

# CLIMATE EMERGENCY SUPPORT PROGRAMME

# Making your community electric vehicle ready - a guide for parish and town councils

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# Introduction

This resource pack takes you through what electric vehicles (EVs) are, their costs and benefits, whether purchasing one is an option for your town or parish council and how you can help to get your community ready for EVs in the future. This pack also includes information about community car clubs, EV charging networks and other low carbon modes of transport.

# What are EVs?

Electric vehicles (EVs) are cars or vans which use a rechargeable battery instead of, or alongside, a petrol or diesel internal combustion engine (ICE). This means they are generally considered to be better for the environment because the carbon emissions associated with generating the electricity needed to run them are lower than emissions from burning petrol or diesel in an internal combustion engine.

The first mass-produced electric vehicle was introduced into the market in 2000, and since then most car manufacturers have released their own versions, with UK sales taking off around 2014. Electric vehicles still account for a small proportion of the cars on the UK's roads, but there has been a huge increase in new registrations each quarter over recent years. In the early days, hybrid vehicle sales outstripped pure electric vehicle sales, the pure electric (battery only, or BEV) model sales have now jumped well ahead. And the share of the new car market has also jumped. While only around 500 EVs were registered new per quarter in 2014, that number had jumped to over 12,000 per quarter in 2020 (and that in the middle of a pandemic!). With government announcing in late 2020 that it will bring forward a ban on new fossil-fuelled cars from 2035 to 2030, it seems clear that EVs are here to stay.

# What type of EVs are there?



#### 1) Battery electric vehicles

Battery electric vehicles (BEVs) are fully electric vehicles with rechargeable batteries only and no internalcombustion engine (ICE). They store electricity in high capacity battery packs. The battery is charged primarily through plugging in to an external source of electrical power, and a small amount of electricity is also generated through regenerative braking (i.e. electricity is produced when you brake and is stored in the battery to be used later). The majority of BEVs have a driving range of 100 to 250 miles on a single charge, depending on the model, though some of the larger and more expensive models have more, and the range is increasing as new models are released.

### 2) Parallel hybrid vehicles

Parallel hybrid vehicles (PHVs) also called hybrid electric vehicles (HEVs) have both internal combustion engines and electric motors, but are principally ICE vehicles and cannot be plugged into a charger. They carry a battery which is charged by the ICE when driving, allowing the car to be run on its electric motor at low speeds. Regenerative braking is also used to charge the battery. A PHV battery only carries enough charge for 1-2 miles, after which it will revert to running on the ICE. It is essentially a way of making a fossil fuelled car marginally more efficient. This type of vehicle is likely to be included in the 2030 ban.

# 3) Plug-in hybrid electric vehicles

Plug-in Hybrid Electric vehicles (PHEVs) are similar to HEVs, but there is also the option of using an external source of electrical power. This extends their range, meaning most models can go from 10 to 40 miles before the petrol or diesel engine takes over. Some of these vehicles may be included in the 2030 ban, and some (where they can demonstrate they can drive a significant distance on battery power alone) will continue to be eligible for sale until 2035.

# 4) Range-extended EVs

Range-extended EVs (REXs), also known as Series Hybrid vehicles, behave like BEVs, in so far as they run exclusively from an electric motor. However, a small ICE is available as an on-board generator to recharge the battery.

# **Buying an EV**

# Is an EV suitable for your town or parish?

There are three main considerations when determining what type of EV is the right choice: access to a charging point; daily mileage; and overall budget. If buying a pure-EV, for maximum convenience driving mileage needs to be limited to around 120 miles per day, preferably on regular routes i.e. if you want to avoid needing to re-charge as part of that journey. In general, BEVs are perfect for city-driving, commuting, regular routes, and all short to medium distance journeys. You should be aware that the mileage range given in the EVs specification is often higher than you will be able to achieve when driving in 'real-world' conditions, especially in very cold conditions. In contrast, PHEVs and REXs offer longer range and greater fuel flexibility – permitting longer, more unpredictable journeys, as they can be charged directly using any suitable source of electricity or can be refuelled using petrol or diesel. However, they have smaller battery packs than pure EVs, are more complex mechanically (so there are higher purchase and maintenance costs), and grants and tax breaks tend to be lower, and the ban on new sales may also negatively affect second hand values.

