Electric Vehicle Charging Infrastructure Policy

September 2020

Maribyrnong
CITY COUNCIL

What are electric vehicles?

Electric vehicles (EVs) are cars or other vehicles that are propelled by motors that are powered by electricity, unlike traditional internal combustion engine vehicles that use liquid fuels.

There are currently four main types of EVs:

Battery electric vehicles (BEVs): These vehicles are fully-electric, meaning they are solely powered by electricity and do not have a petrol, diesel or LPG engine, fuel tank or exhaust pipe. BEVs are also known as 'plug-in' EVs as they use an external electrical charging outlet to charge the battery.

Plug-in hybrid electric vehicles (PHEVs): These vehicles are powered by a combination of fuel and electricity. They can be charged with electricity using a plug but also contain an internal combustion engine that uses liquid fuel.

Fuel cell electric vehicles (FCEVs): These vehicles use a fuel cell instead of a battery, or in combination with a battery or super capacitor, to power their electric motors. FCEVs are typically fuelled by hydrogen

Non-plug-in hybrid EVs (HEVs): Instead of using an external plug to charge the vehicle, the electricity generated by the HEV's braking system is used to recharge the battery. This is called 'regenerative braking'.

Electric vehicles in Australia

Electric vehicle uptake in Australia is currently lower than other developed countries but the number of EVs is expected to grow as cheaper models arrive and more charging infrastructure is rolled out.

EVs are expected to match petrol vehicles on both upfront price and range by the mid 2020s. Once EVs reach this price parity with internal combustion engine vehicles, sales of EVs are expected to rapidly increase.

The potential benefits of EVs include reduced fuel costs, lower maintenance costs, enhanced energy security, reduced air pollution (with associated health benefits) and an improved driving experience. Greenhouse gas emissions can be eliminated if EVs are charged using renewable energy.

Source: ARENA (Aust Govt – Aust Renewal Energy Agency) web: https://arena.gov.au/renewable-energy/electric-vehicles/

Introduction

Maribyrnong City Council (MCC) is committed to improving sustainability and transport connectivity in our City. Facilitating the transition to Electric Vehicles (EVs), including convenient access to EV charging infrastructure, plays a significant role in meeting this commitment. This policy addresses the opportunities for EV charging infrastructure, encouraging, enabling and guiding the installation of EV infrastructure across our city.

EVs are the basis for future transportation, both in Maribyrnong, and beyond. With the environmental impact of transport a significant issue for Councils and Governments, EVs offer a sustainable and increasingly affordable future.

Implementation of EV charging infrastructure is a fundamental step towards the wide-scale uptake of EVs. Benefits include:

- Reduced dependency on petroleum
- Reduced emissions and improved air quality
- Future proofing transport/mobility
- Data insights and utilisation

Policy Objectives

Key objectives of this policy are to:

- Encourage the coordinated roll-out of EV charging infrastructure across Maribyrnong
- Inform local residents, businesses and investors about Council's role and how to seek further guidance
- Facilitate consistent and timely responses to community and stakeholder enquiries

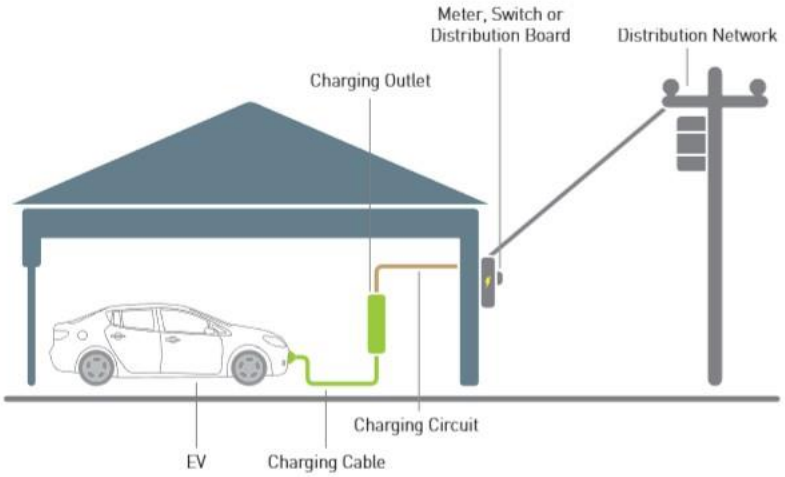
Related Strategies & Policies

- Zero Carbon Maribyrnong
- Maribyrnong Planning Scheme
- City Design Manual
- Local Laws (Parking)
- Asset Management Policy
- Procurement Policy 2019
- Fleet Vehicle Policy
- Maribyrnong Parking Management Policy
- Bicycle Strategy 2020

