

EVAS has started to establish links with other Associations in Europe.

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[The Scottish EV Drivers Club are having a meet at Culzean Castle on Sunday October 15th at 11:00](#)

[A rally is also planned for the old Madelvic factory in Granton, Edinburgh across the Queensferry Crossing, Sunday October 22nd.](#)

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## EVAS Established as Community Interest Company

After the AGM in April, the committee has successfully registered EVAS as a Community Interest Company, (CIC).

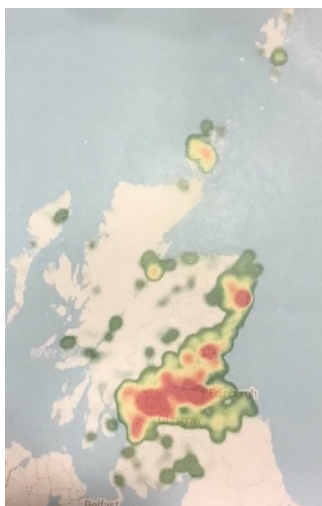
As a CIC we are an incorporated body, which gives us what we need to be formally recognized and addressed by governmental bodies, as well as seek avenues of funding.

The first event we were invited to as a CIC was the formal lighting up of the Queensferry Crossing. Two representative vehicles were requested, at short notice, to join in the convoy. Alister Hamilton tells the story at the bottom of the page.

Transport Scotland now meet with us six times a year, with further meetings taking place with Chargeplace Scotland.

Next steps include greater contact

with other Associations, manufacturers, dealerships and local authorities. We also need to grow our membership, especially Full members. We'll explain more with the welcome pack.



ChargePlace Scotland Member Heatmap

### Getting Involved:

EVAS Directors are still finding their feet as part of a CIC, but we are working hard behind the scenes to develop benefits for members.

We are working alongside Transport Scotland and ChargePlace Scotland to try to better identify and address some of the network issues. A sample welcome pack should be sent out to members in a few months.

The development of local groups is important: we can't be everywhere. See more of this on [page 4](#).

## View from the Bridge

Alister Hamilton EVAS Chair

For some time, EVAS has been suggesting that the opening of the Queensferry Crossing was a fantastic opportunity to showcase

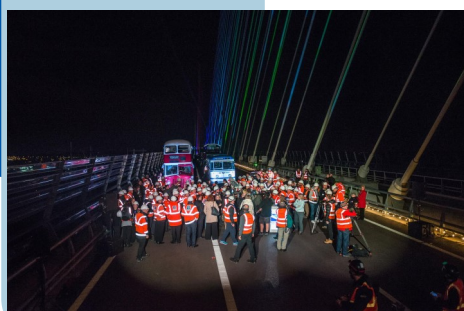
electric vehicles. With a week to go to the hand over of the bridge from the contractors to the Scottish Government, EVAS received this invitation:

*"Several weeks back you suggested EV's should be represented on the Queensferry Crossing. There is a small VIP event where the contractors handover the bridge to Scottish Government [on] Monday 28th August and I wonder if EVAS would be kind enough to provide two EV's for this event."*

Naturally EVAS were delighted to oblige and Douglas Robertson and

Alister Hamilton in separate EV's formed part of the procession of vintage, modern and electric vehicles across the bridge after which First Minister Nicola Sturgeon gave a short speech and switched on a dramatic and impressive light display to mark the occasion.

Exclusive video of the event is available [here](#).



## A Nation with Ambition: The EV perspective.



TRANSPORT  
SCOTLAND  
CÒMHDHAIL ALBA

Most EV challenges are in the remit of Transport Scotland

Supporting EV's in rural and urban Scotland, making it viable for *everyone*

You may have seen the Scottish Government 2017-18 policy document published in early September. From the EVAS perspective this is a very positive document. We spoke to Transport Scotland the day after publication, learning more about how they aim to achieve this within Holyrood's devolved powers.

The biggest step is to eliminate the need for new petrol and diesel cars and vans by 2032. Ambitious, as an outright ban is in the power of Westminster, currently set for 2040.

The development of Low Emission Zones, LEZ's, will aim to reduce

pollution in some areas, with the four major cities to create them by 2020. The press believe Edinburgh and Glasgow are both vying to be first, with Dundee and Aberdeen next.

It will be up to the councils involved to define the rules, but EV drivers can be comfortable in the knowledge that they will be in the exempt group.

Elsewhere in the policy the support for EV charging is continued until 2022. The aim is to both expand and strengthen the network, which we understand

includes adding Journey/Rapid chargers as well as 22kW Fast units at or near existing sites.

It won't solve all the issues we face, but it will start the ball rolling on the way forward.

There is also work to push electric cycles, a fantastic way to get about. Cycle commuting and arriving fresh is possible. A 30 mile ride is easy to achieve.



Developing the electrification of the A9 sounds simple. Difficulty comes in making all the parts line up to actually meet the needs not only of the EV drivers, but also of the communities on the route. Our first comment was that the route must extend right round the NC500 Tourist Route.

