

Support for Local Authorities on Electric Vehicle Infrastructure – Switched on Towns and Cities

Programme plan for supporting Scottish local authorities by delivering 10 in-depth feasibility studies in the financial year 2018/19.

Background

The 2017-18 Programme for Government included actions of expanding electric vehicle charging infrastructure between now and 2022, accelerating the procurement of ultra-low emission vehicles (ULEVs) in public and private sector fleets and providing financial support for local solutions and small scale research and development to address the particular challenges in expanding charging infrastructure in Scotland. In support of these actions, in 2018-19 Transport Scotland launched a new Switched on Towns and Cities (SoT&C) Challenge Fund with the aim of supporting the delivery of a significant package of measures and intensified action, at the local level, to enable a step change in the uptake of ULEVs in Scotland's towns and cities.

Through a Challenge Fund mechanism managed and delivered by Transport Scotland, SoT&C offers up to 5 funding awards annually to Scottish towns and cities to support projects with eligible costs in the region of £1.5M to £2.5M. The first round of bidding opened on 20 June 2018 and it is anticipated that bids will continue in the three subsequent financial years.

The Role of Energy Saving Trust

In parallel with the Challenge Fund, for plans that require further development, local authorities (LAs) be able to access support from Energy Saving Trust (EST) in the form of in-depth feasibility studies. The primary purpose of these studies is to comprehensively map out opportunities within a target town or city to help inform future potential applications to the Challenge Fund. It is expected that applicants for feasibility support are able to demonstrate that the report will form the basis of scoping for a subsequent Challenge Fund application. The feasibility studies will help to identify detailed, costed options for infrastructure, vehicle and non-capital incentives¹ to support the electrification of road transport in prioritised² towns and cities.

In FY 2018-19, EST will undertake up to 10 in-depth feasibility studies to identify a balanced³ and effective set of capital⁴ and non-capital incentives which would encourage and facilitate the uptake of ULEVs within a specific urban area(s). There will be no cost to LAs for accessing this support, other than the modest costs associated with administration, data provision and liaison. There is likely to be a high level of demand for this assistance and EST will offer support on a first come first serve basis to applicants who are able to demonstrate existing leadership and delivery on the EV agenda and that the study will progress their

¹ *Non-capital incentives* are measures supporting the use of existing or planned actions, such as parking or charging incentives or priority lanes for ULEVs. For more information, please refer to the [Transport Scotland Challenge Fund Guide for Applicants](#).

² Prioritised towns and cities are those who can demonstrate strong ambition to improve their existing plans for increasing the uptake of ULEVs and are well positioned to deliver the infrastructure and local incentives to support ULEV uptake.

³ Project proposals should feature balanced mix of capital measures and complementary non-capital incentives.

⁴ *Capital measures* include infrastructure such as chargepoints, ULEVs, land purchase, costs related to grid connection and grid upgrades. For more details, please refer to Transport Scotland SoT&C Guide for Applicants.

existing ambitions to deliver ULEV supportive infrastructure⁵. LAs who are considering multiple urban centres within their applications, should demonstrate that they understand the benefit in ensuring feasibility studies concentrate on urban areas where the installation of charging infrastructure would have maximum impact; in most cases this would limit the study to one or two urban centres.

EST will require local authorities requesting support to demonstrate:

- An understanding that the study should form the next stage of meaningful progress towards installation of ULEV charging infrastructure and application to the SoT&C Challenge Fund (where appropriate);
- The aim of developing a package of local capital measures of a significant scale and intensity;
- The aim of developing complementary, non-capital incentives in support of existing or planned infrastructure;
- The ambition and enthusiasm in driving a significant step increase in the uptake of ULEVs across the proposed study area;
- Recognition of the potential environmental, social and economic benefits of the electrification of road transport;
- Support for Transport Scotland's policy on decarbonisation of road transport and its 2032 timescales.

Programme outputs and outcomes

Outputs: Provide up to 10 in-depth feasibility studies supporting the development of detailed costed plans for local measures to enable a step change in uptake of ULEVs in Scotland's towns and cities. For LAs which demonstrated eligibility for a support study, EST will conduct research and produce a report, written for a non-technical audience, documenting all of the key research findings, providing the basis for an investment grade proposal.

Outcomes: Support LAs in receiving in-depth feasibility studies to identify and implement local measures enabling a step change in uptake of ULEVs and successfully bid for Transport Scotland Challenge Fund in the upcoming calls for bidding⁶.

