



## **FASTER – Facilitating A Sustainable Transition to EVs in the Regions**

The FASTER Project is a joint proposal across Scotland, Ireland and Northern Ireland to support the overarching ambition to transition to low carbon transport systems, and demonstrate how the three countries can provide learning in relation to the electrification of transport. As well as the physical rollout of 73 rapid charge points, the project will assist with cross-border analysis of the planning and procurement requirements needed to kick start a commercial charging service in the three jurisdictions.

A common policy ambition across Scotland, Ireland and Northern Ireland is to transition to a low carbon transport system between now and 2040. The respective Government policies have set targets for the phasing out of internal combustion engines in the next decades and are providing incentives for the uptake of electric vehicles. One of the main barriers is the lack of public charging infrastructure and rapid charging locations in particular. FASTER will ensure that the availability of charging stations is not a major obstacle to EV market penetration, with the proposal to carry out the design and analysis, procurement, installation and operation of 73 rapid chargers (50KW capacity) across the 3 programme countries. It will also provide an additional supportive, enabling environment for suppliers and consumers and provide increased confidence and reassurance in regional commitment to the emerging EV market.

The project partnership comprises the following organisations:

- 1) East Border Region (Lead Partner)
- 2) Sustainable Energy Authority of Ireland
- 3) South West College
- 4) HITRANS
- 5) Ulster University
- 6) Dundalk Institute of Technology
- 7) University of Strathclyde

The FASTER Project has six work packages:

- **Management:** The overall programme management and administration of the project (WP Leader – East Border Region)
- **Communication:** Communicating the processes, procurements and project milestones (WP Leader – East Border Region)
- **Technical 1:** Research and develop an outline design and the needs analysis required across the 3 programme countries for EV rapid chargers; identify sites and develop a technical and operational plan that will form the basis of a central procurement for 73 rapid chargers (WP Leader – Ulster University)
- **Technical 2:** Design and run the procurement for the detailed design, installation, operation and maintenance of the EV rapid charging infrastructure to ensure interoperability across the regions and integration with existing infrastructures, and select the preferred supplier/suppliers for the three jurisdictions (WP Leader – HITRANS)
- **Technical 3:** Oversee the installation and operation with an exit strategy for the handover of the infrastructure to a commercial operator (WP Leader – Sustainable Energy Authority of Ireland)
- **Technical 4:** Behaviour change and awareness programme to ensure adequate promotion and usage of the new rapid chargers in all three jurisdictions. As the EV sector is a growing sector, it is recognised that the initial investment in alternative infrastructure is considered costly; however, the proposal will demonstrate that the infrastructure will yield dividends in the longer term, enabling the countries to adapt more quickly to the developing market and actively set the countries on the right path to

decarbonisation and cleaner air. The proposal is aligned with the three country strategies for alternative infrastructure and this project will demonstrate the regional benefits of cross border co-operation in this sector. (WP Leader – South West College)

## **HITRANS ROLE**

The FASTER project closely aligns with HITRANS Regional Transport Strategy and allows HITRANS to deliver practical projects contributing towards the greening of transport in the area. FASTER allows HITRANS to learn best practice for deploying charge points and promote sustainable transport in the region. HITRANS are leading on the Design and Procurement work package, and it is expected that HITRANS will install 24 rapid chargers across the HITRANS proportion of the INTERREG VA programme area. Preliminary work has been conducted on possible locations for the chargers through our EV Strategy; however, a large proportion of the project is dedicated to site selection and needs analysis to ensure that the best locations are selected, and that it is complementary to existing infrastructure in the region.

HITRANS has met twice with the project consortium since the application was submitted to discuss the supplementary information requested from the programme. If approved, the project will begin in Autumn 2019 so a quick turnaround is required. To fulfil project requirements, HITRANS will be hiring two new staff members – a project officer and a project administrator.

## **PROJECT BUDGET**

HITRANS has a significant budget in the FASTER project, totalling €1,688,653, allowing HITRANS to install 24 rapid chargers in Scotland – or more if budget allows.

## **RISK REGISTER**

### RTS Delivery

Impact – Positive

Comment – The FASTER project supports several RTS objectives, particularly in the field of low carbon transport and support for EV uptake.

### Policy

Impact – Positive

Comment – FASTER is supporting broader policy work by conducting research on the procurement and installation of a rapid charging network and how this complements existing infrastructure.

### Financial

Impact – Positive

Budget line and value – The project attracts a reimbursement rate of 85%.

### Equality

Impact – Positive

Comment – FASTER aims to increase the number of publicly accessible charge points to encourage more EV drivers in the region.

