

## Invitation to Tender



**For Colintraive & Glendaruel Development Trust**

### Consultancy Brief

**August 2014**

**BRIEF FOR CONSULTANT TO CARRY OUT A HYDRO FEASIBILITY STUDY AT THREE POTENTIAL SITES IN GLENDARUEL, ARGYLL - SITE 1 LOCATION - GRID REFERENCE: NS X 201948 Y 687982, SITE 2 LOCATION - GRID REFERENCE: NS X 201823 Y 687894 & SITE 3 LOCATION - GRID REFERENCE: NS X 299800 Y 684170**

### Introduction

Colintraive & Glendaruel Development Trust (CGDT) is seeking tenders for the provision of a feasibility assessment for potential micro hydro schemes. The consultant will provide technical advice and assistance to help CGDT utilise their local hydro resource, with the aim of creating income for the local community, increasing employment opportunities at CGDT and supporting the Scottish Government renewables targets.

CGDT is seeking a consultant who can provide expertise, knowledge and resources not otherwise available in the community. Knowledge of small scale hydro feasibility assessment, hydro development work and extensive practical knowledge in the field will be essential along with demonstrable experience of assistance with similar projects.

### Hydro Pre-Feasibility Study

#### Background

Colintraive and Glendaruel Development Trust is a membership-led charitable enterprise formed to work with and for the Community to develop environmentally and economically sustainable projects and activities that will enhance community resilience, employment, education, health and recreation. CGDT has identified three burns (from an independent desk top study and site visits from their Development Officer) that it believes has the potential to be operational and productive. Site 1 and 2 are situated on Forestry Commission Scotland (FCS) land and as such will be part of their National Forest Land Scheme Community Renewables portfolio. Should a development go ahead at one of these sites CGDT and the winning consultants will be expected to work closely with FCS. An initial meeting with FCS's renewables team has been earmarked for Thursday 18<sup>th</sup> September and the winning consultants will be expected to attend this meeting.

The third potential site (The Clachan Burn) sits in Stronafian Forest which is currently owned by CGDT.

The location of the first two sites, **site 1 (NS X 201948 Y 687982)** and **site 2 (NS X 201823 Y 687894)** lie close together in an area known as Duiletter just North of the Clachan of Glendaruel, Argyll, PA22. The grid references are marked where the burns cross the A886 road. **Site 3 (NS X 299800 Y 684170)** lies a few miles south of sites 1 & 2 in the Clachan of Glendaruel and again the grid reference location has been taken from where the burn crosses the A886.

All three sites have good access to undertake a full feasibility study. Sites 1 & 2 currently have no civil works in place. Site 3 has a small private water supply running off it and it has some remains of a water holding dam from the time when it was used as the main source of water to the local community.

Due to financial and time constraints CGDT anticipate that a maximum of 2 of the 3 projects will only proceed at this time. At this time site's 1 and 3 are the Trust's preferred choices for full feasibility analysis.

The preliminary feasibility study will provide CGDT with advice on the hydropower generation potential and identify barriers to the scheme development. The objectives of the study are to:

- Identify physical and economical aspects of practical opportunities for developing hydro scheme at the chosen site/s.
- Examine the local topography and provide an initial assessment of the scheme's viability
- Identify key areas of risk and suggest mitigation actions
- Determine the economic viability of each site/s
- Evaluation of the site/s to identify the most suitable option
- Develop a roadmap for the Community Group for the next steps going forward (pre-planning)

The study should provide clear advice on which options are the most viable, and where subsequent decision-making will need to balance various factors against each other.

The work should also highlight the potential risks involved in the project and any potential barriers to development. It will suggest where risks can be mitigated and highlight any issues that could prove to be insurmountable.

The study should consider how financial benefits will be achieved from the scheme(s), both for CGDT and by FCS. Ideally, the consultant should provide advice on a range of potential business models, indicating the strengths and weaknesses of each.