# How do you charge an EV?

Obviously, if you're investing in, or promoting the use of EVs, charging is a key consideration. EV chargers come in different shapes and sizes. You may want to investigate options for installing a charger and/or check out existing charging points (and their suitability for the EV you're looking at). Chargers are classified according to the power output of the electricity connection, and therefore the speed with which they

recharge an EV battery. The classifications are Level 1, 2 and 3. All EVs can be charged at Level 1 or Level 2, but not all at Level 3. It depends partly on what type of on-board charger has been fitted, socket type and the battery capacity – in general larger batteries are more likely to require rapid charging. Knowing your vehicle's specification is therefore important.

- Level 1 (Slow chargers) generally use a standard household outlet to plug into the electric vehicle. They
  provide power at around 3kW, and usually take 6 to 12 hours to charge a pure EV or 2-4 hours for a PHEV.
  This is done typically at home or at the workplace.
- Level 2 (Fast chargers) provide power from 7kW to 22kW. These are usually found at workplaces and public charging stations, and can also be installed at home. They take about 4 hours to charge an EV battery.
- Level 3 (Rapid chargers) are currently the fastest charging solution in the market, and will charge the majority of compatible EVs to 80% in around 30-60minutes. They are found at dedicated EV charging stations, in places like service stations and car parks. They are of two types - AC or DC. Current Rapid AC chargers are rated at 43kW while most Rapid DC units are at least 50kW. Tesla Superchargers are also Rapid DC and charge at 120kW.

#### Smart charging

As we decarbonise our heat and transport systems, and increase the amount of renewable energy generation in the UK, we will need a smarter and more flexible management of our energy. Flexibility in the energy system means being able to quickly increase or decrease the amount of energy being used at a given time, to help balance supply and demand in the grid.

It will become increasingly important for chargers to be 'smart' in order to be a flexible load on the electricity grid. Currently, most EV chargers are 'dumb', meaning they cannot be controlled remotely, or if they can, they cannot vary their charge output and can only be turned on or off. Smart chargers can flex their load in response to signals from the grid to participate in flexibility markets and respond to local network constraints. The best smart chargers can be accessed remotely to control their rate of charging and to turn on and off. Some chargers will even allow the EV battery to release electricity back into the grid to provide grid balancing services – this "vehicle-to-grid" two way charging technology is still just being tested in pilot projects, and is often called 'flexibility services'.

It is feasible that EVs could be used instead of a household battery in conjunction with solar PV systems and provide somewhere to store charge rather than everyone getting a household battery and an EV to reduce the environmental costs that come with producing batteries.

Smart chargers are a lot more expensive at the moment, but 'smartness' is an important consideration when purchasing a charger you might want to have for a while, especially as more and more communities will be hoping to participate in flexibility markets in the future.

#### No EV charging points in your area? Install some...

A sensible first step would be to **install an EV charging point (EVCP) at your council office**. This will provide the supporting infrastructure for the council to purchase its own EV and also support staff members who wish to switch to an EV. Many installers offer a free site survey, enabling you to find out whether your site is suitable.

When it comes to funding your EVCP the Office for Low Emissions Vehicles (OLEV) offers a <u>workplace</u> <u>charging scheme</u> (WCS). The WCS is a voucher-based scheme that provides support towards the upfront costs of the purchase and installation of EVCPs. The contribution is limited to the 75% purchase and installation costs, up to a maximum of £350 for each socket, up to a maximum of 40 across all sites for each applicant. A voucher can only be redeemed by installers who have been authorised by OLEV for the WCS. A full list of installers can be found here -

<u>www.gov.uk/government/publications/workplace-charging-scheme-authorised-installers</u>. Ensure you get at least three quotes from the approved list of installers to adequately compare options.

Does your council own any carparks? Why not go one step further and **install EVCPs in your council owned carparks for public use**? There are different business models available, including options for no cost to council, with the EVCP supplier paying for the installation, maintenance and running costs and the council in effect leasing its space to the supplier. In some instances the council will receive a percentage of the income from the public EVCPs. Contact some local suppliers and find out what business models they offer. Installing EVCPs in key parts of your town and parish will help encourage more business and tourism and help the local economy.

