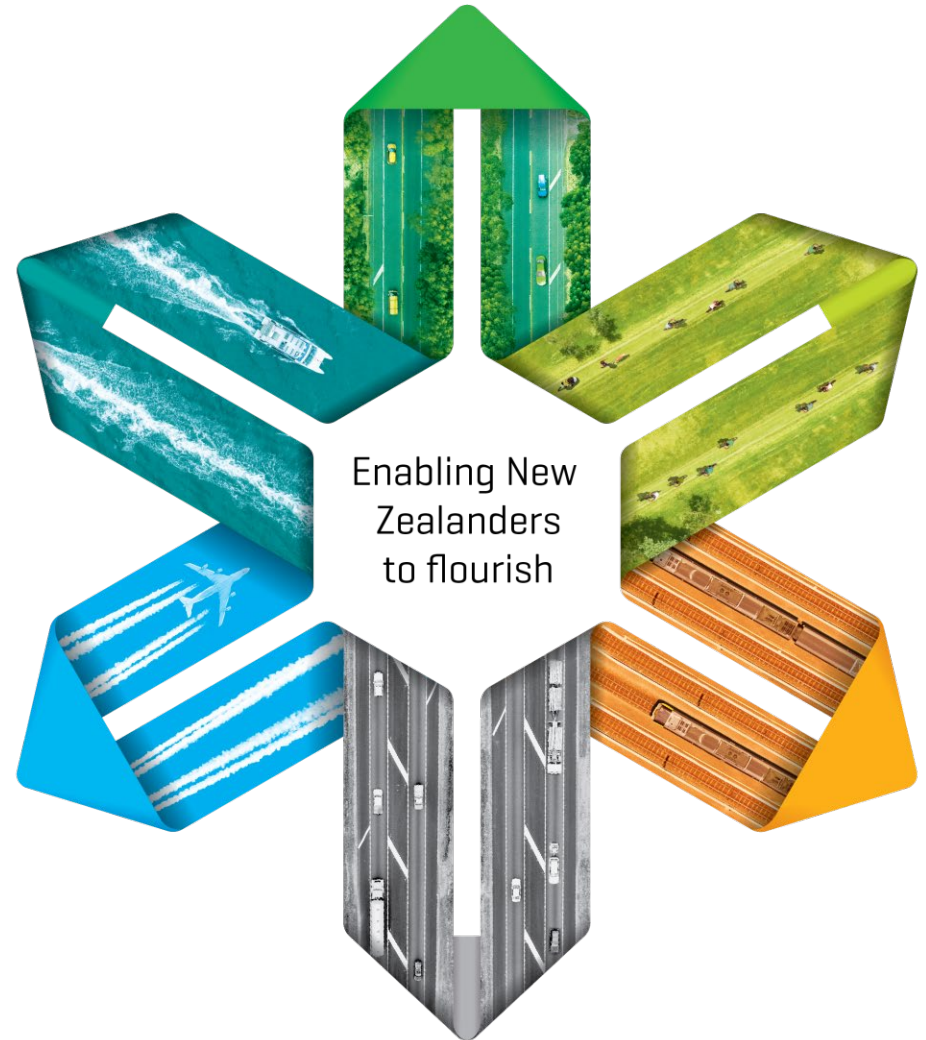


# Transport Research Colloquium

## Transitioning to net zero carbon emissions



26 November 2020 | 3 Queens Wharf, Wellington – Virtual



# New Zealand is committed to reducing emissions



*We have challenging obligations and targets to meet*



**International target** of 30 per cent reduction below 2005 (or 11 per cent below 1990) gross emissions for the period 2021-2030.



