Tabled 24 September 2024

Climate Change Office

Transport Emissions Reduction and Resilience Plan

2024–2029

Renewables, Climate and Future Industries Tasmania
Department of State Growth

Tasmanian Government

In recognition of the deep history and culture of these islands, we acknowledge all Tasmanian Aboriginal people as the continuing Custodians of this Land and Sea Country and pay our respect to Elders past and present.

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Chris Crerar

Minister's message

Hon Nick Duigan MLC
Minister for Energy
and Renewables

The *Transport Emissions Reduction and Resilience Plan 2024-29* is the first legislated Plan for the transport sector under the *Climate Change (State Action) Act 2008*. This Plan builds on work undertaken to date to improve the Tasmanian transport system and to support the transition to low and zero emissions technology.

Tasmania's transport sector accounts for around 21 per cent of the state's total emissions, excluding the land use, land use change and forestry sector. Transport emissions have increased by around 12.4 per cent since 1990, due to an increase in the number of vehicles and a switch to larger vehicles offsetting the use of more fuel efficient vehicles. We have an opportunity to meaningfully reduce our emissions through the transition to low and zero emissions vehicles, as well as increasing public and active transport.

We need to ensure we have the appropriate infrastructure and systems to support the transition of our transport sector to net zero. For example, more electric vehicles will result in increased electricity demand for charging. Increased demand can lead to the need to consider appropriate retail electricity offerings, ensuring the network can handle additional load, and that new electricity generation is zero emissions.

Under a changing climate, the increased frequency and intensity of extreme events, such as fires, storms and floods, will place increasing pressure on our road and rail infrastructure. Damage to transport infrastructure disrupts free movement of passengers and freight, and there is a cost to businesses, households and government to repair or replace damaged infrastructure.

Through this Plan, the government is committing to deliver a $1.4 million program to support increased public electric vehicle charging infrastructure, education resources for the community, businesses and the tourism industry, grants to assist small businesses to transition vehicles, skills transition planning for the industry, and more. This funding is in addition to $177 million for Tasmanian Government projects committed or already underway to ensure we have a reliable, affordable, efficient, modern transport system.

This Plan will guide additional strategic investment over the next five years. We will work with industry, the community and the Australian Government to leverage any funding that may become available at the national level to support this transition. This Plan also considers relevant actions already underway in the transport portfolio, including those that support increased use of active transport and improve public transport services.

This Plan is one of six sectoral Plans. Together, the Plans for our transport, waste, energy, industrial processes, agriculture, and land and forestry sectors will set out our pathway to achieve our target of net zero emissions, or lower, from 2030, support businesses and industry to transition to a low emissions economy, and build resilience to the impacts of climate change.

Tasmania's transport sector

Tasmania's transport network enables connectivity and accessibility to and from, and within our island, to meet the needs of residents, visitors, business and industry. It comprises various modes of transport, including roads, bus network, rail used for freight, air, ferries and shipping, and walking and cycling. The transport, postal and warehousing sector of the economy contributed $1.8 billion to Tasmania's gross state product in 2022-23.

Tasmania is mountainous and, given the absence of large cities, it has a lower population density than some other parts of Australia. These factors can be challenging for our transport sector and have led to a heavy reliance on private vehicles. We need regional, placed-based solutions to enable travel within and between regions.

The transport sector around the world is experiencing significant change due to the emergence of new technologies, such as electric and hydrogen vehicles and low carbon liquid fuels, and the rapid rate of change within those new technologies, such as improvements to battery technologies that lead to greater range and performance.

Tasmania's vehicle use: a snapshot

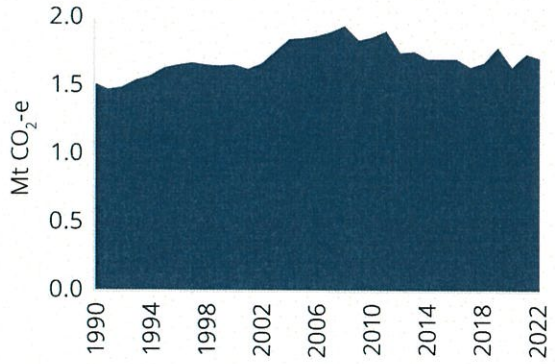
- Tasmanian vehicles have the oldest average age of any state or territory fleet, at 13.21 years, compared with the national average age of 11.25 years.[1]
- Due to their older average ages, Tasmanian vehicles are more likely to have higher emissions than the national fleet.
- Tasmania also has a higher number of vehicles per person than the rest of Australia.[2]
- As well as having older vehicles and more of them, Tasmanians are more likely to rely on cars than other modes of transport, compared with other states and territories in Australia.[3]

1 Bureau of Infrastructure and Transport Research Economics (BITRE) (2023), 'Road Vehicles Australia', www.bitre.gov.au/publications/2023/road-vehicles-australia-january-2023

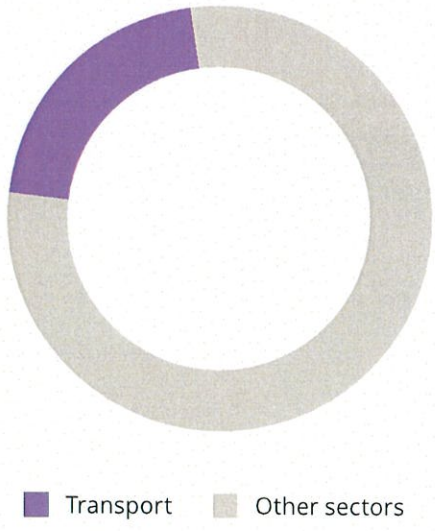
2 BITRE 2023.

3 Australian Bureau of Statistics (ABS) (2021) 'Australia's journey to work', 2021 Census, www.abs.gov.au/articles/australias-journey-work

Tasmanian emissions from transport 1990 – 2022

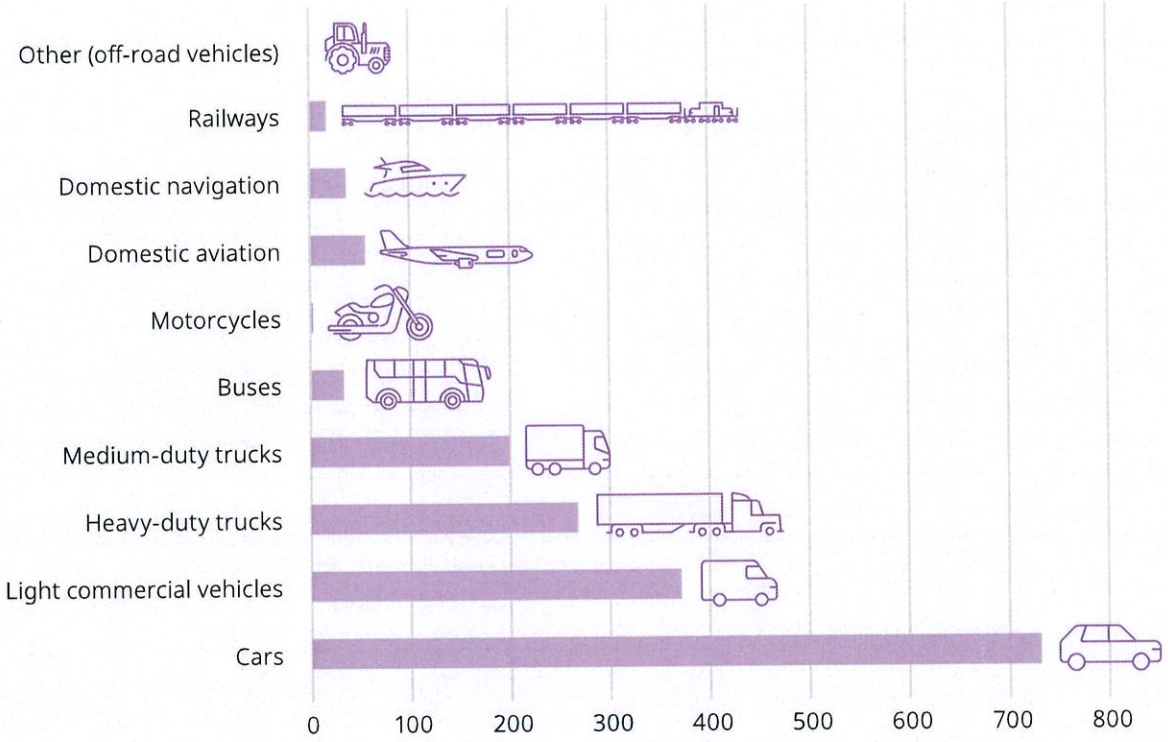


Share of Tasmanian emissions (excluding LULUCF) 2022



Department of Climate Change, Energy, the Environment and Water (DCCEEW) 2024, State and Territory Greenhouse Gas Inventories 2022

Tasmanian transport emissions 2022 (kt CO_2-e)



Source: Department of Climate Change, Energy, the Environment and Water (DCCEEW) 2024, State and Territory Greenhouse Gas Inventories 2022

Road transport accounts for over 90 per cent of Tasmania's transport emissions.

iStock.com/Alexwise

Road transport makes up the majority (around 93 per cent) of Tasmania's transport sector emissions and is a key focus area for this Plan.

