



Annual Report
December 2021



Changes since 2020

Since our formation in 2017, HEVRA has always been about our key goals:

- Promoting the use of electric vehicles by removing a barrier to purchase (namely a lack of repair options)
- Keeping existing electric vehicles on the road
- Promoting high standards within the car repair industry
- Enabling skilled jobs in the repair sector

However, as of 2021, we've made it official, and become a certified Social Enterprise, which is a business that puts its social goals above profit. As part of this, we're making this document available so that anyone can see what we're doing to meet our goals.

Other significant changes in 2021:

- All technical support now provided in house, and R&D conducted in house. Previously some of our technical support was outsourced to another business, although the same individuals are now directly employed, so the team providing the support is still the same (albeit now larger).
- Opening of our European office in Tallinn, Estonia, to provide services to garages located within the European Union.



Changes since 2020

Minor changes in 2021:

- Changes to technical support databases for Mercedes/Smart, BMW/MINI, Land Rover/Jaguar, Hyundai/Kia, Peugeot/Citroen/Vauxhall and VAG. This is because the same powertrain is used across multiple models, so the traditional make/model filing system does not work effectively or results in duplication of information.
- Changes to fault code recording for BMW and Tesla, based on the system successfully used for Renault.
- Improvements to labelling for thermal management diagrams
- Working with remanufacturing companies to repair high voltage components and further reduce costs for drivers
- Working with Cleevly EV to provide parts to the network and further reduce costs for drivers
- Business cards for technical support sent directly to workshops, to avoid the problem of the business signing up but the individuals working there not knowing support is available. As well as sending these to new members, these have been sent to all existing members who have never made use of the support service.
- New vehicle purchased and converted to use for on-site technical support. The vehicle is a Renault Zoe ZE50 van, chosen for its excellent destination charging ability, as well as having CCS charging ability, and has been fitted with mains electrics and storage for tools and equipment.
- Working with Our Virtual Academy and Pro-Moto to improve EV repair training
- Increased use of separate work and personal mobile phones to improve work/life balance for staff



Importance of HEVRA

There isn't a training course in the world that can you prepare you for any fault on any modern vehicle. If there was, it would be so long that by the time you finished, cars would have moved on.

The first part of fixing a modern vehicle (regardless of fuel type) is to diagnose the problem, and the first part of that is research. It's vital to know how the relevant part of the vehicle works, in order to work out which bit is making it not work. This can be pieced together with data collected from the vehicle to form a test plan. The tests can then be carried out to find the problem, or perhaps find that more tests are needed, in which case it's a bit more research and data and then testing again.

Needless to say, some things don't take much research. A technician can see how a suspension setup works by looking at it, and that's the extent of the research. Other problems take a bit more, especially on today's vehicles driven by electronics and software.

There are a few options to the garage when it comes to the time taken for the research. You can either charge it to the owner of the car, you can lose it, but hope to make it up by seeing similar faults on similar vehicles, or you can not bother, and just fit new parts in the hope it will fix the problem. There's plenty of garages doing the latter, and unfortunately it isn't very easy to tell which ones they are.



Importance of HEVRA

HEVRA does much of this research on behalf of our members, so when a particular car comes in with a particular fault, we already know the precise details of how that part of that particular model works and in many cases, have a test plan ready.

This means research time is much reduced, making the job more efficient for the garage and cheaper for the customer. It means parts can be ordered sooner and the car back on the road more quickly.

The other benefit to the customer is the ease of finding a competent and equipped garage. Drivers know that HEVRA member garages not only have the training and tools, but also benefit from HEVRA's documentation, shared R&D, and can call on the support service whenever needed. HEVRA member garages also get regular work from being listed, so are likely to have much more experience than alternatives.

The way HEVRA works means that a fault can go from a particularly difficult head-scratcher to common knowledge across 200 different businesses in just a few weeks, benefiting both garages and drivers.

Whilst this information is only available to members, we are an open network- regardless of where someone has done their training, or how close they are to existing members, if they meet the standard, they are allowed in. We also ensure membership is as affordable as possible (see minimum cost of membership in relevant section of this report).



Membership

Listed members as of December 2021: 182

This does not include unlisted members, who are not listed on the website but still benefit from our documentation and technical support.

Minimum cost of membership: £30.00+VAT

Whilst we offer higher levels of membership with further benefits, the minimum cost of membership is a careful balance. We're keen to keep it accessible enough to be a "no-brainer" for any business serious about repairing electric vehicles, whilst high enough to enable investment in R&D and provide technical support. A financial commitment (albeit very small) also is another way of keeping standards high by deterring those who do not want to invest in their business.