**Domestic target** of net zero emissions of all greenhouse gases other than biogenic methane by 2050

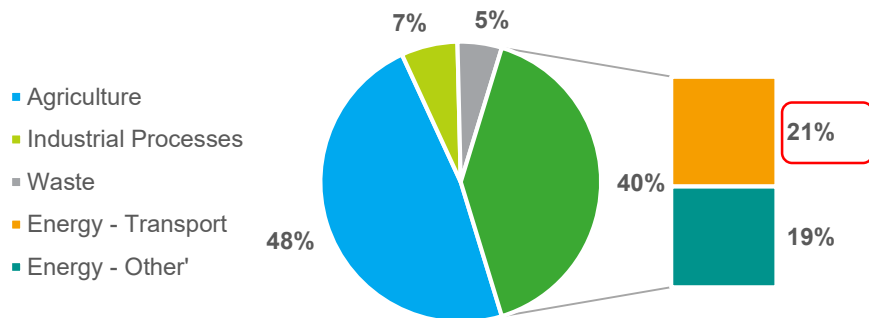


Our domestic target is set into law as part of the Climate Change Response (Zero Carbon) Amendment Act

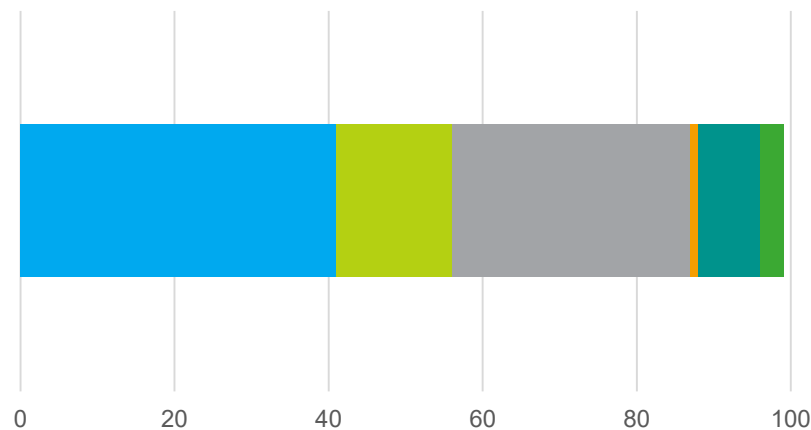
# Transport emits over 20% of NZ's GHG emissions