EV Charging Infrastructure

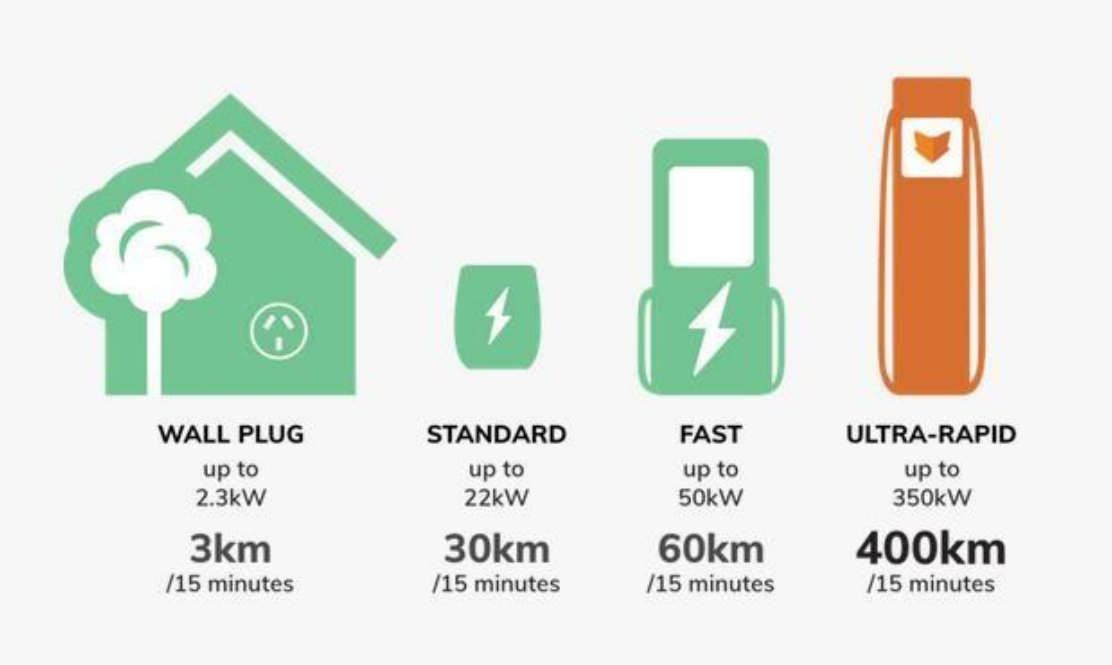
The most simplistic description of EV Charging Infrastructure is a place an EV can park and charge its battery while not in use. EV chargers are delivered in a number of different forms, as indicated in figure 2 below. There is also different scenarios where EV charging infrastructure can be installed. All scenarios require a different approach.

Figure 1: Basic Description of EV Infrastructure.



Source: Creating a Market: Victorian Electric Vehicle Trial Mid-Term Report: Transport.Vic.Gov.Au

Figure 2: Types of Electric Vehicle Chargers



Source: chargefox.com

Private Residence – Private Use

In most instances, installation of EV charging infrastructure within a private residence, exclusively for private use, will not require advice or approval from Council. Residents should ensure any installation meets relevant Australian standards for electrical works and safety.

Installation of EV charging infrastructure may, in some instances, have implications on heritage streetscapes. Residents should seek further advice from Council's City Planning Department if the residence is subject to heritage or other requirements and proposed infrastructure will be viewed from the street.

For residents without off-street parking who wish to utilise public space for Charging (i.e. parking bay adjacent to their property) their enquiry will be assessed on a case by case basis and a set of protocols will be developed to ensure community safety and compliance with local laws and planning regulations.

Private Residence - Under Lease

Installation of EV charging infrastructure at a residence under lease would be subject to the terms and conditions of the lease, and again, in most instances, would not require Council advice or approval. As above advice from Council should be sought if the site has heritage or other controls.

