five years
- new NDCs need to represent an enhancement of the level of ambition (targets cannot be weakened, unless the legislation is amended or repealed in the future. Similarly, weakening of the targets would not be consistent with the *Paris Agreement*)
- require the Climate Change Authority to conduct public consultation in providing advice on emissions reduction targets
- are similar to laws enacted in other OECD nations and in four Australian states and territories.²

¹ The Hon Chris Bowen MP, 26 July 2022. [Legislating to end climate and energy chaos.](#)

² Maclean, H & Prest, J, 28 July 2022. [Climate Change Bill 2022.](#) Parliamentary Library FlagPost.

4. Impact of climate change on trucking

The CSIRO reports that Australia's changing climate represents a significant challenge to individuals, communities, governments, businesses, industry and the environment. They also report—

- increases in greenhouse gases due to human activity have been the dominant cause of observed global warming since the mid-20th century
- Australia has already experienced increases in average temperatures over the past 60 years, with more frequent hot weather, fewer cold days, shifting rainfall patterns and rising sea levels
- these weather changes are likely to continue, including—
 - hot days will become more frequent and hotter
 - sea levels will rise
 - extreme rainfall events will become more intense
 - time spent in drought in southern Australia is likely to increase
 - southern and eastern Australia are projected to experience harsher fire conditions
 - tropical cyclones may occur less often but become more intense.³

The people of the trucking industry are part of the fabric of the Australian community – the impacts of more frequent and more extreme weather affect us all.

Natural disasters and extreme weather impacts are also a significant direct impact on the trucking industry. In recent bushfires and floods this has included—

- extended, constant and uncertain road closures
- uncertain trip times for truck drivers and the potential risks when the road network is impacted by weather events
- long route diversions, which in some cases results in already contracted transport tasks costing more to fulfill than the contracted amount
- lack of suitable alternate routes for heavy vehicles
- loss of income from the reduced transport task
- lack of easy to access assistance measures to affected trucking businesses, placing increased pressure on small businesses
- in some cases, property damage
- in some cases, increased cost of business (such as increasing insurance rates).

Climate change is ultimately a global issue. As such, we should seek to achieve Australia's international climate commitments and achieve net zero emissions by 2050.

Seeking to limit climate change is important for our long-term economic future.

³ CSIRO, December 2020. [Climate change in Australia](#).

5. Impact of the 43 per cent emissions reduction target on trucking

The Australian Government has committed to a 43 per cent emissions reduction target by 2030 as part of Australia's updated Nationally Determined Contribution under the *Paris Agreement*.

This target is an increase of 15 percentage points above Australia's previous target of a 26 to 28 per cent reduction in emissions by 2030.

The 43 per cent emissions reduction target is achievable and improves certainty for businesses to invest in emissions reduction.

The Government has outlined policy measures to achieve the target.⁴ The primary impact of these measures on the trucking industry is the proposed reforms for declining baselines under the Safeguard Mechanism.⁵ Only the largest trucking companies are included in the mechanism. The reforms to the mechanism will proceed separately to these bills.

However, to achieve net zero emissions by 2050 and limit global warming and its impacts, trucking will be required to reduce emissions. The former government's net zero commitment included a projection of reducing transport emissions by up to 71 per cent by 2050.⁶

The trucking industry is an industry largely comprised of small businesses which operate with tight margins. Many operators already struggle to pass on increased costs to customers, and many of measures needed to reduce the industry's emissions require regulatory changes. As a result, further policy reform will be required to enable the trucking industry to meet net zero emissions by 2050.

6. Adopting a zero emission truck target of 100 per cent sales by 2040

The ATA has endorsed the global agreement on zero emission trucks and buses (MoU) and recommends that the Australian Government sign the memorandum of understanding.

The MoU calls for 100 per cent of medium and heavy duty vehicle sales to be zero emissions by 2040, with an interim target of 30 per cent by 2030. The agreement has been signed by 16 nations, including New Zealand, the United Kingdom and Canada.⁷ Canada has a transport task with geographical similarities to Australia.

