



Invitation to Tender

For Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh)

Consultancy Brief

February 2016

BRIEF FOR CONSULTANT TO CARRY OUT LOCAL SUPPLY FEASIBILITY, PRELIMINARY DESIGN AND DEVELOPMENT WORK AT CARLOWAY, ISLE OF LEWIS

Introduction

Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) is seeking tenders for the provision of a feasibility study, preliminary design and development work (up to and including the planning application) for a community development on Carloway Estate, Isle of Lewis. The consultant will provide technical advice and assistance to help the local community to utilise their local renewable energy resources in order to supply local demand, with the aims of supporting the Scottish Government renewables target, creating income for the local community and increasing employment opportunities at Carloway, Isle of Lewis.

Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) is seeking a consultant who can provide expertise, knowledge and resources not otherwise available in the community group. Knowledge of renewable energy feasibility, local energy supply systems, preliminary design, development work and extensive practical knowledge in the field will be essential, along with demonstrable experience of assistance with similar projects.

Feasibility, Preliminary Design and Development Work

Background

Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) is a new community owned estate. The estate was purchased on 1st May 2015 and includes 11,500 acres, approximately 600 people and just over 200 crofts. The mission of the Trust is to *Develop Our Land, Our Assets and Our Community*. The purposes include environmental protection or improvement, advancement of community development and regeneration of the area (Callanish, New Park, Breasclete, Tolsta Chaolais, Doune, Kirivick and Knock Carloway). Renewables are a key priority for the Trust as a sustainable income source and method to help recognise their purposes.

Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) has previously commissioned Wind and Hydro Energy Feasibility Studies considering the options for a community energy development on Carloway Estate. The studies reviewed a number of different options, with an emphasis on projects smaller than 50kW due to relevant grid constraints at the time of the study. Since these studies were carried out, the local grid has been further constrained to only allow grid export of 3.68kW/phase (G83 connections).

Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) are now looking to build on the initial work carried out and investigate the potential for an innovative solution supplying electricity directly to West Lewis Water Treatment Works, Carloway, Isle of Lewis, HS2 9AG. Scottish Water consumes circa 380-400 MWh per annum at this site and the site baseload varies between 10 and 80 kW.

Scottish Water is supportive of this concept and early consultation work has shown community support for the project. This study will investigate the options for a local energy use project and identify the preferred option to take forward to obtain planning permission.

Scottish Water is interested in purchasing the power from the Community for 20 years on a fixed price basis, indexed to inflation. The power price will be negotiated with Scottish Water to enable the community to meet its investment criteria.

The work as a minimum will be split into three phases, with “break points” between the phases that will provide the opportunity to reassess the viability of the project before moving onto the next phase. The three phases will be as follows:

1. Phase 1 – Feasibility study and options review BREAK POINT 1
2. Phase 2 – Preliminary design BREAK POINT 2
3. Phase 3 – Development work (including local consultation, consultation with relevant stakeholders, submission of planning application)

Contractors may suggest additional break points if they believe these would be beneficial for determining viability.

Extent of the study

Phase 1: Feasibility study and options review

The initial piece of work would investigate the potential for local supply to the West Lewis Water Treatment Works (Carloway, Isle of Lewis) from a locally sited renewable energy resource. This will include reviewing the previously undertaken studies (Carloway Estate Wind and Hydro Feasibility Study Phase 1; Carloway Estate Wind and Hydro Feasibility Study Phase 2 and 3), analysing the energy requirements of the Water Treatment Works (data will be made available by Scottish Water), carrying out modelling to see how well-matched the generation and demand would be and assessing the technical and financial viability of a system incorporating renewable generation being used by demand from Scottish Water, and any associated controls, storage and other systems necessary.

It is anticipated that the consultant should include, but not be limited to:

- Review of the previous work carried out including
 - Previous site analysis and description considering suitability for this project;
 - Previous resource assessment (including wind resource, head, flow rate and catchment area analysis) for any sites appropriate for this project;

- Investigate potential for community-owned renewable generation with supply to West Lewis Water Treatment Works, including a suitable site for renewable development including new site options if appropriate. This could include site at new dam currently being proposed by Scottish Water;
- Analyse energy requirement (and potential future requirements) of West Lewis Water Treatment Works (energy usage data has been provided by Scottish Water and will be provided to the chosen consultant);
- In consultation with Scottish Water, carry out an electrical survey at the West Lewis Water Treatment Works to determine how the embedded generation will be connected to Scottish Water;
- Identify suitable scale and type of technology for local generation and demand project (including innovative options such as storage if applicable).
- Identify control systems and/or storage which would be required
- Assess constraints such as, but not limited to, those listed below, to confirm that there are no high level “show-stoppers”:
 - The environmental impact on the local area, including designations, impact on protected species, etc;
 - Potential impact on local heritage;
 - Grid constraints or associated problems;
 - Access to development rights on any proposed sites;
 - Access for construction equipment and project site.
- Following analysis of site and technologies, propose a preferred option(s). This options appraisal should review and consider (at the minimum):
 - Technical and physical constraints of development at the site;
 - Estimates of scheme characteristics and key assumptions relevant to technology (installed capacity, estimated capacity factor, estimated annual energy yield for wind or head, design flow rate, design power output, annual energy yield for hydro);
 - Potential permitting/environmental constraints;
 - Preliminary financial assessment of the options including:
 - Initial estimates of capital costs (based on budget enquiries for key equipment and infrastructure) and operation and maintenance;
 - Payback over the lifetime of the project, considering the cost of finance and reviewing whether loan/private grant and Feed-in Tariff or public grant (and no Feed-in Tariff) is more viable;
 - Details of suitable financial arrangements for selling energy to Scottish Water (this would ideally be a financially favourable arrangement for both Carloway Estate Trust and Scottish Water)

