

#### The state of electric vehicles in Australia

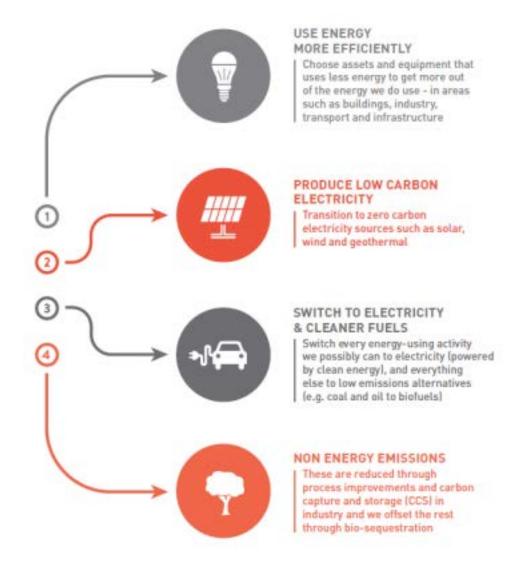
#### **Claire Connell**

October 2018



Founded in 2009 through a partnership with The Myer Foundation and Monash University and working within the Monash Sustainable Development Institute.

ClimateWorks' signature research, undertaken with Australian National University in 2014, built on the global 'Deep Decarbonization Pathways Project'(DDPP) which represents 15 countries that produce over 70% of global emissions. In Australia, we mapped a four step plan to show how we could 'decarbonize' our economy.



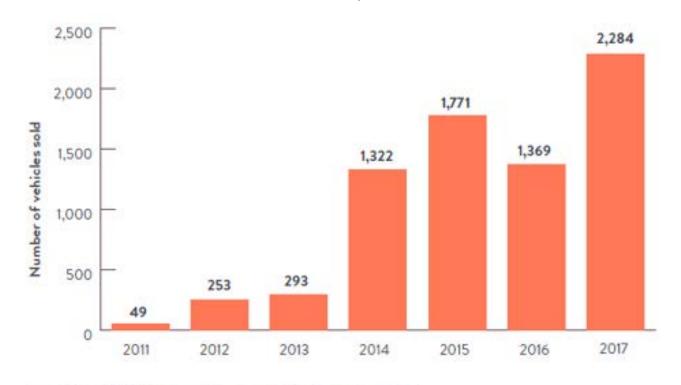


# Electric vehicle momentum is growing

The launch of the Electric Vehicle Council, Australian Parliament House, 22 May 2017.

#### Electric vehicle uptake in Australia

Electric vehicle sales in Australia, 2011-2017



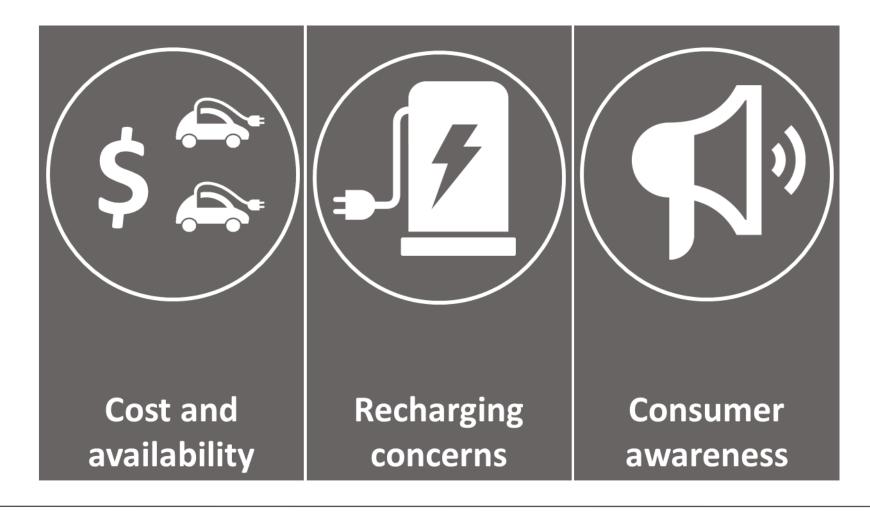
 Sales increased 67 per cent from 2016 to 2017

• In 2017, Australians purchased 1,076 plug-in hybrid electric vehicles, and 1,208 battery electric vehicles

Source: V-Facts (2018); Numbers include estimated Tesla sales (see Footnote 8).