Forest Row Parish Council teamed up with a local company and installed an EVCP at the local community centre which is supplied by 100% renewable electricity and FREE to use by members of the public. It is hoped that it will provide an incentive for current and prospective owners of EVs to use greener energy.

**Lobby your Local Authority** to take advantage of <u>OLEV's on-street residential charging scheme</u>. This grant scheme exists to put street-based chargers in areas where homes do not have drives or garages of their own. This is often the biggest barrier to EV uptake in more affluent areas, for example where people live in older, terraced housing that was built before the car was invented.

**Contact your Local Energy Hub** for support. Find your local hub here - www.energyhub.org.uk/about/other-hub-regions/

Host a community charging point through the Charge My Streets project: <u>https://www.chargemystreet.co.uk/host</u>

#### What are the costs?

EVs of all types tend to be more expensive to buy than their ICE equivalents, with most new BEV models in the £15,000-£30,000 range, and higher for PHEVs. To help with this the <u>Government offers a grant for</u> <u>some new vehicles</u>. The maximum grant is £3,500 and you do not need to apply for it, as it is already taken off the sale value. Grants do not apply to hybrid vehicles since to qualify a car needs to have a range of at least 70 miles and CO2 emissions of less than 50g/km.

To help reduce the upfront price you could look at a finance scheme for the car, as with ICE vehicles. Some manufacturers also offer EV battery leasing as an option, although this is becoming less common as the market develops, with cars dropping in price and batteries proving themselves as reliable. Leasing will cut the upfront cost of a new car by £5,000-£6,000, and it can also be an attractive option if buying a used car since it means you don't have to worry about long term battery deterioration. Rental costs are based on estimated mileage, and sometimes contract length, and roadside assistance and recovery is usually included. If you sell your vehicle, your obligation will cease and the new owner starts a new agreement based on their estimated mileage. Batteries will deteriorate in the longer term, but with good battery care you are likely to get at least 100,000 miles before you notice any drop in capacity, with older batteries still typically maintaining 80%-90% of their original capacity. As an indicator the warranty on a new BEV tends to be between 50,000-100,000 miles and 8-10 years. It is uncommon for batteries to need replacing in this warranty period, but you might need to replace the battery if capacity drops to 75% (if you lease your battery this would be done for free).

Another option to consider is purchasing a second hand EV. There are now more dealerships offering this as an option (including with leased batteries).

# What are the benefits?

#### Saving money

Once you have bought them EVs have significantly lower running costs than ICE vehicles. Fuel costs drop by around 70% when you can charge at your own charger, particularly if you have access to an off-peak overnight electricity tariff. On average, an EV costs 3-4p/mile compared to 12-15p/mile for petrol or diesel, and there are online calculators that allow you to compare specific models of car.

Most of the maintenance and repair costs associated with an ICE are eliminated (i.e. no oil changes, expensive exhaust systems, or gear-box repairs). This is because EVs have fewer components that require maintenance, making servicing and repairs simpler and cheaper than for conventional cars. And although a lot of people worry about the cost of needing to replace a whole battery, EV batteries actually last a long time and are often modular and so you can replace modules instead of the whole battery.

BEVs are currently exempt from vehicle tax, potentially removing a three-figure sum from annual car running costs. PHEVs have to pay the same rate as petrol or diesel drivers, but they are eligible for a £10 annual Alternative Fuel Discount. Depending on your council's location you might also save on parking or congestion charges. In London, for example, an eligible EV registered with the Congestion Charge scheme could save around £2,000 a year. In some other places EVs have free or discounted parking.

On average, an EV costs about a quarter of the price per mile than a petrol or diesel car.

### Free or discounted EV parking in your council carpark

If you charge parking fees for your council owned carparks, why not make the spaces assigned to EVs free? This sends a strong message of support to residents and encourages the uptake of EVs. If you don't charge for parking in your car parks, consider bringing in parking fees for non-EV. Not only could this increase revenue for climate action projects but it again sends a strong message to your community.