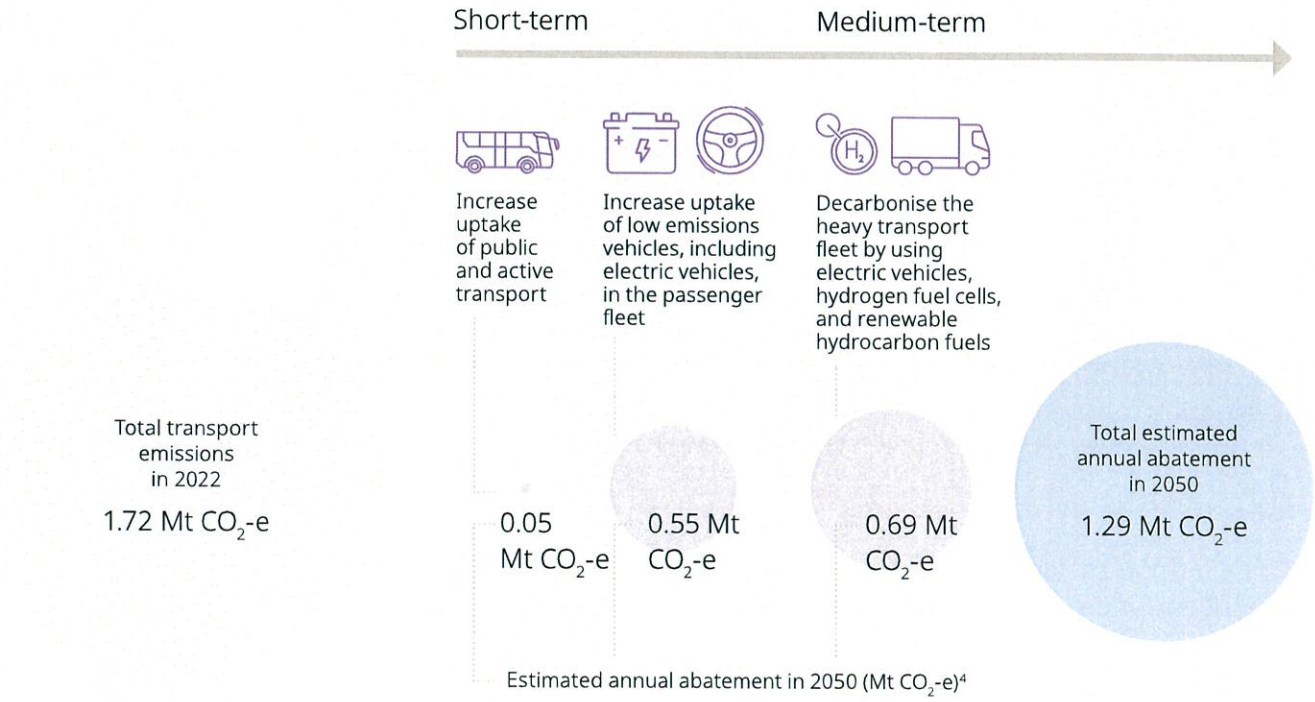
Since 1990, emissions from cars have fallen by 19.5 per cent. This drop is mainly caused by increasing fuel efficiency of vehicles. It may also reflect some consumers changing from cars to vehicles defined as 'light commercial vehicles' (such as utes and vans). The emissions from these vehicles have almost doubled since 1990. The decreased emissions from cars have only partially offset increased emissions from light commercial vehicles, and heavy duty trucks and buses.

Emissions reduction opportunities for Tasmania's transport sector

The 2021 Tasmanian Emissions Pathway Review identified 16 "best-fit" emissions reduction opportunities for Tasmania. The opportunities were assessed based on their achievability against economic considerations, technical barriers and government policy. Three of the best-fit opportunities relate to the transport sector. The Emissions Pathway Review estimated that these opportunities could reduce Tasmania's transport emissions by 1.29 Mt CO_2-e per year by 2050. For comparison, this represents 75 per cent of Tasmania's total transport emissions in 2022.

The actions in this plan are focused on supporting the uptake of these opportunities across Tasmania.

Emissions reduction opportunities

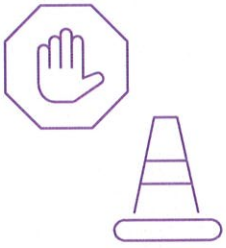


4 Tasmania's Emissions Pathway Review, Point Advisory with Indufor, recfit.tas.gov.au/__data/assets/pdf_file/0009/492093/Tasmanian_Emissions_Pathway_Review_-_Technical_Report.pdf

Impacts of climate change on the transport sector

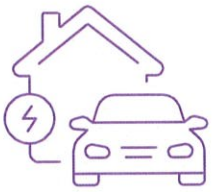
Climate change will increase physical risks to transport systems, for example through damage to infrastructure from more frequent extreme weather events like storms and floods, and risks to low lying infrastructure from ongoing sea level rise. This increased incidence may also mean that public and private assets are harder to insure.

Damage to infrastructure from extreme events disrupts the free movement of passengers and freight, and results in costs to businesses, households and government to repair or replace damaged infrastructure. This damage may make it harder for emergency management services to respond to extreme weather events, and may result in parts of Tasmania with limited road access being cut-off during extreme events, leaving residents and communities isolated. Extended power outages may impact on the ability to charge and use electric vehicles (EVs).

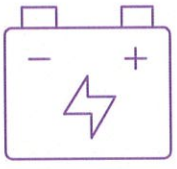


The shift away from internal combustion engine (ICE) vehicles means less fuel excise being paid to the Australian Government under the current excise arrangement. This transitional risk may affect Australian Government funding for road projects in the future.

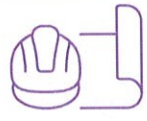
More EVs will result in increased electricity demand for charging. This increased demand will lead to the need to consider appropriate retail electricity offerings, ensuring the network can handle additional load, and that new electricity generation is zero emissions. EVs may be capable of supporting households in times of short-term electricity outage through Vehicle to Load technology.



The switch to low emissions vehicles presents different risks and hazards to be managed, compared with ICE vehicles. These risks include fire, radiation, heat, and chemical and electrical hazards, as well as the impact over time of heavier electric vehicles on roads and bridges. There will also be a need to consider resource recovery pathways for obsolete ICE vehicles, as well as EVs and their batteries.



The transport sector will need different skills and workforce capability to support the transition, for example the maintenance of EVs and charging infrastructure.



Opportunities for the transport sector include increased public and active transport, which can reduce transport emissions, and has associated co-benefits, such as improved air quality and less road traffic congestion.

New commitments to reduce emissions and build resilience in the transport sector

The Tasmanian Government has committed $1.4 million to implement this Plan and deliver eight new initiatives:

- financial support for Tasmanians to purchase electric bikes through the Energy Saver Loan Scheme
- support small businesses to purchase cargo e-bikes for last mile deliveries
- work with partners on a *Greater Hobart Bicycle Parking Master Plan*, and fund pilot sites for secure bike parking, to support a sustainable and accessible transport network
- grants to support the expansion of the state's EV charging network, for example fast charging at key destinations
- support small businesses to purchase electric delivery vans
- support the Australian Electric Vehicle Association (AEVA) National Conference and the Energy, Efficiency, Electric Expo, which will be held in Hobart in 2024
- partner with peak bodies and other industry organisations to develop public education resources about driving electric vehicles in Tasmanian conditions, EV tourism materials, and resources for small business
- provide funding to the automotive industry to develop a skills transition plan to support the switch to electric vehicles.

These actions will deliver outcomes for small Tasmanian businesses, the community, and the tourism sector. The actions will support these groups to reduce their transport emissions and have the potential for a range of other co-benefits, including reduced traffic congestion, by supporting the uptake of public and active transport, and reduced costs associated with maintaining and fuelling EVs in comparison with internal combustion engine vehicles.