The price shown above is for one month, as all of our memberships have a rolling monthly contract. A "cancel any time" policy incentivises HEVRA to provide a good service to its members.

Minimum qualification for membership: IMI Level 3 or equivalent

Higher qualification standards can improve the customer experience and reduce our technical support workload. However, it's also important to keep membership accessible to improve geographical spread, and the fact remains that the vast majority of repair jobs do not require a higher qualification. We're planning to keep the Level 3 as the standard but may increase it in the future.



Marketing

Marketing is important for the following reasons:

- It allows drivers to find member garages, helping us reach our goal of keeping cars on the road
- It allows potential EV buyers to know that repair options are available, helping us reach our goal of promoting EVs
- It allows garages to see a return on their membership investment, and therefore retain their membership
- It increases work for garages, helping us reach our goal of enabling skilled jobs in the repair sector

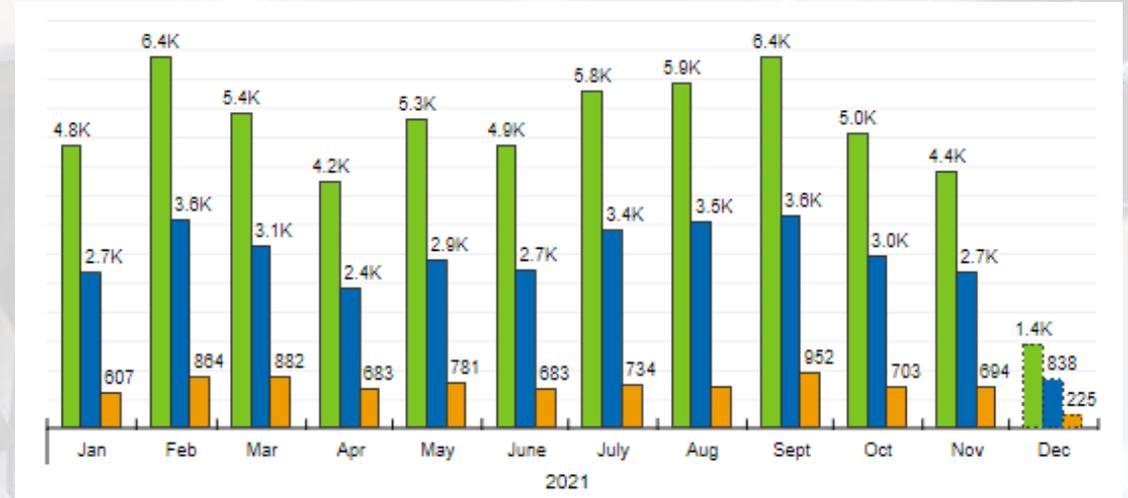
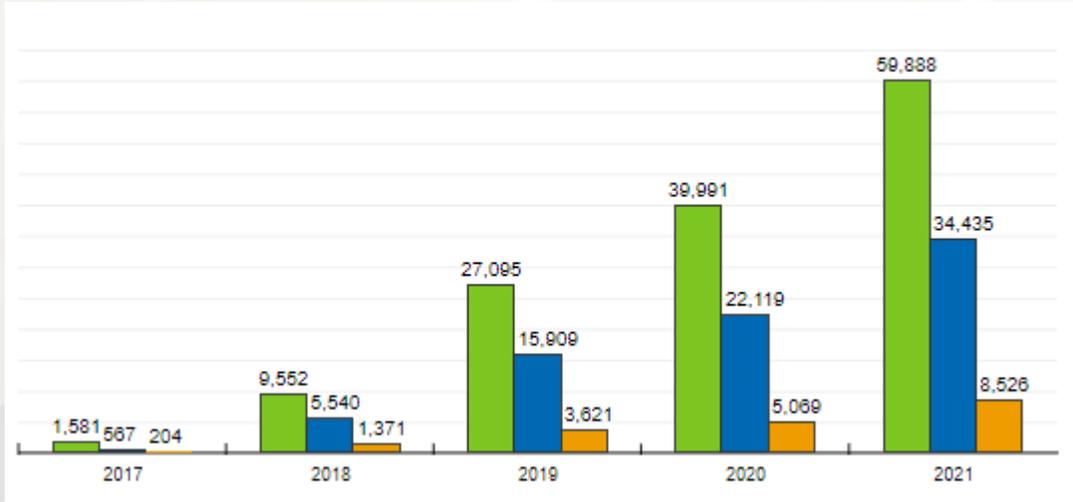
This year we've had a stand at EVs in the Park, Electric Vehicle Festival and Fully Charged Live, as well as attending Simply Electric, EV Drivers Summer Megameet, Electric Road to COP26, and various small local gatherings. We've got some new methods for marketing next year to reflect the fact that EVs are increasingly being bought by non-enthusiasts who simply want a practical car, and are less likely to attend events.

