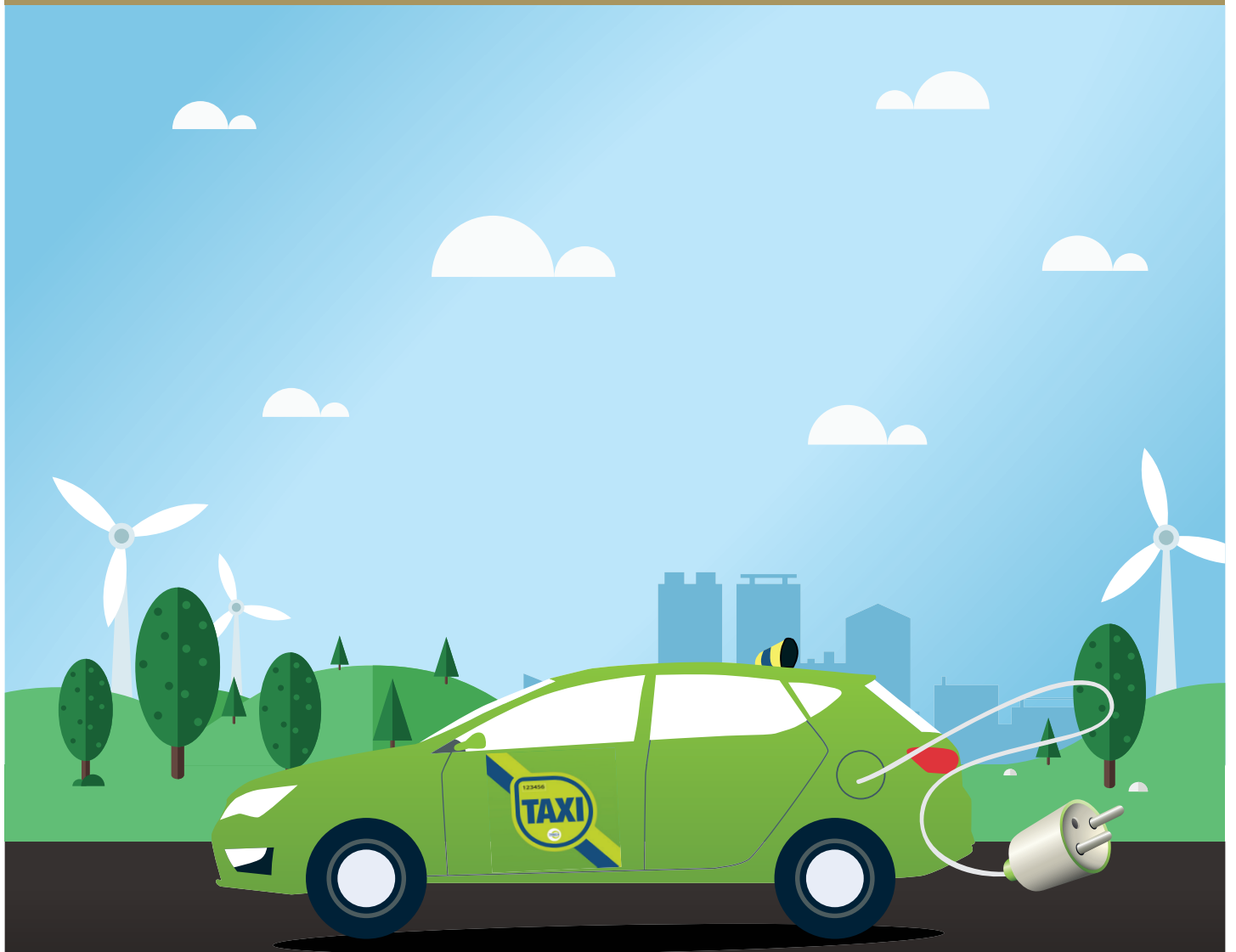


Electric SPSV Grant Scheme

A guide to driving your electric vehicle





Driving Your Electric Vehicle

Driving an Electric Vehicle (EV) efficiently and economically will not only help to reduce your transport costs but will also maximise your vehicle's battery range, helping you to go further in between charges.