## New Zealand Greenhouse Gas Inventory



## Emissions in transport by mode

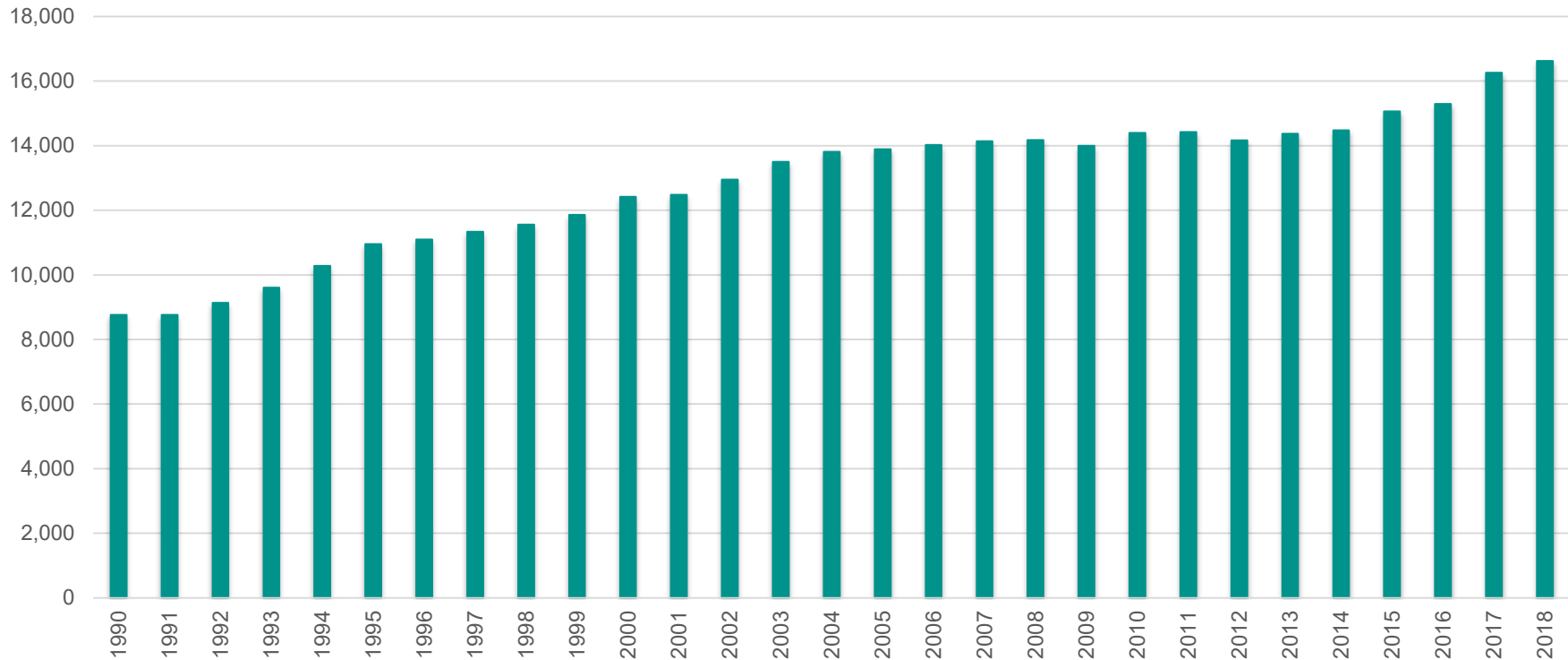


- Road - light vehicles - households/other
- Light vehicles - road fleets (eg, business, hire firms)
- Heavy vehicles - road
- Rail
- Aviation - passengers and freight
- Marine transport

# Transport emissions over time have increased steadily



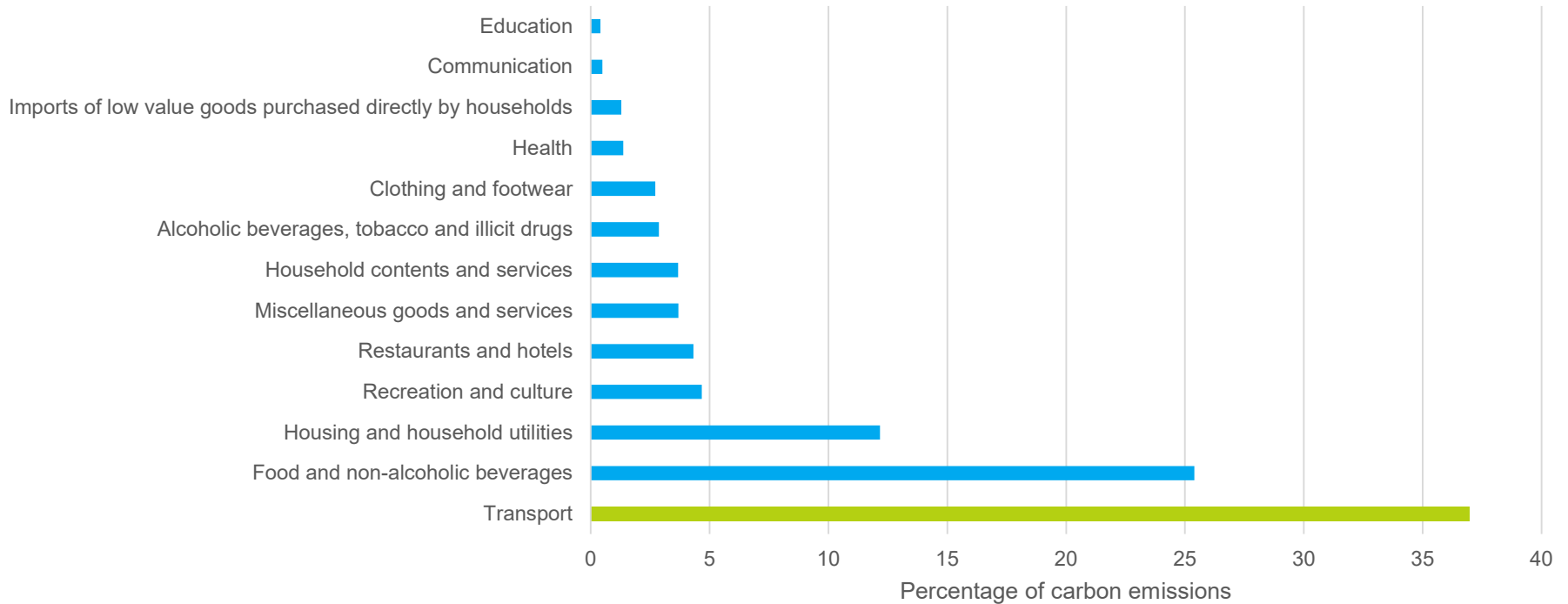
Greenhouse gas emissions from transport (kt CO<sub>2</sub>-e)



