



Electric Vehicles:

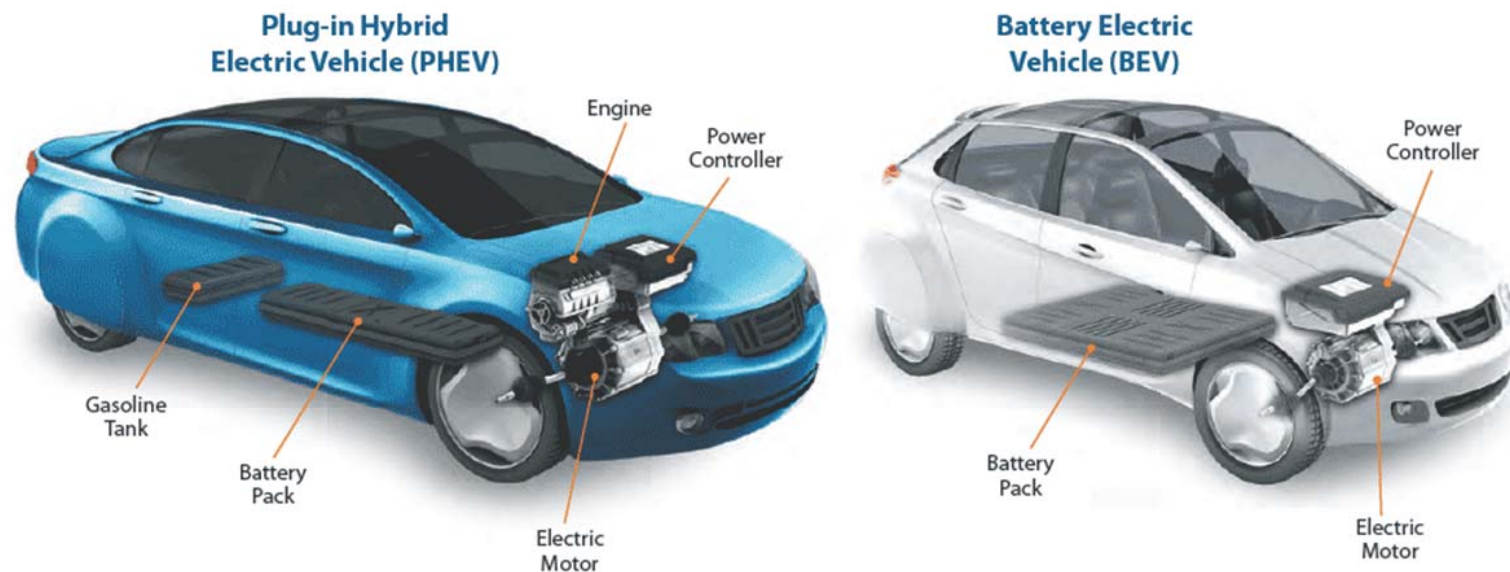
Drive a Safe and Sustainable Future

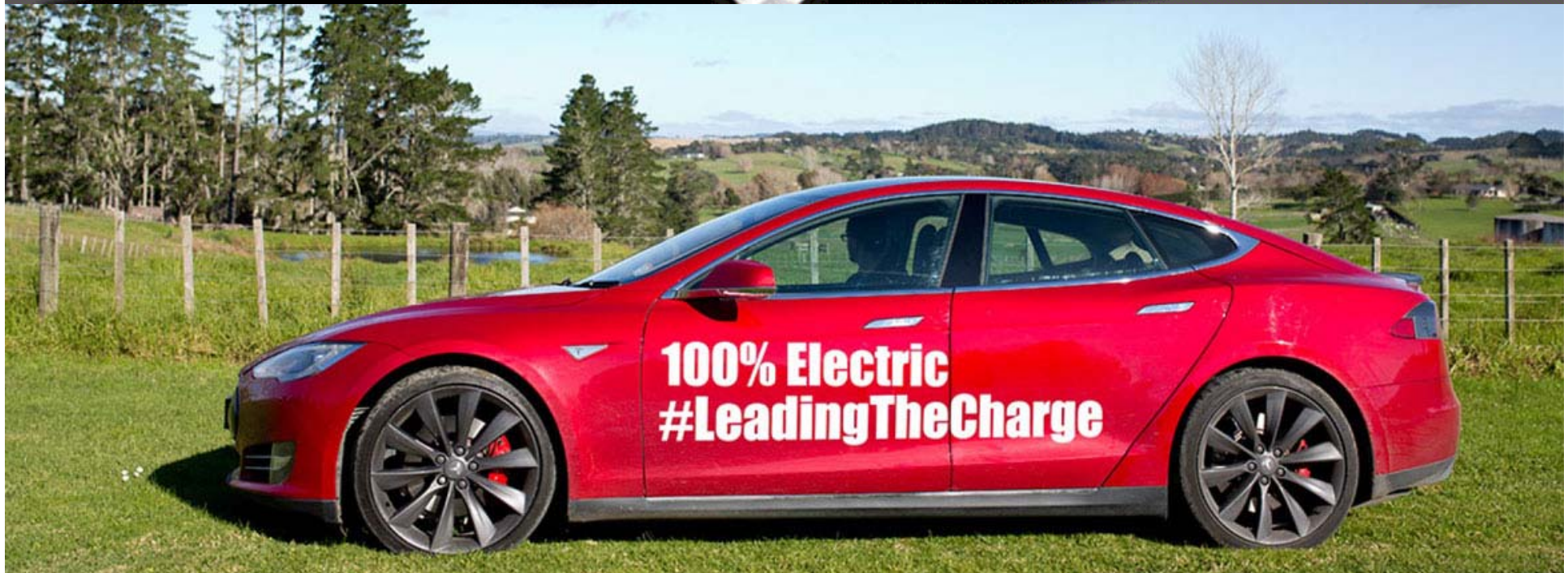
Elizabeth Yeaman, General Manager Transport, EECA



What counts as an EV?