## **RECOMMENDATION**

Members are asked to:-

1. Note the report.

**Report by:** Neil MacRae / Jayne Golding  
**Designation:** Partnership Manager / Projects and Policy Officer  
**Date:** 3<sup>rd</sup> September 2019

### HITRANS Statement of Site Selection

A key activity of FASTER is the completion of site selections in each jurisdiction, taking into account current and future electricity network capabilities, EV growth rates, size changes of vehicles, ease of access and end-user expectations. HITRANS completed an EV Strategy in 2018 that identified priority actions to improve levels of EV adoption in the area, with key priorities outlined below:

- **Increased resilience of the rapid charging network:** Increased confidence in the availability of charging infrastructure is key to increasing uptake of EVs in the region.
- **Provide EV charging clusters:** Particularly useful in areas with high demand, e.g. taxi ranks, ferry terminals, airports, major tourists centres, and areas with a high proportion of properties with no off-street parking.
- **Targeted expansion of the strategic rapid charging network:** The EV Strategy suggests using 25-40 miles as a guide for maximum travel time between charging units (based on a network of slow, fast and rapid chargers in the region) using recent work in Norway as a best practice example of an area with a similar rural road network and challenging weather conditions. Using this target, a number of gaps have been identified, prioritised by traffic levels likely to be passing the proposed sites. The following table lists those priority sites that are within the Interreg VA area.

Network Gap	Proposed Location	Estimated Traffic Levels (Annual Average Daily Flow)	Priority
Fort William to Oban (44 miles) Glencoe Mountain Sports to Oban (46 miles)	A82 / A828 Ballachulish	c. 5000 - 7000	High
Portree to Shiel Bridge (50 miles)	A 87 Kyle of Lochaish	c. 3000 - 5000	Medium
Mallaig to Fort William (43 miles) Mallaig to Kilchoan (57 miles)	A830 / A861 Lochailort	c. 1500	Low

The above list is an example of the type of analysis that will be conducted for the FASTER project. HITRANS will work closely with project partners to reach the goal of installing 73 rapid chargers across the three jurisdictions ensuring sensible site selections are conducted.

A crucial aspect of this analysis will include cooperation with FASTER project partner University of Strathclyde, who will work closely with SSE Networks to ensure sites are chosen in line with network capability. Also, SSE Networks has recently seconded a network planning engineer to Scottish Government to help identify best places for chargers based on network capacity, so HITRANS will maintain regular communication with this contact to coordinate installations. HITRANS are also in talks with Transport Scotland to improve data sharing between stakeholders installing public chargers to streamline site selection processes.

#### **Proposed Sites**

In addition to those mentioned above, the following locations have been identified as benefiting from rapid chargers.

	Western Isles	Highland	Argyll & Bute
<b>Supplement existing network</b>	<ul style="list-style-type: none"> <li>• Port of Ness</li> <li>• Shawbost</li> <li>• Leverburgh Ferry Terminal</li> </ul>	<ul style="list-style-type: none"> <li>• Skyeskyns, Isle of Skye</li> <li>• Invermoriston</li> <li>• Kilchoan</li> <li>• Glencoe Village / Visitor Centre</li> </ul>	<ul style="list-style-type: none"> <li>• Benderloch</li> <li>• Dalmally</li> </ul>
<b>New locations</b>	<ul style="list-style-type: none"> <li>• Balallan</li> <li>• Berneray Ferry Terminal</li> <li>• Eriskay Ferry Terminal</li> </ul>	<ul style="list-style-type: none"> <li>• Uig</li> <li>• Applecross</li> <li>• Armadale</li> <li>• Dunvegan</li> <li>• Glenfinnan</li> <li>• Fort Augustus</li> <li>• Lochinver</li> <li>• Strontian</li> <li>• Corran Ferry</li> </ul>	<ul style="list-style-type: none"> <li>• Ardrishaig</li> <li>• Carradale</li> <li>• Campbeltown Airport</li> <li>• Tiree</li> <li>• Cairndow</li> <li>• Coll</li> <li>• Craignure</li> <li>• Craighouse</li> <li>• Rothesay</li> <li>• Taynuilt</li> </ul>

## **HITRANS Procurement Strategy, Implementation, Installation & Connectivity**

### **Procurement**

For the procurement exercise, the intention is to utilise existing suitable frameworks for charge point installations. There are two existing frameworks available to public bodies in the UK:

- Vehicle Charging Infrastructure: a national framework offering public sector bodies a comprehensive range of charging solutions from leading providers in the market: <https://www.espo.org/Frameworks/Fleet-Highways/636-Vehicle-Charging-Infrastructure>
- CCS Traffic Management Technology 2, Lot 10: Sustainable Transport Infrastructure: <https://www.crowncommercial.gov.uk/agreements/rm1089>

In addition, Transport Scotland (the Scottish Government's transport agency) is currently in the process of developing a new bespoke contract for EV chargers and their installation. This is expected to be in place in 2019 and will therefore be available for the FASTER project. HITRANS intention is to utilise this contract to procure chargers for installation in Scotland, but further investigation is required to confirm if this procurement route (or the above mentioned frameworks) are available to all project partners. If it is not suitable for all project partners to use, it will still offer a solid basis for the procurement of the design, supply, installation and operation of EV chargers in each area as significant elements of the technical specification for the EV chargers and their installation should be transferrable across the jurisdictions, even if the Scottish Government framework itself cannot be used in each partner area.