(key metrics such as land lease should be agreed with Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh)). Any appropriate options for ownership should be examined, including joint ownership with a commercial developer.

 - Sensitivity analysis of key factors influencing project viability;
 - Risks of developing a scheme at the site, and how these can be mitigated;
 - All recommendations for technology should include details on available equipment

and suitability for site in terms of local conditions (eg. wind speeds).

The resulting Phase 1 report will summarise the review and confirm options for Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) in terms of the site for the scheme, the scale of generation and demand, the technologies which will be most viable, the likely income from the project, assumptions made etc. It should also include a high-level risk assessment based on the identified options.

Phase 2: Preliminary design

Following agreement with Carloway Estate Trust and confirmation that a viable project has been identified, a preliminary design should be prepared for the preferred option. This will include a full economic assessment of a local energy use scheme at the site and preliminary design work to the required level to allow a planning application to be submitted (i.e. detailed design would follow in a later phase of the project).

In the preliminary design phase it is anticipated that the consultant should include, but not be limited to:

- Preliminary specification for all key project elements – description of all key equipment, specifications and sizing;
- Preliminary project layout;
- Preliminary design drawing – initial design drawings should be undertaken; these should be of suitable detail that they can be used for the planning application of the scheme.
- Consenting discussions – the consultant may wish to consult with the local planning authorities, SEPA and Scottish Natural Heritage (SNH) over factors that may affect the preliminary design of the project and influence on its performance.
- System Performance – the system efficiency, power output, annual energy yield – this should include all the key assumptions used. Where possible, P50 and P90 energy yields should be provided.
- Capital cost – the provision of a detailed costing for all technology, infrastructure and services required. This should include quotations for core equipment and include a detailed cost breakdown and provide an estimate of the cost accuracy;
- O&M costs – estimates of annual operation and maintenance costs should be provided, including key assumptions and a breakdown of elements included.
- Detailed electrical scope for the connection to Scottish Water, including an electrical design, subject to Scottish Water’s standards and specifications.
- Detailed Economic analysis – a detailed economic analysis should be conducted, given the detailed costing of the project and any other financial outcomes from the preliminary design. This should include sensitivity analysis to variation in costs/rates. This will be central in the community making a business case for securing finance for the project;

The key deliverable of this phase will be a written report that will be provided to Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh), including all preliminary design work. The financial model should also be provided in an excel format.

Phase 3: Development work

Following successful completion of Phase 2 and a positive outcome from the financial analysis, the project will advance to development activities to enable Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) to secure capital funding to move into the implementation phase. These activities include:

- Preparation and submission of the planning permission documents required, including environmental surveys and submission to Comhairle nan Eilean Siar;
- Preparation and submission of CAR application (for SEPA all required licences) and supporting information/studies and submission to SEPA if hydro is the preferred technology.

Contractors should make allowance for all the fees associated with these applications and include contingency for dealing with queries during the applications (assumptions on this time allowance should be clearly stated).

The key deliverables for this phase will be the permitting application documents; these will be provided to Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) in draft prior to submission to the relevant regulatory bodies.

Methodology

Consultants should propose how they intend to approach the delivery of the requirements set out above. The project should be phased to include break points (this can be beyond the break points already specified in the scope of work), such that any barriers identified in the development of the project that would completely prohibit further development. At the break points, barriers should be clearly outlined by the appointed consultant and Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) will determine, in consultation with the appointed consultant, whether the project should proceed further.

In addition to the phased approach, we would expect the following activities to be included in the methodology:

- Introductory meeting with Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) to confirm project requirements and assess specific project needs and preferences. Project management and working methods, project timeframe, logistics, risk management and project communications should also be discussed and agreed at the introductory meeting. Following the introductory meeting a document outlining the revised and agreed scope of work should be issued.
- Consultation when and where appropriate with relevant stakeholders, e.g. SEPA / SNH / Scottish Water, to identify potential 'show stoppers'.
- At least one site visit.
- Regular progress reports and close liaison and co-operation with Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh).
- Presentation to Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) of the findings and draft reports, with opportunities for discussion and questions. The outcome of this presentation will be used to finalise the project reports. This can be carried out by teleconference to save costs.

Expected Outputs

The expected outputs are stated in the section *Extent of the Study* above. These are predominantly in a report format or specific to the deliverable.

In all cases initial versions of the deliverables will be provided to Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) in a draft format, allowing time for comments from the group.