Delivery approach

EST will provide support to LAs, on a first come first serve basis, who demonstrated their ambitions will deliver intensive, balanced and inclusive packages of capital-related activity and non-capital incentives that would effectively facilitate a step increase in adoption of plug-in electric vehicles (ULEVs), and help to achieve the overall aim of the fund.

⁵ ULEV charge points proposed as part of application for the Challenge Fund are required to be publicly available and be part of the ChargePlace Scotland network.

⁶ Call for bids are anticipated to occur annually.

Aim

The proposed approach has the following aims:

1. Identify detailed costed plans for infrastructure, vehicle and non-capital incentives.
2. Develop cost effective portfolio of measures which will enable town or city to create balanced and effective plans aimed at significantly increasing the uptake of ULEVs.

Study methodology

EST will approach each individual study with a methodology which allows an element of flexibility. This will ensure that the individual requirements of each LA can be met, whilst also encouraging a degree of consistency in the approaches taken across LAs. Each study will consider both present and where possible future conditions; making quantitative recommendations for appropriate locations, number and specification of ULEV charging infrastructure across a range of vehicle groups, inclusive of the replacement of public sector fleet with ULEV passenger cars and light commercial vehicles (LCVs) (where appropriate) and other volume ready plug-in vehicle types (e.g. buses that are part of public sector fleets). Additionally, the study will consider qualitative data and detail the non-capital incentives that would be required to achieve the wider emissions and air quality targets set by Transport Scotland.

Each study will be carried out in stages:

- *Establishment of baseline* vehicle statistics for existing parking conditions and behaviours of different classes of vehicles including fleet operators, taxi and private hire (TPH) licensing, car club contracts and regional/national datasets, including identification and ranking of locations which have merit for the installation of charge points in areas which demonstrate variation in land-use and building type; making use of existing public assets where practicable.
- *Engagement with local public sector* organisations from study commencement and throughout to, ensure that a balanced approach is adopted for the study which fully considers each organisations area of specialism.
- *Forecasting*, including developing a set of scenarios to estimate the proportion and number of ULEVs in each vehicle category that are likely to require charging, where applicable, taking into account the potential for introduction of a Low Emission Zone (LEZ) and air quality improvement (if applicable);
- *Proposal of ideal charge points*, where EST will rationally target areas that charge points will be used more frequently, thereby maximising potential for ULEV uptake;
- *Economic assessment*, including detailed outline of capital costs associated with proposed infrastructure, grid upgrades and purchase of ULEVs as part of fleet upgrades;
- *Final recommendations*, including production of final feasibility study report. This stage will also include proposal for non-capital incentives⁷ that could be used to complement existing and planned infrastructure.

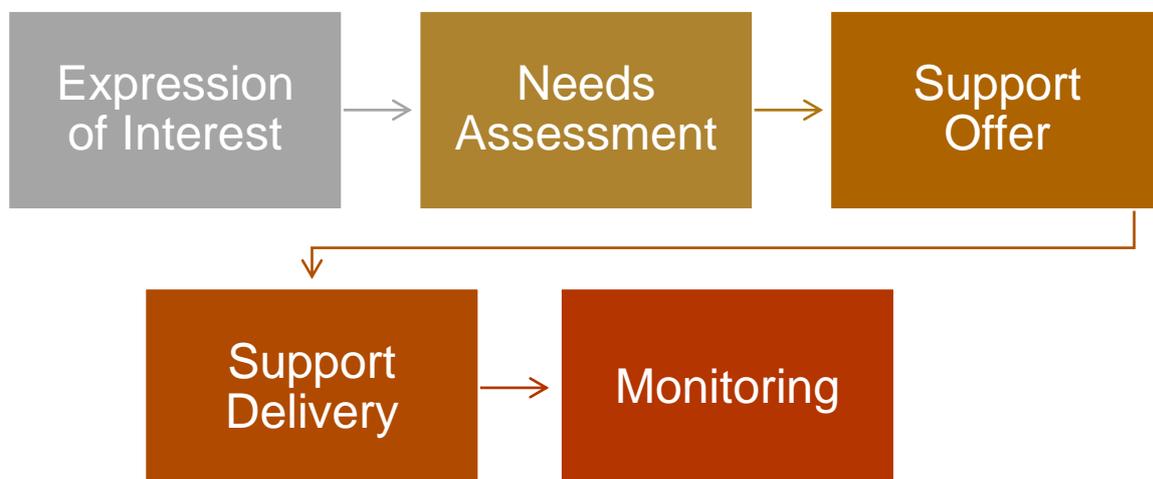
⁷ EST will seek smart and innovative solutions in addressing charging infrastructure such as use of public car parks etc. as part of exploring non-capital incentives to encourage uptake of ULEVs.