- Uses an external source of electricity for some or all of its motive power
- You can plug it in
- Battery Electric Vehicle (BEV) – 100% electric
- Plug in Hybrid Electric Vehicle (PHEV) – electric and petrol/diesel

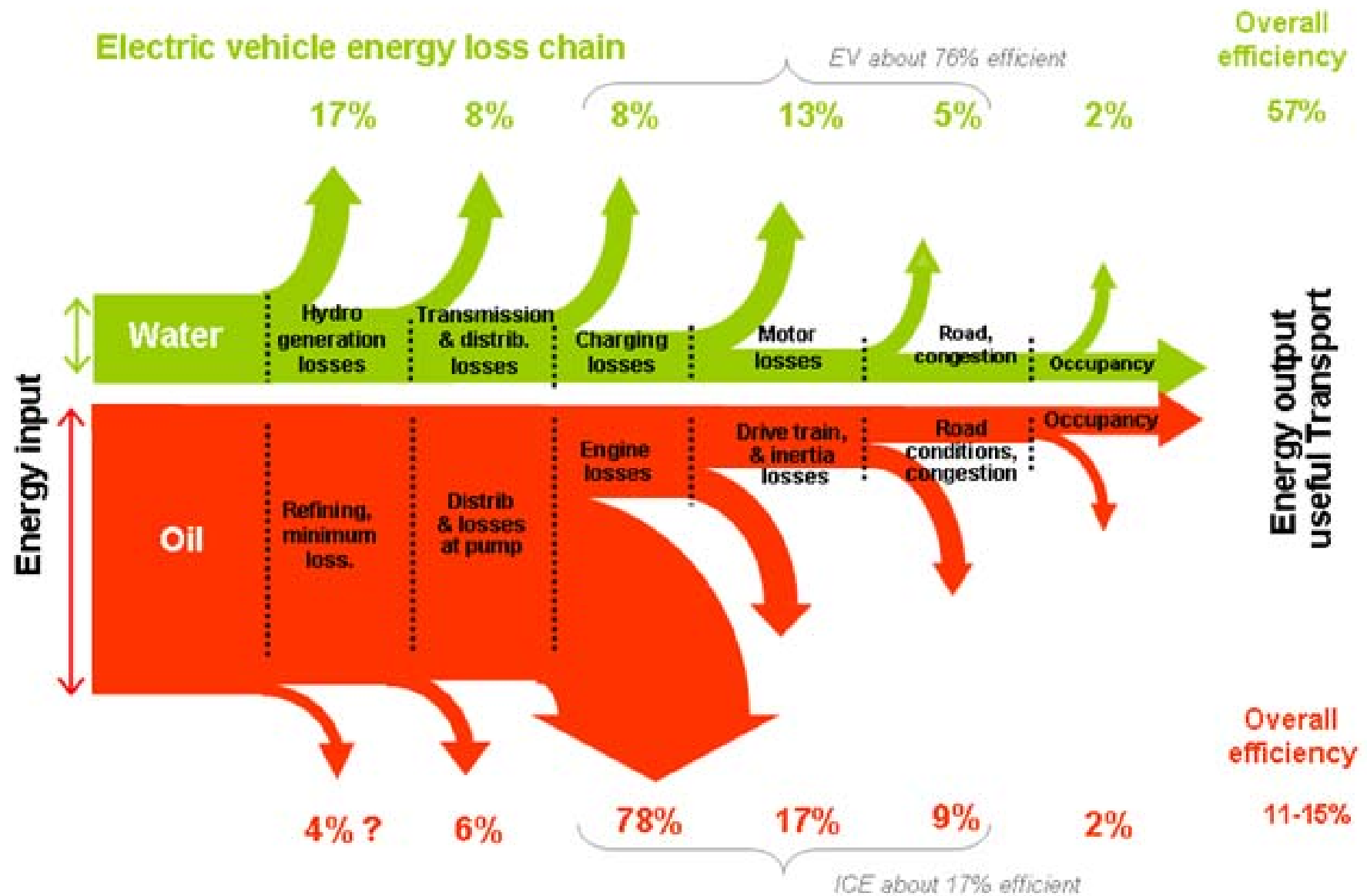




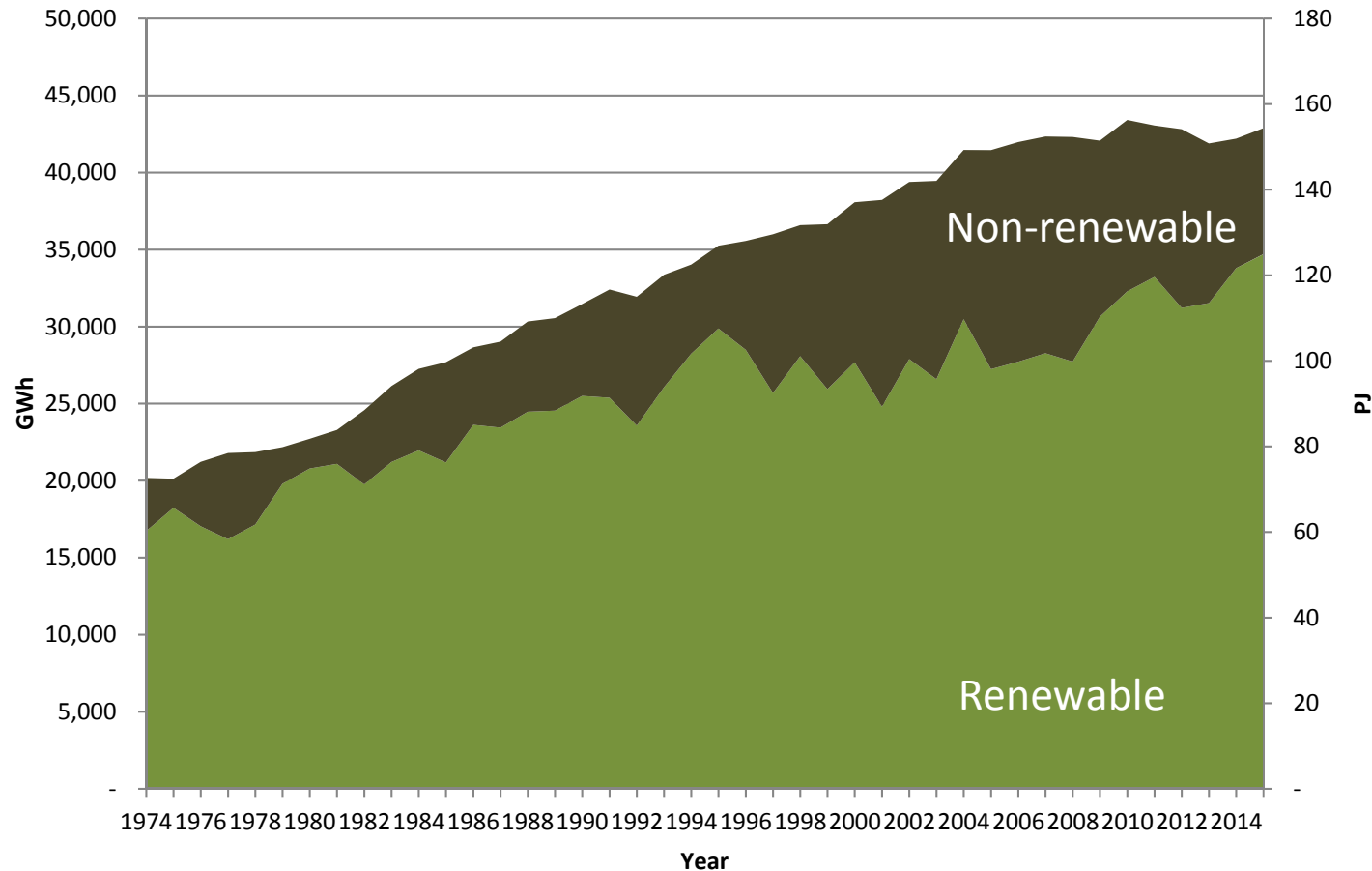






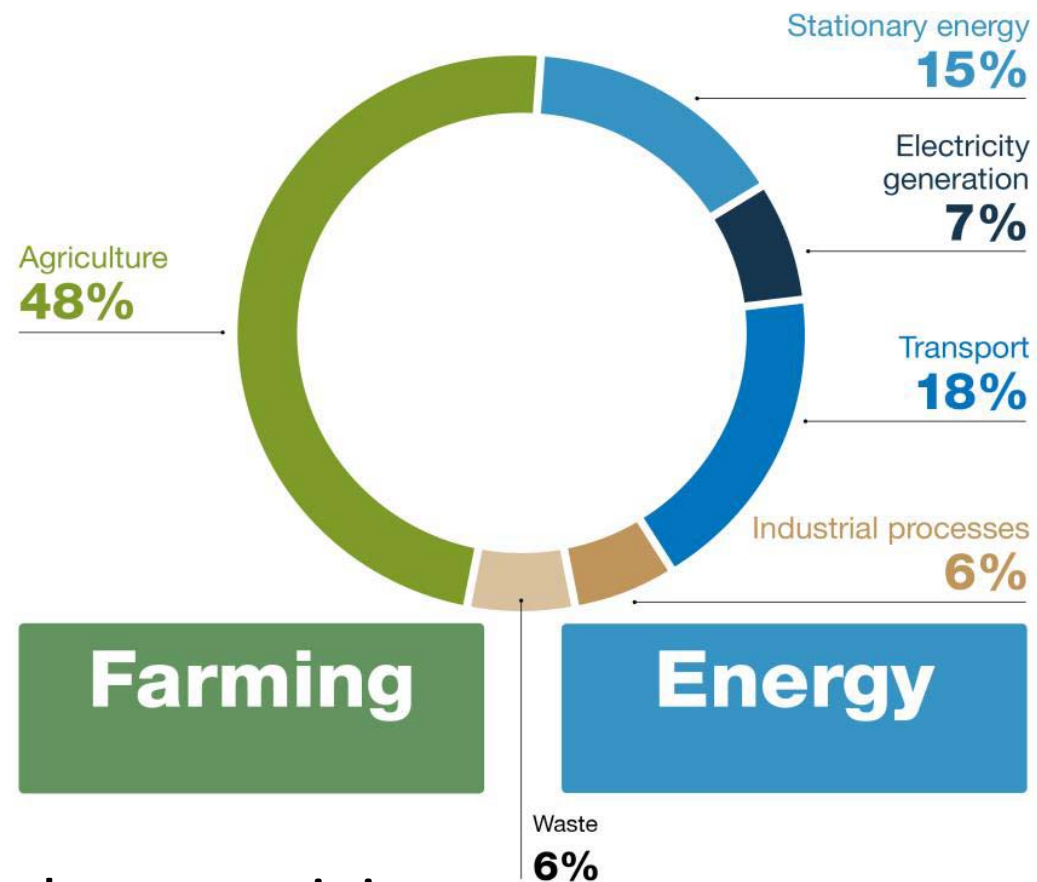


New Zealand electricity generation



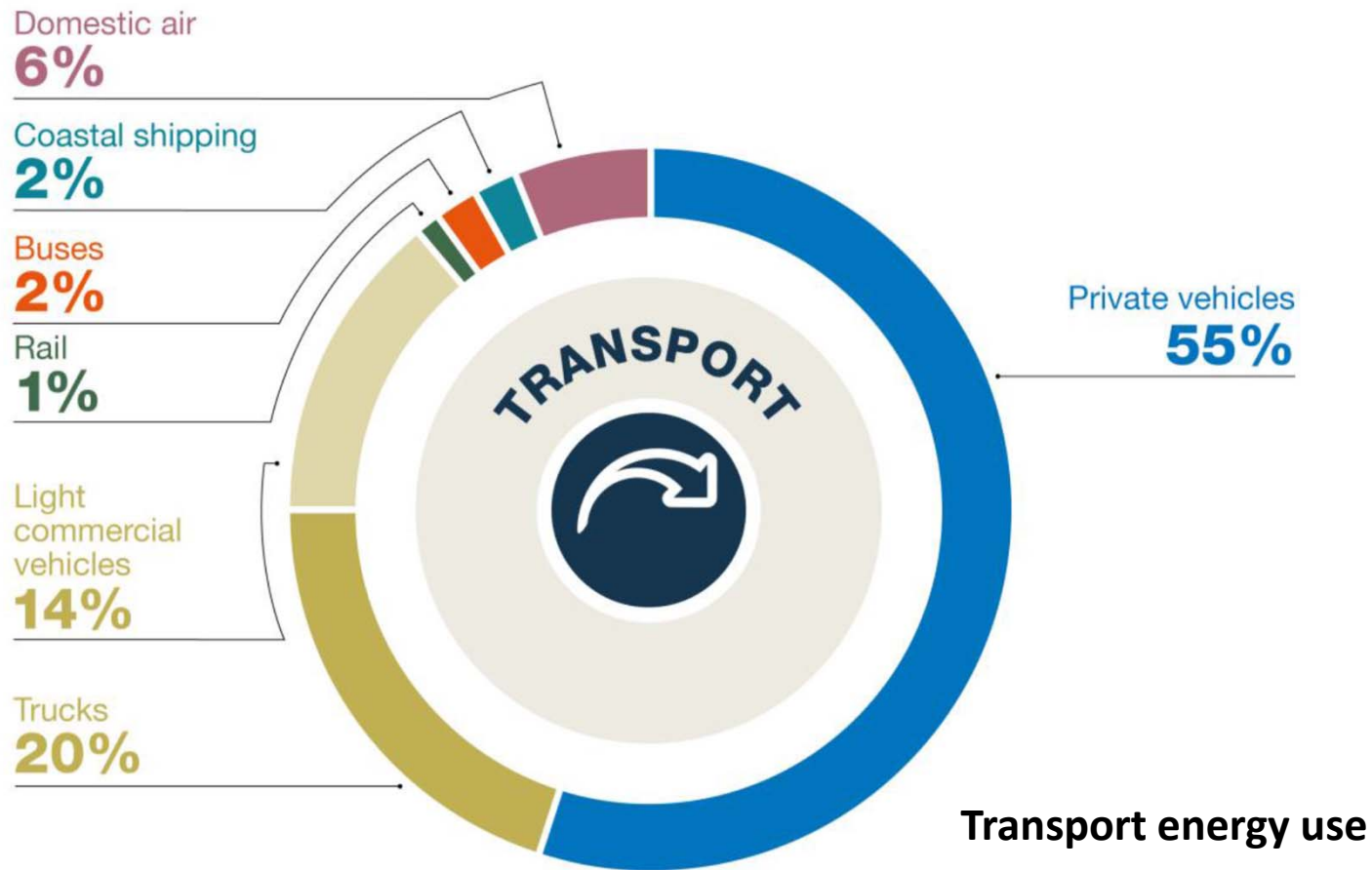
Source: MBIE Energy in NZ

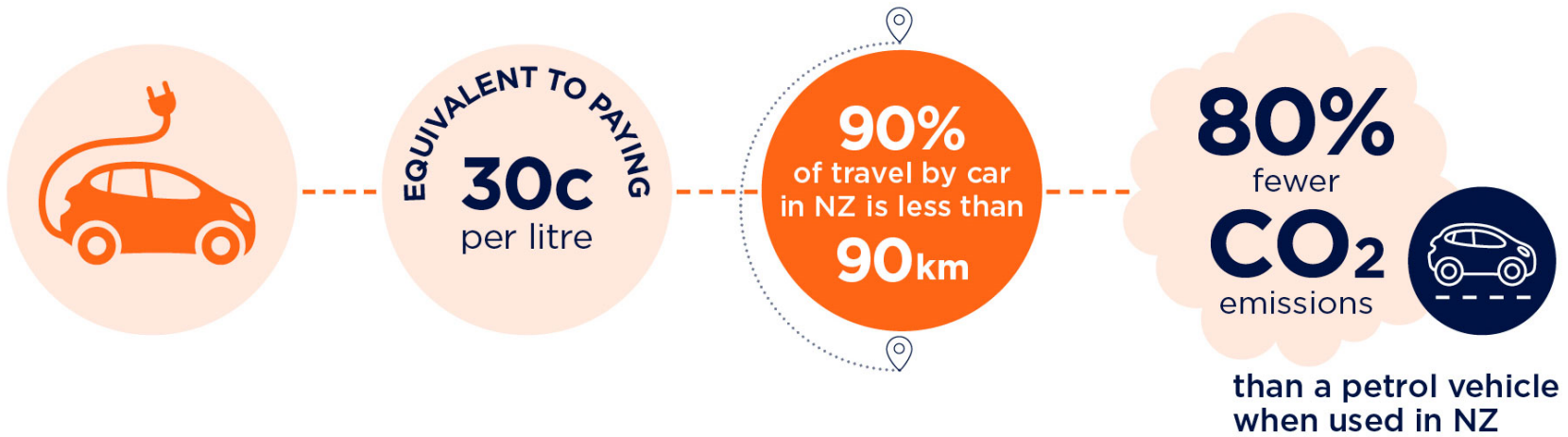
New Zealand's Carbon Challenge



New Zealand's greenhouse gas emissions

The EV opportunity





Lead agencies for the EV programme

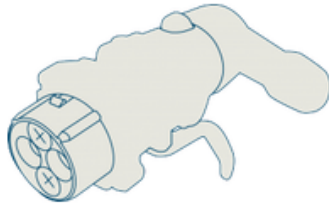
Ministry of Transport	EECA	NZTA
Regulatory changes to implement RUC exemptions for light and heavy EVs	Nationwide information and promotion campaign	Supporting the development of public charging infrastructure, along with WorkSafe