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About this Plan

This Plan for the transport sector focuses on Tasmania's major sources of transport emissions, as outlined under the United Nations Framework Convention on Climate Change (UNFCCC) reporting framework. These emissions are from the combustion of fuels used in domestic aviation (Tasmania's share of fuel used in aviation), road transportation (cars, buses, trucks, motorcycles), railways, domestic navigation (shipping, ferries, leisure craft) and off-road vehicles (such as quad bikes, which are not used on public roads). Emissions from mining and farming equipment are both accounted for in the energy sector. Road transport accounts for over 90 per cent of Tasmania's transport emissions, which makes it the key focus for action.

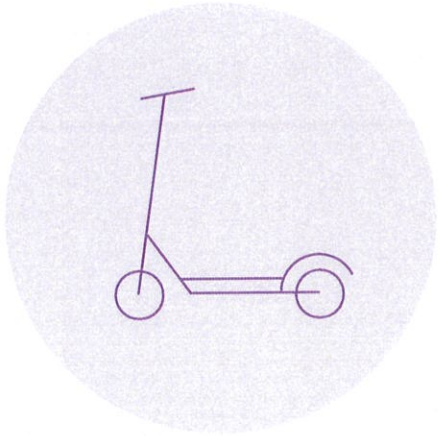
The UNFCCC reporting framework for transport does not include the embodied emissions from the production of transport infrastructure, such as the emissions created in the production of cement or other building materials used in bridges, roads and other transport infrastructure. These emissions are accounted for in the industrial process and product use (IPPU) category in the UNFCCC framework, and will be considered in both the transport and IPPU Plans where relevant.

This Plan considers how we can build resilience to the impacts of climate change in our transport sector, and how the sector can be supported in the transition to net zero. Examples include how our transport infrastructure can withstand the impacts of extreme weather events such as flooding and extreme heat.

Public consultation identified opportunities for public and active transport improvements, such as real time information for public transport, improved bus stop facilities, park and ride facilities, and improved infrastructure to support active transport.

The Tasmanian Government has a range of strategies and actions underway relating to public and active transport that address some of these public concerns. Relevant actions have been included in this Plan to provide a coordinated view of the action underway. Further details can be found on the Department of State Growth website at: www.stategrowth.tas.gov.au/policies_and_strategies

The Australian Government has also developed a National Electric Vehicle Strategy, and released its Transport and Infrastructure Net Zero Roadmap for consultation. An Action Plan will also be developed to support transport emissions reductions. The actions in this Plan are designed to complement existing work at both a state and national level.



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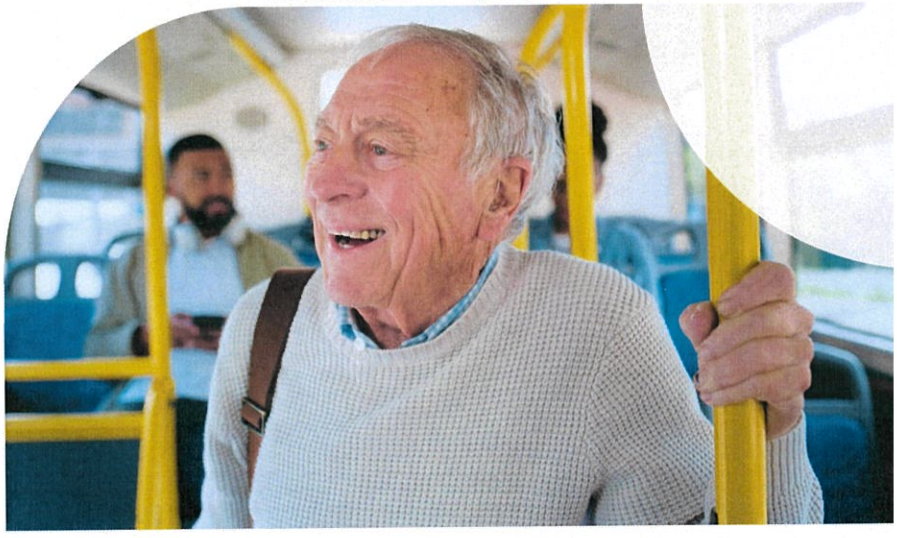
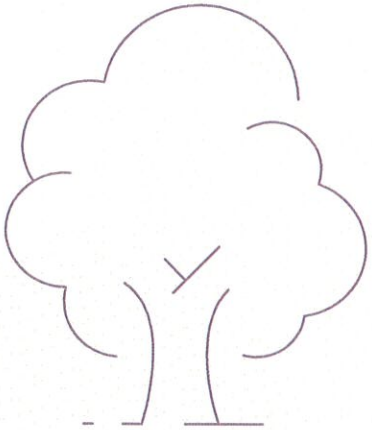


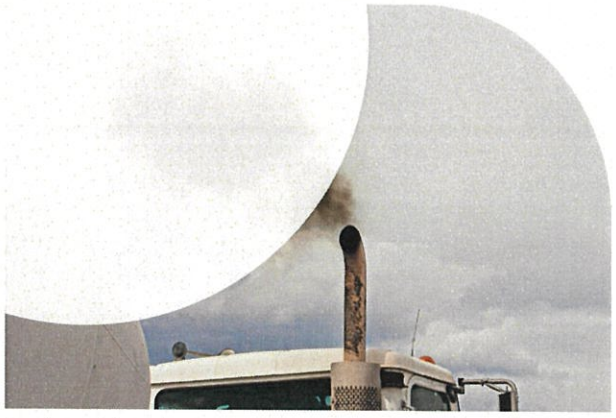
Our Plan for reducing emissions and building resilience in the transport sector is made up of five focus areas:

1. We will increase the use of public and active transport in Tasmania.
2. We will increase the number of low emissions cars and other light vehicles on Tasmanian roads.
3. We will support the uptake of low emissions heavy vehicles and vessels on Tasmanian roads and waterways.
4. We will support our transport sector to transition to low emissions and build resilience into the future.
5. We will drive action through partnerships and collaboration.

Targets

- **Economy-wide target of net zero emissions, or lower, from 2030. This target recognises the risks to Tasmania's current net zero status, for example from major bushfires, which could change our emissions profile by reducing the carbon sink in our forests.**
- **Transition the Tasmanian government vehicle fleet to electric by 2030.**
- **Increase the use of public transport for journeys to work in Greater Hobart.**





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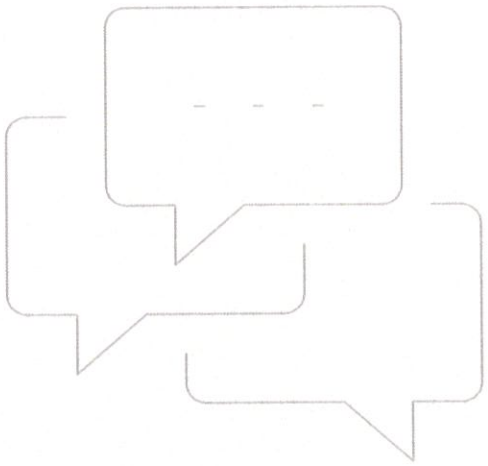
Consultation – What we heard

Targeted consultation with business and industry started in mid-2023, and public consultation was open from November to December 2023. Sixty five submissions were received through the public consultation process. Consultation participants included:

- Tasmanian Government agencies
- representatives from the Tasmanian transport industry and relevant national bodies
- relevant non-government organisations and research institutions
- members of the community and community organisations.

Key themes from consultation, in order of the number of times raised, and actions in this Plan to address them, are summarised below. All public submissions are published on the ReCFIT website at www.recfit.tas.gov.au/consultation



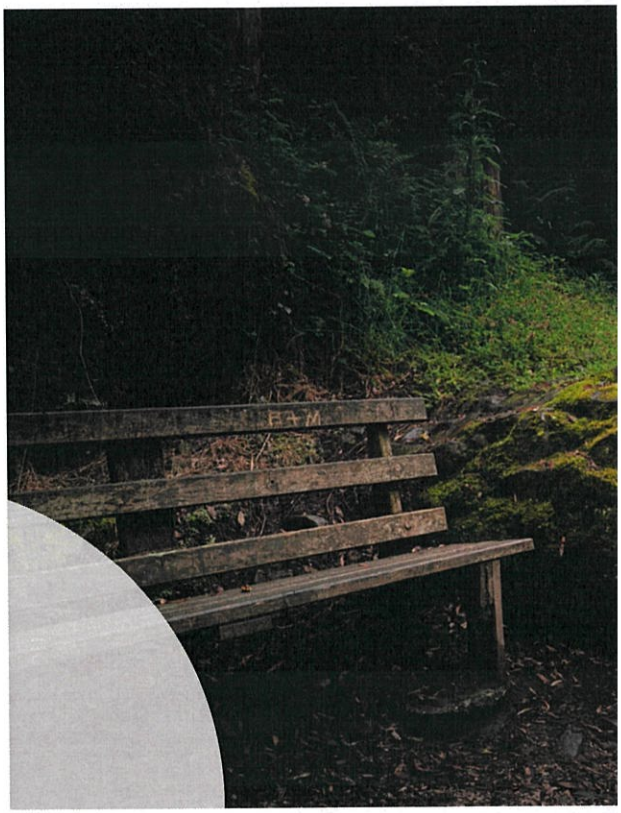
Key themes from consultation		What we are doing
1	**Improved public transport services, including increased frequency and improved quality and reliability**	Expanding the River Derwent ferry service.
		Rolling out a common ticketing system for public transport.
		Rolling out real time passenger information for public transport.
		Upgrading bus stops across Tasmania.
		Constructing park and ride facilities.
		Progressing the Northern Suburbs Transit Corridor Growth Strategy.
		Providing half price bus fares from 1 July 2024 to 30 June 2025.
2	**Regulatory change across all levels of government to support the transition, particularly for heavy vehicles**	Working collaboratively with the Australian Government on heavy vehicle reform, including mass limits, and the decarbonisation of transport and transport infrastructure.
		Consulting with the community on the regulatory framework for e-bikes.

