E E C TE TARI TIAKI PŪNGAO ENERGY EFFICIENCY & CONSERVATION AUTHORITY

Low Emission Vehicles Contestable Fin

Camilla Cochrane, EECA 21 August 2019

electric

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ONIQ

Our strategy

Our purpose

Mobilise New Zealanders to be world leaders in clean and clever energy use

Our strategic principles



New Zealand Government

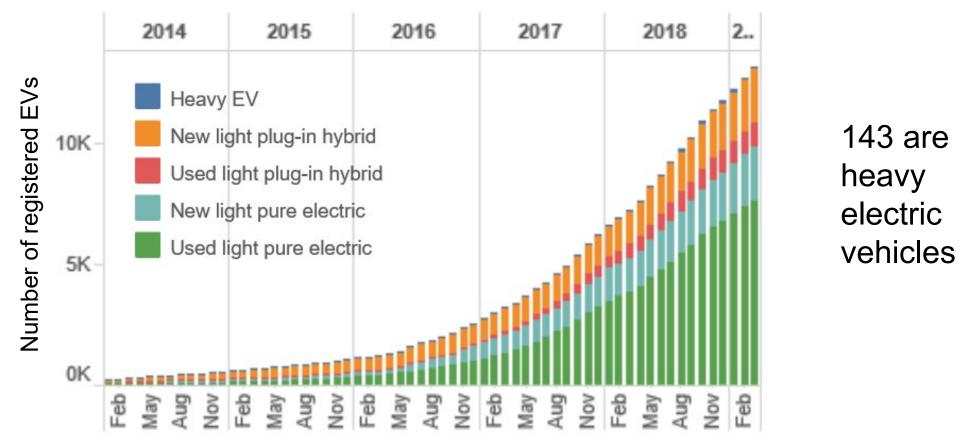
Ministry of Transport TE MANATŪ WAKA Enabling New Zealanders to flourish





EV growth in NZ is accelerating – 15,538 registered EVs

EV fleet size



Source: https://www.transport.govt.nz/resources/vehicle-fleet-statistics/monthly-electric-and-hybrid-light-vehicle-registrations/



Road User Charges: HV advantage

Light vehicles: Light EVs (e.g. cars and vans) are exempt from RUC until 2021

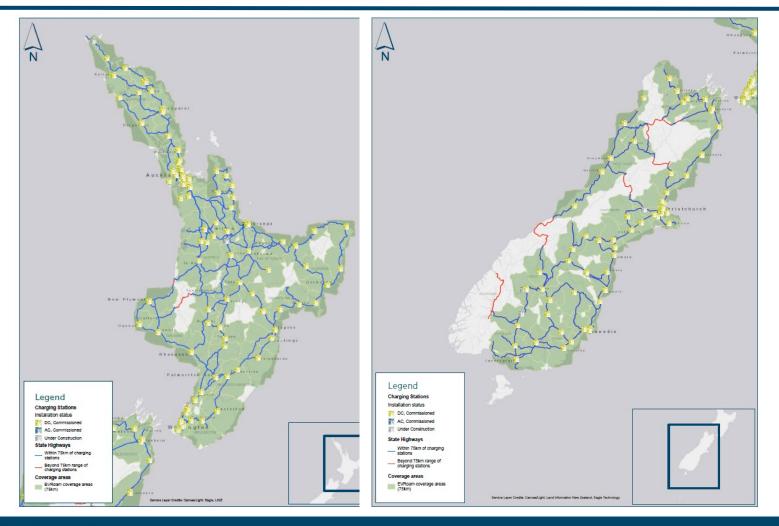
Heavy vehicles: From 1 September 2017 heavy electric vehicles have been exempt from road user charges until they make up 2% of the heavy vehicle fleet.

Examples of what this is worth:

Vehicle	Definition	RUC rate (GST incl)	Example annual distance	Example RUC exemption saving
Urban delivery truck	Under 6 tonnes, dual rear wheels	\$66 / 1,000 km	30,000 km	\$1,980 / year
Regional freight truck	12 – 18 tonnes, 3 axle	\$292 / 1,000 km	75,000 km	\$21,900 / year



Charging Coverage - 93% of State Highways have a 50kw charger every 75km



NZTRANSPORT

- New coverage represented in the East Cape.
- Higher density represented in urban areas and overall coverage of the state highway network than the South Island.
- Uncovered area remains on the West Coast of the South Island.
- Alpine routes present challenges – but round 6 will help.
- (August 2019)



Vehicle range becoming less of an issue

NEW EV CAR TYPES					
MAKE	MODEL	TYPE	PRICING RRP est.	APPROX RANGE KMS	
BMW	13	BEV	\$76,900	200 km	
	i3s	BEV	\$84,300	200 km	
Hyundai	loniq	BEV	\$59,990	220 km	
	Ioniq Elite	BEV	\$65,990	220 km	
	Kona	BEV	\$73,990	400 km	
	Kona Elite	BEV	\$79,990	400 km	
Kia	Niro EX289 (39 kWh)	BEV	\$67,990	289 km	
	Niro EX455 (64 kWh)	BEV	\$73,990	455 km	
LDV	EV80	BEV	\$80,489	180 km	
Renault	Zoe 40 kWh	BEV	\$68,990	300 km	
	Kangoo van	BEV	\$74,990	160 km	
Tesla	S - Standard Range	BEV	\$137,120	520 km	
	S - Long Range	BEV	\$144,120	630 km	
	S - Performance	BEV	\$165,420	610 km	
	X - Long Range	BEV	\$152,220	565 km	
	X - Performance	BEV	\$172,820	540 km	
Volkswagen	e-Golf	BEV	\$61,990	220 km	
Audi	A3 Sportback e-tron	PHEV	\$69,900	45 km + 600 km	
	Q7 e-tron	PHEV	\$158,400	54 km + 800 km	
BMW	i3 - Range Extender	PHEV	\$84,500	200 km + 130 km	



EV Talk August 2019

Low Emission Vehicles Contestable Fund (LEVCF)

Purpose: Encourage innovation and investment that will accelerate uptake of electric and other low emission vehicles.