We've also been advertising online via SpeakEV forums, Google search, and in conjunction with various owners groups.

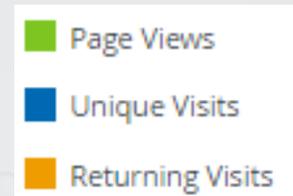
Marketing budget for 2022: £14,000 (already allocated)



Website traffic



2021 has seen an increase in overall website traffic compared to previous years, with an average of 174 page views and 100 unique visits daily, formed of 75 new visitors, and 25 returning visitors.





Map searches



Unfortunately there are too many possible variables to represent everything here.

Map data is checked periodically to ensure we are responding to driver needs.

The map to the left shows map searches for the first ten days of December 2021.

Total map searches for 2021 is expected to be 29,979 of which 56% were on mobile devices.

Figures are estimated by extrapolation as the last three weeks of the year are not yet available.



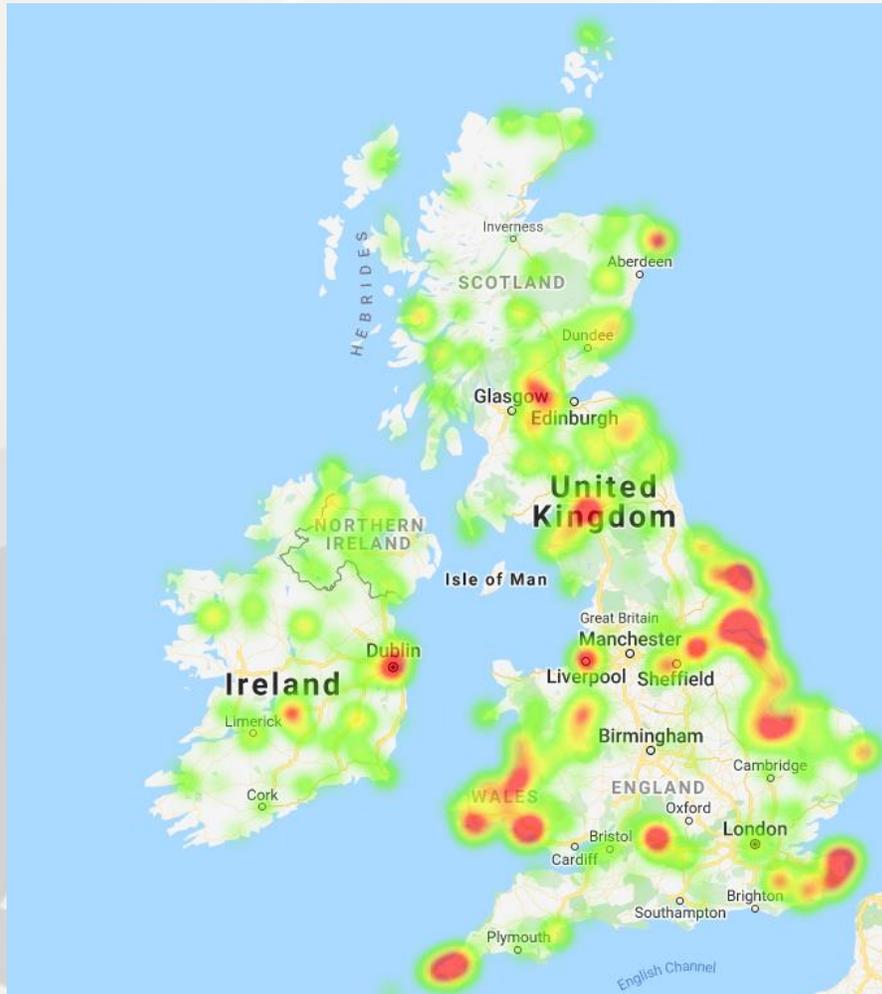
Total vehicles repaired

As vehicles are booked in via member garages themselves, we do not have visibility of the number of vehicles repaired or serviced. There are no plans to change this so there will not be data available in future either.

Elsewhere in this report you can see numbers relating to website visits, map searches, and support enquiries.