For each project phase a meeting with Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh), and any other parties invited by Directors, should be held to present the draft report and receive comments and suggestions for the final draft of each of the phase reports.

Following comments, one hard copy of the final deliverables will be provided to Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh). In addition, an electronic copy of the final report is to be provided in Microsoft Word or PDF format (and Excel where appropriate). Copyright of the report is to be vested in Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh).

Project Timetable

The key milestones are:

- **13 March 2017:** Closing date for tender responses
- **Week commencing 20 March 2017:** Successful bidder will be notified; final appointment will be subject to successful funding application
- **Week commencing 3 April 2017:** Project initiation – meeting with Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) representatives (Please note that the timescale for this meeting is subject to funding approval).
- **Early May 2017:** Submission and presentation of draft final report
- **End May 2017:** Submission of final report

Details of the timescales for completion of each phase will be agreed with selected consultant at the project initiation.

Guidance on tender submissions

The following is required in the tender response:

- **Relevant experience and past performance.** Tenderers should:
 - Provide details of relevant company experience. The ideal submission would show a strong record, knowledge and experience of developing community owned projects in line with the requirements of this tender.
 - Provide two contactable references for relevant previous projects.
- **Technical skills of project team.** Tenderers should:
 - Clearly identify members of the project team.
 - Demonstrate relevant skills and knowledge of project team.
 - Provide professional CVs of individuals who will be involved in the delivery of the contract.
- **Project management and risk.** Tenderers should:
 - Detail project management processes.
 - Set out the project plan demonstrating how the project will be phased.
 - Outline their understanding of risk and approach to managing project risks.

- **Project understanding.** Tenderers should demonstrate understanding of the requirements of the project.
- **Methodology.** Tenderers should:
 - Demonstrate how all elements described in the tender specification will be met.
 - Provide a proposed project programme for the delivery of the different elements and key milestones for the scope of works.
 - The contractor should clearly state any specific exclusions from the scope of works.
- **Price.** Tenderers should:
 - Provide detailed costing including Travel and Subsistence and any other expenses. Project costing should be clearly broken down by project tasks.
 - Demonstrate value for money.

The tenderer should have a single point of contact within the organisation that is responsible for the project and contact details should be included in the tender response.

The tenderer should also provide details of their Professional Liability Insurance.

Responses should not exceed a page limit of 20 pages, excluding cover pages, executive summary and appendices.

Budget

The overall cost of this work is not expected to exceed £10,000, including all works, materials, fees and other expenses. The successful tender will demonstrate the best value in meeting the specific requirements of the brief.

Tender Evaluation Criteria

All submissions from suppliers will be scored on both price and quality. The contract will be awarded to the supplier who receives the highest total score. The overall Price/Quality split for this tender will be 30%/70% respectively with the following quality criteria considered

Criteria	Weighting %
Value for money (detailed costings must be provided)	30%
Previous relevant experience	15%
Relevant skills and qualifications of proposed team	15%
Understanding of the specific project requirements	10%
Methodology and approach proposed	30%
Total	100%

Each of the quality criteria will be scored using the scale below:

- 0 - No response or wholly unacceptable;
- 1 - Partially unacceptable: Partially meets Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) requirements, but with significant weaknesses;
- 2 - Acceptable: Largely meets Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) requirements but with some weaknesses;
- 3 - Good: Fully meets Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) requirements;

4 - Excellent: Exceeds Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) requirements and adds value.

Those submitting a tender may be invited for interview.

General Variations to Contract

It is possible that other unforeseen additional work will arise during the course of this contract. As any of this may give rise to a requirement for a variation in agreed works or a contract extension, the successful consultant would be expected to quantify its charges for any potential additional work. This will also be subject to formal approval by Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) and the funders prior to any further work being undertaken.

Equally, as the study and development progresses, 'showstoppers' to the development may become apparent and further work after this would not be worthwhile. In this case, a pro rata payment would be made for the work and associated reports completed. Tenderers should clearly identify costs relating to each project phase in their response.

Terms and Conditions

The work described above is what is currently envisaged to be required, but Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) reserve the right to vary these requirements, by mutual agreement with the successful consultant.

Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) also reserves the right to terminate the contract, subject to full payment of work which has been satisfactorily completed.

Submissions should be open for acceptance for up to ninety days.

Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh) is under no obligation to accept the lowest or any tender submission.

Intellectual Property

The report, presentation and all intellectual property and copyright of all materials prepared under this commission shall rest with Carloway Estate Trust (Urras Oighreachd Chàrlabhaigh).

Tender Submission and Closing Date

Contractors should email their intent to submit a proposal to sally@carlowayestatetrust.co.uk by 6 March 2017. The deadline for submission of the tenders is 5pm on 13 March 2017. Tenders should be as a pdf email attachment or three hard copies and addressed to:

Name: Sally Reynolds

Email: sally@carlowayestatetrust.co.uk

Address: Carloway Estate Trust, Old Carloway School, Knock, Carloway, Isle of Lewis, HS2 9AU

The contract will be managed by Carloway Estate Trust (Urras Oighreachd Charlabhaigh)'s Board of Directors.

Any questions regarding the tender should be emailed to sally@carlowayestatetrust.co.uk.