

Step by Step to NetZero



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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
- Passenger Vehicles
 - Vehicles Cost and Benefits
 - Systems and Expectations
 - Vehicle Allowances
 - Optimum Replacement Intervals
 - Impact of EVs on council maintenance teams
 - What does the future look like?

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



Questions and Answers

Use the chat function to:

make a point; or
ask a question; or
seek clarification.

We will call on you to join the conversation by turning on your camera and microphone.



Light Fleet – Passenger Vehicles

The role and purpose of Council is to provide services and local infrastructure that continue to improve the community's wellbeing.

The provision of fleet, plant and equipment enables delivery of Council services and infrastructure assets that meet the needs and expectations of the community.

- vehicle benefits under the guise of attraction and retention;
- poor systems, data collection and analysis, most Councils do not realise the costs;
- cost of providing the vehicle exceeds the value of the employee benefit.

Providing passenger vehicles with personal use/restricted private use is not Council's core business.

- cost of providing these vehicles is not adequately recognised in salary packages;
- cost of Fleet Management associated with passenger vehicles is significantly greater than for other assets;
- because of the personalisation attached to the employee's vehicle;
- personalisation of these assets becomes a **distraction for FM**, which impacts asset delivery.

Too much time is spent on managing light fleet and not enough time is spent on plant.

Light Fleet – Passenger Vehicles

Based on data gathered working with clients throughout Australia, Uniqco has found:

- The average vehicle with private use is travelling between 20,000km and 30,000km per annum
- **Some** users are travelling 40,000 Kms – 70,000 Kms per annum
- An employee with a Mazda CX5 travelling 20,000 Kms per annum has a benefit of \$11,700 per annum
- An employee travelling 52,000 Kms per annum in the same car has a benefit of \$27,300

Annual costs including FBT for typical Council vehicles travelling 30,000 Kms:

- Toyota Prado = \$29,000.00
- Toyota Camry SX = \$21,000
- Mazda CX5 = \$18,500
- Toyota Corolla = \$16,500
- Ford Ranger Ute = \$18,500
- **The Government is preparing a National EV Strategy.** In all likelihood it will remove FBT on EVs to stimulate demand.
- BEV's as attractive as the Volvo XC40 Recharge will only cost \$14,300 per annum to travel 20,000 Kms.

The Government is inviting views on the goals, objectives and actions for Australia's National Electric Vehicle Strategy.

Light Fleet – Passenger Vehicles

Council Systems

Councils need to set up their systems to aggregate data from across the organisation and calculate the cost of providing assets.

Once councils know what it costs, they will look for alternatives.

Community Expectations

The community/ratepayers do not expect to see councillors and council employees receiving vehicle benefits **that are out of step with the local values.**

They are not expecting that vehicle benefits will extend to:

- new vehicles every two years; or
- exotic cars/sports cars; or
- flashy convertibles; or
- petrol guzzlers.

For the Light Vehicle fleet, irrespective of make/model/type, the optimum replacement point for changeover is at seven years or 150,000 kms (whichever comes first).

There may be opportunities to extend the length of ownership subject to a favourable mechanical risk assessment.

Vehicles should not generally be held beyond 150,000 kms due to the increasing risk of vehicle safety, breakdowns and maintenance costs.

Vehicles – Council Assets

Council vehicles allocated for work-related purposes are the same as any other Council asset used to provide goods and services to the community. Their use is subject to consideration of efficiency, effectiveness and economy as well as appropriate standards of probity and accountability.



Mercedes-Benz electric vans.

Helping you cut costs, optimise your business and making it easier to switch than ever before.

E'Vito Van – Plumbers – Building Maintenance – IT Support Teams



- With a range of up to 260km¹ combined (NEDC)^{1,2}
- Highly efficient electric motor with a maximum output of 85 kW (116 hp) and up to 360 Nm torque.
- 60 kWh usable battery capacity.
- Electrical consumption 27.36 kWh/100 km¹.
- Charging output up to 11 kW (AC charging) or 80 kW⁴ (DC rapid charging).
- Front-wheel drive.
- Charging time of under 6.5 hours³ from 0 to 100 % (AC charging)
- Useful 822kg Payload

Mercedes-Benz electric vans.

Helping you cut costs, optimise your business and making it easier to switch than ever before.

E'Vito Tourer – Serving your communities



- In the spacious interior with up to 8 seats plus the driver
- Climate control
- Up to 420 km indicative electric range.^{1,2}
- 90 kWh usable battery capacity with 100 kWh installed battery capacity.
- Consumption 26.15 kWh/100 km.¹
- Less than 10 hours charging time from 0 to 100 % at a wallbox with 11 kW charging output (90 kWh usable battery capacity).
- Front-wheel drive.

Mercedes-Benz electric vans.

Helping you cut costs, optimise your business and making it easier to switch than ever before.