The Global MoU sets a level of ambition and does not represent a regulated cap on vehicle sales. The agreement recognises that the adoption of zero emission trucks might require different approaches and enabling conditions in different parts of the world. Instead, by signing the agreement, the Australian Government would be signing up to work with other leading nations and markets on identifying viable pathways and supportive implementation action.⁸

⁴ Australian Government, 2022. [Australia's Nationally Determined Contribution](#).

⁵ Reputex Energy, 2021. The economic impact of the ALP's powering Australia plan.

⁶ Australian Government, 2021. [Australia's long-term emissions reduction plan: A whole-of-economy plan to achieve net zero emissions by 2050](#). 17.

⁷ Global commercial vehicle drive to zero. 2021. [Global memorandum of understanding on zero-emission medium- and heavy-duty vehicles](#).

⁸ [Memorandum of Understanding on Zero Emission Medium and Heavy Duty Vehicles](#). 1-2.

The target puts both the ultimate objective of net zero transport and the necessary timeline firmly in view. With the right policy framework, Australia can achieve a zero emission truck fleet. This is likely to include a mix of technologies—

- battery electric trucks, especially for urban tasks
- hydrogen fuel cell electric trucks for longer distances and heavier transport tasks
- internal combustion engine trucks running on renewable fuels for the heaviest transport tasks. These fuels are likely to be in demand from other hard to abate sectors, such as aviation and shipping.

Of these technologies, **battery electric trucks are deployable today**. The majority of the Australian truck fleet is urban. With a total fleet of more than 600,000 trucks, more than 500,000 are rigid trucks which are smaller, carry less freight, and two-thirds of the rigid freight task is conducted in urban regions.⁹

Whilst both green hydrogen and renewable fuels are currently more expensive than diesel, **electricity is already significantly cheaper than diesel**.

The benefits of zero emissions trucks include—

- reducing greenhouse gas emissions
- reducing noxious emissions
- improving fuel security
- removing the reliance of freight on volatile and high diesel prices
- lower maintenance costs for electric vehicles
- lower vehicle noise
- improving conditions for truck drivers (less vehicle vibration, reduced emissions)
- enabling more efficient freight, through exempting deliveries from truck curfews.

⁹ Austroads, 2021. [Options for managing the impacts of aged heavy vehicles](#). 13, 14.

7. Zero emission truck incentive plan

The ATA recommends the adoption of a zero emission truck incentive plan to accelerate the adoption of zero emission trucks, bringing forward their point of commercial viability to enable Australia to meet our climate goals.

This should include—

- a broad, easy to access, zero emission truck purchase incentive, such as the Californian voucher scheme¹⁰
- incentives for installation of electric recharging infrastructure at depots, warehouses, dealerships and customer sites
- funding for public electric truck recharging and green hydrogen refuelling networks, with priority given to locations which support the national freight task and provide zero emission freight networks (such as funding multiple locations to transition key freight routes)
- regulatory reform, including amendments to vehicle design rules and exemptions for zero emission trucks from urban truck curfews¹¹
- support for the manufacture, export, and local distribution of liquid hydrogen as a key enabler for zero emission road freight transport.

The Government's election commitment for hydrogen refuelling investment is also strongly supported by the ATA.

Implementing a zero emission truck incentive plan would enable trucking businesses to accelerate the reduction of transport emissions. The earlier the transition accelerates, the smoother the change can be for businesses with more time to understand and then embed new vehicle technologies as well as adopting new ways of doing business.

Enabling zero emission transport would also provide other economic sectors with the ability to meet sustainability goals and reduce their supply chain emissions.

¹⁰ For more information, see [Voucher incentive programs: A tool for clean commercial vehicle deployment](#). Calstart. July 2019.

¹¹ For more information, see [Electric trucks: Keeping shelves stocked in a net zero world](#). ATA and Electric Vehicle Council. January 2022.