Many councils offer a reduced rate for parking permits to zero and low emission vehicles, including Bath and North East Somerset Council, Brighton and Hove City Council and City of York Council.

<u>Isle of Wight Council</u> combined the installation of EVCPs in five council owned carparks with the announcement of free 12-month parking permits for owners of new, zero-emission electric vehicles, thereby providing the infrastructure and incentive for local residents to invest in an EV.

#### Bicycle and e-bike parking

While you are using your car parks as a way of stimulating the move from ICE cars to EVs, you could also consider sending out other signals about <u>the need to get out of cars altogether</u>. Many town and parish council owned car parks are very centrally located in the town or village. Access to shops by bicyle, e-bike and e-cargo bike could be encouraged by installing good quality bike racks in place of some of your parking bays. Lack of secure storage is a key barrier to shopping by bike for many people, so giving over 3 or 4 parking bays for bike parking sends a very strong message about what your priorities are.

#### Saving the environment

Even if your vehicle was to be fuelled exclusively by electricity generated in coal fired power stations, your EV would still have a better emissions profile than an ICE vehicle because less fuel is needed overall. However, the grid electricity that powers most EVs actually comes from many sources, including lowemission sources like natural gas and renewables (which are increasing each year), enabling EVs to dramatically reduce emissions that cause air pollution and helping lower greenhouse gas emissions. The box below explains how you could ensure your EV is powered by 100% true renewable electricity.

The location and timing of the EVs emissions are generally better as well. While ICE vehicles often emit pollution during peak driving hours in the middle of the city, the emissions from fuelling an EV generally happen overnight at power plants in remote locations. Better air quality in cities means fewer health problems and other issues caused by air pollution. Government figures suggest that up to 36,000 people a year die from air pollution and that vehicle emissions are a significant factor.

Electric cars are much quieter than petrol or diesel cars, particularly at low speed. While reduced noise makes built up areas more pleasant to be in and has health benefits for everyone, it does mean there are safety issues from near silent cars in residential areas. Typically electric cars are designed to emit an artificial engine sound while driving at low speeds, for the benefit of other road users like pedestrians and cyclists.

The environmental impact of building EVs is higher than ICE vehicles, due mainly to battery production and the rare earth metals used, but over its whole lifetime an EV car is better for the environment. The environmental impact can be improved by responsible sourcing or developing alternatives to rare earth

metal and by recycling batteries, such as converting them for home energy storage. In terms of greenhouse gas emissions these are currently around 25% lower than ICE vehicles, and this could rise to 70% as more renewables enter the energy mix. There is also a trend towards eco-friendly production and materials for EVs, with some model's bodywork and interior being made fully or partially from recycled materials.

# **Getting your community ready**

# What knowledge should you share with your community and how?

A good first step is to share some of the information from this resource pack and CSE's Electric Vehicle advice leaflet with your community.

Why not put an EV case study in your next newsletter or post on your social media account. Find out who already owns an EV in your community, ask them to write about their experience, and share it.

If your council already owns an EV or is intending to buy one **tell your community** about it.

If you have installed EVCPs in any council owned carparks, (or intend to), make sure this is communicated with your community clearly and be sure to provide information on the exact location of EVCPs, their type and plug socket available.

If you don't have any EVCPs yet, you could promote websites which list EVCPs in the surrounding area available for public use (for example, <u>Open Charge Map</u>, a non-commercial EV data service). There's also <u>ZapMap</u>, a leading charging point platform, and <u>Carwow</u>, a car price comparison website.

You could also share funding opportunities available to members of your community. For example, the Government's plug-in grant (described on page 4) and the Government's EV Homecharge Scheme (see below).

If you have any local industrial buildings, it might be worth encouraging them to add solar PV to their roofs, install EV charging points and run an electric fleet on site which is a great way to have a big impact. It's easier to justify the cost of chargers for businesses than the public as they know the chargers are a worthwhile investment because they will be using them themselves and save petrol costs to get around the site.

For more information on communicating with your community see our 'Communicating Climate Change' resource pack.

