



AppleCoRRE: Community Rapid and Renewable Energy Hub

 Applecross Peninsula, Scotland

In 2015, Applecross Community Company (ACC) developed a 90kW hydro scheme, Apple Juice (Hydro), of which 50kW is exported to the grid and remaining energy used locally.

In 2020, ACC undertook an initial investigation into the installation of public electric vehicle charging infrastructure in Applecross and its integration with the 90kW community hydro turbine scheme.

The study was funded by Local Energy Scotland from the CARES Innovation Grant (Community and Renewable Energy Scheme), and Urban Foresight undertook the study. The study was split into two Phases:

- **Phase 1 Feasibility Study** – Feasibility of installing EV charge point(s) in Applecross along with associated infrastructure and battery storage.
- **Phase 2 Detailed Design** – Detailed Design for a 50kW Rapid and 7kW Fast charger with a battery storage unit, alongside an onboard inverter converting single-phase to three-phase.



The AppleCoRRE project has built upon this study and is identifying potential funders.

Interview Questions and Responses

How did you as a community agree the key objectives that you wanted your project to deliver?

The main desire of the community was to get EV chargers in Applecross. The Applecross Community Company collectively recognised EV as vital for the tourism market in Applecross. In parallel, Applecross is 2 hours away from the nearest hospital and therefore the community needs the infrastructure and having a rapid charging station is key.

How did you decide upon a single project idea that could deliver against those objectives?

The transition to renewables could only be enabled by EV charging and a hydro scheme in Applecross. The Board of Directors of Applecross Community Company steered the community on the EV charger project as it is a larger scale project and enabled the community to come together on the idea.

Describe the process by which you achieved consensus around objectives and projects. Has that consensus held or does it remain challenged by some in the community? If so, how are you dealing with that?

The project has encountered little opposition. There are some people with the issue of increased tourism, and it has been dealt with open dialogue.

The community company did a survey on EV vehicles and charging stations to gauge interest, which has built interest and consensus.

How did you approach planning and project management around your selected idea?

A Low Carbon Development Officer has been managing the EV project and providing broad updates to the community. For example, updating the community on developing a design, a feasibility study and the location of the EV chargers.



Funded through the Just Transition Fund and the Carbon Tax Fund

How has that stood the test of time through the project? Have you had to revise your plans. How have you managed that process?

A community land use plan for Applecross was undertaken and there were various locations for EV development and agreed locations, which supported the planning and project management approach.

If plans had to be revised, another adjacent site could be utilised and the community would be asked to vote on a site.

How did you identify a funding need?

The current hydro is community owned, with a community share issue unlocking a 4% annual return and any profit goes to the community company, making around £15,000 per year. The EV is critical for generating revenue.

However, funding was required for the initial brief design stage and feasibility study to OFGEM. Without this funding, the project would not have been able to proceed.

How have you managed the process of bidding for funding?

Urban Foresight identified funding options for the construction stage. The Board of Directors and the Low Carbon Development Officer have applied for OFGEM for the next phase.

Did you have a need for specialist expertise for your project? If so how did you handle that and approach experts?

Urban Foresight were procured to manage the two phases of the AppleCoRRE project, producing both the feasibility and design studies. Urban Foresight were sourced through open tender. Urban Foresight are also actively in contact with the Applecross Community Company to support the future development of the project.

What have been the hardest difficulties to overcome and how did you overcome them?

A key difficulty was a VAT issue which meant the feasibility study may have been over budget. All firms undertaking the feasibility study collectively agreed to reduce their costs to ensure the feasibility study would be under budget and factored into the next stage of the project.

This involved directly negotiating with the firms undertaking the feasibility study and collectively agreeing a fee.

Has the community managed to stay true to the original project vision? If not, why not? If it has, how has this been achieved?

The project is simple and therefore remained true to what the community company originally envisaged.

Only providing broad 'stage' updates to the community has kept the community on board.

What have been the biggest learnings from the delivery of your project?

Identifying issues such as VAT and recognising if you are a development trust or a charity is key before committing to large investments.

Guaranteeing funding further ahead of time following the feasibility study is a key lesson, alongside estimating the total project cost at feasibility stage.

Identifying the potential capital funding for construction, potentially sourcing private investors.

Communities need a robust planning approach for undertaking funding applications to avoid missing funding opportunities.

What decisions, or elements of organisation have been the most important in the delivery of your project?

The Board of Directors have been key in making decisions to continue the project as long as it is fully funded, although this will be shaped by future funding decisions taken by OFGEM.

What were the most important sources of advice and guidance for your community as you moved through the different phases of the project?

CARES have provided a lot of advice on the use of technology and also funded the initial design.

The Energy Saving Trust have also advised the community on the use of technology in the project.

Highland Council have been supportive as it is within its remit and have also provided grant support.

Key contact

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Links

Website: <https://www.applecrosscommunitycompany.org/company-projects/apple-juice-ev-charger/>