NET ZERO WEBINAR

EV Supply Equipment, Installation & Services





We fuel EVs

Accelerating the adoption of low emissions transport by breaking down the barriers to EV charging.

What we do

An overview of who we are



Project Design and Delivery

We are project managers, engineers and electricians. We have deployed over 5,000 charging stations and over 8,000 related accessories, from home installs to the largest EV projects in the country.



Hardware

We distribute hardware. We are the largest supplier of EV charging stations and accessories into the Australian market.



Technology

We are software, hardware and firmware developers. We are creating the best EV charging energy management system in the world and complementary hardware.



Advocacy and Community

We are industry leaders. We are co-founders of Chargefox, the largest EV charging network in Australia. Tim Washington is the Chair of the Australian Electric Vehicle Council.

Humble beginnings to breakneck ambition.

We believe in long term market facilitation

VIC Contracting Focus

Started out as electricians for Tesla in Victoria. Our in-house electrical capability continues to this day, setting us apart.

2013/14

Software Focus

Co-founded Chargefox, now Australia's largest EV charging network. We understand what it takes to run EV chargers at scale.

2017

Starting to Scale

Investment from the Australian Government through CEFC; National office expansion; scaling up of team

2020/21

2016

National Focus

Completed first national rollout for Volvo, and focused attention on OEMs.

2017/18

Energy Focus

Started in-house R&D on charging hardware and software. Creating best EV energy management system in the world.



Nationwide Coverage

We believe EV charging needs face to face time

Servicing Australia and New Zealand

JET Charge has rapidly expanded around Australia and New Zealand to provide on the ground support to our clients and partners, with over 115 staff in EV charging, and over 250 electrical contractors.

Headquartered in Melbourne, JET Charge has established additional bases in Sydney, Brisbane, Perth, Adelaide, ACT and Auckland.

Our installation base covers the country, both metro and regional.

Our Work

In a fast-moving industry, it is hard to know who to trust and what advice to take on board. JET Charge have deployed more charging stations than any other company Australia-wide, and our specialist advice is respected by industry leaders and clients nationwide.

We are the official EV charging partner for 21 major automakers:



We are also proud to call the following notable entities our clients:





Project Design and Delivery

EV Charging Major Projects

Selection of projects across each category



Tech: REVS

ARENA funded project with 51 bi-directional chargers in the ACT. Currently underway, the project aims to demonstrate V2G technology, complemented with a holistic roadmap of new V2G enabled service offerings for fleets and residential customers.



Homes: Jemena

Dynamic EV charging trial, lead by Jemena and funded by ARENA. The project will recruit 176 EV owners across the ACT, Victoria and Tasmania, using the JET Charge ChargeMate hardware to monitor the impact of these EVs on electricity networks.



Buses: Clarks Logan

We are working with Clarks Logan in Queensland to deliver the first stage of a fully electrified bus fleet, with 10 electric buses to be charged. JET Charge is responsible for all works including grid upgrade, MSB replacement, civil works, hardware supply, project management and software.



Fleet: ACT Government

JET Charge are working with the ACT Government on the largest fleet transition in Australia, with over 200 charging stations to be installed across government buildings in the ACT. Hugely challenging both administratively and technically.

EV Charging Major Projects

Selection of projects across each category



OEM: Porsche

We worked with Porsche for 4 years to bring their dream of electrification alive. With the introduction of the Taycan, Porsche were looking to electrify all their dealers with very high-powered charging. JET Charge continues to be responsible for their Dealer network.



Greenfield: Collins Arch

3 years before one of Melbourne's best buildings was erected, JET Charge worked with CBUS and Multiplex on a master EV strategy. This was then implemented into Australia's largest Greenfields deployment of EV charging, with 52 charging ports delivered.



Public: 3 Council

Whilst not the biggest deal by quantum, the EV charging network project in Waverley, Woollahra and Randwick Councils brought together many stakeholders in a competitive tender process. It provided EV charging in an area where off-street parking is scarce and has spurred continued community engagement.



Maintenance: Chargefox

We are the maintenance partners for Chargefox, the largest EV charging network (which we also co-founded before selling out stake in 07/22). Due to its extensive nature and wide array of environments/hardware, Chargefox maintenance remains one of our ongoing major projects.



Hardware

Australia and New Zealand's best range (AC)

We're the largest distributors of EV charging hardware in the country



ChargeMate

JET Charge's own AC charging station is the only charger in Australia with NMI approved metering



Schneider

JET Charge helped build Schneider into Australia's most popular AC charging brand



ABB

Australia's leading distributor of ABB AC and DC Chargers



Wallbox

Australian importers of Wallbox, now the most specified brand among vehicle OEMs

Australia's best range (DC)

We're the largest distributors of EV charging hardware in the country



Kempower

One of Europe's hottest new brands, with an advanced EV charging satellite system and mobile DC charging



Starcharge

One of the largest EV charging companies in the world has partnered with JET Charge to deliver high powered charging



Fimer

With a history in high quality solar inverters and renewable energy, Fimer has established significant presence in the EU market



Tritium

Long term partners of Tritium, Australia's own DC charging station manufacturer

Practical Solutions

JET Charge provide technology to solve real world issues, rather than tech for tech's sake.