#### Barriers to increased electric vehicle uptake



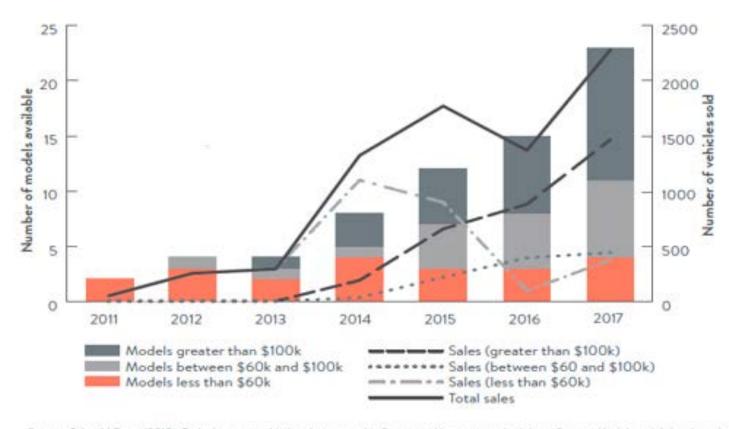


### Model availability



#### **Model availability in Australia**

Number of electric vehicle models available in Australia



- 7 news models expected in next 18 months
- 5 of which expected to be priced under \$60k

Source: Sales: V- Facts (2018), Tesla does not publicly release its sales figures and has not supplied these figures. Model availability: based on information published on Car Advice and Motoring.com.au.



## Charging infrastructure



#### **Recharging concerns**





#### **Current infrastructure in Australia**

- 64% increase
- 783 charging locations
- 1 for every 6 vehicles





#### Sylvia's story

- 20,396km around Australia
- 110 days
- Fuel bill \$150.90





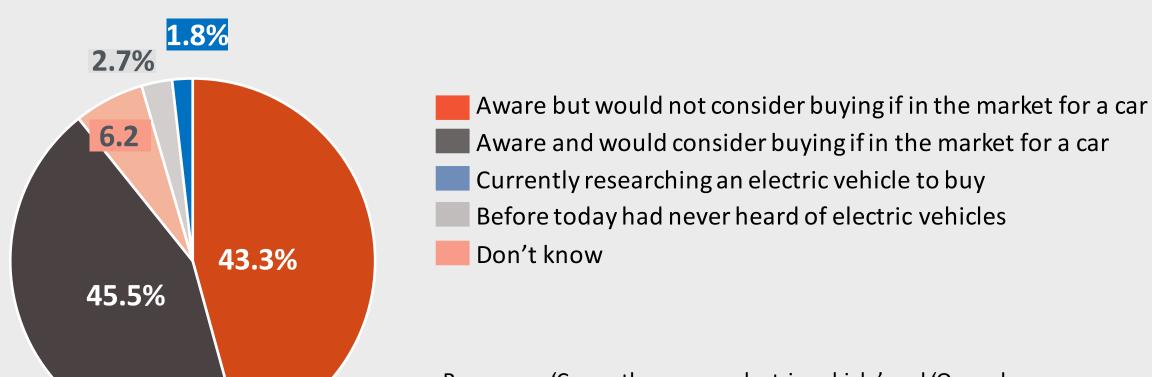
#### **Electric vehicles and the grid in Australia**

An average EV charged from the grid in 2016 emitted less than an average internal combustion engine vehicle in all states except Victoria, where it was only slightly higher.





