

Electric Vehicles (EVs) and EV Charging Infrastructure

SUU supports the responsible use of lithium-ion batteries and rollout of EV Chargers and the broader contributing role they play in managing climate risk.

The increasing adoption of electric vehicles (EVs) within strata communities presents both opportunities and emerging risks. There are key insurance, safety, infrastructure, and risk management considerations associated with EV ownership and EV charging systems in strata properties.

Growth of EVs in Strata Buildings

Electric vehicles are becoming increasingly common in apartment buildings and mixed-use developments. As adoption grows, many strata schemes are being asked to approve:

- ▶ Private EV chargers
- ▶ Shared charging infrastructure
- ▶ Upgrades to electrical systems
- ▶ Charging within basement car parks

These changes require careful planning to ensure safety, compliance, and insurance protection.

Key Risks Associated With EV Charging

Potential risks include:

- ▶ Electrical overload
- ▶ Non-compliant installations
- ▶ Fire originating from charging equipment or batteries
- ▶ Trip hazards from charging cables
- ▶ Damage to common property
- ▶ Inadequate ventilation in enclosed spaces
- ▶ Unauthorised use of common power

Infrastructure and Capacity Considerations

Before approving EV charging, strata schemes should as a guide consider:

Electrical Capacity

Older buildings may not have sufficient electrical capacity to support multiple chargers simultaneously.

An electrical capacity assessment should be undertaken to determine:

- ▶ Existing load capacity
- ▶ Upgrade requirements
- ▶ Load management solutions
- ▶ Future scalability

Load Management Systems

Smart load management systems can:

- ▶ Balance power demand
- ▶ Reduce overload risk
- ▶ Allocate electricity usage fairly
- ▶ Support future expansion

Installation Requirements

All EV charging installations should as a guide:

- ▶ Be installed by a licensed electrician
- ▶ Comply with Australian Standards
- ▶ Be approved by the owners corporation where required
- ▶ Include appropriate circuit protection
- ▶ Be connected through dedicated circuits
- ▶ Avoid reliance on standard domestic power points for ongoing charging

Portable extension leads should not be used for routine EV charging.

Fire Safety Considerations

Strata communities should consider reviewing:

- ▶ Fire detection systems
- ▶ Sprinkler coverage
- ▶ Basement ventilation
- ▶ Emergency response procedures
- ▶ Access for fire services

Emergency planning should specifically consider EV-related fire incidents.

Charging on Common Property

Where charging infrastructure is installed on common property, strata schemes should consider establishing clear policies regarding:

- ▶ Approval processes
- ▶ Cost allocation
- ▶ Maintenance responsibilities
- ▶ Electricity billing
- ▶ Access rights
- ▶ Future upgrades

Legal agreements or by-laws may be required.

Resident Responsibilities

EV owners should as a guide:

- ▶ Use approved charging equipment only
- ▶ Follow manufacturer instructions
- ▶ Report damaged charging equipment immediately
- ▶ Avoid charging with damaged cables or adapters
- ▶ Ensure chargers are professionally maintained

Suggestions for Strata Committees

Strata committees are encouraged to:

1. Engage qualified electrical engineers
2. Consult insurers before infrastructure upgrades
3. Develop EV charging policies
4. Establish approval procedures
5. Plan for long-term demand growth
6. Review by-laws and legal obligations
7. Conduct regular infrastructure inspections

Future Planning

EV adoption is expected to continue increasing rapidly.

Proactive planning can help strata schemes:

- ▶ Protect insurance coverage
- ▶ Reduce future retrofit costs
- ▶ Improve resident satisfaction
- ▶ Enhance property value
- ▶ Reduce safety risks

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