At EVAS we are keen to see charging hubs on the route, with multiple Rapid/Journey chargers, battery storage, renewable

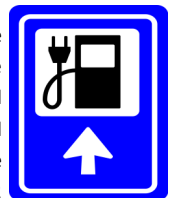
generation, and toilets. We would also hope that the strategy will give local businesses opportunities at the hubs.

Other policy aims we hope to influence are the development of charging within the towns, encouraging visitors to the area. This is one of the things that will justify the cost of running the charge points to local businesses.

Something else that we have said to Transport Scotland is that

## The Electric A9

signage for charge locations needs to be standardized and improved. We would like to see a simple distance to the next 2 charger additions to existing signs, as well as local signs including directions to charge points.



Wikimedia commons

## Life without home charging-Easy

In November 2015 I took the plunge and traded in my Nissan Qashqai for a brand new 24KW Nissan Leaf. The number one question from friends and family was 'where are you going to charge it?'

Like many people in cities I live in a flat. I own my property and have allocated parking. Unfortunately my space is at the far side of the car park away from the building. I looked into having a home charger installed but the quote ended in several zeros as large lengths of cabling would be required as well as obtaining the approval of the other flat owners to allow me have the car park dug up. Frustratingly, the developers who constructed my property have installed charging points in their most recent complex.

When I realised a home charger wasn't likely to happen I was slightly anxious as I had already signed on the dotted line for my new Leaf. I had undertaken some research about where to charge in the local-

ly prior to deciding to convert to an EV as I kept seeing chargers popping up all over the place. I discovered that I would be able to charge at work as the University of Dundee had recently installed a Rapid Charger and a pair of types 2's in the staff carpark. My daily commute is less than 20 miles per day so I knew if I could charge every other day I would get by just fine. Since then the University has installed further chargers around the campus.

The excellent charging infrastructure in Dundee makes owning an EV without a home charger a piece of cake. The well thought out placement of 'destination chargers' in the city centre along with three hours of free parking while charging allows plenty of time to pop to the shops and return to a fully charged car.

On-street chargers are shared with Co-wheels Car Club EVs. On the days where I need to park in town but have a full battery I can park in any of the Dundee City Council car parks for free. To register for

the free parking for 100% zero emissions vehicles all I had to do was email the Council's Fleet Team with my car registration details. The last time I counted there were 13 Rapid Chargers (5 at the Dundee Electric Taxi hub), multiple type 2's and even Tesla Superchargers in the Dundee area. Dundee Drive Electric also have 3 charging hubs planned with the first due to open by the end of 2017.

When I have a longer journey planned I make sure I have topped up to 100% before setting off. On my return I will sometimes squeeze in a charge on the way back as I am not coming home to my own charger and I am cautious not to let my battery get too close to turtle mode.

After almost two years of electric driving I haven't had a second thought about having a home charger installed. With the implementation of charging hubs and lamp post chargers I hope this also become a reality to other flat owners across Scotland who want to own an EV.



Elinor's wedding car, the ZooLeaf alongside her own.

Follow her [@She\\_sElectric](#) on Twitter

*Elinor Chalmers*  
*EVAS member*

## Hyundai Ioniq Plug In Hybrid

Only a 5-6 mile test drive was possible. Ride quality & handling was very good with very little body roll. The car was driven in EV mode with an estimated starting EV range of 20 miles (66% SOC, 6.5kWh battery pack). It was evident that the car would be happy to cruise on the flat (even up gentle hills) in this mode at up to 25-30MPH if little acceleration was required. 60 MPH was achieved without the petrol engine starting. However if required to overtake another vehicle, then the petrol engine

kicked in & there was a decided lag in the transition with relatively poor acceleration achieved. The paddle gear shifters on the steering column could allow for manual gear selection. The majority of the test was carried out in EV mode and the estimated remaining EV range was 16 miles after a 5-6 miles.

The MRRP for this car was not available but £23.5k-£25.5k. (with £2.5k plug-in grant applied) was suggested.

The PHEV model is being sold to customers who feel they require a



car which can deliver 31 to 39 miles EV range with the comfort of knowing that it will be able to drive a further say 300 to 450 miles in petrol mode. The car comes with 2 battery options, 6.5kWh & 8.9kWh. However, my experience shows issues with acceleration & transitions from EV to petrol mode. The dealership were unable to say what the charger ratings are.

## Hyundai Ioniq Hybrid

A very brief 5-6 mile test drive was offered by a Hyundai dealership over town roads (30MPH speed limit), and rural B-roads (60MPH speed limit).

Ride quality and handling were very good with very little body roll. The car was driven in EV mode with an estimated EV range of 9 miles. It was evident that the car would be happy to cruise on the flat in this

mode up to 25-30MPH but if any acceleration or ascent was required then the petrol engine kicked in and provided a reasonably smooth transition and



passable increase in speed. There was a brief delay when this transition occurred.

