

Safe,  
simple,  
clean  
and cheap

EQUIVALENT TO PAYING  
**30c**\*  
per litre

**Charging an EV is as easy as charging a phone -  
you just plug it in.**

Using a residential off-peak electricity rate means you  
can charge your EV for the equivalent of 30c a litre.\*

You can charge inside or outside, in any weather, so long  
as all equipment is designed for use in New Zealand and  
for the conditions in which it will be used.

*\*Estimate based on a residential off-peak charge rate, and will vary.*

Will your next car be an EV?  
[www.electricvehicles.govt.nz](http://www.electricvehicles.govt.nz)



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Photo credit Mark Tantrum  
Produced by the Energy Efficiency and Conservation Authority (EECA)

[New Zealand Government](http://www.govt.nz)



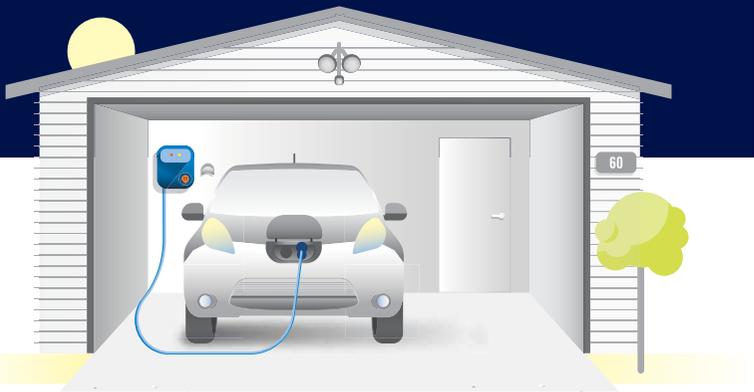
# Charging electric vehicles



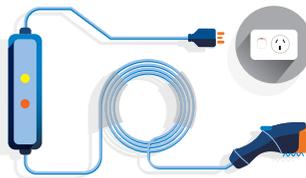
## Charging at home >>>

Charging at home overnight is the simplest, cheapest and most convenient way to charge.

You may be able to take advantage of off-peak electricity rates. Some power companies offer special rates for EVs.



### A Portable 3-pin charging cable



This plugs into a standard household power point and is typically supplied with your EV when you buy it.

**Check:** Used vehicles from other countries may be supplied with a charging cable. These should not be used and should be replaced with a charging cable that is suitable for New Zealand's power supply.

Some cables come with an industrial or caravan plug that allows faster charging. These would require an electrician to install a special wall power point.

**Safety:** Don't use extension cables or adaptors.

**Tip:** To maximise the life of your EV's battery, avoid charging to full every day unless you have to. Use software or timers on the charger to minimise the time the battery is fully charged.

### B Wall-mounted charging unit



A dedicated wall-mounted AC charging unit is great to have at home or work.

They provide more safety than a regular charging cable and can charge faster, yet they're easier on the battery than fast (DC) charging.

Some devices have timers to make off-peak charging easy. They may display information and allow you to control charging with a smartphone.

The units need to be installed by a registered electrician.

### Safety checks

Only use charging equipment designed for use in New Zealand. Never use modified equipment, such as imported cables fitted with a New Zealand plug. Ask the seller for a signed copy of a Supplier Declaration of Conformity – this shows the equipment has been tested and meets electrical safety standards.

## Charging out and about >>>

You may sometimes want to top up when you're out, or on a longer trip.

Our network of public charging stations is growing all the time.

There are two types – fast (DC) and slow (AC).



### C Public fast charging



These are available around New Zealand.

Fast chargers typically cost about \$10 per 100km. To recharge your battery to 80% takes approximately 20 minutes.

**Tip:** All fast charge stations have tethered cables, so there is no need to bring your own for fast charging.

Sign-up to a fast charging network for easy billing and payment.

It's better for your battery to fast charge occasionally rather than frequently.

The last 20% of the battery takes longer to charge and is why fast chargers usually charge only to 80%.

**Check:** Most pure EVs can fast charge, but many plug-in hybrid EVs cannot.

### D Public slow charging



These are often found at locations where drivers stop longer (e.g. shops, hotels, tourism attractions).

Charging is usually free and can take several hours.

**Tip:** You usually need to bring your own supply lead to use this type of charger.

### How to find a charger

Websites and apps can show you public charger locations, whether they're fast or slow, if they're in working order and what type of connectors or sockets are provided or required.