Private Residence – Public Use

Noting emerging business models, Council anticipates some residents may wish to install EV charging infrastructure for public use (i.e. for commercial purposes).

In such cases, residents should seek further advice from Council on relevant planning requirements and/or restrictions (which may relate to noise, zoning, land use, etc). Each proposal would be assessed on a 'case by case' basis. Assessment considerations would include:

- Planning requirements
- Public safety
- Impacts on adjoining properties
- Impacts on public infrastructure, including street trees, drainage, services and parking considerations

Existing Commercial/Industrial Premises – Private and Public Use

Council encourages the installation of EV charging infrastructure at existing commercial/industrial premises, both for private and public use (as determined by the responsible person/entity). In most instances, Council advice or approval will not be required to progress such installations. However, installers are required to ensure industry standards are met.

Council will not be offering subsidies, nor will it be required to consider requests of this nature, for the installation of EV charging infrastructure at commercial/industrial premises.

New Developments – Commercial/Industrial/Residential

Under Council's planning requirements, all new commercial/industrial/large scale residential developments are encouraged to include an appropriate standard of EV charging infrastructure. Decisions on EV charging are guided by the *Sustainable Design Assessment in the Planning Process (SDAPP) and Zero Carbon Maribyrnong Policy.*

The SDAPP includes mandatory consideration of environmental impacts in all building and planning applications at the planning stage including incorporating electric vehicle charging infrastructure into the development. It is acknowledged this is an emerging sector and whilst full-scale EV charging infrastructure may not be installed as part of new developments, infrastructure facilitating future installation (i.e. conduit) is to be included in the scope of new developments of this nature.

Council will continue to collaborate with developers and other Councils in support of a state-wide approach to EV charging infrastructure requirements for new developments. Council will continue to advocate best practice guidelines, as well as advocating for changes to the planning scheme to create mandatory inclusion of EV infrastructure provisions.

Public Spaces and Places

On behalf of the community, Council owns, maintains and manages a wide array of public spaces and places (e.g. kerbsides, parks, sporting facilities, on-street/ off-street parking facilities). Council may consider proposals to install EV infrastructure on Council managed land. In such instances, proposals would be subject to:

- A 'public-interest' test: assessing the proposal's community/commercial benefit, project costs (both financial and non-financial), and associated risks
- Adherence to all Council requirements, including the City Design Manual, and procurement requirements (if relevant)
- Comparison to other EV charging options

Council does not have an allocated budget for investing in, or subsidising, EV charging infrastructure, and expects the private sector to lead investment opportunities. In this regard, Council may also initiate an Expression of Interest (EOI) process, seeking market interest to install EV charging infrastructure in a public space/place.

Council expects all proposals for EV charging infrastructure in public spaces would ensure:

- Consultation with energy provider, utilities, and community (especially neighbouring residents/businesses)
- Public use of the EV charging infrastructure
- Full life-cycle responsibility for infrastructure, from installation, operation, maintenance and removal
- Adherence to best-practice service standards, relating to reliability, safety, customer service, etc.

Public Carparks

Off street parking areas may be considered, based on a threshold of 1 EV car space for every 50. The EV car space will be for the exclusive use of EV vehicles and, when unattended, the vehicle must be plugged in and actively using the charger.

EV Infrastructure Opportunities

Council Fleet

Council is currently exploring options for modernising their vehicle fleet, which may include increasing EV numbers. To support EV fleet vehicles Council will consider integration of EV charging infrastructure into new and existing Council buildings.

Council Buildings

Council will consider installing EV charging infrastructure at two Council buildings on a trial basis. Current sites under consideration include the Footscray Town Hall, Robert Barret Reserve car park (adjacent to Maribyrnong Aquatic Centre & Highpoint Shopping Centre) and Operations Centre.

EV Infrastructure Information Sharing

There are a number of online EV charging site databases enabling the public to be informed where EV charging infrastructure is available. Council will work with EV infrastructure owners to enable broad knowledge of infrastructure.

Electric Charging for E-Bikes

Council's Bike Strategy 2020-2029 supports the use of e-bikes and Council will investigate e-bike charging station opportunities.

Policy Duration

Due to the ever-evolving nature of EVs and changes in technology, this policy will be reviewed after two years to ensure any sector/industry changes are addressed.

Further Information

For further information about this policy please contact Maribyrnong City Council on 9680 0200.