



## Transitioning to Electric Fleet



1

## Transitioning to Electric Fleet

### Rules of Engagement

- Please join the webinar on mute with your camera OFF, which should be maintained during the presentation.
- Participants will be invited to ask questions. Please raise your hand using the icon on Teams or simply turn on your camera or use the chat function.
- The presenters may invite you by name to contribute to the session. Where possible, when responding, please turn on your camera so the participants know who is speaking.

### Objectives for the Webinar

- Working with webinar participants to explore development of an EV transition plan
- Provide some insight into the history behind the political push to EVs
- Topics
  - Early transition to achieve quick wins
  - European experiences
  - Infrastructure
  - Changing face of maintenance
  - Early modelling costs

**Most Councils have expressed some intention to reduce their emissions**



© Copyright Uniqco WA Pty Ltd



2

## Introduction

### Grant Andrews

- 45 years experience working in the motor vehicle industry
- Combined with 30 years consulting to Local and State Government
- Passionate about financial modelling and innovation

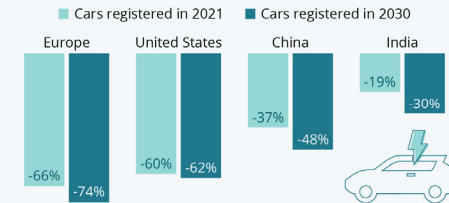
### John Ravlic

- Associated with Local Government for over 30 years as an executive and consultant
- Passionate about developing best practice service delivery to meet community needs



### Electric Cars Found to Cut Emissions Drastically

Estimated reduction in life-cycle greenhouse gas emissions of new medium-size electric cars compared to gasoline cars\*



\* Life-cycle emissions include emissions associated with vehicle and battery manufacture, fuel/electricity production and consumption, as well as maintenance. Figures show lower bound of estimates based on electricity mix according to current policies.

Source: ICCT



statista

Portt

© Copyright Uniqco WA Pty Ltd

uniqco

3

## EVs – Australian Context

- 1 million new cars are purchased annually across Australia
- Less than 1% of these are EVs
- Compared to 10% in UK and Europe and 75% in Norway
- 11 million EVs sold worldwide
  - China has 5 million
  - USA has almost 2 million
- 20,000 EVs have been sold into Australia over the last decade including 10,000 Tesla 3s
- Charging infrastructure under development and range anxiety is prominent

### Bloomberg predicts penetration of EVs across Australia:

- 18% by 2030 and
- 64% by 2040

Despite the lack of national coordination and support, in 2019 electric vehicle sales tripled from 2,216 to 6,718.

- The difference between Australia and Europe is government policy and incentives.
- State Governments like ACT and NSW more recently will provide some incentives.
- While Victoria is talking about taxing EVs.
- The Australian Government does not provide any incentive for EVs.
- VW have pushed back their new model releases to Australia to 2023, comparing our national EV policies to third world.

Portt

© Copyright Uniqco WA Pty Ltd

uniqco

4

## What are the Barriers?

- Using the chat function please identify barriers to progressing your transition to Electric Vehicles.
- We will analyse the results and provide you with a Briefing Note on the barriers you identified.

### HOW CAN WE HELP?



© Copyright Uniqco WA Pty Ltd



5

## Quick Wins and Real-Life Experience

### Easy - Quick Wins

Reducing your carbon footprint

- ✓ Track your fleet emissions and report regularly



- ✓ Introduce low consumption vehicles to drive down your fleet fuel consumption
- ✓ Introduce all electric small plant
- ✓ Consider hybrid plant and vehicles
- ✓ Move to plug-in electric vehicles (with no range anxiety)

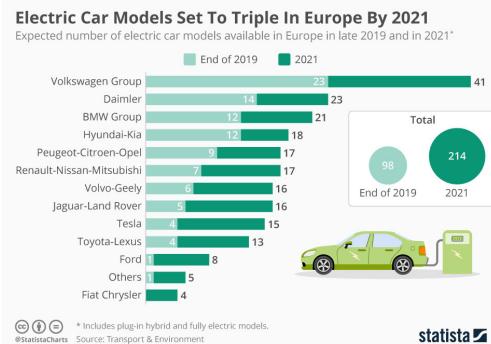


© Copyright Uniqco WA Pty Ltd

### Real Life - Europe

Europe always leads the way

- ✓ Europe will register 1 million battery electric vehicles in 2021



\* Includes plug-in hybrid and fully electric models. Source: Transport & Environment



© Copyright Uniqco WA Pty Ltd



6

## Considerations

### Infrastructure

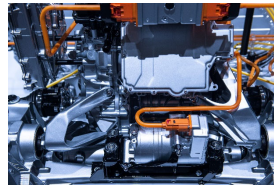
- ✓ Confirm you are providing renewable energy for your charging stations.
- ✓ Remember if you are generating renewable energy there is a cost.
- ✓ Calculate optimum amount of chargers needed for your fleet and where they will be located.
- ✓ Will your chargers be accessed by the public (possible revenue)?
- ✓ Consider rapid charging stations.
- ✓ Offer free charging to staff that own an EV.



© Copyright Uniqco WA Pty Ltd

### Maintenance

- ✓ In-house maintenance team will be challenged by the transition to EVs.
- ✓ EVs require minimal maintenance - brakes, and fluids etc.
- ✓ Keeping up with technology updates in EVs will require specialised IP-protected software.
- ✓ Consider the dealer service package.
- ✓ Develop an electrical maintenance capability to cater for small electrical issues.
- ✓ Develop internal skills on fault analytics, particularly strategic assets like electric/hybrid rubbish vehicles.



7

## Let's Talk Costs for EV

**PHEV based on 5 years 100,000km**  
(Includes all costs, FBT, fuel, power, tyres, insurance and on-road etc)

Make	Model	Annual cost
Hyundai	Ioniq	\$18,869
Mitsubishi	Outlander	\$22,992
Ford	Escape	\$21,945

**BEV based on 7 years 140,000km**  
(Includes all costs, FBT, power, tyres, insurance and on-road etc)

Make	Model	Annual cost
Hyundai	Kona	\$23,993
Mercedes	EQA	\$27,816
Nissan	Leaf	\$22,347

Make	Model	Annual cost
Toyota	RAV 4 GXL	\$16,000
Hyundai	Santa Fe (Active)	\$16,400
Nissan	X Trail ST-L	\$14,500



**ICE based on 5 years 100,000km**  
(Includes all costs, FBT, fuel, tyres, insurance and on-road etc)



© Copyright Uniqco WA Pty Ltd



8

## Summary

- EVs are here - you cannot ignore them!
- The least you can do is put together a Transition Plan
- Focus on reducing your fuel consumption = lower emissions
- Invest in Plug-in Hybrids and avoid range anxiety
- Plan your charging infrastructure
- Know when to invest in BEV
- It's not all about light fleet. What about earthmoving equipment?
- Where is small plant and equipment in your Transition Plan?

### Vehicle Manufacturing

- Production of vehicles has slowed due to supply of semiconductors
- EVs use many more semiconductors than ICE vehicles
- Manufacturers have halted assembly lines around the world
- Lowering expected revenue by billions

### Transition to EVs will impact your:

- servicing/maintenance regime
- workshop operation – skills/equipment
- Fleet Policies and standard operating procedures

**If you're not committing to Zero Emission Vehicles and renewable energy, you're not progressing towards your emission targets!**



© Copyright Uniqco WA Pty Ltd

