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

# Low Emission Vehicles Contestable Fin

Camilla Cochrane, EECA 21 August 2019

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#### **Our strategy**

#### Our purpose

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

#### **Our strategic principles**



New Zealand Government

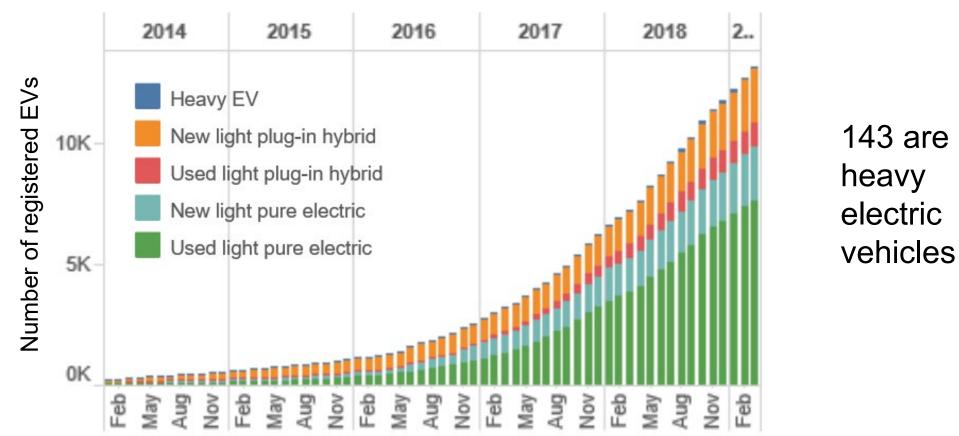
Ministry of Transport TE MANATŪ WAKA Enabling New Zealanders to flourish





# 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

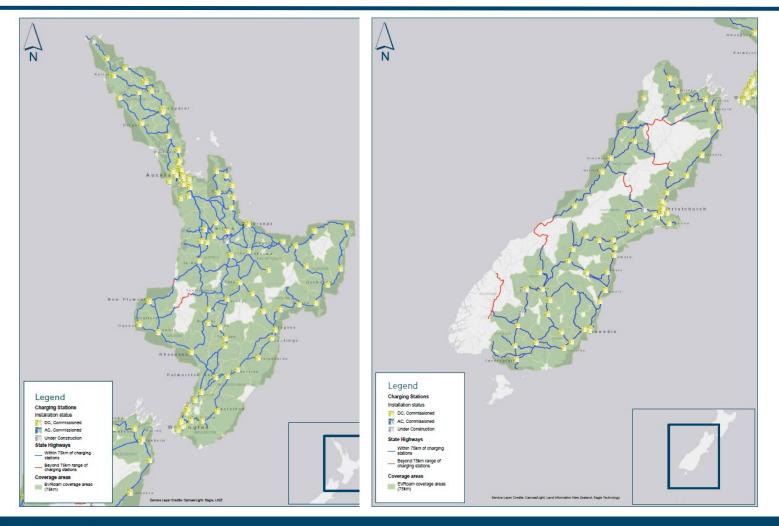
**Heavy vehicles:** From 1 September 2017 heavy electric vehicles have been exempt from road user charges until they make up 2% of the heavy vehicle fleet.

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?