Where applicable, EST will address ULEV charging issues associated with tenement buildings or residential properties that lack off-street parking and will identify opportunities for the development of ULEV-friendly districts which facilitate destination charging.

EST may conduct feasibility studies of two or three (maximum) adjacent towns or cities as part of one study, but only where the LA has presented a sound business case highlighting the clear benefits that consideration of the locations in a wider context brings. LAs are however encouraged to focus on single towns or cities. Where feasibility studies cover more than one urban centre, the recommendations may be used as a tool to prioritise which town or city should be the focus for a Challenge Fund bid.

Programme delivery process

We propose a five-stage delivery process for local authorities. Each LA we assist through the feasibility study programme will be guided through the following process.



Expression of Interest

In the first instance, LAs who wish to receive support will submit a written Expression of Interest (EoI) to EST. The EoI process will include the requirement for local authorities to answer some very basic questions, allowing EST to plan the nature of support that will be required. A key requirement of accessing the support will be evidencing existing leadership and delivery on the EV agenda.

In addition to identifying applicants for feasibility support, the completion of the questionnaire will generate useful insight on the prevalent readiness of local government to deliver ULEV projects. These insights will be shared with Transport Scotland.

Needs assessment

Appraisal of the applications for support will allow EST to conduct an assessment of the viability of the proposed feasibility study and will highlight where a LA may require additional support.

In addition to consideration of the applications merits, EST may also conduct an initial review of publically available local plans and policy relating to ULEV infrastructure within the relevant authority's area.

In cases where the information submitted on the EoI is not clear, or where EST require clarification on any particular point, a meeting or a phone call will be arranged with the local authority officer who submitted the EoI, in order to obtain clarity and any supporting documentation.

Support offer

Following the needs assessment, EST will convey an offer of support to successful applicants in terms of facilitating the delivery of ULEV charging infrastructure, public sector fleet passenger cars and LCVs, and complementary non-capital measures which would incentivise uptake of ULEVs.

The areas of support that we can provide include, but are not limited to:

- Introductory knowledge of ULEVs and charging infrastructure, for non-technical audiences;
- Technical support on ULEV infrastructure specification;
- ULEV infrastructure location planning (including GIS mapping of existing and proposed charge points);
- Completion of an initial review of publically available local plans and policy relating to ULEV infrastructure;
- Inform authorities where it is anticipated upgrades to electrical distribution infrastructure are required;
- Inform discussion and debate between local councillors and cabinet members;
- Review and critique the quality and robustness of existing plans, policies and reports;
- Engagement with taxi and private hire stakeholders;
- Support in developing non-capital incentives to encourage the use of ULEV infrastructure and uptake of ULEVs, including the use of public land as means for development of such incentives;
- Guidance and support in engaging with local commercial fleets (augmented by Transport Scotland Switched on Fleets scheme);
- Review and support in implementing ULEVs in public sector fleets (augmented by Transport Scotland Switched-on Fleets⁸ scheme);
- Contextual advice on environmental issues including air quality and climate change;
- Support for ULEV infrastructure delivery project planning;
- Support for ULEV infrastructure procurement, including procurement specification and soft-market testing;
- ULEV supply chain training, delivered to local dealerships and rental/leasing operations;
- Advice and co-ordination of press releases and public awareness initiative.

For each EoI, we would anticipate that a particular combination of the above areas of support will be required. By only providing support that is actually required, rather than delivering a one-size-fits-all support package, we can deliver support more efficiently and ensure we are providing that support to the right individuals in each town or city.

⁸ In 2018-19 EST will be conducting review of Switched on Fleets Reports, and where possible, results of these reports will help to inform EST's recommendations for replacing existing public sector owned fleets with ULEV passenger cars and LCVs.

Support delivery

Once the support offer is agreed, EST will agree a date to meet the LA to commence the pre-report stakeholder engagement activity.

Ahead of this meeting, EST will prepare locally-specific analysis to assist in the delivery of each town or city's specific support requirements. This may include:

- Current ULEV registration statistics, compared to other local authorities
- Current levels of ULEV infrastructure provision
- Current condition of taxi and private hire vehicle stock

Ahead of the meeting, EST will also provide guidance as to who should attend the meeting, for example Community Planning Partnerships and other sector partners and actors with a key role in project development and delivery (e.g. colleges, universities, SEPA, Historic Environment Scotland etc.). In some cases, the applying local authority may have a particular audience in mind, in which case EST will deliver support tailored to that audience (e.g. some LAs may desire for EST to present to councillors in order to raise awareness).