## **Scope of the study**

The scope of work is to conduct a feasibility study to make an assessment of the potential hydro sites. The study will specifically include:

- Review of previous work carried out in the local area (desk based research, consultations with community group members, local authority planning database etc);
- Review of hydro options for the proposed locations and outline scheme layouts:

- Catchment and hydrology, estimate of water resource available (and generation of flow duration curve) and head measurements (including use of any appropriate software as required and with information on testing and validation of the software used);
- Site visit(s) (walk-overs) to evaluate potential hydropower locations;
- Review of construction access to the site;
- Outline scheme layouts (equipment requirements), construction requirements for the hydro site (intake, weir, powerhouse, penstock route etc.);
- Identification of suitable grid infrastructure in the local vicinity (and initial discussions with the DNO as required);
- Evaluation of estimated annual energy generation and CO<sub>2</sub> emissions offset;
- A preliminary financial analysis with cost estimations and revenue (capital cost estimates and operation & maintenance) clearly noting method of estimation, details of relevant assumptions and uncertainty of estimates;
- An initial understanding of the following, with future recommendations should be provided:
  - Planning and consents (e.g.: planning permission, SEPA guidance, land owner holdings etc.), this should consider *SEPA Guidance for developers of run-of-river hydropower schemes: Annex A to Part A: Guidance on identifying provisionally acceptable hydropower schemes* (as a method of screening the suitability of different hydro options).
  - Environmental impacts on the local area (e.g.: Scottish Natural Heritage designated protected areas)
  - Risks of developing a hydropower scheme at the site, and how these risks are best mitigated going forward.
- An evaluation of the hydropower sites reviewed, and preferred option presented to the group. This option appraisal should (at the minimum):
  - Consider technical and physical constraints of hydro development for the different hydropower options;
  - Estimate of scheme characteristics and key assumptions (head, design flow rate, design power output, annual energy yield);
  - Potential permitting and environmental constraints;
  - Account for most recent FIT tariff rates that may influence the sizing of the scheme and sizing to optimise benefit from the FIT;
  - Budget cost estimations (capital costs and operation and maintenance) and revenue.

The resulting report will summarise the different hydro options for the community in terms of the site/s available, the scale of generation, the likely income from the project, key assumptions made, variations of costs etc. It should also include a high level risk assessment based on the identified options and provide clear recommendations for CGDT on how best to develop the project and any specific requirements for later project phases.

## **Methodology**

Consultants should propose how they intend to approach the delivery of the requirements set out above.

Where possible the project should be phased to include break points, such that any barriers identified in the development of the project that would completely prohibit further development, should be outlined (for example, if resource analysis reveals limited annual flow). CGDT will determine, in consultation with the appointed consultant, whether the project should proceed further.

We would expect the following activities to be included:

- An introductory meeting with us to assess needs, preferences and aspirations, as well as to agree ways of working, timeframe, logistics, etc.;
- Confirm the scope of works following the introductory meeting with any amendments / adjustments to the proposal highlighted and issued. It is anticipated there will be minimal changes;
- Site visits to conduct walk-over surveys and data collection;
- Regular progress reports and close liaison and collaboration with CGDT;
- Presentation to CGDT of the findings and draft reports, with opportunities for discussion and questions. The outcome of this will be used to finalise the reports.

## **Expected Outputs**

The expected outputs are stated in the scope of works. These are predominantly in a report format or specific to the deliverable.

- A preliminary report should be provided electronically, outlining the initial constraints analysis and highlighting the site/s with the greatest potential. These sites will be agreed with CGDT and then taken forward to the more detailed feasibility.
- A draft final report should be submitted (electronically and two hard copies) for comments, providing information as stated in the reporting section.
- A meeting with CGDT, and any other parties invited by CGDT, should be held to present the draft report and receive comments and suggestions for the final report.
- Following comments, two hardbound copies of the final deliverable will be provided to CGDT. In addition, an electronic copy of the final report is to be provided in Microsoft Word or PDF format. Copyright of the report is to be vested in CGDT

## Project Timetable

The key milestones are:

