

What are Electric Vehicles and how do they work?



What are EVs?

Battery powers an electric motor (rather than a gasoline tank that relies on petrol/diesel to power an engine)

2 overarching types of EVs:



Battery EVs – solely powered by an electric battery



Hybrid EVs – battery powered and backed up by a fuel powered engine, the "best of both"



Pros and Cons of EVs

Pros

- Low carbon emissions
- Lower maintenance and servicing costs
- Cheaper to run
- Quieter to drive
- Additional storage

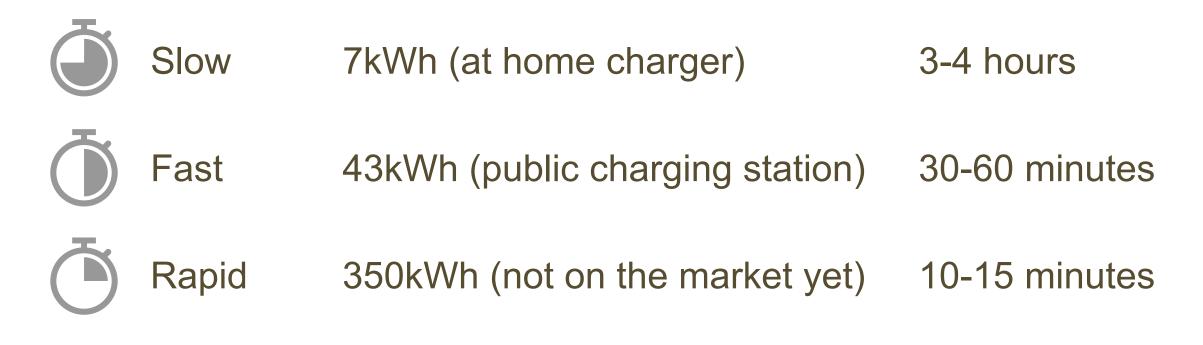
Cons

- Lack of charging stations/infrastru cture
- Higher upfront costs
- Limited driving range
- Lack of models available
- Downtime to recharge battery

How long does it take to charge an EV?

Depends on the size of the battery and the speed of the charging point

Standard EVs has a 60kWh battery



Uptake of EVs in Australia

- EV sales have tripled in Australia since 2020
- As at April 2022, EVs make up 2% of national car sales
- By 2030, EVs are projected to make up at least 30% of national car sales
- EVs are expected to match petrol vehicles on both price and range by the mid-2020s



What does this mean for Bodies Corporate?

2018 EV Charging in Strata Study

Surveyed 700+ residents across 130+ strata schemes in Sydney

78% were in favour of installing EV chargers in their complex now

48% planned to have an EV in the next 5 years

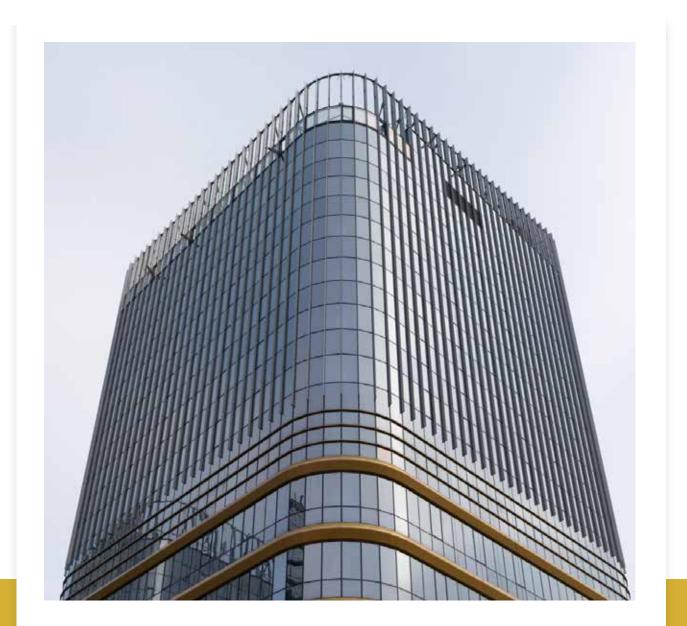
79% favoured a user pays system

61% favoured charging in their individual lot parking spaces

New Developments are 'EV Ready'

- Urbancom's Infinity Cove, Lane Cove 2019
- Entire development was 'EV ready' – built with infrastructure to support EV charging in parking spaces for all 97 apartments
- 40 owners opted in despite not owning EVs
- Remaining 57 owners could install easily and affordably
- 'Futureproofing' their asset