8. A national truck productivity and decarbonisation road network








The National Land Transport Network should support the use of 53.5 metre HPFVs, improving the productivity and decarbonisation of Australia's supply chains. The use of all HPFVs should be incentivised with simpler and consistent road access.

Moving the freight task with fewer vehicle trips, by improving truck productivity, will reduce the carbon emissions produced by Australia's supply chains.

The Australian Infrastructure Audit found that HPFVs reduce total vehicle movements, reduce congestion growth, lower freight costs, enable faster deliveries and are more likely to be safer, quieter and less emissions intensive. Despite these benefits, Infrastructure Australia also reported that the use of HPFVs has been limited.¹²

The following table illustrates that more productive trucks have a lower emissions intensity as a result of needing fewer individual trips to move the freight task.

High Productivity Freight Vehicle configurations

Configuration	Nominal Payload (tonnes)	Payload Equivalency	No Trips to transport 1000 tonnes (GML)	CO2 (tonnes) emitted per 1000 tonne transport task	Road space equivalent (kilometres) with 3 second spacing
 19metre (24 pallet) Semi-trailer	24.04	1.00	42	28.78	4.3
 26metre 36 pallet B-double	38.84	1.62	26	23.48	2.84
 PBS Level 2A truck and dog (8x4 with 6 axle dog)	39.92	1.66	25	25.10	2.73
 PBS A-double	48.73	2.03	21	20.53	2.38
 35metre Modular B-triple	52.35	2.18	19	19.14	2.25
 36.5metre Type 1 Road Train	51.43	2.14	19	19.43	2.28
 36.5metre AB-triple	66.7	2.77	15	16.56	1.8



¹² Infrastructure Australia, [An assessment of Australia's future infrastructure needs: the Australian Infrastructure Audit 2019](#), June 2019. 344.

The Australian Government should—

- plan for up to 53.5 metre long HPFVs on the National Land Transport Network, with specific productivity upgrades in the immediate term
- work with the states to reduce road access permits by 95 per cent through the rollout of an automated notice system based on the successful Tasmanian model.

9. Euro VI and equivalent standards

As a related vehicle emissions issue, the Australian Government should mandate Euro VI emissions standards at Stage C and equivalent US and Japanese standards for new truck models from 1 January 2024 and all new trucks from 1 January 2025.¹³

The Euro series of standards regulate the emission of carbon monoxide, hydrocarbons, nitrogen oxides and particulates by on-road heavy diesel vehicles.

The Government's October 2020 regulatory impact statement proposed mandating Euro VI or its equivalents for new truck models from 1 July 2027 and for new trucks from 1 July 2028.¹⁴

After extensive consultation with its members, the ATA considers that the standards can and should be implemented earlier than planned. The necessary Australian Design Rules should be made urgently to give the industry certainty about the timing.

The ADRs should be accompanied by mass and width amendments to offset the increased weight and complexity of Euro VI emission control systems. These should include—

- an additional 500kg axle mass for steer trucks, that can be shared between the front and rear axles (or be applied solely to one axle, or axle set)
- an additional 1000kg axle mass for twin steer trucks with load-share front suspension, to be applied to the steer axles
- an increase in maximum vehicle width to 2.6m (or if governments do not accept this option, width should be increased to 2.55m with 2.6m for refrigerated vehicles).

Australia's truck fleet is old by international standards. Older trucks have the highest crash frequencies, lack the latest safety technologies, and produce higher emissions. Less than half of Australia's truck fleet meets the latest emission standards.

It is vital that government does not just enable and mandate new technologies. Together with industry, government should plan and incentivise for the take up of newer, greener vehicles.

Heavy vehicle sales have increased in recent years with the introduction of temporary full expensing for trucks and trailers, illustrating that incentives and taxation measures can be calibrated to improve the sustainability of the vehicle fleet.

¹³ ATA, [Heavy vehicle emission standards for cleaner air](#). Submission to DITRDC, March 2021.

¹⁴ DITRDC, [Heavy vehicle emission standards for cleaner air](#). Draft regulation impact statement, October 2020. 6.

10.ATA contact

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