# THE TRANSITION TO ELECTRIC VEHICLES

Learnings from the Smarter Fleets Program – Electric Vehicles in Local Government

### BENEFITS OF ELECTRIC VEHICLES IN TASMANIA

### Environmental

Electric vehicles reduce greenhouse gas emissions, particularly when powered by Tasmania's renewable energy.

### Health

Electric vehicles eliminate exhaust emissions, which improves air quality and benefits human health. Unlike other Australian states and territories, there are very few emissions from the generation of electricity because over 90 per cent of Tasmania's energy comes from renewable sources.

### Economic

Electric vehicles already have lower service and fuel costs than internal combustion engine (ICE) vehicles. For high-use vehicles, electric vehicles are already cost competitive or cheaper than ICE vehicles on a whole-of-life basis, in some scenarios. As purchase prices for electric vehicles reduce over time, they will become more financially viable.

### Energy security

The uptake of electric vehicles in Tasmania will reduce Tasmania's dependence on imported petrol and increase demand for locally produced electricity. With opportunities to use managed charging to balance supply and demand within the existing electricity network, this has the potential to increase stability within the grid and reduce the future cost of electricity for all Tasmanians.

### FLEETS HAVE AN IMPORTANT ROLE TO PLAY

The uptake of electric vehicles in fleets stimulates demand, potentially attracting additional models to the Tasmanian market. It will also provide a greater supply of electric vehicles to the second-hand market in the future. This is likely to have a significant effect on the uptake of electric vehicles in the State, as most private car owners buy used cars.

Introducing electric vehicles to fleets also helps to raise community awareness through exposure to electric vehicles. Staff who have an opportunity to drive electric vehicles regularly will come to regard them as standard.

# THE TRANSITION IS COMING

The transition from ICE to electric vehicles is well underway, driven by:

- electric vehicles becoming the most economical option in a few years, in a greater range of scenarios;
- stronger efforts to reduce greenhouse gas emissions; and
- manufacturers responding to tightening pollution standards globally.





### START TRANSITIONING YOUR FLEET NOW

Becoming an early adopter by introducing electric vehicles into your fleet now will enable you to gain experience, resolve any issues, and spread capital expenditure for charging infrastructure over time.

Your fleet will then be well prepared to take full advantage of electric vehicles as they increasingly become an economical option. This is preferable to waiting, and then trying to rapidly transition a large proportion of your fleet at one time with no experience to draw from.

### TRANSITIONING YOUR FLEET

## Start with the most appropriate vehicles

Start by introducing a small number of electric vehicles where they are most cost competitive on a whole-of-life basis. In the short-term, existing fleet vehicles that are best suited to replacement with electric vehicles are ones that travel longer distances per year (keep in mind range limitations for individual trips), are mostly used in urban areas, and are not used for private use.

See the *Electric Vehicle Selection* Fact Sheet in this series for more information.

## Make the most of your first electric vehicles

Since they have lower running costs per kilometre, try to encourage use of electric vehicles in your fleet rather than ICE vehicles. One option is to prioritise electric vehicles when allocating pool vehicles.

### Plan charging infrastructure in advance

While it is best to spread the cost of installing charging infrastructure over time as the number of electric vehicles in your fleet increases, it is also beneficial to plan in advance. Planning early can reduce the overall cost of installing charging infrastructure (eg by installing additional electrical cabling).

It is also worth considering how the addition of electric vehicle charging to a site's electricity use may affect the choice of electricity tariffs. You could also factor in the opportunity for rooftop solar panels at the site.

See the *Electric Vehicle Charging* Fact Sheet in this series for more information.

### Put appropriate policies in place

Electric vehicles are not that different from ICE vehicles in terms of how they are driven and managed as part of a fleet. However, there are a few differences that may require policy updates in order to take full advantage of the benefits that electric vehicles have to offer.

These include:

- financial policies around capital vs operational budgets;
- how vehicle options are compared;
- how long vehicles are held for;
- how employees are reimbursed for charging fleet vehicles at home; and
- driver training.

See the Policy Considerations for Electric Vehicles Fact Sheet in this series for more information.

This document was prepared by Sustainable Living Tasmania to summarise the general information provided to councils during the Smarter Fleets Program – Electric Vehicles in Local Government.

The Smarter Fleets Program supported 10 Tasmanian councils to prepare to introduce electric vehicles into their fleets. The Program provided tailored information and analysis of the participating councils' existing fleets to calculate the environmental benefits and cost reductions that electric vehicles can offer.

The Program ran from July 2018 to June 2019 as a partnership between the Tasmanian Government and Sustainable Living Tasmania and was funded by the Tasmanian Government. This information is correct as at October 2019, but is general in nature so it may not be relevant to your fleet.