	Key themes from consultation	What we are doing
3	**Transition planning for industry, including skills development**	Providing funding for the automotive industry to support skills transition planning.
4	**Investment in infrastructure and facilities, planning, and behaviour change programs to support the uptake of active and public transport**	Continuing to implement key strategies, plans and programs in the Department of State Growth to improve Tasmania's transport system, such as the *Draft Keeping Hobart Moving Plan, Tasmanian Walking and Cycling for Active Transport Strategy,* and the *Better Active Transport Grant Program.*
5	**Incentives to support the uptake of electric vehicles and increased public electric vehicle charging**	Funding for public electric vehicle charging infrastructure. Supporting small businesses to purchase electric delivery vans. Supporting the AEVA National Conference and the Energy, Efficiency, Electric Expo, which will be held in Hobart in 2024. Recent financial support for the purchase of eligible EVs.
6	**Targets for emissions reduction, uptake of public and active transport, sales targets, and fleet transition targets**	Legislated state emissions reduction target of net zero, or lower, from 2030. Target to transition the government fleet to electric vehicles.
7	**Partnerships for government to work with other levels of government, the scientific community, business and industry**	Continuing to work with the Australian Government and other jurisdictions to decarbonise transport and transport infrastructure. Work with Local Government Association of Tasmania to support councils to transition their fleets to electric vehicles.
8	**Education resources for drivers of electric vehicles**	Working with partners in industry to develop education and awareness resources for EV driving in Tasmania, including for Tasmanian businesses and the tourism sector.

Research and alignment with relevant policies

There is significant work underway by governments, business, industry and the community to improve the transport network in Tasmania, Australia and internationally. This Plan brings together the work already underway or committed, and the proposed new work programs, to coordinate our approach to reducing emissions and building resilience in the transport sector. We have considered:

- existing Tasmanian Government policies, including strategies to increase public and active transport
- our legislated target to ensure Tasmania's emissions are net zero, or lower, from 2030
- the objects of the *Climate Change (State Action) Act 2008*, including adaptation, contribution to international, national and local government action, and supporting a consultative partnership approach to action on climate change
- complementarity with actions already underway by local government, business and industry, such as the City of Hobart's Development of its *Climate Ready Hobart* strategy
- relevant national policies and strategies, including the National Electric Vehicle Strategy, the Transport and Infrastructure Net Zero Roadmap and proposed Action Plan, and the new Australian Government Infrastructure Policy Statement, which includes a theme of sustainability and outlines the Australian Government's commitment to cut total emissions by 43 per cent by 2030
- feedback from consultation on Tasmania's Climate Change Action Plan 2023-25[5] (Action Plan)
- the 2021 Tasmanian Emissions Pathway Review[6]
- a desktop review of relevant research and publications relating to emissions in the transport sector, from organisations such as the University of Tasmania, ClimateWorks, the Climate Council, the Australia Institute, and the Australian Electric Vehicle Association
- the principles of sustainable development and social equity, transparency and reporting, science-based approach, integrated decision making, risk management, community engagement, and complementarity (as outlined in the Action Plan).



5 recfit.tas.gov.au/climate/climate_change_action_plan

6 recfit.tas.gov.au/__data/assets/pdf_file/0009/492093/Tasmanian_Emissions_Pathway_Review_-_Technical_Report.pdf

How we will take action

The Emissions Reduction and Resilience Plans will guide Tasmania's action on climate change in the transport, waste, energy, industrial processes and product use, and land use, land use change and forestry sectors for the next five years.

Some actions are fully funded and ready to implement, and some are already underway. Other opportunities require additional funding throughout the life of the Plan before they can be progressed.

The Transport Plan includes funding of $1.4 million from the Climate Change Action Plan 2023-25 for new actions to support emissions reductions in the transport sector.

The status of each action in this Plan is shown as follows:

NEW
New initiatives that are being funded through the Plan or recently announced.

IN PROGRESS
Initiatives that are already being progressed by ReCFIT or the relevant department.

ONGOING
Streams of work that are expected to remain ongoing.

FUTURE FUNDING PRIORITY
Initiatives that require additional funding before they can be progressed.

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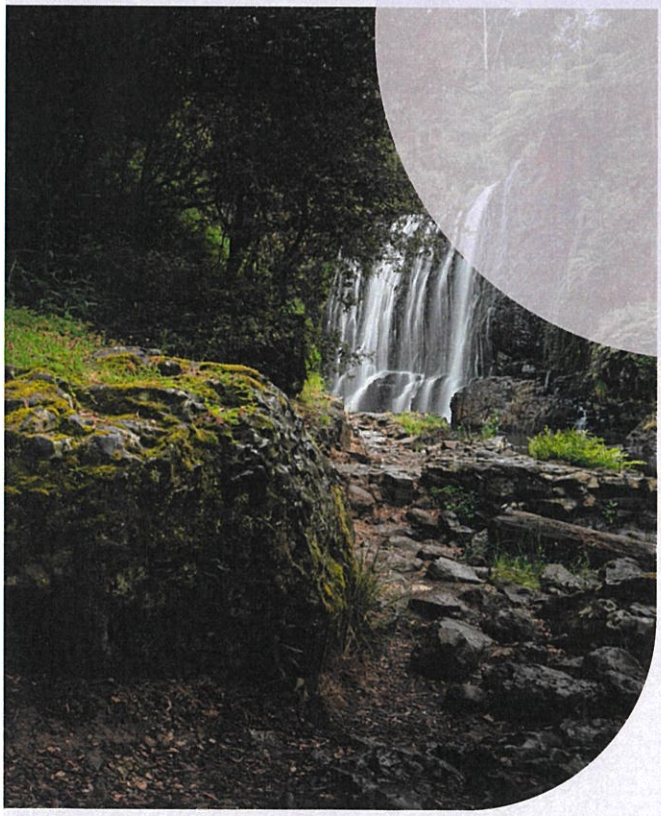

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Chris Crerar

Our pathway to reduce emissions and build resilience in the transport sector

1 We will increase the use of public and active transport in Tasmania

Increasing the use of public and active transport will help to reduce transport emissions by generating lower emissions per passenger per kilometre compared to private car use, decreasing traffic congestion, and improving health outcomes by increasing physical activity.

Tasmania has a high level of private car dependence. Shifting to public and active transport, for those that are able to, will play an essential role in reducing Tasmania's transport emissions.

Even where public transport is fuelled by fossil fuels, using public transport produces significantly less greenhouse gas emissions than transporting the same number of people in private cars[7].

Increased use of public and active transport can have many other benefits, including reduced traffic congestion, reduced air pollution, improved health and wellbeing, and reduced costs of maintaining and fuelling internal combustion engine (ICE) vehicles.

Nearly 90 per cent of Tasmanians drive to work.

7 Institute for Sensible Transport (2023) 'Transport and climate change', sensibletransport.org.au/project/transport-and-climate-change/

Tasmania's population is dispersed across larger cities, towns and small rural communities, creating challenges for our public transport network.

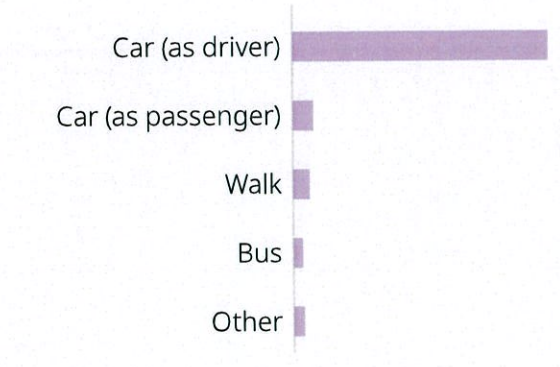
Tasmania is also a mountainous island, which can be a barrier when people consider active transport.