Regulatory changes to enable EVs to use special vehicle lanes	Administering the Low Emission Vehicles Contestable Fund	Enabling electric vehicles access to special vehicle lanes
Convening the Leadership Group		Updating the motor vehicle register
NZ Government Procurement, MBIE	MBIE and ACC	IRD
Joint public-private procurement of EVs	Reviewing and potentially amending the ACC levies payable by PHEVs	Reviewing and potentially amending the depreciation rate and/or FBT for EVs

Recommendations for public charging installations

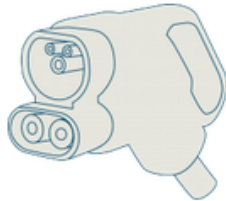
Public FAST charging

It is recommended that DC fast charge installations have at least two tethered cables:

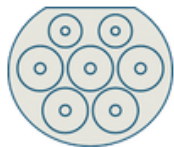
one fitted with a CHAdeMo connector, and



one fitted with a CCS Type 2 connector

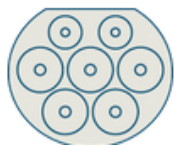


It is also recommended that an additional Type 2 socket outlet is provided at the charging station (for relatively fast AC charging for selected vehicles).



Public SLOW charging

It is recommended that all public slow charge installations have a Type 2 socket outlet.



EVs in special vehicle lanes

- Road controlling authorities will be empowered to make lane-by-lane decisions to allow EVs in special vehicle lanes including transit, high occupancy vehicle, priority bypass, and bus lanes.
- Changes to Land Transport Act 1998 (currently before Parliament) and Land Transport Rules required, should come into force on 1 July 2017
- NZTA has just completed a two week trial of EVs in five priority bypass lanes in Auckland.
- The majority of EV drivers who used the lanes confirmed that these provided travel benefits.

Hearts and minds



Filmed on NZ roads using electric vehicles



<https://www.youtube.com/watch?v=-GqsNO6Sq50>



Public Information Campaign



www.electricvehicles.govt.nz



[ABOUT ELECTRIC VEHICLES](#) [WHAT NZ IS DOING](#) [WHAT CAN I DO NEXT?](#)

I love my ev.

Curious about electric vehicles?

This video shows how easy it is to charge an EV, at home or out and about.



ELECTRIC VEHICLES AT HOME

Drive the future – with an electric car you'll not only have a fun, smooth, quiet drive, you'll also save a huge amount on running costs – equivalent to paying 30 cents a litre for fuel! And because EVs run on New Zealand's 80% renewable electricity, rather than imported oil, you'll be helping the environment too through reduced carbon emissions. Find out more about electric vehicles at EECA Energywise.