# Transport is a significant part of households' carbon footprint



## Carbon footprint of New Zealand households, by type of item, 2017 Percentage



# Existing policies



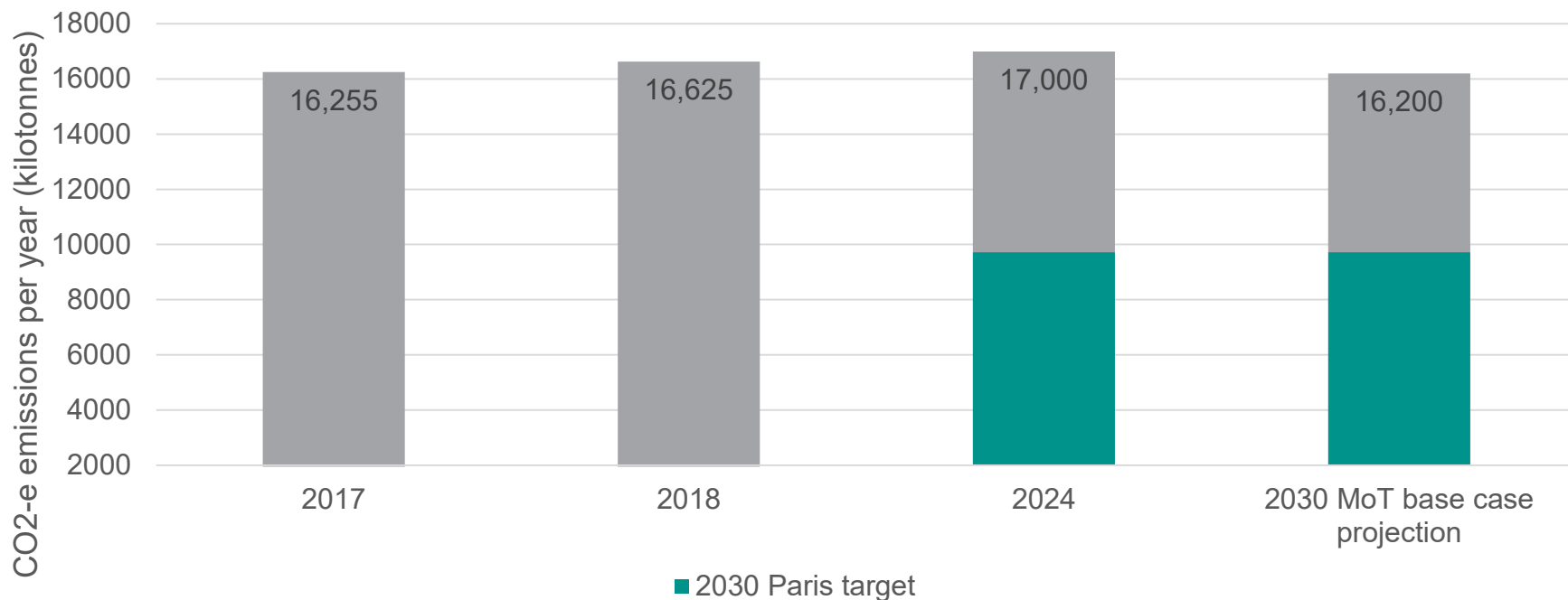
***Government has implemented a handful of emissions reduction policies for the transport sector over recent years***