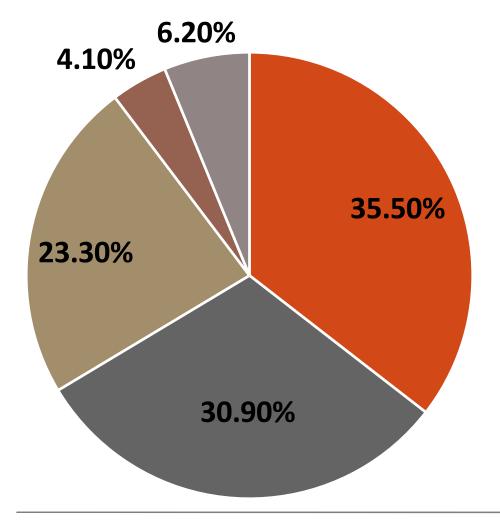
#### Consumer attitudes – electric vehicle awareness and consideration



Responses 'Currently own an electric vehicle' and 'Owned an electric vehicle in the past' both not shown with <1%.



#### **Consumer attitudes – price**



- Willing to buy an EV at the same price as petrol or diesel options
- Willing to pay more for an EV if there is more support, incentives and infrastructure
- Not interested in buying an EV
- Willing to pay more for an EV than a petrol or diesel vehicle
- Don't know



# Policy support The same of the sa



#### **Electric vehicle policy in Australia**

Table 4. Overview of federal, state and territory government policy.

		ACT	NSW	NT	QLD	SA	TAS	VIC	WA	Cwth
Uptake	EV purchases 2011 - 2017	165	1238	13	688	957	61	1324	375	4821
	EV sales per 10,000 vehicles (2017)	21	10	1	6	22	3	10	8	7
Regulation	Vehicle CO <sub>2</sub> emissions standards									•
Financial incentives	Stamp duty, registration and tax discounts	<b>\</b>	<b>√</b>	<b>\</b>	>	•		>		<b>√</b>
	Direct vehicle subsidy									•
	Fleet incentive									✓
	Charging infrastructure incentive	1		•	1		✓			•
	Toll and parking discounts				✓					
Non financial incentives	Vehicle lane and parking privileges	1								
	Electric vehicle public transport trials	1		1		<b>&gt;</b>				
	Government fleet policy	>	>			>	<b>√</b>			
	Information and education programs	1	1		1	✓	1	✓		<b>√</b>



#### Electric vehicle ready local government fleets

Enable greater uptake of electric vehicles in local government fleets





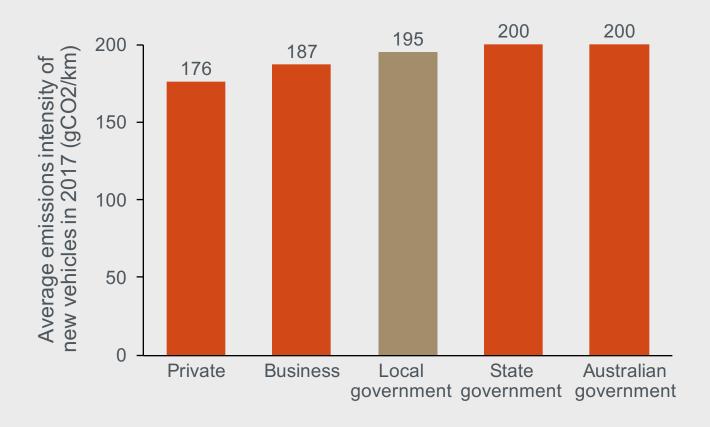




#### **Local government opportunity**

Total number of light vehicles purchased by Australian local governments in 2017

9,307





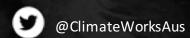
#### Contact Us

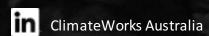
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Climate Works Australia was co-founded by Monash University and The Myer Foundation and works within the Monash Sustainable Development Institute

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