- **5.00pm Monday 1<sup>st</sup> September 2014:** Closing date for tender responses
- **Friday 5<sup>th</sup> September 2014:** Successful bidder will be notified
- **Friday 12<sup>th</sup> September 2014:** Project initiation – meeting with two of CGDT’s representatives in Colintrave Village Hall and visits to the three potential sites
- **Thursday 18<sup>th</sup> September 2014:** Meeting with CGDT and FCS at 1.00pm in Glenbranter Forestry Offices, Argyll, PA27 8DJ
- **Friday 13<sup>th</sup> February 2015 (Estimated):** Submission and presentation of draft final report
- **Monday 2<sup>nd</sup> March 2015 (Estimated):** : Submission of final report

There is flexibility in the timetable for the project phases and 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.**

The ideal submission would show a strong record, knowledge and experience of carrying out pre-feasibility work and developing community owned hydro projects to planning permission and beyond. Tenderers should:

- Technical hydro power capability, including pre-feasibility and design capability;
  - Experience of working with Community Groups on energy related projects
  - A track record of taking hydro projects through the development process, including activities such as applying for CAR licences/consulting with SEPA and managing steps in the hydropower development process;
  - A reference (and contact details) should be provided for a minimum of three examples.
- **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 demonstrate how the project will be phased.
    - Outline their understanding of risk and approach to managing project risks.
  - **Project understanding.** Tenderers should demonstrate and 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 exclusion from the scope of works.
  
- **Price.** Tenderers should:
  - Provide detailed costing for all activities in the scope of work. Project costing should be clearly broken down by project tasks.
  - The contractor should clearly state any specific additional activities to the scope of works (and why they have been included), these should be priced as separate line items.
  - Give an indication of value for money.

## Budget

CGDT will not be receiving a CARES grant or loan for this work so all tenders should provide best quotes possible as CGDT will be funding 100% of the costs and has a limited budget. Please provide quotes for taking one and two of the feasibility projects forward. Quotes should include 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

Price Criteria	Weighting %
Price itemisation of services	10%
Price and value for money	90%
<b>Total</b>	<b>100%</b>

Quality Criteria	Weighting %
Previous relevant experience e.g. 3 previous examples of work that are relevant to this contract	25%
Relevant skills and qualifications of proposed team	20 %
Understanding of the specific project requirements detailed in the scope of services	20 %
Methodology and approach proposed	20 %
Risk identification and mitigation	15 %
<b>Total</b>	<b>100%</b>

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

0 - No response or wholly unacceptable;

- 1 - Partially unacceptable: Partially meets CGDT's requirements, but with significant weaknesses;
- 2 - Acceptable: Largely meets CGDT's requirements but with some weaknesses;
- 3 - Good: Fully meets CGDT's requirements;
- 4 - Excellent: Exceeds CGDT's requirements and adds value.

The 'price and value for money' evaluation will be scored as follows:

The maximum marks available for this part of the Tender will be 5 and will be awarded to the cheapest price submitted by a Tenderer who meets all of the tender requirements. The remaining Tenderers will receive marks on a pro rata basis from the cheapest to the most expensive price. The total price submitted by the Tenderer will be used for the purpose of this evaluation.

The calculation used is the following:

Score = Lowest Compliant Tender Price/ Price of Tender being scored x 5 (Maximum available marks)

**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 CGDT and the funders prior to any further work being undertaken.

Equally, as the study and development progresses, 'showstoppers' to the hydro 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 CGDT reserve the right to vary these requirements, by mutual agreement with the successful consultant.

CGDT 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 sixty days.

CGDT 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 CGDT.

## **Tender Submission and Closing Date**

The deadline for submission of the tenders is 5.00pm on Monday 1<sup>st</sup> September. Tenders should be as a pdf email attachment and one hard copy addressed to:

Name: Eamon King

Email: [eamon@cgdt.org](mailto:eamon@cgdt.org)

Address: Colintrave & Glendaruel Development Trust, The Village Hall, Colintrave, Argyll, PA22 3AS

The contract will be managed by Eamon King

Any questions regarding this tender should be emailed to [eamon@cgdt.org](mailto:eamon@cgdt.org) by 5.00 pm Wednesday 27<sup>th</sup> August.