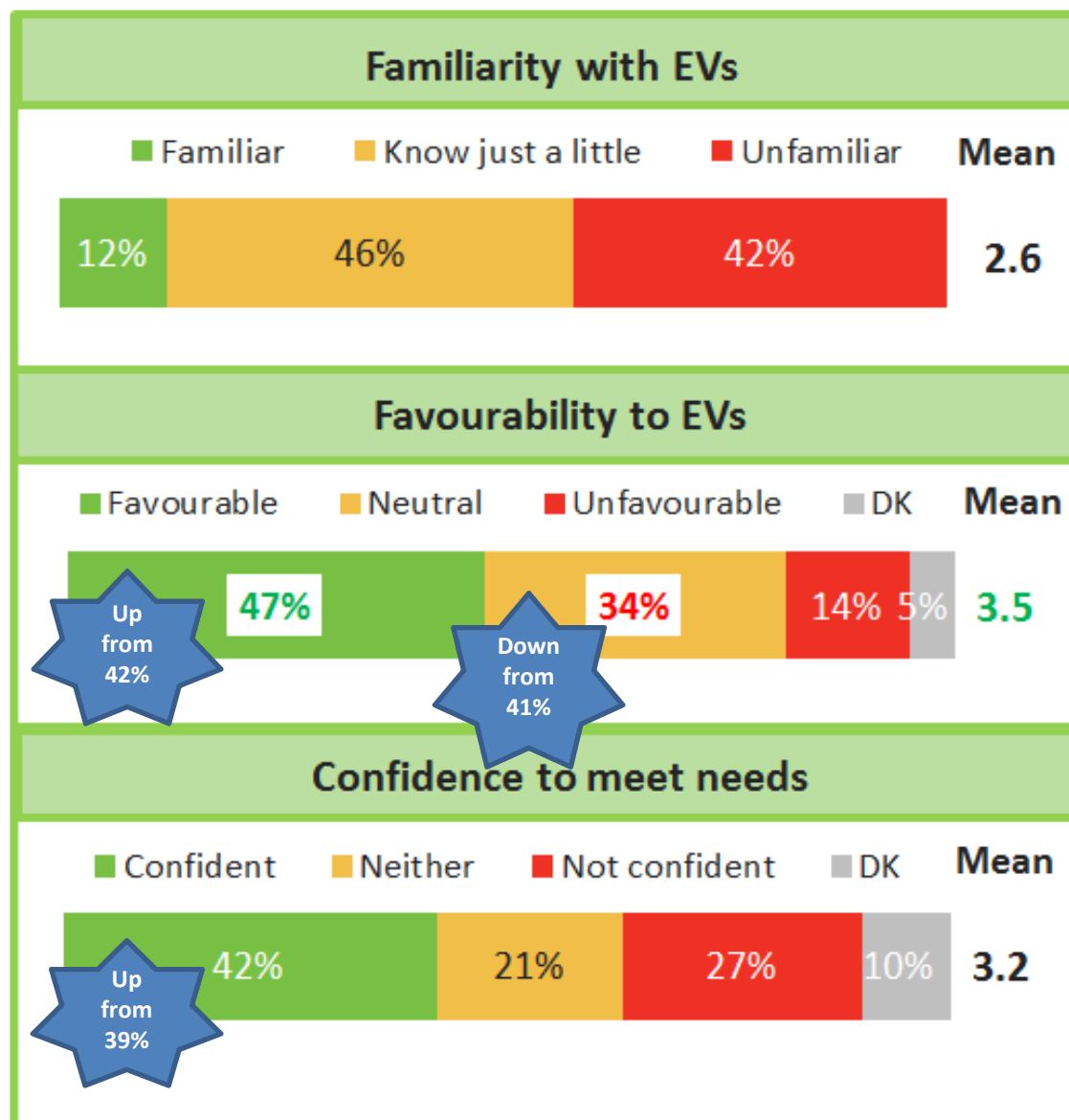
[FIND OUT MORE ABOUT ELECTRIC VEHICLES](#) 

ELECTRIC VEHICLES IN YOUR BUSINESS

If you want to stay ahead in business, it's time to go electric. Reduce the running costs of your business vehicles and reduce your carbon emissions from transport by 80%. You'll be filling your vehicles with locally produced, 80% renewable electricity rather than imported oil, and giving your fleet drivers a car that is enjoyable to drive. Find out more about EVs in fleets, and use the total cost of ownership tool at EECA Business.

[FIND OUT MORE](#) 

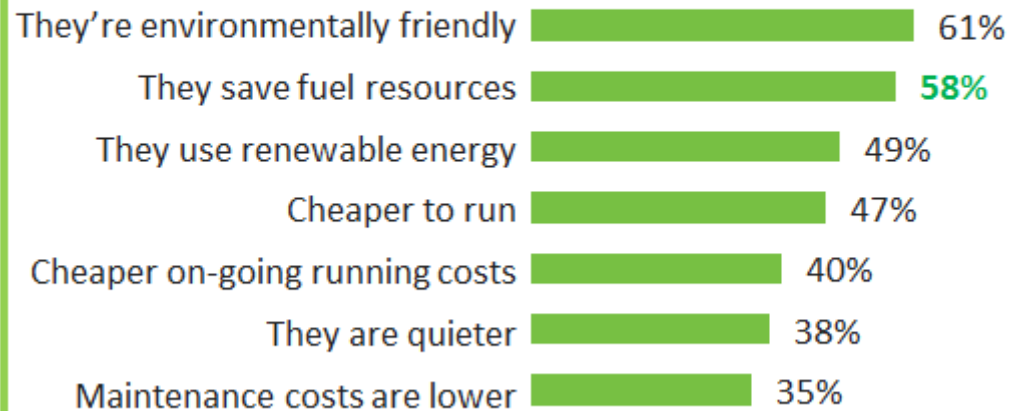




EECA Quarterly Consumer Monitor Results

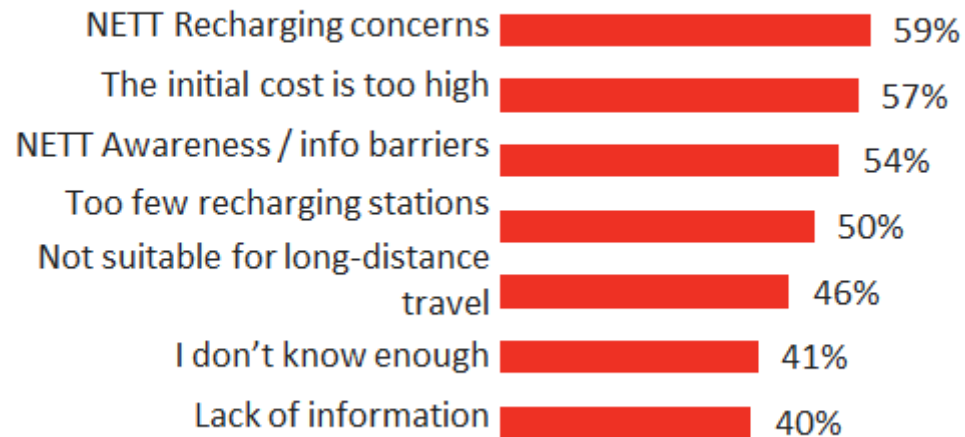
Why would consider EVs

(n=335)



Why would not consider EVs

(n=525)



Note: Top-7 reasons for considering and not considering shown in charts.