Poorly served locations



This heatmap shows the areas in the UK and Ireland poorly served by HEVRA Member Garages by showing where there are significant numbers of searches where the nearest HEVRA member garage is more than 20 miles away.

Particular areas of interest are Shetland, Peterhead, Carlisle, Scarborough, Hull, Doncaster, Derry/Londonderry, Dublin, West Wales, Skegness, Kings Lynn, Lowestoft, Thanet, Folkestone, Hastings, Torquay and Penzance.

Elsewhere in the world, there are relatively small numbers of disappointed searches across Europe and the USA, but significant numbers in Perth, Brisbane and Sydney in Australia.



Support, Research and Development

Our support and R&D have always been combined, because it's providing support that often sparks something that needs more work, and the R&D exists to improve the support service.

Our newsletters are designed to improve a technician's ability and confidence to find problems. But we still provide unlimited technical support for the following reasons:

- Repairs that are right first time improve the customer experience and the reputation of the whole network
- Support gives garages the confidence to book unusual repairs in, which in many cases they can fix without support anyway
- It sometimes provides an opportunity for the support team to learn new information which can be used in future

The below numbers are extrapolated estimates as a full year is not available. One support case is one fault on one vehicle, regardless of the number of communications. Numbers do not give an indication of vehicle reliability, as there are many other factors such as number on the road, warranty period, complexity, likelihood of recommendation, etc.

In 2021, we've helped our member garages with 809 faults, including 184 Renault Zoes, 124 Nissan Leafs, 53 Teslas and 48 Mitsubishi Outlander PHEVs.



Supported vehicles

We now support more brands than ever before, adding support for MG, Volvo, Fiat and Jeep in 2021.

We now support Peugeot, Citroen, Renault, Volkswagen, Audi, Mercedes, BMW, Toyota, Lexus, Nissan, Mitsubishi, Honda, Kia, Hyundai, Vauxhall/Opel (GM and PSA), Tesla, Jaguar, Land Rover, Smart, Mini, Porsche, Seat, Skoda, Ford, Bentley, MAN Light Commercial, MG, Volvo, Suzuki, Fiat and Jeep

We exist to keep electric vehicles on the road, so for electric vehicles we don't just support electric drive systems- we support the whole vehicle. We also support hybrid vehicles, although we only support the hybrid-specific parts of the vehicle. We support hybrid vehicles for two reasons:

- Repairing hybrid vehicles improves the knowledge and experience of us and our members, which can be applied to electric vehicles.
- A customer with a hybrid-specific fault that cannot be repaired will likely be put off buying a fully electric vehicle.



Documentation

As well as providing day-to-day support, we also publish vehicle-specific guides that can make a technician familiar with a car, even if it's the first one they've worked on.

Vehicle guides published in 2021:

Nissan Leaf 2018-on (ZE1)

Jaguar I-Pace (X590)

Audi A3 e-tron (8V)

BMW 330e (F30)

MAN eTGE

Honda Civic Hybrid (ES9)

Tesla Model 3

BMW X5 40e (F15)

We have also published a large number of test plans for individual fault codes and symptoms, of which there are too many to list here.



European Division

In order to continue operations within the European Union, we have opened a sister company, HEVRA Europe OÜ, based in Tallinn, Estonia.

The company serves our members within the European Union. Technical expertise is shared between the two organisations.



Charitable donations and sponsorships

We were proud to sponsor members and supporters of Zero Carbon World in re-running the Lands End to John O'Groats trip from ten years ago, using the same car with its original battery, but taking less time to complete the trip.

As well as providing publicity for HEVRA, the trip proved that electric car batteries can last much longer than some popular myths would suggest, and raised over £5000 for Zero Carbon World.





Member feedback

“Support is excellent, had a few jobs from being part of the network”

“Marketing has been great for me. Gone from almost zero EV work before we joined in March to 3 in today , 7 this week . Servicing , diags etc. Cars coming from 50 miles away.”

“I’ve only been a member last 4 months ish and what I’ve found is the amount of people who ring us as we’re the local HEVRA garage so whatever advertising is being done must be working”

“Tech support I don’t think anyone can argue that is second to none really is excellent! Newsletter again very informative and an excellent read!”