Feedback on the draft Plan focused on barriers to making changes, such as a lack of suitable infrastructure to support active transport, the need for improved public transport, and the need for broader consideration of active and public transport in planning considerations.

Tasmania has an existing priority to increase all public transport modes used for journeys to work in Greater Hobart from 6.4 per cent to 10 per cent by 2030.

The actions in this Plan continue the large program of work underway to improve active and public transport, as well as new initiatives to support the community to increase their use of public and active transport.

How Tasmanians travelled to work in 2021



Source: Australian Bureau of Statistics, 2021 Census of Population and Housing

River Derwent Ferry expansion

In August 2021, Derwent Ferries began a trial commuter ferry service between Bellerive and Hobart, supported by the Tasmanian Government. The ferry service carried over 250,000 passengers in its first two years of operation and has contributed to reduced private vehicle journeys during peak hours.

In 2024, the government has committed to build three new ferry terminals along the River Derwent over the next four years, at Lindisfarne Bay, Wilkinsons Point and Sandy Bay. The expansion is expected to take additional private vehicles off the road in peak hours.

Other priority ferry terminal locations along the River Derwent were identified in the draft Derwent ferry masterplan, including Howrah Point, Kingston Beach and Regatta Point. The government will consider these locations under a future expansion plan.

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Actions

Objective	Summary	Status	Delivered by
Continue to implement key strategies, programs and projects that support the transition to a modern transport sector	Progress the draft *Keeping Hobart Moving – Transport Solutions for Our Future* (the Plan), which includes actions to improve Hobart's transport system, including: • new and enhanced walking, wheeling and cycling networks • a new, integrated rapid bus network and improved bus services • multiple new ferry terminals and routes • a number of significant road infrastructure projects.	 IN PROGRESS	**State Growth**
	Progress the Northern Suburbs Transit Corridor Growth Strategy, focusing initially on the four-kilometre section between the Glenorchy CBD and New Town.	 IN PROGRESS	**State Growth**
	Finalise the update to the Tasmanian Walking and Cycling for Active Transport Strategy, which aims to promote walking and cycling as viable and desirable forms of transport, through improved infrastructure, land use planning and behavioural change.	 IN PROGRESS	**State Growth**
	Continue to deliver grants through the Better Active Transport Grant Program, which aims to: • support local government partners to develop and construct upgraded, new or extended active transport infrastructure at priority locations, and increase local government capacity to design and build infrastructure • increase active transport accessibility and recognition of the importance of active transport as a transport option.	 IN PROGRESS	**State Growth**

Objective	Summary	Status	Delivered by
Continue to implement key strategies, programs and projects that support the transition to a modern transport sector (continued)	Continue to deliver grants through the Bus Stop Upgrade Program, to provide all access, all weather bus stops at priority locations.	 IN PROGRESS	State Growth
	Deliver the Common Ticketing Project, to enable a seamless journey for commuters combined with real time information, which will boost public transport use and help reduce congestion.	 IN PROGRESS	State Growth
	Consult with the community on improving the regulatory framework for e-bikes.	 IN PROGRESS	State Growth
	Analyse the costs and issues associated with transitioning Tasmania's public transport fleet to zero emissions technologies, including ferries. This analysis will inform future decision making and begin the transition planning process.	 IN PROGRESS	State Growth
	Explore options for the National Transport Commission to review the regulatory barriers to active transport uptake (particularly e-bikes).	 NEW	State Growth
	Explore opportunities to seek support from the National Active Transport Fund.	 NEW	State Growth
	Provide financial support for the purchase of electric bikes through the Energy Saver Loan Scheme.	 NEW	ReCFIT

Objective	Summary	Status	Delivered by
Continue to implement key strategies, programs and projects that support the transition to a modern transport sector (continued)	Provide support to small businesses to purchase cargo e-bikes for last mile deliveries.	 NEW	**ReCFIT**
	Work with partners on a *Greater Hobart Bicycle Parking Master Plan* and fund pilot sites for secure bike parking, to support a sustainable and accessible transport network.	 NEW	**State Growth / ReCFIT**
Support the uptake of active transport	Support Metro Tasmania to undertake zero emission bus trials, which will provide valuable operational information to inform future decisions on the electrification of public transport.	 IN PROGRESS	**ReCFIT**
	Implement half price fares for buses and Derwent ferries from 1 June 2024 to 30 June 2025.	 IN PROGRESS	**State Growth**
	Invest in park and ride facilities in the north of the state and a new bus interchange in Launceston.	 NEW	**State Growth**
	Build three new ferry terminals over the next four years from 2024, commencing with Lindisfarne Bay, followed by Sandy Bay and Wilkinsons Point.	 NEW	**State Growth**
	Invest in expanding bus services to growing communities and schools to improve travel times and increase access to employment, education and other services.	 NEW	**State Growth**

E-mobility Rebate Program

In late 2023, the Tasmanian Government launched the $200,000 e-Mobility Rebate Program. The program offered rebates for people to purchase zero emission transport options such as e-scooters, e-bikes and cargo e-bikes. The goal of the program was to reduce transport emissions in the state by encouraging commuters to replace some of their journeys with electric transport options. Rebates of up to 12 per cent of the purchase price were available.

A total of 501 Tasmanians received a rebate and 414 of these were used to purchase e-bikes.

We surveyed some of the people who received rebates to find out more about why they purchased their e-mobility device.

Their reasons included the enjoyment and health benefits of riding, the assistance provided for hill climbing, the convenience for short trips, and helping to reduce greenhouse gas emissions.

Tasmania was the first Australian jurisdiction to introduce a scheme like this. Results from the program and surveys will help us design future programs.

Through this transport Plan, the government will provide no-interest loans to help with the up-front costs of purchasing e-bikes.

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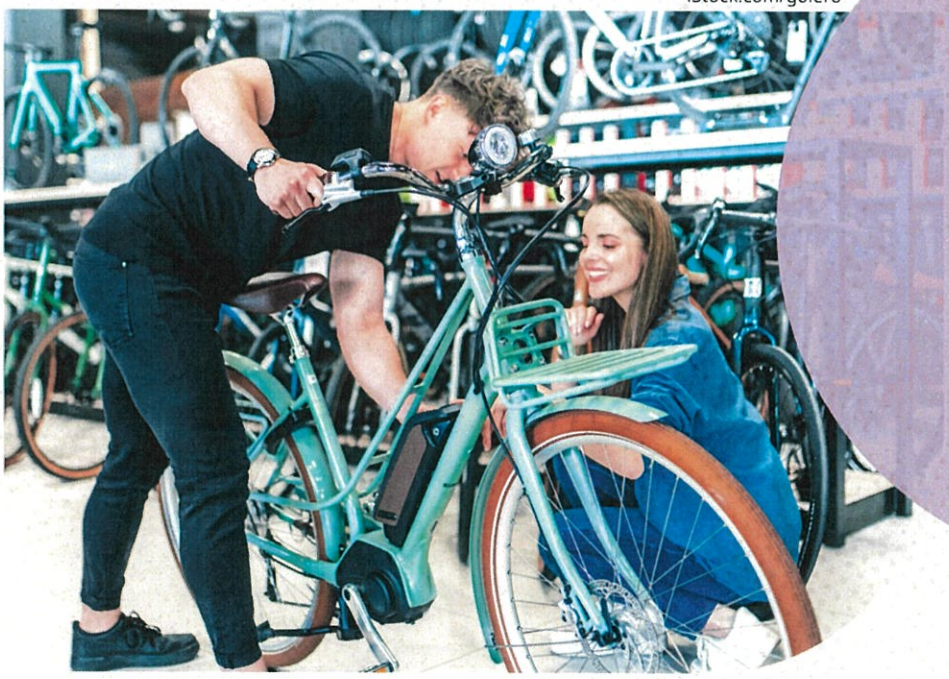

2 We will increase the number of low emissions cars and other light vehicles on Tasmanian roads

Cars and light vehicles are a major contributor to transport emissions. Supporting the uptake of low emissions vehicles is an important way to lower transport emissions and may result in other benefits for Tasmanians, such as lower vehicle operating costs. Tasmania's renewable energy means greater emissions savings for electric vehicles compared to jurisdictions where electricity grids include more fossil fuels.

Tasmania already has a statewide electric vehicle charging network, supported by the government's Electric Vehicle ChargeSmart Grant Program from 2018 to 2021. However, as electric vehicles become more common, this network will need to expand, both in terms of the number and size of sites, to ensure that EVs can continue to efficiently travel around the state.

More work is needed to improve education and awareness about electric vehicles, for both consumers and businesses, to combat common misconceptions such as range anxiety.