Low Emission Vehicles Contestable Fund

- Funding of up to \$6 million per year to co-fund projects where commercial returns aren't strong enough yet to justify full private investment.
- Projects must contribute to at least one of the following objectives:
 - Increasing the variety and supply of electric vehicles (EVs) available – light and heavy
 - Improving the availability of servicing or charging infrastructure in areas where demand is not fully developed
 - Increasing demand for EVs
 - Developing innovative products or systems to take advantage of growing EV usage
- The fund's investment focus for Rounds 1 and 2 is demonstration projects that can be implemented relatively quickly.
- Round 1 was significantly oversubscribed.
- Round 2 is currently open – closes 26 April.
- <https://www.eeca.govt.nz/funding-and-support/electric-vehicles-programme/>

Round 1 approved projects

Demonstrations:

- 100% electric delivery vans: Foodstuffs
- 100% electric taxis: Green Cabs
- 100% electric buses: AT; Transit Group
- PHEV car share: Mevo; Z Energy

Infrastructure:

- Charging at park and ride: AT
- Smart poles with EV charging: AT
- Charging at 20 stores: The Warehouse
- Charging on touring routes: Thames-Coromandel DC; Unison (Taupo-Napier)
- Other charging: Hutt CC; Counties Power (Pukekohe); PowerNet
- EV truck conversion facilities: Waste Management



Private sector fleet commitment



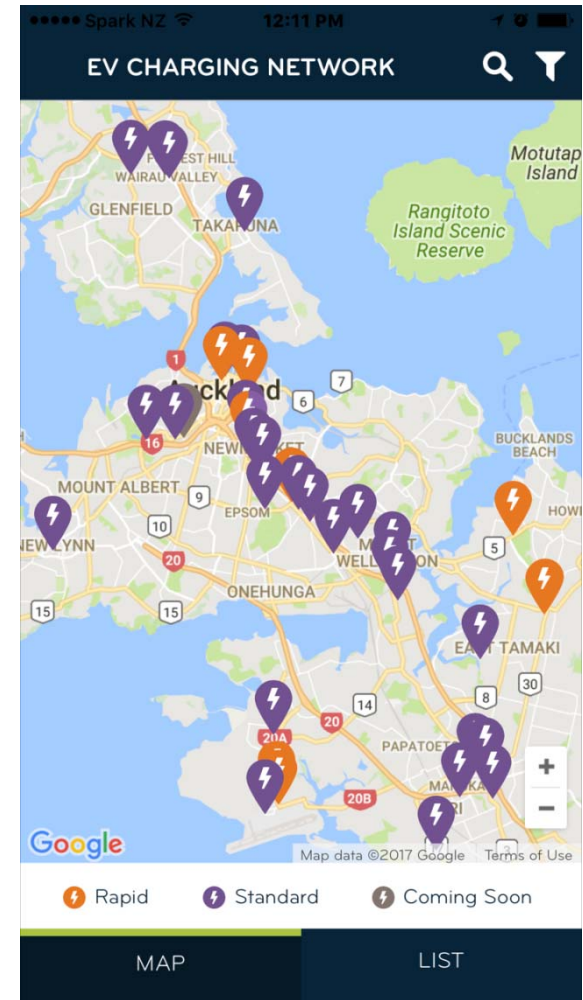
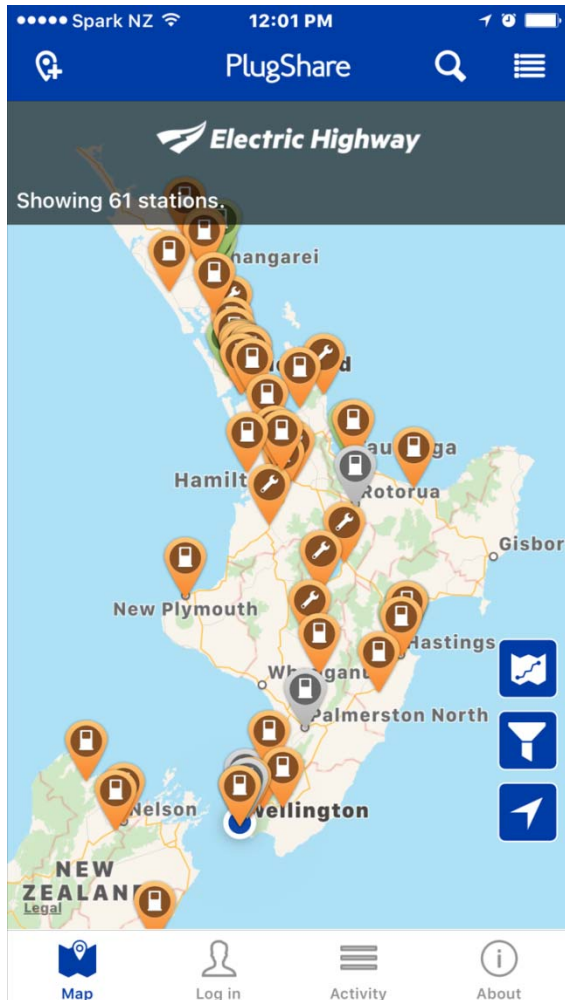
- Over 30 of NZ's largest companies have committed to changing at least 30% of their fleet to EVs over the next three years – at least 1,450 EVs
- The initiative is driven jointly by Air New Zealand and Mercury, with the support of Westpac, and includes Fonterra, Spark, Vodafone, Foodstuffs, AMP, Xero, The Warehouse, Waste Management, LeasePlan, SG Fleet, Custom Fleet, Turners Cars, Hyundai, BWM, Giltrap Group...