POLICY	OBJECTIVE
RUC exemption for light fleet	Increase speed of light low-emission vehicle (LEV) uptake.
RUC exemption for heavy vehicles	Increase speed of heavy low-emission vehicle (LEV) uptake.
Low Emissions Vehicle Fund	Increase speed of low-emission vehicle (LEV) uptake through encouraging innovation e.g. testing vehicles that make a difference.
Walking & cycling investment	Provide transport choice and to increase access to places via walking and cycling (main objectives). GHG emissions reduction is a co-benefit of this initiative.
PT investment	As with walking and cycling investment above.
Rail freight	Improve the availability and range of freight options as well as transport network resilience (main objectives). GHG emissions reduction is a co-benefit.
EV information campaigns (ends this year)	Encouraging EV uptake (discontinued as other organisations fill this gap already).
Vehicle fuel economy label	Goal was to encourage LEV purchase, but rating is flawed and does not appear to achieve objective.

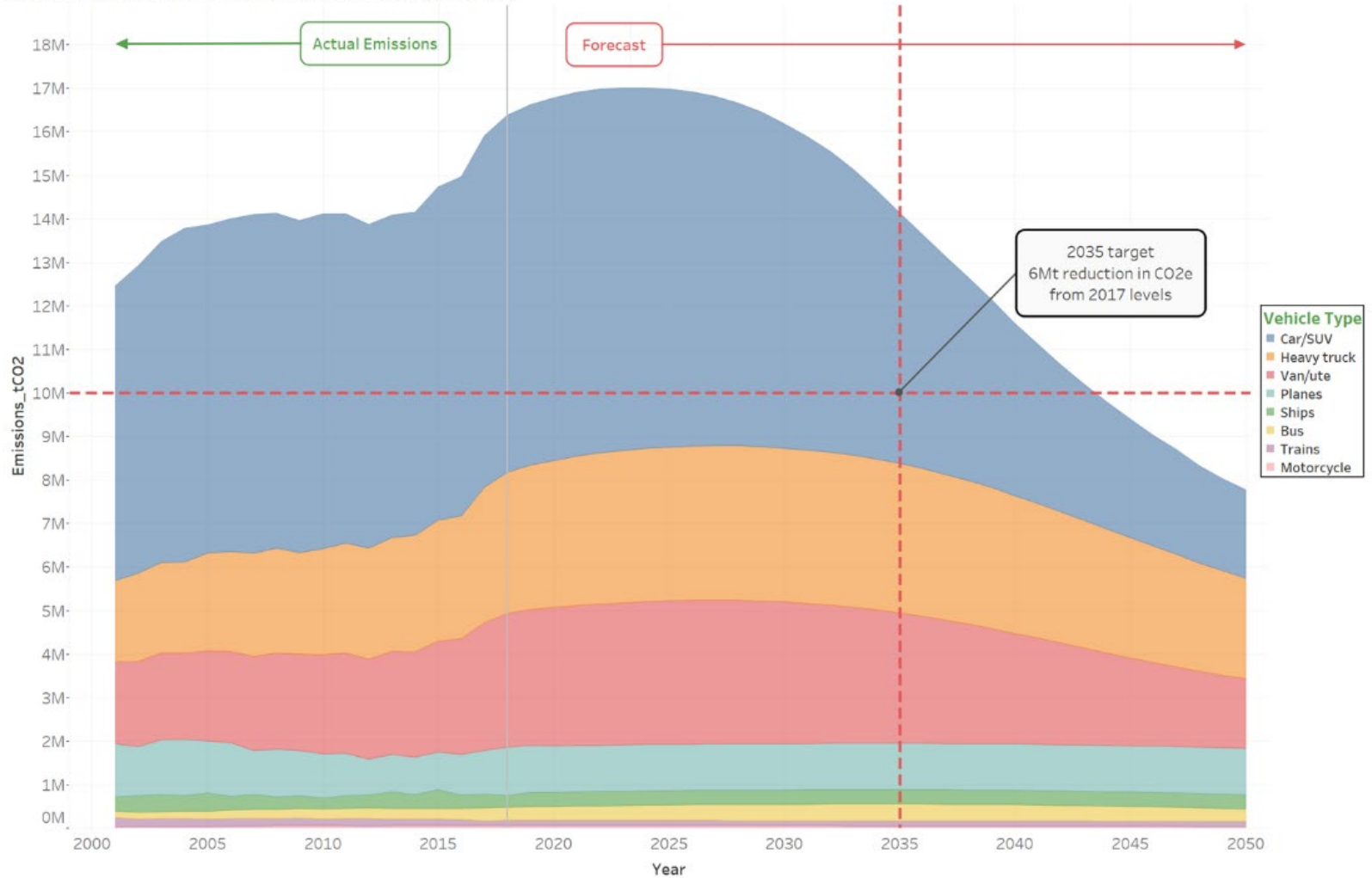
# Unless we do more, emissions from transport will not decline fast enough