We can reduce our reliance on cars by increasing public and active transport, and increasing the number of low emissions vehicles on Tasmanian roads. These changes can:

- reduce our greenhouse gas emissions
- improve public health, through reduced traffic noise and improved air quality
- increase energy security through reduced reliance on imported fuel
- reduce transport costs for households and businesses
- increase opportunities for the tourism sector, for example by incorporating EVs into strategies to make Tasmania a leading destination for climate-conscious travel
- generate job opportunities, such as in the installation and maintenance of charging infrastructure.

Chris Crerar

Electric Vehicle Rebate Program

In November 2023, the Tasmanian Government launched the Electric Vehicle Rebate program. The program provides funding of $2,000 for new battery electric vehicles and second-hand (but 'new to Tasmania') electric vehicles.

As of mid-July 2024, 202 EV rebates have been paid. The most popular make of car purchased with the support of the rebate was BYD, followed by Tesla and Nissan. The most popular models were the BYD Atto 3, the Tesla Model Y, the Nissan Leaf and the Tesla Model 3. Rebates have been provided to purchase vehicles across 16 different makes and 31 different models.

Rebates went to applicants all around the state, in 23 local government areas. Hobart City Council, Kingborough Council, Clarence City Council, Launceston City Council and Glenorchy City Council areas have had the highest number of rebates to date.

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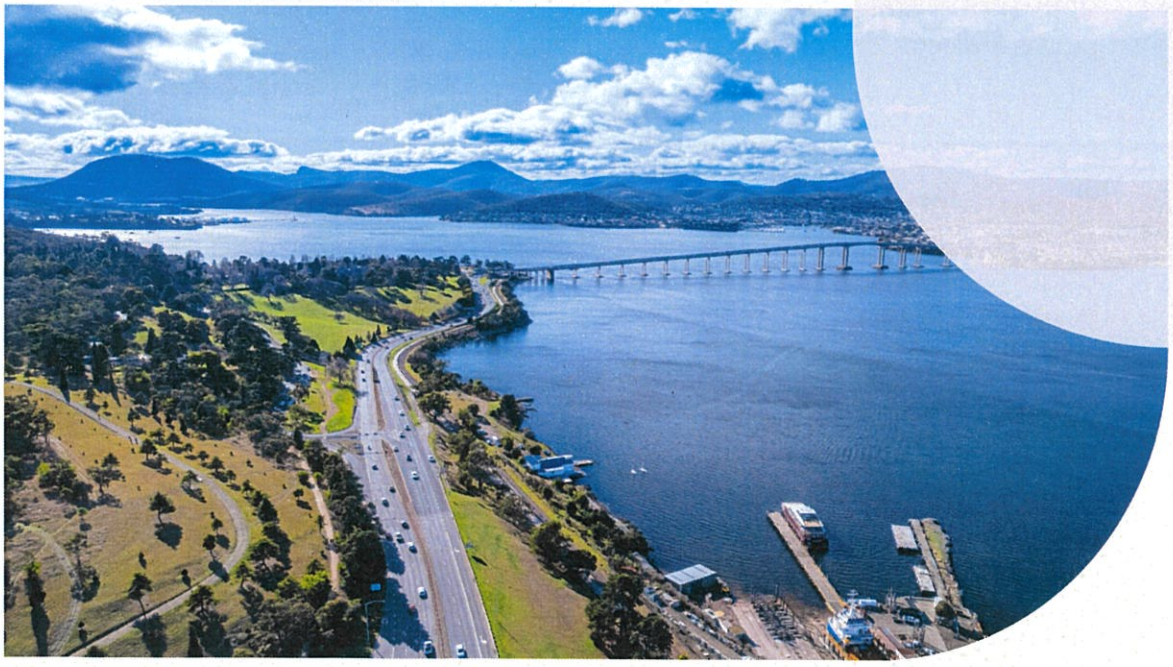

Actions

Objective	Summary	Status	Delivered by
Increase access to EV charging across Tasmania	Provide grants to support the expansion of the state's electric vehicle charging network, for example fast charging at key destinations.	NEW	**ReCFIT**
Support Tasmanian communities and organisations to adopt EVs	Work with partners to explore options to incentivise the uptake of low emissions vehicles through price setting as part of registration fees.	FUTURE FUNDING PRIORITY	**State Growth / ReCFIT**
	Work with local governments to support the uptake of EVs in their fleets, building on the Smarter Fleets for local government program delivered through Tasmania's previous climate change action plan.	FUTURE FUNDING PRIORITY	**ReCFIT / LGAT**
	Encourage all Tasmanian energy retailers to consider introducing EV-specific charging tariffs.	NEW	**ReCFIT**
	Support small businesses to purchase electric delivery vans.	NEW	**ReCFIT**
Improve education and awareness about EVs	Support the AEVA National Conference and the Energy, Efficiency, Electric Expo which will be held in Hobart in 2024.	NEW	**ReCFIT**
	Partner with peak bodies and other industry organisations to develop public education resources on driving electric vehicles in Tasmanian conditions, EV tourism materials and resources for small businesses.	NEW	**ReCFIT / partner**

Chris Crerar

3 We will support the uptake of low emissions heavy vehicles and vessels on Tasmanian roads and waterways

There are currently very low numbers of low emissions heavy vehicles on Tasmanian roads, due to factors such as high cost, low vehicle availability, and a lack of charging infrastructure.

Tasmania has a diverse heavy vehicle fleet, ranging from buses and garbage trucks, to trucks used for freight haulage and in the forestry and mining sectors, and rail freight.

Demand for low emissions heavy vehicles in Australia is currently low due to a range of factors, including limited availability, high capital cost, operator knowledge, and regulations related to truck widths and axle mass limits that do not support battery electric vehicles. In addition, there are currently limited zero emissions technical solutions for some heavy vehicle applications, such as remote operations and line haul freight that don't return to base.

During our consultation process, industry and businesses outlined the barriers to transitioning to low emissions heavy vehicles, and the need for government support through planning, regulatory review by both the state and Australian government, and support for skills development. This support is particularly important for Tasmania, given the large number of small operators.

There are also opportunities to increase the amount of freight transported by rail. Freight moved by rail is less carbon intensive than freight moved by road on a like-for-like basis. Rail is best suited for point-to-point bulk freight movements.

Both low carbon liquid fuels and hydrogen (including hydrogen derivatives such as methanol and e-fuels) are also likely to play a part in supporting the transition to low emissions heavy vehicles, through actions in the *Tasmanian Renewable Hydrogen Action Plan*, and the *Bioenergy Vision for Tasmania*.

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In January 2024, Tasmania received $70 million from the Australian Government towards the $300 million Tasmanian Green Hydrogen Hub project, a major project to support Tasmania's hydrogen industry. Tasmania is also attracting the attention of methanol and e-fuels companies looking to build on our strong renewable energy and sustainable biomass resources. These initiatives have the potential to support the transformation of our heavy vehicle and marine transport sectors. The Australian government hydrogen support programs are underpinning the development of these new hydrogen fuel sources.

Tasmania has also implemented the Green Hydrogen Price Reduction Scheme, which aims to bring the sale price of green hydrogen down to a level that is competitive with other energy or fuel sources to become an attractive zero emissions substitute for customers. In May 2024, Countrywide Hydrogen was awarded an $8 million funding package through the Scheme.

Metro Zero Emission Bus Trials

The government has allocated funding to Metro Tasmania to undertake trials of zero emission buses. Funding of $6 million will support a two year trial of four battery electric buses, and $11.3 million from the Tasmanian Renewable Hydrogen Industry Development Fund will support a trial of three hydrogen electric buses for up to three years. The battery electric bus trial will take place in Launceston, and the hydrogen electric bus trial in Hobart.

The zero emission bus trial will provide valuable operational data and insights to help Metro explore and plan for a longer-term, future transition of its fleet to zero-emissions technologies.

The battery electric buses started services in early 2024 and updates on the trials can be found on Metro's website (www.metrotas.com.au).