HITRANS will lead on procurement in Scotland, South West College will lead in Northern Ireland, and SEAI will lead in Ireland. However, HITRANS will work closely with project leads to oversee and advise on the procurement process in all jurisdictions.

### **Implementation & Installation Methodology**

Key steps that will be involved for installations include:

- Follow procurement strategies and/or frameworks as stated above;
- Engage with suppliers listed in the frameworks/procurement tenders to obtain quotes for chosen sites;
- Once quotes are obtained, the chosen supplier will liaise with the network operator to obtain quotes for connection costs.

For each respective area, the leaders will liaise closely with the chosen supplier, network operator (e.g. SSE in Scotland), and relevant local authorities to ensure timeframes for each step of the installation process is coordinated – e.g. receiving permissions for any required access to the area for electrical connections, site excavations, site installations and DNO commissioning. HITRANS will work closely with the installation leaders in each jurisdiction to ensure timelines are met, and provide guidance on each step following lessons learned from previous installations.

## **Connectivity**

A key aim of the FASTER project is to provide seamless interoperability between each of the three jurisdictions. At present, in Scotland, the majority of publicly accessible charge points are managed via ChargePlaceScotland (CPS) – Scotland’s national network of electric vehicle charge points, developed by the Scottish Government. Owners of the charge points, known as charge point ‘Hosts’ (mostly local authorities), are responsible for the maintenance and upkeep of the charge points. Users require a swipe card or smart phone app to access the charge points, and the app includes a detailed map showing the location, type, status and live availability of charge points.

The intention is that all newly installed charge points in Scotland through the FASTER project will join the ChargePlaceScotland network, as stated in the letter of support from Transport Scotland, to harmonise with existing infrastructure and limit the number of apps a person might need to access charge points. Throughout the project, we will explore if it is possible to link CPS access with respective systems in Northern Ireland and Ireland to enhance cross-border connectivity.

## **Exit Strategy**

As stated in the letters of support from The Highland Council, Argyll & Bute Council and Comhairle nan Eilean Siar (Western Isles Council), HITRANS has agreed with its respective local authorities that chargers installed in the FASTER project by HITRANS will be owned and maintained by the local authorities following the end of the project. This follows existing procedures in Scotland and is in line with HITRANS previous experience of installing chargers.

The FASTER project team understand the importance of long-lasting outputs beyond the project end date, and to do so involves planning an exit strategy from the outset. Having previous experience of installing rapid chargers, HITRANS fully acknowledges the importance of long term agreements for the operation and maintenance of chargers.

Adding the chargers to local authority existing portfolios of chargers is sensible in a number of ways:

- It streamlines procedures involved at each installation site, such as obtaining access permissions for electricity connections & excavations;
- It improves ease of access for users in each local authority area if access & payment procedures are the same;
- It streamlines maintenance procedures if several chargers in the area require fixes/checks at the same time;

- It reduces the number of charge point 'Hosts' that require back-office system access, therefore making issue logging & solutions more efficient.

An aspect to consider for the exit strategy is access to each charge point and associated costs of charging. At present, access to the majority of public chargers in Scotland is through Charge Place Scotland, and HITRANS will work with Transport Scotland and the FASTER delivery partners in the other jurisdictions with the aim that chargers in Northern Ireland and Ireland could be accessed using the CPS card, and vice versa, with the aim of seamless transition across the borders for EV drivers. Access to the Charge Place Scotland network is also open to anyone with charger access enabled by telephone or a smart phone app.

In Scotland, each local authority (or charge point owner) can set their own tariffs for electricity. Through HITRANS EV Stakeholder Forum, discussions are in place to try to streamline the tariffs that will be imposed for charging to simplify procedures for users, and also streamline how payment is obtained. The HITRANS EV Strategy has recommended tariffs for charging, and Transport Scotland is also due to produce guidance on tariff setting and payment mechanisms that the FASTER project will utilise, working with project partners to create a strategy across the jurisdictions with the aim that charging and payment procedures can be coordinated across the different areas.