***Current projections see emissions peaking in 2024 before beginning to decline***



Forecast transport CO2 emissions by vehicle type (all modes)



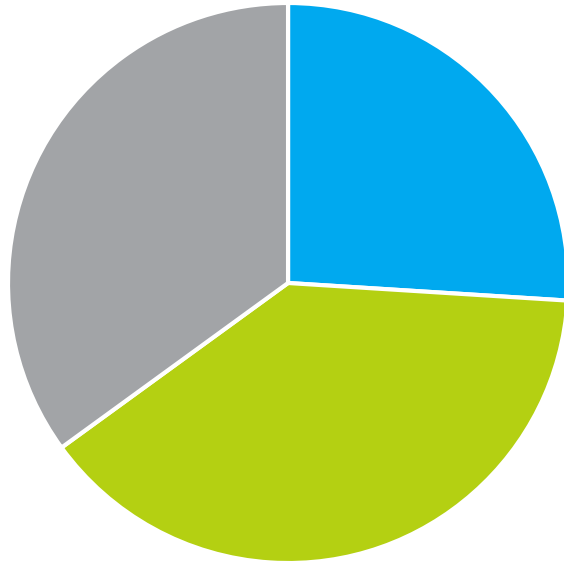


# Current vehicle preferences don't help



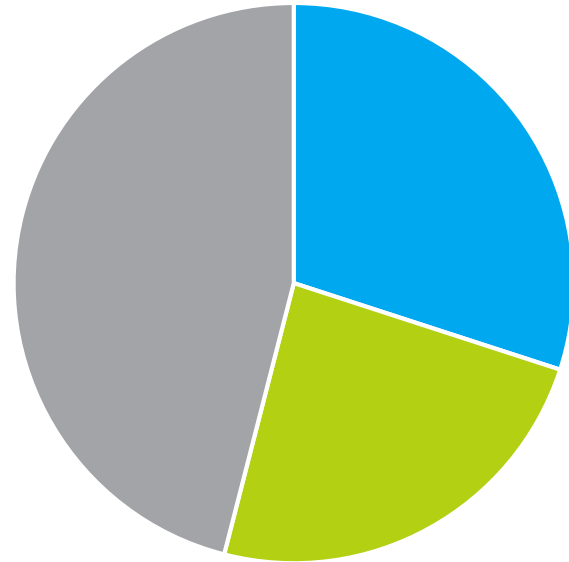
*Over time our vehicle preferences have changed to favour heavier light vehicles. That's bad for emissions because heavier vehicles tend to have higher emissions.*

2015



■ Vans, utes, light trucks ■ Cars ■ SUVs

2019



■ Vans, utes, light trucks ■ Cars ■ SUVs

# Transport Outcomes



## Inclusive access

Enabling all people to participate in society through access to social and economic opportunities, such as work, education, and healthcare.