#### Charging your EV with true renewable electricity

The national grid is now supplied with >30% renewable energy, meaning that if you were to charge your EV from a regular charging point, around 30% of the charge would be from renewable (clean) energy. However, to get the highest carbon emission savings from your EV it is best to charge it with 100% renewable electricity.

One way to do this is to **ensure any EVCPs you install are supplied by a true green electricity tariff**. Now, what is a true green electricity tariff? The greenest tariffs come from suppliers that buy renewable electricity and its accompanying REGO (guarantee of origin) certificates directly from renewable generators, such as UK wind or solar farms, via a mechanism called a Power Purchase Agreement (PPA), and which never separate the REGO from the original units of generation.

Energy suppliers that offer these genuinely green tariffs generally carry higher costs of operating than greenwashed or mixed-tariff providers. This is because they must invest in detailed forecasting and demand management processes to ensure that the renewable energy generation is matched as closely as possible to actual customer demand, an issue that does not affect providers of REGO-backed tariffs in the same way. These costs are recognised by Ofgem, who provide a certificate of exemption for certain companies from the energy price cap because their operating models provide materially greater support for the development of the renewables industry than other suppliers, and because they can trace their renewable energy supplies direct to the source.

As such, a 'true green' tariff can be described as "a supplier which has a renewable derogation from Ofgem, or a supplier which sources at least ~75% of its electricity directly from renewable PPAs, and demonstrates material support to UK renewables."

Using an assessment by the Energy Saving Trust and a recent article by Which?, the following suppliers have been identified as providing the greenest tariff:

- Good Energy (https://www.goodenergy.co.uk/our-energy/)
- Green Energy UK (https://www.greenenergyuk.com/OurEnergy)
- Ecotricity (https://www.ecotricity.co.uk/about-ecotricity/our-eco-credentials/ourenvironmental-footprint)

Still confused? Give this article a read.

If you want to find out more about electricity tariffs for EVs, including overnight off-peak tariffs, check out this <u>article by the Energy Saving Trust</u>.

#### Home Charging – what advice to give within your community?

EVs can technically be charged using an existing three-pin socket, but because of the higher current demand and the amount of time the socket will be used, for safety it is recommended you get a dedicated EV charging unit installed by an accredited installer. These come as slow (3kW) or fast (7kW) units, and usually the householder will only have to pay a fraction of the cost (and may be offered a home charger for free). This is because of subsidies offered by the government and car dealers, or as part of EV energy tariff deals, such as the Octopus Go tariff with Octopus which offers cheaper electricity at night so that EV owners can charge their cars at night for less cost: <u>https://www.octopusev.com/tariff</u>. Any install cost the

householder does have to pay will typically pay back very quickly, as it is estimated you can halve your electricity costs by charging at home rather than relying on public charging.

The government's Electric Vehicle Homecharge Scheme applies to eligible cars and provides up to £500 towards the install cost (a charging unit costs around £1,000 to install by a qualified electrician). The grant is capped at £500 and one grant per vehicle (and two charging points per household). There are certain criteria, including being the named user of the car, having suitable off-street parking facilities and using an approved installer. The <u>Office of Low Emission Vehicles</u> website has more details.

EVs and charging units can also be digitally connected, allowing you to control charging from a smartphone app.

# What information do you need from your community?

It would be worthwhile speaking with members of your community and hearing their thoughts on purchasing an EV. Find out who would like to purchase one and what is stopping them, as well as who in your community already has one, and how they have found it.

You could send out a survey (e.g. using google forms online, or distribute a printed survey), asking your community these questions. You may also want to find out where their typical journeys are to/from and where it would be useful to have EVCPs located. You can then use this as evidence when discussing ideas with follow councillors or when you speak with your local authority about installing on-street charging points.

# **Community Car Club**

# What is a community car club?

Roughly a third of UK households own two or more private vehicles, and car numbers are increasing (the RAC Foundation estimates that we'll have around four million more cars in the next 20 years), so even with many car-owners switching to low carbon vehicles there's still a growing need to get cars off the road. Reducing car travel would help to tackle not only the climate crisis by lowering transport related emissions but also help reduce local air pollution and traffic delays.