- A Government fund, administered by EECA
- Helps overcome first mover risk
- Normalises EVs by making them more visible
- Up to 50% co-funding*
- Maximum of \$500,000 per project*
- Central Govt excluded





120 projects in the first six rounds

Purpose: Encourage innovation and investment to accelerate the uptake of electric and other low emission vehicles that might not otherwise occur.

- received over 400 proposals; co-funded 1/4
- awarded \$20.9 million in co-funding, and catalysed \$40.7 million in private investment
- supported projects worth \$61 million

Our 120 projects range from charging infrastructure to buses and trucks, to vans and battery testing

Project type	No. Projects		
Charging	46		
Vans	21		
Cars	13		
Trucks	13		
Buses	6		
Technology	9		
Car share	6		
Campervans	2		
Training	1		
Data sharing	1		
Fleets	2		
Total	120		



Round six: \$4.5 million from Govt, 29 projects, \$16 million from applicants

> 4 truck projects

JJZ655

The Low Emission Vehicles Contestable Fund: \$21.5 million provided over six rounds so far; \$7 million this financial year

Zigra Emission

Case study: ContainerCo

- NZ's first electric container movement truck, Isuzu eHV
- Can move 3 empty containers at once, operate 18 hours before charging, 200km range when loaded
- Motor rated 195kW, can go to 250kW for towing
- Benefits: silent, no pollution, supports opening facilities for longer





Case study: Palmerston North District Council

- 2 waste collection trucks replacing diesel
- Built by Manco
- Council taking a
 leadership position
- Benefits: quieter service, lighter for drivers, reduced maintenance costs





Case study: Round 6 projects

- Dempsey Wood Civil Ltd
 - 1 tipper truck, 1 traffic safety truck, and 4 chargers around Auckland
- KAM Transport
 - a 24-tonne diesel truck replaced with electric, supplying chilled and frozen products to McDonalds restaurants and to wholesalers with an Isuzu electric truck in Wellington CBD
- The Warehouse Group
 - 4 electric trucks for home deliveries around NZ, with each truck driving upwards of 250km per day
- Blackwell Motors
 - an Isuzu truck to be used for long loaded test runs in Christchurch



Round 7 is open – we are looking for projects that...

- identify and fill key gaps in the public charging network
- reduce barriers in the fleet sector and public transport
- encourage uptake in <u>sectors where EVs remain relatively</u> <u>unproven</u>, e.g. high visibility heavy vehicle projects
- encourage EV technology innovation e.g. V2G and Smart Charging to reduce peak electricity demand
- support EV maintenance, repair and support services
- support battery refurbishment, recycling, repurposing
- demonstrate mobility-as-a-service, car share, taxis, rentals



What's in, what's not

What can be funded – the fund is limited to projects involving mainstream vehicles and related technologies/ charging infrastructure, such as:

- passenger vehicles (cars, SUVs, vans)
- omnibuses (buses)
- goods vehicles (trucks)

What will not be funded

- maritime, aviation and rail vehicles
- Off-road vehicles e.g. forklifts, specialist off-road vehicles e.g. diggers
- conventional hybrids and biofuel vehicles (they don't use electricity from an external source)
- biofuel vehicles (they don't use electricity from an external source)
- two or three wheeled vehicles, quadricycles and 'neighbourhood' vehicles
- activities representing an ongoing financial liability for EECA e.g. insurance underwriting
- projects purely focused on training or professional development or education/ information provision
- Research
- international travel
- "business as usual" costs of an organisation, e.g. costs associated with existing staff

4 questions you need to answer

- 1. How does your project contribute to the objectives of the Fund?
- 2. How does it fit the investment focus?
- 3. What is your ability to deliver?
- 4. What value for money does your project deliver?



Build a strong proposal

Practical things to show:

Internal approvals and budget approved

Regulations met

Any land / Council permissions provided

Costs clear – vehicles, chargers, transformers

Suppliers in place

What the panel asks:

Innovation – what's new or different?

Public benefit – why <u>your</u> project? What's in it for NZ?

Would you do it anyway?

Is it actually just a subsidy?

What does success look like? Share incremental costs



What's the process?

- Two funding rounds per year \$3.1 million for round 7
- Round 7 open for 4 weeks 16 August to 13 September
 RFP document; Response form; Funding Agreement; tips
- Assessment
 - Eligibility and administration checks
 - Independent panel scoring and moderation
 - Panel recommendations to EECA Board
- Approval and contracting
 - EECA Board approves funding mid-December



What you can do now

- 1. Download the RFP forms and read the case studies
- 2. Talk to us: LEVFund@eeca.govt.nz, 04 470 2229
- **3**. Questions?