Rent-a-Tesla

- Aria Property Group's *The Standard,* South Brisbane 2019
- Development application approved for 261 apartments
- Includes 2 Tesla EVs gifted by the developer to the Body Corporate for residents to share
- Teslas are booked through a booking system

Retrofitting EV Chargers

- Many existing schemes will not have the electrical infrastructure and load capacity to support EV charging stations
- Upgrading a scheme's electrical infrastructure is costly

153

123

206

\$21

205

SLI

21

207

- Pass a resolution to upgrade
- Owners who do not drive EVs will not want to pay for services where the whole body corporate does not benefit from that service
- Engage an expert

How can Bodies Corporate prepare for this transition?

- No one size fits all answer
- 2 options:



Exclusive Use Areas – each owner has a separately metered EV charger, and the cost of the electricity billed directly to them



- Common Property communal EV charging stations on common property with 'tap and go' payment
- Current technology lends to option 2
- Shift towards option 1 as EVs become widely used



EV Chargers in Exclusive Use Carpark or Carpark on Title

Exclusive use (EU) carpark = improvement to common property Carpark on title = alteration to external appearance of a lot

- Bodies Corporate would approve applications made by owners to install EV chargers
- Owners should pay for the installation and ongoing maintenance costs
- EV chargers should <u>not</u> be linked to common property electricity
- Lots need to be separately metered or submeters installed



Communal EV Charging Stations on Common Property

2

= improvement to common property

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Governance

What rules should apply to the use of EV chargers? How will the Body Corporate implement and enforce those rules?

- Adopting new by-laws
- Supply of services agreement

Adopting By-Laws

Access	Time Restrictions	Insurance	Faults, Outages and Damage
Owners/occupiers? Visitors? Public?	Limits on usage? First in, first served?	What level of coverage? Who pays?	Reporting? Who pays?
Dispute Resolution	Security	Costs	Monitoring and enforcement
How are disputes resolved? By whom?	Additional measures?	Electricity consumption costs? Who reads the meter? Maintenance costs?	Caretaking duty?

Supply of Services Agreement

Agreement between the Body Corporate and the EV owner

Section 210 BCCM Act:

- (1) The body corporate may supply, or engage another person to supply, utility services and other services for the benefit of owners and occupiers of lots, if the services consist of 1 or more of the following types of services
 - (a) maintenance services including, for example, cleaning, repairing, painting, pest prevention or extermination and mowing;
 - (b) communication services including, for example, the installation and supply of telephone, intercom, computer data and television;
 - (c) domestic services including, for example, <u>electricity</u>, gas, water, garbage removal, air conditioning and heating.
- (2) The body corporate may, by agreement with a person for whom services are supplied, charge for the services, including for the installation of, and the maintenance and other operating costs associated with, utility infrastructure for the services, but only to the extent necessary for reimbursing the body corporate for supplying the services.
- (3) In acting under subsections (1) and (2), the body corporate must, to the greatest practicable extent, ensure the total cost to the body corporate, other than body corporate administrative costs for supplying a service, including the cost of a commercial service, and the cost of purchasing, operating, maintaining and replacing any equipment, is recovered from the users of the service.

Obstacles



Electricity Consumption

Who pays for the electricity consumption?

- Electricity usage should be paid directly by the owner of the EV
- Ideally:
 - a pay per use system in common property charging stations
 - lots would be separately metered/sub-metered in exclusive use parking spaces
- Bodies Corporate should ensure they do not become the debtor to electricity providers
- Avoid becoming the administrator of a billing system

Theft

How can Bodies Corporate protect against owners using common property electricity to charge their EVs without reimbursing the cost of the electricity consumption?

= Theft

Don't need to address theft in the by-laws because it is already dealt with under the law



Closed Networks

- Tesla have different charging ports
- Sell adaptors separately
- Think Apple v Android
- 'Superchargers' work exclusively with Teslas

Does this mean Bodies Corporate must cater to both?

What next?

- Bodies Corporate should plan for EV charging now
- Survey lot owners
- Engage an expert
- Start budgeting
- Consider amending bylaws



Takeaways







Costs should <u>always</u> be passed on to the users of the EV chargers Bodies Corporate should avoid becoming the debtor to electricity providers Avoid becoming the administrator of a billing system



Questions?