The manufacturer's claimed MPG for the car with 16" tyres was 83 with a CO<sub>2</sub> figure of 79gm/km. With 17" tyres the MPG figure is given as 70 with a CO<sub>2</sub> figure of 92gm/km.

The MRRP for this car was in the region of £20k-£23k

EVAS's  
Doug  
Robertson  
give his  
impressions  
on the three  
versions of  
the [Hyundai Ioniq](#)

## Hyundai Ioniq EV

A 24 hour test drive was provided by a Hyundai dealership. Ride quality & handling were again very good with very little body roll – there was very little distinction being the driving characteristics on the EV with its “trailing-arm” rear suspension against the fully independent suspension of the Hybrids. The EV acceleration was much smoother and decidedly quicker with no lags or transitions. Overall the EV gave a much more pleasant driving experience.

The car's estimated range when fully charged ranged from 132 to 140 miles & this proved very accurate. Over 107 miles of B-roads the car's final estimated range was 31 miles from a starting figure of 124 miles. A realistic range then of 138 miles at speeds of 45-50MPH over fairly hilly country roads.

On the motorway at 63-75MPH into a strong headwind in driving rain it averaged 3.2 miles/kWh at 10°C over a distance of 60 miles, starting with an estimated 127 miles, finishing with 62 miles. The

car did not seem to be badly affected by

headwinds as is the case with some other EVs. The car achieved an efficiency of 6.9 miles/kWh over short run at 45-50MPH at 10°C. 160-170 miles might be possible under some conditions.

MRRP for the EV ranges from £25k. to £26.8k. (after the Plug-in Grant).

A 6.6kW on-board charger is standard.







Electric Vehicle Association Scotland  
PO Box 499  
Bishopbriggs  
GLASGOW  
G64 3JR  
EVAS is a Community Interest Company,  
number SC569460

[info@eva.scot](mailto:info@eva.scot)  
[@eva\\_scotland](https://www.facebook.com/groups/evascotland)  
<https://www.facebook.com/groups/evascotland>

### **Make EVAS Local**

As we are a very well spread out organisation, we really need you, the members, to form local sections. Run events, help promote EV's locally and help run stands on behalf of EVAS.

Just let us know where you set up, who is the contact and let us know about what you get up to for the newsletter and AGM. We're working on space on the website for each group too.

Contact us on the email above.

### **Our Aims:**

To represent the interests of EV users in Scotland.

To promote EV use in Scotland.

To be a collective voice to work with all Stakeholders to pro-actively identify and highlight the specific issues of ownership and driving EV's in Scotland and related infrastructure.

What we do:

We represent EV drivers at Government level. Bringing issues from not only our forums, but other complementary groups in the EV world.

In the next issue:

Ewan McTurk, long time Electric Peugeot 106 driver tells us more about it and how it compares to his Leaf.

The EVAS welcome box, what to expect.



## **EVAS seek out Norsk Elbilforening**



Down town Oslo, there are electric vehicles everywhere. We soon give up counting – it's too easy! I'm here to meet Norsk Elbilforening (NE), the Norwegian EV Association to find out what EVAS can learn from the world leaders. I'm with my son, who wanted to come along when he heard where I was going. I'm paying - it's his 21<sup>st</sup> birthday.

We meet Morten Edvardsen, NE's Senior Adviser, who explains their development from a support organisation for the now defunct EV manufacturing ecosystem, to their current form as a membership organisation. Christina Bu, NE's Secretary General, pops in and out. She's preparing a presentation for Audi. This week she's also meeting representatives of organisations from 6 countries.

Norwegian EV statistics are impressive.

There are close to 200,000 EVs in Norway, with a 19% share of the new car market for battery EVs and 15% for plug-in hybrids. 4.6% of all passenger cars on the road in Norway are battery EVs. This has been achieved by generous tax breaks and incentives such as use of bus lanes and free toll roads, ferries and parking. The charging network has 8,000+ publicly accessible 3 kW charging points, over 500 rapid or DC Fast charging stations with a target of double multi-standard rapid charging stations every 50 km (31 miles) on all main roads by December 31st. As Christina says, "we're passed the early adopters stage – the geeks" as she looks at me and Morten. She's right of course and NE now has 45,000 members.

We discuss the Norwegian Government's 2025 target to phase out petrol and diesel car sales. Having lobbied our own First Minister in late 2015 about the reasons for an urgent transition away from oil based transport fuels, it's a target I

greatly admire. That initial contact has been followed up by EVAS meeting the Minister for Transport and the Islands, Transport Scotland and Urban Foresight in the E-COSSE forum to reinforce that message and lobby to bring forward the 2040 target. The subsequent recent announcement of a Scottish date of 2032 is therefore particularly welcome, although EVAS will continue to push to front load this effort in the period up to 2025.

[Alister presents Christina Bu and Morten Edvardsen the obligatory Malt Whisky.](#)

Picture: James Hamilton



[Alister Hamilton, EVAS](#)