Car clubs and car-sharing schemes can provide part of the solution.

Car clubs work by giving members access to a car on a short-term rental basis and charging by the hour or the day. You can typically book a car online or by phone and then pick it up from (and return it to) a designated bay in your local area. Payment is then calculated and charged to a member's account based on how long the vehicle was used or how many miles were travelled.

CoMoUK (originally Carplus) has previously estimated that in England, Scotland and Wales there are >160,000 people who are members of car clubs and UK Car clubs operate fleets with >3,000 vehicles in hundreds of locations. Some of the most popular car clubs include City Car Club, Co-wheels, E-Car Club, easyCar Club, Hertz 24/7 and Zipcar.

A community car club is a local, member-based initiative that provides access to self-service, pay as you drive vehicles. Often community car clubs are run by local groups or local councils to support their

communities. There are numerous community-led car clubs in towns and cities across England, Scotland and Wales. <u>Visit CoMoUK for an example list</u>.

A car club can offer many benefits, including convenience and cost savings to members and a reduced environmental impact compared to driving a private vehicle. Many company owned and community car clubs include EV's in their fleet, reducing the environmental impact further and allowing members to try an EV in a shared-ownership environment. A 2017/18 survey of car clubs carried out by CoMoUk found that 36% of car club fleets in England and Wales are either hybrid or electric vehicles. The survey also found that after joining a car club, members completed 3,832 more walking and cycling trips.

Car clubs offer the convenience of having access to a car for trips you cannot do via public transport, cycling or walking, without the responsibility of owning one. There is no need to worry about insurance, paying for maintenance and MOTs, finding overnight parking or worrying about tax. As a member of a car club all members pay for is their membership and car hire. According to CoMoUK, car club members that drive <6,000 to 8,000 miles per year could save up to £3,500 by being a member of a car club. In terms of carbon emissions, each vehicle operated by a car club is estimated to save 1.392 tonnes of carbon each year (by reducing the need for private car ownership). CoMoUK estimates that in 2017/18 in England and Wales around 4,747 vehicles were taken off the road by car-owners joining car clubs. Many car clubs are actively looking to move to EVs as their main car. Other volunteer driver schemes are also springing up which use pooled EVs to move people around rural areas.

### Setting up a community car club in your area

As a Town or Parish Council you could champion the community car club concept by setting one up in your area, you could even team up with a local community group or business. Why not make your council's EV part of a community car club and kick-start the trend in your community?

CoMoUK can provide advice, support and share best practice for the set-up and continued management of community car club. They have developed a number of resources to support community car clubs from a handbook, a marketing toolkit, and advice on how to create a business case and telematics and back office systems. All of these resource can be found on their website - <u>https://como.org.uk/community-car-clubs/</u>. Where possible make your car club clean, and include only low emission and electric vehicles. In 2012 CoMoUK produced guidance on including EVs in car clubs. Although dated the guidance still includes some useful and valid information, <u>check out page 14</u> of their guidance for useful recommendations.

Pairing up with a local community energy group is a good way to get a car club or charger project off the ground. Brighton Energy and Nadder Community Energy in Wiltshire are exploring these types of projects: <a href="https://www.next-generation.org.uk/innovation">https://www.next-generation.org.uk/innovation</a>.

Schools with solar PV systems could also be a good partnership for an EV car club as they are empty during the summer months when the solar PVs are generating the most electricity.

### **Lift-sharing Schemes**

Alongside community car clubs, many town and parish councils also support lift-sharing schemes, particularly for community members who are unable to drive or use public transport and need to attend medical appointments. This is different to a community car club, as instead of booking a community car for their journey they book a lift. Often run by volunteers, the volunteer driver then collects the individual in their private car and takes them to their appointment. Journeys are typically charged based on miles travelled and can bring many community benefits, including tackling rural isolation. Such schemes are run by <u>Beetley Parish Council in Norfolk</u>, <u>Wilsden Parish Council in West Yorkshire</u> and <u>Yaxley Parish in Cambridgeshire</u>.