All of our technology is designed in house, and are designed to provide a solution to the following challenges:

- How do we integrate EV charging into buildings/sites without enough electrical capacity?
- How do we ensure grid level stability?
- How do we make sure the building doesn't trip, even if we lose communications?
- How do we bill people for EV charging accurately?
- How do we take instructions from solar / batteries and modify EV charging accordingly?
- How do we provide open, vendor free payment systems?



Load Management

We are creating the best EV charging energy management system in the world, through a unique hardware / software approach



Grid Integration

We are working on some of the most advanced grid integration projects in Australia featuring smart charging and bi-directional charging



Understanding Customer Needs

Customer Journey Mapping

Questions to validate prospective customers

1

Interest in an electric vehicle

Identify whether a customer is open to electric mobility in general terms

- Do you currently own an electric vehicle?
- Do you have any experience with electric vehicles?

2

Mobility pattern

Identify customer's mobility pattern

- When would the vehicle be used? - Work/City/Travel/etc.
 - Private or fleet use?
- How far will the vehicle drive on average each day?
- Do you drive long distances and, if so, how often?
- Does your household or workplace own other vehicles?

3

Charging options

Identify what charging options the customer has

- What charging opportunities are there?
- Can you charge it at home or your workplace?
- Have you searched for public charging stations in your local area?



Delivery & Installation

What is Charging-as-a-Service?

And why is it needed to support the uptake of EVs?

Charging-as-a-Service (CaaS) solves the cost and complexity of Electric Vehicle (EV) charging infrastructure by bundling various products and services into a simple subscription model.

Instead of a customer having to buy, own and operate charging infrastructure, CaaS focuses on keeping vehicles on the road and realising the benefits from transport electrification.

Different customers have different problems, so our CaaS model can be tailored to their requirements with flexible inclusions and pricing models.

Customer Problem

Unlike traditional ICE vehicles, EV deployment and operating requirements require charging infrastructure which can be costly and complicated

CaaS Solution

JET Charge CaaS solves for cost and complexity with a subscription package tailored to customer deployment plans and operating requirements

CaaS Operation

Customer pays a monthly &/or energy-based CaaS subscription fee right-sized to their vehicle/charging application



What are the CaaS fleet charging solutions?



CaaS Business Premise

Tailored bundle may include hardware, installation, carbon neutral electricity supply, removal



CaaS Employee @ Home

Hardware, installation, carbon offset, reporting for payroll reimbursement, removal & relocation



CaaS Public Charging

Access and billing for public charging networks, including carbon offset



CaaS Monthly Report

Consolidated view of all charging activity including energy used, fuel and emissions savings



J E T C H A R G E

Australia

1300 856 328

info@jetcharge.com.au

jetcharge.com.au

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NetZero Fleet

What Does the Future Look Like?

Emission Targets

- As a nation we will require significant CHANGE to achieve the 2030 emission targets (43%) and NetZero by 2050.
- In 2021 EVs made up less than 2% of new vehicle sales, compared with 9% globally.
- The Government is taking steps to develop a National EV Strategy to progress demand for EVs.

The National EV Strategy will be designed to achieve the following rapid increase in EV demand:

- Encourage rapid increase of demand for Evs;
- Increase supply of affordable and accessible EVs to meet demand across all segments;
- Establish the system and infrastructure to enable rapid uptake of EVs.

Electric vehicle sales in Australia tripled from 6,900 in 2020 to 20,665 in 2021.

Yet the limited supply of affordable EVs remains a barrier to higher uptake.

Examples of measure that could be introduced:

- Concessions such as stamp duty, registration incentives and tax measures – FBT, import tariffs
- Combining fuel quality, light vehicle noxious emissions standards and vehicle fuel efficiency standards.
- Increase EVs in Government Fleets - Commonwealth target 75% of new vehicles by 2025 with similar State Fleet targets.
Good and Bad

Road User Charges

- With the growth of EVs, Australia will need a new way of paying for roads. What will that look like?

Summary

- Light Fleet – Passenger Vehicles
- Cost and Benefit
- Optimum Replacement Intervals
- Personalisation of Light Fleet is a Distraction to FM
- Vehicle Allowance
- National EV Strategy
 - Removal of FBT – Significant Incentive to Employees
- Maintenance focus on Mission Critical Assets
- The future is NetZero Fleet



**If you're not working on achieving NetZero,
you're asleep at the wheel!**