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Actions

Objective	Summary	Status	Delivered by
Support the uptake of low emissions medium and heavy vehicles	Explore options to subsidise businesses to purchase zero emissions medium and heavy vehicles.	FUTURE FUNDING PRIORITY	ReCFIT
	Identify priority locations to support heavy vehicle charging or refuelling infrastructure.	FUTURE FUNDING PRIORITY	ReCFIT
	Incentivise businesses to produce, sell and use green hydrogen in Tasmania, through the Green Hydrogen Price Reduction Scheme.	IN PROGRESS	ReCFIT
	Support the Tasmanian Transport Association to develop transition planning for carbon reduction and resilience in the heavy vehicle sector.	NEW	State Growth / TTA
	Explore opportunities to increase the use of blended fuels and low carbon liquid fuels in government heavy vehicle fleets and leverage Australian Government funding opportunities.	FUTURE FUNDING PRIORITY	ReCFIT
	Continue to engage with the National Transport Commission on Heavy Vehicle Road Reform, to ensure future heavy vehicle road user charges reflect the benefits of low emissions vehicles.	IN PROGRESS	State Growth

Objective	Summary	Status	Delivered by
Increase the use of rail as an option for the transport of freight	Support TasRail to research low emissions rail technology.	FUTURE FUNDING PRIORITY	ReCFIT / TasRail
	Encourage the increased use of rail to transport freight around Tasmania.	FUTURE FUNDING PRIORITY	State Growth
Address regulatory barriers to the uptake of low emissions medium and heavy vehicles	Continue to work with the Australian Government on the Decarbonisation of Transport Working Group, including the Heavy Vehicle Decarbonisation sub-working group.	ONGOING	State Growth / ReCFIT
	Consult with the Australian Government on its reforms to Australia's Heavy Vehicle National Law, particularly mass limits, to support the uptake of zero emission trucks in Australia.	IN PROGRESS	State Growth / Australian Government

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4 We will support our transport sector to transition to low emissions and build resilience into the future

Despite the benefits of low emissions technology, the shift may present a challenge for some businesses due to the need for new skills, changes to business models, and increased up-front costs. The impacts of climate change are also likely to present challenges for the transport sector when extreme events occur.

The projected changes to the Tasmanian climate, including increased frequency and intensity of extreme weather events, will increase physical risks for our transport system. Damage to transport infrastructure disrupts the free movement of passengers and freight, and there is a cost to businesses, households and government to repair or replace damaged infrastructure.

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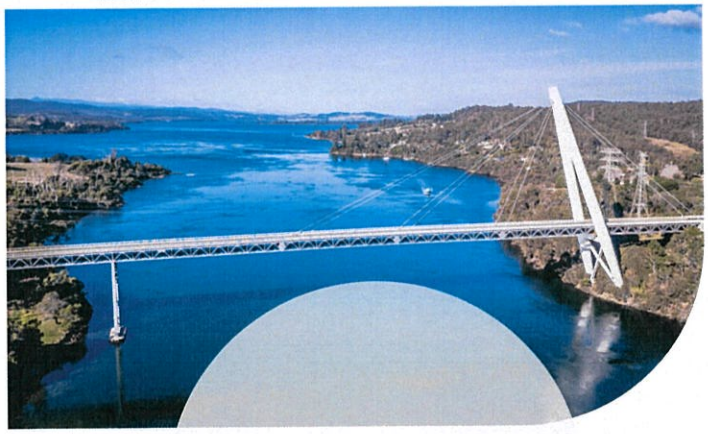


In the transition to a low emissions economy, the transport sector will be required to consider not just emissions from the use of vehicles, but a range of emissions released through the lifecycle of vehicles and road infrastructure. For example, the production of materials used in road infrastructure often releases large amounts of greenhouse gas emissions. End-of-life tyres are a problematic waste stream if they are illegally dumped or stored inappropriately. Poorly managed stockpiles of tyres can potentially create fire risks and pest problems. Increasingly, circular economy solutions are becoming technically and economically feasible. These solutions can reduce emissions, improve resource efficiency, and support the transport and other sectors in the transition to a low emissions economy.

Opportunities to reduce emissions from transport systems and increase their resilience to extreme weather events should be considered alongside other important factors in the planning, construction and maintenance of infrastructure.

The transition will also result in changes to the skills needed to keep our fleets moving, and how our emergency responders deal with the different risks and hazards from incidents with EVs compared to ICE vehicles. There is a lower incidence of fires relating to EVs than internal combustion engines, but the response to EV fires is different.

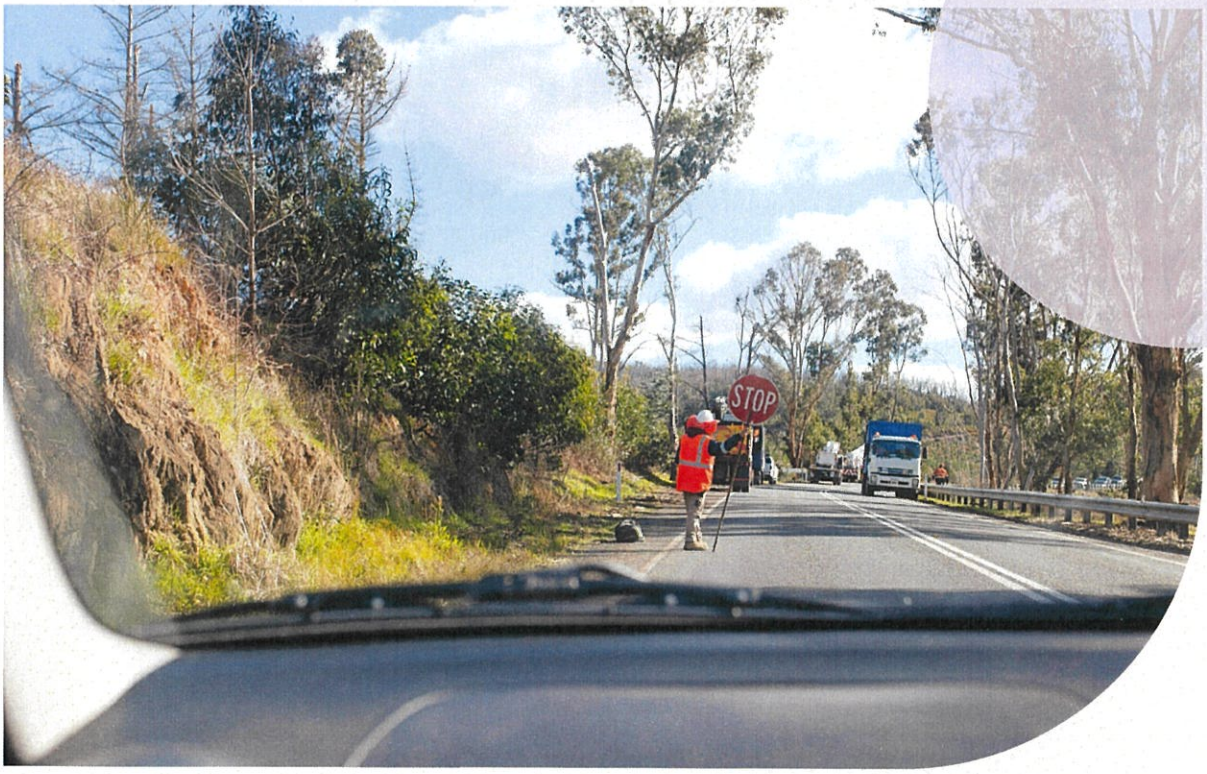
Electric vehicles also place increased demand on our electrical grid, so we need to consider appropriate retail electricity offerings and ensure the network can manage additional load.

Crumb rubber in Tasmanian roads

In mid 2023, Fulton Hogan opened a new crumb rubber blending plant in Launceston, which demonstrates the growing use of recycled materials in road surfaces.

The Department of State Growth has expanded the use of crumb rubber in the state road resurfacing program. In the 2022-23 resurfacing season, 18 sites used a crumb rubber asphalt mix.

Crumb rubber was expanded into the broader resurfacing tenders from 1 July 2023. A total of 60 sites were completed in 2023-24 and 11 sites are targeted for the 2024-25 resurfacing season.