### Case Study – Low emission car share and volunteer driver schemes

#### Harbury e-wheels

Harbury e-wheels, based in the village of Harbury in Warwickshire, uses two electric cars and a pool of 24 volunteer drivers to provide transport to those that need it within a 15 mile radius of the village. There is no cost to the beneficiaries or the agencies that refer them, and the scheme raises money through local fundraising.

Working with the parish council, Harbury e-wheels was awarded £33,000 from the Rural Community Energy Fund for early feasibility work looking into how to charge their scheme cars from wind energy and solar energy.

The early study results were very promising, and the group have now been awarded a further £98,000 grant to bring the project to full development and business planning. The aim is to install a 7kW vertical axis wind turbine and 10kW of solar power to provide clean, renewable electricity for the scheme's two cars, and for the public to use. This will encourage uptake of EVs by residents that can't install a charger of their own, and finances from electricity sales will be used to support the continued operation of the e-wheels scheme.

https://www.harburyenergy.co.uk/harbury-e-wheels/

#### **Co-wheels Frome**

Frome Town Council has worked in partnership with a local car share scheme, Co-wheels, to provide two low emission community cars in Frome. One of these is located outside the Town Hall and available for use 24/7. Residents interested in giving it a go can sign up as members for just £1 on the Co-Wheels website at <a href="http://www.co-wheels.org.uk/frome">www.co-wheels.org.uk/frome</a>.

# **Other low carbon transport**

While an electric car has many benefits over a conventional ICE vehicle, it is still a car, with many of the negative issues linked to this form of transportation.

Electric cars still contribute to congestion, road accidents, parking demand and the dominance of roads in city centres. The growth of cars on the UK's roads has far outstripped the provision of new road space. In the late 1970's, there were only around 13 million cars on the UK's roads – now there are over 40 million. In that time, the road network has grown by only around 7%. As we have vastly increased the numbers of cars on the roads, so they have come to dominate the public realm almost entirely. Beautiful town and village centres are reduced to little more than sprawling car parks, with cars parked on every street, often blocking pavement access for disabled people and those with prams and pushchairs. Children's rights are also eroded; as we have succumbed to the idea that 'the car is king', the ability to play and walk safely in or near roads, even quiet back lanes, has been taken away from children, and their independence is curtailed as parents fear for their safety.

For this reason, we think it's important that any move to EVs should be done as part of a bigger your community and councillors to consider an electric one, if they need a car, but where possible it is still preferable to use a form of public transport, walk or cycle.

### **E-bikes**

Why not also look into electric bikes and encourage their use in your community?

An electric bike (e-bike) is roughly the same as a regular bike with the welcome addition of a motor to assist you. They are capable of doing pretty much everything a regular bike can do and more.

In addition to the clear benefit of a motor to help you get up those hills more easily or with less effort (and sweat), there are also many other benefits:

- They're fun to ride!
- If you have an injury or illness that prevents you from cycling normally, an e-bike might help you get back on the wheels
- E-bikes can fill the gap between journeys short enough for walking and those longer journeys which require a train or car
- They can be a reasonable replacement for a second car
- You may feel safer in traffic than on a traditional bike
- An e-bike can carry heavier loads more easily than a regular bike, allowing the school run or a shopping trip to become practical on an e-bike

You can find out more about the advantages and disadvantages of e-bikes, the different types, including e-cargo bikes, <u>here</u>.

You might also want to check out the <u>UK's Cycle to Work Scheme</u> if you aren't already familiar with it. It may be of interest to your employees (if you have any) and also to local residents and businesses.

# **Key Resources**

www.cse.org.uk/advice/advice-and-support/electric-vehicles

www.sustrans.org.uk/our-blog/get-active/2019/everyday-walking-and-cycling/car-clubs-and-car-sharing

como.org.uk/

como.org.uk/community-car-clubs/

como.org.uk/wp-content/uploads/2019/06/EW-report-v4.0.pdf

www.cse.org.uk/advice/advice-and-support/green-electricity-tariffs

www.gov.uk/government/collections/government-grants-for-low-emission-vehicles#electric-vehiclehomecharge-scheme

www.gov.uk/government/collections/government-grants-for-low-emission-vehicles#workplace-charging-scheme

www.gov.uk/plug-in-car-van-grants

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