## Economic prosperity

Supporting economic activity via local, regional, and international connections, with efficient movements of people and products.

## Healthy and safe people

Protecting people from transport-related injuries and harmful pollution, and making active travel an attractive option.

## Environmental sustainability

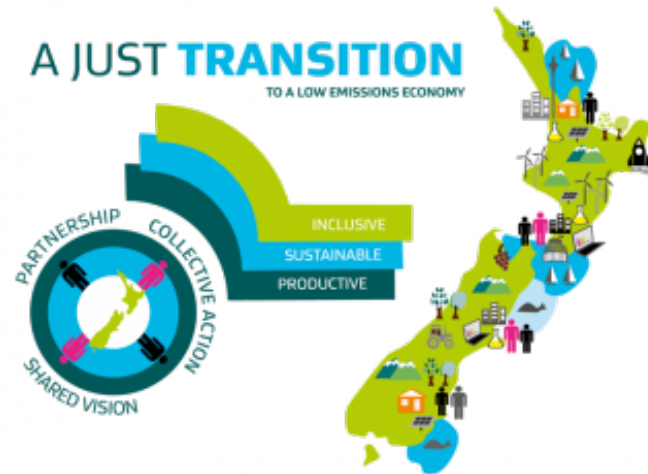
Transitioning to net zero carbon emissions, and maintaining or improving biodiversity, water quality, and air quality.

## Resilience and security

Minimising and managing the risks from natural and human-made hazards, anticipating and adapting to emerging threats, and recovering effectively from disruptive events.



# A Just Transitions Approach



- ▶ New Zealand has committed to taking a ‘just transition’ approach to becoming carbon free.
- ▶ A just transition is fair, equitable and inclusive and makes sure that the Government carefully plans with iwi, communities, regions and sectors to manage the impacts and maximise the opportunities of the changes brought about by the transition to a low emissions economy.
- ▶ A just transition approach ensures that the affected people are considered by those making decisions. Early action on a just transition can minimize the negative impacts and maximize positive opportunities.
- ▶ The Paris Agreement on climate change includes just transition as an important principle.

# The Transport Emissions Action Plan (TEAP)



- **The Ministry is developing the TEAP – it takes a system wide look at the transport system to identify measures we could use to reduce transport emissions.**
- **This will prepare us to be able to respond to the Climate Change Commission’s (CCC) emissions budgets and recommendations. Their draft advice is due on 1 February 2021.**
- **We will use the TEAP to provide advice to Ministers on policies to respond to the CCC’s advice & recommendations.**
- **Agreed policies will form the transport chapter in the Emissions Reduction Plan under the Climate Change Response (Zero Carbon) Amendment Act 2019 (Ministry of Environment lead) – which must be agreed and published by December 2021.**

# The Transport Emissions Action Plan cont'd



*It is important that we take a system-wide approach to reducing emissions from the transport system*



*Changing the way we travel*



*Improving our passenger vehicles*



*Supporting a more efficient freight system*

# Discussion



- **Social equity: how can Aotearoa take steps to enable low income people to be able to access low emission vehicles?**
- **Fuelling and charging infrastructure: There needs to be a wider consideration of how infrastructure is implemented. Optimisation, commercially sustainable, ownership, locations & investment**
- **How can we bring down vehicle kilometres travelled in Aotearoa?**
- **How can we reduce car ownership in Aotearoa?**
- **What types of impacts and risks are associated with discharges and physical disturbances from large ships, in NZ ports and sensitive environments?**