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Actions

Objective	Summary	Status	Delivered by
Enhance decision making around electric vehicle uptake	Model EV uptake to support government decision making on electric vehicle policy issues such as increased electricity requirements.	 NEW	**ReCFIT**
	Work with the Australian Government to develop a mapping tool to support decision making on future charging needs.	 IN PROGRESS	**ReCFIT / Australian Government**
Build the skills required to transition Tasmania's transport sector to low emissions	Partner with industry to develop programs for building Tasmanian workforce capabilities in renewable and low emissions technologies. Initiatives will include pathways through TasTAFE and other Vocational Education and Training providers, supported by Skills Tasmania, and other higher education options, non-accredited training and other forms of capability building.	 NEW	**State Growth**
	Provide funding to the automotive industry to develop a skills transition plan to support the transition to electric vehicles.	 NEW	**ReCFIT / Partner**
Increase the resilience of Tasmania's transport infrastructure	Continue to identify and incorporate opportunities to improve active and public transport as part of projects to improve the state road network.	 IN PROGRESS	**State Growth**
	Consider the impacts of climate change on Tasmania's transport infrastructure, and opportunities to increase resilience to these impacts, through the whole-of-government framework to embed climate change in government decision making.	 IN PROGRESS	**ReCFIT**
	Develop user-friendly information based on the findings of the statewide climate change risk assessment and the updated fine-scale climate projections. For example, these resources could support planning to increase the resilience of transport infrastructure networks and supply chains.	 IN PROGRESS	**ReCFIT**

Objective	Summary	Status	Delivered by
Increase the resilience of Tasmania's transport infrastructure (continued)	Continue to work with the State Planning Office to ensure the Tasmanian Planning Policies and Tasmanian Planning Scheme consider the role of land use planning in reducing emissions and ensuring Tasmania's built environments are resilient to the impacts of climate change.	ONGOING	**ReCFIT / State Planning Office**
Reduce emissions from transport infrastructure	Continue to support the use of recycled materials such as crumb rubber from waste tyres in the construction and maintenance of the state road network. Research the use of other recycled products and the feasibility of increasing their use in state road construction in Tasmania, and continue to support reduction in embodied emissions in the construction and maintenance of the state road network and other transport infrastructure projects.	IN PROGRESS	**State Growth**
	Continue to work with the Australian Government on the Decarbonisation of Transport and Infrastructure Working Groups.	IN PROGRESS	**State Growth**
	Consider the role of government in reducing emissions from transport infrastructure through the Plan for the Industrial Processes and Product Use sector. For example, this could include considering the adoption of sustainability accreditation systems for large-scale government infrastructure projects to promote the use of low emissions materials.	FUTURE FUNDING PRIORITY	**ReCFIT**
Reduce actual and perceived risks associated with EV batteries	Work collaboratively with the Australian Government, through the National Electric Vehicle Action Plan Implementation Group, to support the development of EV guidance, demonstrations, and training for emergency service workers, along with tools and guidance to enable EV uptake for residents of existing multi-residential buildings.	IN PROGRESS	**ReCFIT**

5 We will drive action through partnerships and collaboration

The Tasmanian Government is committed to supporting the decarbonisation of transport, by reviewing the policies it is responsible for, and working collaboratively with all levels of government.

All Tasmanians use the state's transport networks in some way, and everyone can play a role in reducing emissions, including state and local governments, businesses, industries and communities.

The state government has a role in reducing its own transport emissions by transitioning its vehicle fleet to electric, but also has a role supporting business, industry and the community through the transition.

Partnerships are key in taking action to reduce our emissions. By collaborating, we can take advantage of knowledge across all levels of government, business and industry, and the community, to deliver more targeted actions. We can reduce the chance of duplicating effort and maximise the use of our resources to take action.

At the national level, the government currently collaborates with the Australian Government and other states and territories through forums such as the Energy and Climate Ministers' Decarbonisation Working Group, and the Infrastructure and Transport Ministers' Decarbonisation Working Groups. Tasmania is also part of the Net Zero Futures Policy Forum, an international partnership of governments committed to addressing the practical challenges of achieving net zero emissions.

Electric Vehicle Working Group

The Tasmanian Electric Vehicle Working Group was established in 2017 under *Climate Action 21: Tasmania's Climate Change Action Plan 2017-2021*. The aim of the Working Group was to develop a coordinated approach to support the uptake of electric vehicles.

The Working Group brought together Tasmanian Government agencies, government businesses, industry groups, research organisations and community organisations.

The Working Group's role was to:

- identify and explore barriers to electric vehicle uptake
- review relevant policy and regulatory settings relating to each barrier
- identify priority areas of action to support electric vehicle uptake
- understand the impact of electric vehicle uptake on Tasmania's electricity sector
- assess approaches to support the rollout of electric vehicle charging infrastructure in Tasmania
- investigate ways to improve electric vehicle data collection.

The Working Group developed the Electric Vehicle ChargeSmart Grant Program to support the installation of fast, workplace and destination electric vehicle charging infrastructure around Tasmania. As a result of the ChargeSmart Program, Tasmania was the first state in Australia to have a statewide EV charging network.

Actions

Objective	Summary	Status	Delivered by
Encourage business and industry to reduce transport emissions	Work with business and industry to encourage fleet transition initiatives for their operations such as trialling low and zero emissions technologies and setting fleet transition targets.	FUTURE FUNDING PRIORITY	ReCFIT
Work collaboratively with other levels of government to reduce transport emissions	Work collaboratively with the Australian Government and other jurisdictions on key national policies relating to transport decarbonisation through the National Electric Vehicle Action Plan Implementation Group, and the Decarbonisation of Transport and Infrastructure Working Groups.	IN PROGRESS	ReCFIT / State Growth
	Work with the Australian Government to reduce emissions by decarbonising transport operations, as well as in the design, construction and operation of transport infrastructure in line with the Australian Government Infrastructure Policy Statement.	IN PROGRESS	State Growth

Since the inception of the Working Group, the electric vehicle market has matured, and the Australian Government has released the National Electric Vehicle Strategy to guide national action. The Tasmanian Electric Vehicle Working Group has now been transitioned to an information sharing group to ensure knowledge sharing and a coordinated approach.

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Next steps

Implementation

Some actions in this Plan are fully funded and ready to implement and some are already underway. Other opportunities require additional funding from different levels of government before they can be progressed. These opportunities are labelled 'future funding priorities'. The status of each action is identified in this Plan.

Reporting

Every year, we will prepare and table in Parliament:

- a climate change activity statement, showing the status of each sectoral Plan and actions in the Action Plan
- a greenhouse gas emissions report detailing Tasmania's emissions for each sector.

Monitoring and review

We will determine whether actions in this Plan have been effective by monitoring and evaluating individual actions. Monitoring will be based on the approach identified for each of the actions. Evaluation methods will vary, as they will be tailored for each action.

The Tasmanian Government is committed to a co-ordinated, whole-of-government response to climate change. Together with the Action Plan and the delivery of Tasmania's first statewide climate change risk assessment, the development of the sector-based Plans is a strategic priority for the government that will be delivered in consultation with business, industry and portfolio ministers.

We recognise that there is significant overlap between transport and other sectors, and that there are parts of Tasmania's communities, businesses and industries that may not be covered by the sector-based Plans.

The development of all Plans and Tasmania's first statewide climate change risk assessment is expected to be completed by November 2024. At that point, we will analyse the priorities and actions in the Plans, the most up-to-date information about our emissions and future climate, and other resources, to identify gaps and opportunities for the development of Tasmania's next climate change action plan.

The Plans are to be updated at least every five years.

Engagement with business, industry and the community

We will continue to engage with key partners and the community on the development and implementation of future opportunities as required.

We will keep stakeholders and the community informed through the Climate Change Office website, newsletter and social media.

We encourage you to sign up for our newsletter through our website: recfit.tas.gov.au/cc_newsletter and follow the Tasmanian Climate Change Office on Facebook to stay informed about opportunities to participate in relevant programs.

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Glossary and acronyms

Term	Description
ABS	Australian Bureau of Statistics
Active transport	Alternatives to car travel that involve physical activity such as walking, cycling or scooting.
BEV	Battery electric vehicle
BITRE	Bureau of Infrastructure and Transport Research Economics
CO_2	Carbon dioxide, a greenhouse gas
CO_2-e	Carbon dioxide equivalent
DCCEEW	Australian Government Department of Climate Change, Energy, the Environment and Water
Direct combustion	Burning of fuel(s) for energy, predominantly in manufacturing, mining, residential and commercial sectors.
Emissions	Unless otherwise stated, "emissions" refers to Tasmania's net greenhouse gas emissions, which means the greenhouse gases that are emitted from our activities minus the carbon sequestered (for example in our forests).
EV	Electric vehicle. For the purposes of this Plan, unless otherwise stated, a reference to EVs includes battery electric vehicles (BEVs) and hydrogen fuel cell electric vehicles (FCEVs). It does not include hybrid or plug-in hybrid EVs.
FCEV	Fuel cell electric vehicle
ICE	Internal combustion engine (vehicle)
Low carbon liquid fuel (LCLFs)	Low carbon liquid fuels are liquid fuels from non-fossil origin, with low or no net CO_2 emissions from production and combustion.
Low emissions vehicle	For the purposes of this Plan, low emissions vehicles include battery electric vehicles (BEVs) and hydrogen fuel cell electric vehicles (FCEVs). A reference to low emissions vehicles does not include hybrid or plug-in hybrid EVs.
LULUCF	Land Use, Land Use Change and Forestry sector
Mt	Megatonnes
ReCFIT	Renewables, Climate and Future Industries Tasmania
UNFCCC	United Nations Framework Convention on Climate Change
Vehicle to Load	Vehicle to Load is a bidirectional power feature that allows you to use the battery in an electric vehicle to power or charge an electrical appliance, such as a laptop.

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