The initial meeting will consist of a half-day workshop-style session led by EST, with tailored content which considers the nature of support required by each town or a city, but in general, will have the following agenda:

1. Meet and greet;
2. Presentation covering the basics of ULEVs and charging infrastructure, including information on all the grant assistance available to local government and to residents;
3. Discussion of locally specific analysis, conducted prior to the session;
4. Development of strategic objectives (i.e. establishing realistic goals, deliverables, milestones);
5. Identifying sources of match funding⁹ and the requirements to access it;
6. Planning applications for funding (where the local authority is ready to do so);
7. Establishing clear next steps.

Following the session, EST will maintain a presence with the local authority, catching up regularly and keeping a lines of communication open to ensure that we are on hand to provide support, should further questions arise.

Following engagement feedback, EST will then produce a non-technical report, based on the completed research and customised to the requirements of the target town or city, inclusive of supporting mapping illustrating proposed locations of ULEV infrastructure within the study area.

Depending on the size and specific conditions and requirements of a town or city, we will consider the suitability of the zonal approach to ULEV infrastructure distribution and if applicable, we will examine where charge points are required for particular user groups.

⁹ Match funding is not a requirement in successful bidding for the Challenge Fund but the greater the amount of match funding can be brought to support the eligible costs of a project the more favourable the application will be seen during the process of selection by Transport Scotland.

Once drafted, there will be an opportunity for the LA to review the report and provide feedback. This feedback will then be used to refine the final project output prior to publication.

Through the delivery of the feasibility study support, it is intended that the local authority will be equipped with some of the necessary reporting to compliment a potential future application to Transport Scotland's SoT&C Challenge Fund.

Following the delivery of support required by the LA, EST will hold a final stakeholder meeting to debrief and evaluate the project output. The feedback from this process will help inform EST of the challenges faced by LA's and how the support granted has helped to progress solutions. This evaluation will be used to help construct case studies for dissemination of learnings.

Through the delivery of this programme, EST will provide regular feedback on progress to Transport Scotland, covering common issues emerging in local government and their viewpoints regarding low emission transport.

Monitoring & Evaluation

Following submission of a bid to the SoT&C Challenge Fund and a successful receipt of a Grand Award Letter from Transport Scotland, it is anticipated that the local authority will begin delivering their respective projects, in accordance with their plan and with due consideration of the reporting from the feasibility study¹⁰. Those authorities which have been unsuccessful in obtaining SoT&C grant from Transport Scotland and who previously received feasibility support from EST are encouraged to review and prioritise recommendations provided by EST when applying for subsequent rounds of bids.

At agreed and scheduled points during the ULEV project delivery, EST will hold telephone calls with the project manager from the local authority. The purposes of these calls is to provide guidance should the LA require further advice and for EST to assess the suitability of the feasibility support received, for the purpose of continual improvement.

Following the delivery of the SoT&C Challenge Fund project, EST will hold a final meeting or phone call with the awarded local authority to debrief and evaluate the project delivery stage, gathering information that will further benefit the output of case studies.

As a minimum, EST's evaluation activities will cover the extent of improvement seen in each local authority. By taking information at the EoI stage, EST will have a robust understanding of the capability of each local authority prior to having any involvement with them. Evaluation activities will focus on the journey and impact that it has had, in the wider context of the ULEV agenda.

Throughout the delivery of this programme, all activity will be monitored, documented and reported with regular feedback provided to Transport Scotland, covering common issues emerging in local government and viewpoints of local government towards encouraging ULEV adoption.

¹⁰ It should be noted that local authorities are strongly encouraged but not required to consider all of the recommendations made by EST during their process of application for the Challenge Fund award.

Programme governance

In the delivery of in-depth feasibility studies, EST will provide to Transport Scotland:

- Weekly calls on programme activities, which will include:
 - Updates on current and new applicants
 - Emerging risks and issues
- Monthly email updates, including:
 - Statistics and analysis of the responses submitted as part of the EoI
 - Pipeline of EoIs, highlighting new additions
 - Summary of activities with all local authorities who have submitted an EoI, with key dates for meetings and milestones in project delivery, where applicable
 - Forecast for funding requirements, constructed to our best understanding
 - Summary of previous and next months' activities

Output activities

EST shall take into account guidance on eligible activities and wider non-capital measures as set out by Transport Scotland and align those with the scope of feasibility studies. This approach will enable LAs to develop credible projects, access funding and facilitate increase in uptake of ULEVs.