Suggestions from members:

More in-person training

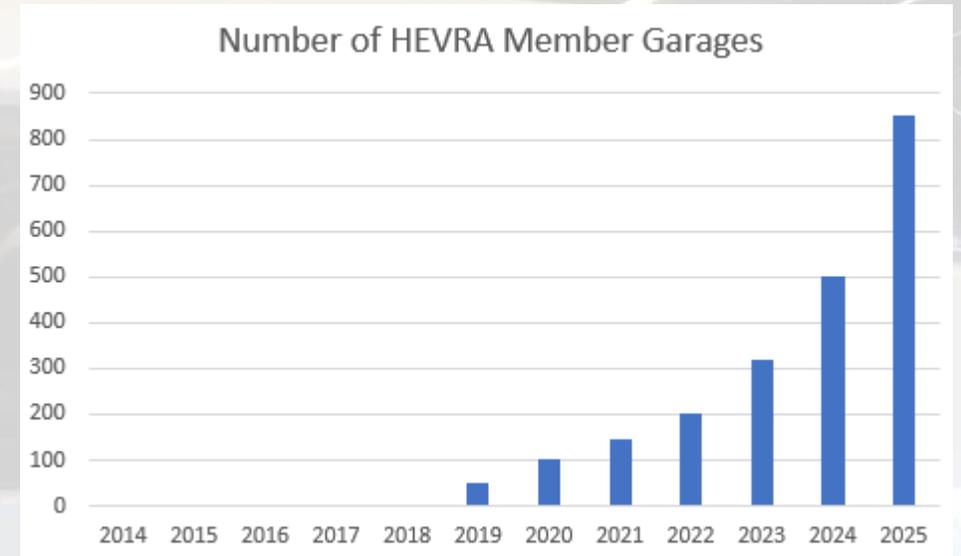
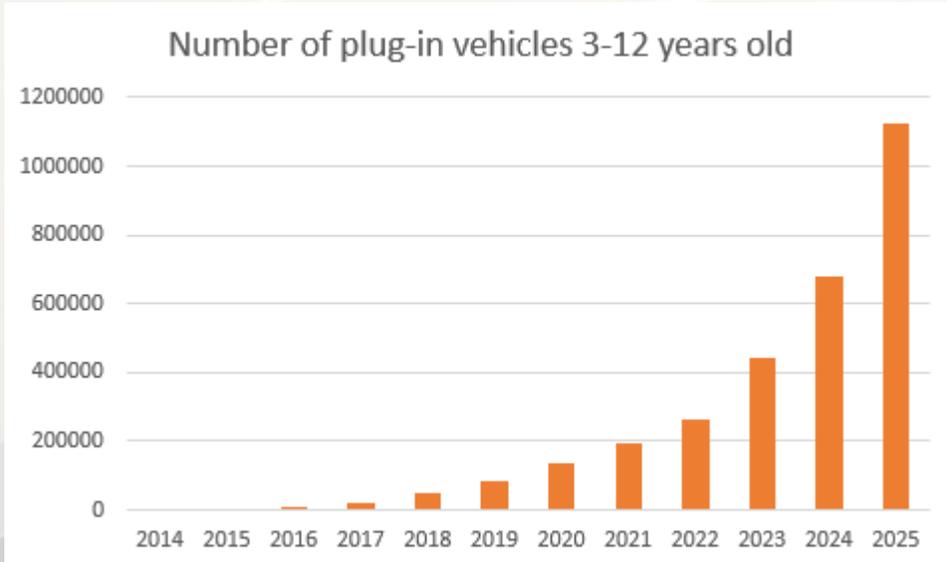
Signage, stickers, etc

Training for front-of-house staff

More social media marketing



Future expansion



The chart above left shows the estimated number of plug-in vehicles based on new car sales figures (does not include non-plugin hybrids). This does not take into account imports, exports, conversions or write-offs, but gives an idea to the numbers.

The chart above right shows the proposed number of HEVRA member garages in order to keep pace with demand. This keeps the number of vehicles per garage between 1300 and 1400 (not all of these will be customers of the garage, but it's a metric we use). The numbers proposed are 200 members in 2022, 320 in 2023, 500 in 2024 and 850 in 2025. Many of our garages are not at maximum capacity for plugin vehicles, and we are expecting workshop efficiency to improve with experience; however we are also expecting the workload per vehicle to increase as the fleet ages.



Plans for 2022

- Continue to grow marketing activities and try new forms of marketing
- Grow the network to 320 UK members by the end of the year
- Organise signage and promotional material for members
- Organise more in-person training events
- Organise training for front-of-house staff
- Increase social media marketing
- Investigate further expansion of markets, particularly Ireland and Australia
- Grow technical support department in line with member needs. This will likely involve a new role of German Brand Specialist and also the first non-technical support staff who are able to forward test plans, procedures and pass technical enquiries onto other staff when required by the workload. Adding non-technical staff allows the department to be expanded at a lower cost and everyone focus on what they do best.