Public-Private EV Procurement

- Local government and state sector organisations can buy EVs through the All of Government vehicle contract run by MBIE New Zealand Government Procurement.
- The first panel of EV suppliers was established in December 2016.
- The panel remains open to allow new suppliers can apply to join at any time.
- The EV RFP also allows for inclusion of manufacturer-supplied near-new vehicles, making EVs a more reasonable choice for the public sector.
- MBIE is collaborating with the private sector to co-ordinate fleet purchase demand to attract more EV suppliers to NZ.
- Any organisations planning to substantially shift their fleets to EVs are encouraged to get in touch with MBIE to explore opportunities for collaboration and purchasing. derek.tunui@mbie.govt.nz

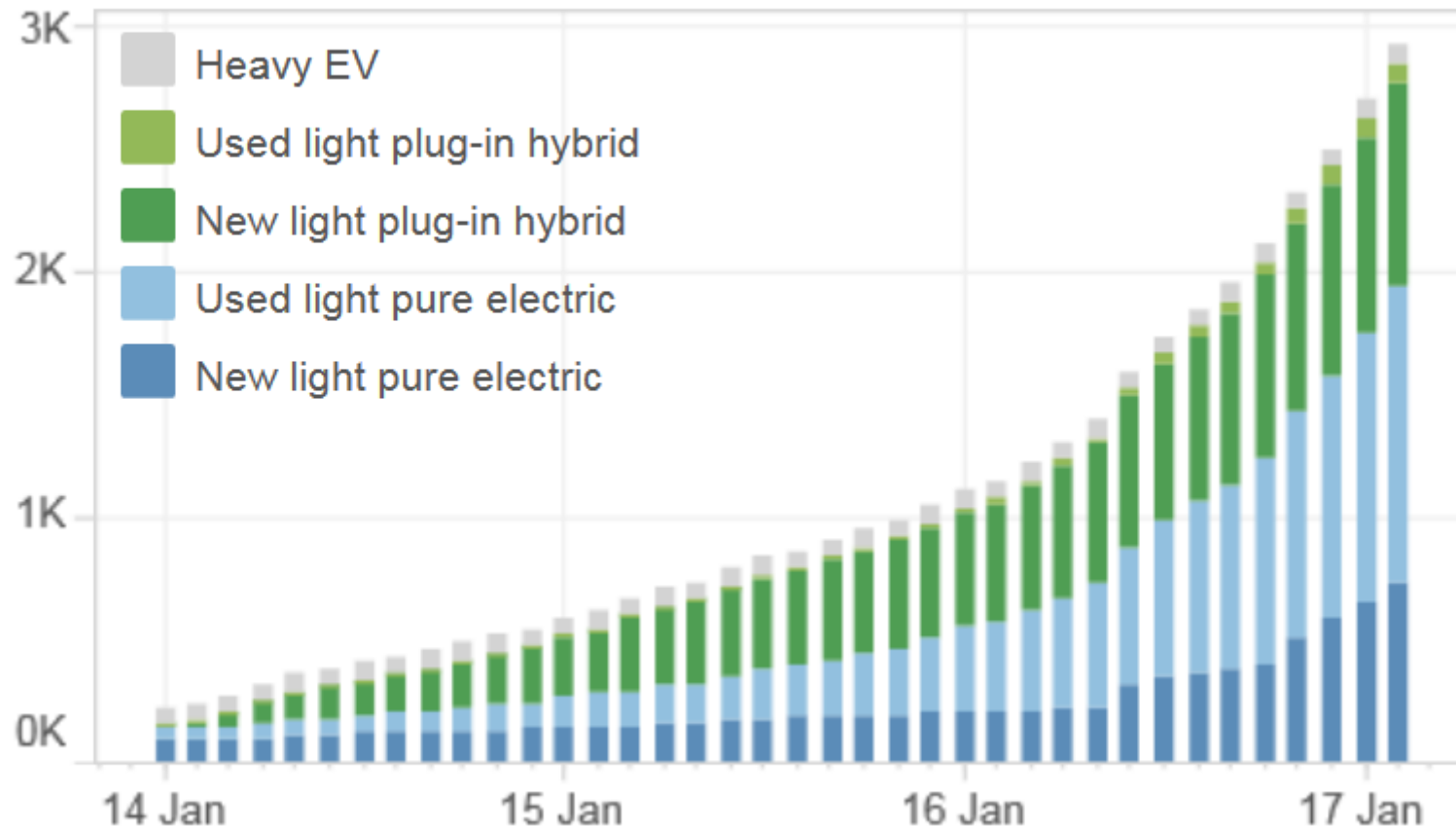


NZ public charging infrastructure



New Zealand EV fleet size

EV fleet size





Electric Vehicles
Drive the Future