Here are a few simple but helpful tips for getting the most out of driving your EV:

1. KEEP AN EYE ON YOUR SPEED

Similar to a petrol or diesel engine, reducing any unnecessary acceleration and braking is a key technique for driving your EV efficiently. Vehicles use more energy in order to travel at higher speeds because of aerodynamic drag. Travelling at slower speeds will use energy at a lower rate from the battery and allow you to travel further on the same charge.

2. AVOID HARSH BRAKING

Gradual stops won't just save your brakes – they can give your battery range a boost too. In addition to conventional brakes, hybrid and electric vehicles have a second method of slowing down known as 'regenerative braking'. This system converts the kinetic energy generated from braking into electricity stored in your battery.

The most effective way to increase regenerative braking is by maintaining a steady momentum; this can be achieved by avoiding any harsh acceleration and braking. Pressing down too hard on the brake pedal will force your conventional braking system to engage and some of the kinetic energy will be lost as heat through friction in the brake pads. If you can avoid using the foot brake until below about 15km you can maximise the regenerative system, but only practice this if it is safe to do so.

Note: Different manufacturers may use different approaches; for example, regeneration may start in some EVs when the brake pedal is pressed lightly first. Check with your vehicle manufacturer for specific information on your own EV.

3. THINK ABOUT CLIMATE CONTROL

Constant or heavy use of systems like air conditioning and heat can diminish fuel efficiency in all vehicles. This is particularly the case for EVs, which will pull power from the battery to generate heat, unlike in conventional vehicles which utilise waste heat generated from the engine.

EV manufacturers tend to use direct heating elements in the seats and steering wheel in an effort to reduce the energy demand on the battery while meeting passenger comfort needs.

4. KNOW YOUR VEHICLES DRIVING MODES

Many EVs have different drive settings and modes – allowing a driver to experience a sportier drive or alternatively an eco-drive experience. Use the feedback screens on the dashboard to hone your skills, save money and extend range.

Bear in mind that most modes are not actually changing the vehicles efficiency, but are instead modifying what is known as the vehicle's 'throttle map'. This term is used to describe how far you need to push down on the pedal to achieve the desired accelerator response. This allows you, the driver, to drive in a different manner. So for instance if you accelerate harder and drive faster you will consume more energy for the same journey.

Many EVs will feature an eco-driving mode, which can help to achieve more efficient driving by limiting the throttle and the power of some ancillary features such as heating and air conditioning systems.

Some plug-in hybrid models will also have features that allow drivers to switch between using battery charge or fuel. This is particularly useful for city driving, where using your vehicles battery power will be more efficient. To learn more about your own vehicle refer to the driver's manual for specific information.

5. REGULAR VEHICLE MAINTENANCE

While EVs require less maintenance than conventionally fuelled vehicles, it is important to ensure that your vehicle is properly maintained. Start with proper tyre inflation – check your tyre pressures regularly to ensure that they are correctly inflated in line with manufacturer recommendations. This simple habit can help extend your vehicles range by several km per charge.

Charging your Electric Vehicle

– where and when to charge your EV

1. HOME CHARGING

The easiest and most convenient way to charge your EV is overnight, at home. This can cost as little as €2-€4 using cheaper night rate electricity (costs vary by vehicle and electricity supplier).

2. CHARGING AT WORK

Many employers are now installing EV chargers in the workplace. EV chargers purchased by a company are eligible for tax relief under the Accelerated Capital Allowance Scheme. Additionally, company cars are entitled to 0% Benefit in Kind (BIK) on the first €50,000 of the vehicle value for battery electric vehicles and any electricity supplied by an employer to an employee is exempt from BIK taxes.

3. CHARGING ON THE GO

There are approximately 800 charge points across the country, of which more than 70 are fast chargers. All of these can be accessed by registering for the ESB's charge point access card. Visit www.esb.ie/ecars or email ecars@esb.ie for further details. In 2020, SPSV dedicated fast recharging infrastructure will be installed at selected transport hubs around the country, likely at locations such as airports and major train/bus stations nationwide.

4. PLAN YOUR JOURNEY

When driving long distances, plan accordingly and know where charge points are situated and which fast charge points are suitable for your car.

To locate your nearest charge point, download the ESBs '**ecar connect**' app, available for Apple and Android devices. The charge point map is also available on the ESB e-cars website www.esb.ie/ecars