



HELSTON TOWN COUNCIL

Konsel an Dre Hellys

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Chris Dawson Town Clerk



Invitation to Tender for Professional Services

An Invitation to Tender for services to provide technical assessment and a business plan for a range of renewable energy and energy storage installations in the Helston and Lizard area.

30th July 2020

Please send tender returns to: -

Town Clerk

Helston Town Council

The Guildhall

Helston

Cornwall TR13 8ST

Please send completed tender documents (paper copy and memory stick) in a sealed envelope marked 'Rural Community Energy Fund tender' to be received by

12.00 noon on Monday 24 August 2020.

Please contact Helston Town Council if you require any further information.

1 Background

In March 2019, Helston Town Council (HTC) declared a climate emergency and facilitated the forming of the Helston Climate Action Group (HCAG). HCAG comprises members of HTC and members of the local community. HTC is now working in partnership with HCAG on a number of projects contained in the Helston Climate Action Plan published in September 2019.

A key element of HTC's aims in this Plan is to reduce the carbon footprint of local communities by increasing renewable energy generation locally and to use the surplus funds from local ownership of energy generation for the benefit of the local community.

Helston has recently benefited from ERDF-funding, via Helston Downsland Trust, to help benchmark Helston's current carbon energy footprint and explore what local renewable energy options exist. Whilst this report shows what can be done within the Town boundaries, it also clearly indicates that the best option to reach carbon neutrality is to work closely with neighbouring parishes on the Lizard to develop our local resources. Helston is the only town and the local centre for communities on the Lizard, as recognised by Cornwall Council in the Helston and South Kerrier Community Network Area.

In September 2019 the Town Council adopted the Helston Climate Action Plan¹ which includes: -

- Aiming to reach Carbon Neutral by 2030
- Restoring local nature
- Promoting local resilience
- Supporting local food production
- Developing local renewable projects such as wind, PV and coppice wood
- Promoting local community energy projects

There are considerable electricity grid constraints in this area of Cornwall. The Town Council has therefore concluded that the most effective ways to develop the Action Plan and move towards carbon neutrality include working within these local grid constraints. Consideration of local Demand Side Response (DSR) and energy storage within the area is required as an enabler to the deployment of more local renewable electricity. HTC are keen to assist the local ownership of renewable energy installations to enable higher local benefits to flow to our communities.

HTC intends to apply for grant funding under Stage 1 of the Rural Community Energy Fund (RCEF) to investigate the feasibility of a community energy project. The application must include at least three quotations for professional services to deliver the work and it is in this respect that you are being invited to bid for the work as set out in Section 3.

The outline structure required for the Final Report is set out in the Appendix and HTC expect to see these areas covered as a minimum.

¹ <http://www.helston-tc.gov.uk/VirDir/CoreContents/News/Display.aspx?id=23718>

2 Area of Study: Helston and the Lizard



The area of interest for this feasibility work is Helston Town and the parishes on the Lizard, comprising: -

- St Keverne
- Grade Ruan
- Landewednack
- Mullion
- Cury
- Gunwalloe
- Porthleven
- Mawgan in Meneague
- St Martin in Meneague
- St Antony in Meneague

3 Outline of tender tasks

The following sections must all be considered as part of the feasibility study's required output; therefore, HTC would like to know how you propose to deliver against each of the following sections in turn. If the bidder plans to sub-contract work packages in order to bring specific expert knowledge, then the costs incurred for each element of specific advice or delivery must be listed in the cost breakdown. Regardless of the above, the HTC requires a single tender containing separate cost statements for the three sections noted below.

- Renewable energy technology: solar PV and energy storage
- Business Plan development
- Grid constraints issues and their alleviation

As this project contributes towards the transitioning to a Zero Carbon environment, it is essential that the work programme includes significant liaison with HTC's Projects Officer (PO) who will be co-ordinating a programme of community outreach, volunteer involvement and development of community benefits in liaison with the external energy consultant to be appointed. The labour costs of this work will be fully funded by the Council outside of the RCEF bid. It is the intention for the PO to prepare a report on this work which will be incorporated into or appended to the external consultant's Final Report.

3.1 Renewable energy technology: solar PV and energy storage

3.1.1 *Large Rooftops*

The aim is to identify a number of suitable rooftops in this area, each capable of hosting at least 100kW and to produce a list of roof top owners who have agreed to consider the option of an HTC PV system on their roof. The list should include at least 12 sites and include already identified publicly owned buildings.

For each roof the following should be noted: -

- Roof owner (and lessees)
- Contact details of all parties
- Owner's willingness to agree a long-term lease
- Scale and orientation, allowing for permitted development rights
- Access issues
- Grid connection issues including size of existing grid connection
- Type and use of building and indication of the occupier's present electricity use and an indication of how it varies with time of day and year, if possible, by use of the site half hourly data.
- Roof area available and its visibility
- Any planning issues
- Other relevant issues – absentee roof owner, physical state and age of building/roof, building owner's plans for any changes.
- Outline costs assessment

3.1.2 Land Arrays

Initial assessment of suitable locations for PV arrays of at least 500kW against at least the following criteria>-

- Potential for grid connection or local high summer electricity user
- Willing landowner
- Potentially suitable for planning success
- Suitable access and low visibility
- Costs assessment

3.1.3 Energy Storage

An initial assessment to be made of the two potential pumped storage sites already identified in the study area. The sites are the two quarries of Dean Quarry and Porthoustock, which have potential for pumped storage with the sea as the bottom reservoir. This assessment should cover the following: -

- Technical issues especially sea access, shaping and lining, outline sea barrage and plant design
- Energy assessment including potential for operation in conjunction with local renewable electricity installations
- Landowner discussions
- Initial planning discussions
- Liaison with grid tender consultants on grid issues
- Recommendations for next steps

A second outline assessment should be made of the potential for local battery storage at the sites of larger land arrays, to assist their grid connection access and costs.

This should include

- Assessment of space and capital cost considerations
- Noise assessment for nearby homes
- Impact on grid connection costs

3.2 Business Plan

HTC requires the delivery of an initial cost analysis exercise for the project to include as much detail as possible on capital and operating expenditure, including professional fees; design fees; equipment procurement; construction costs; installation costs auxiliary equipment purchase and installation; grid connection fees; engineering overheads, commissioning costs and running costs.

In addition, a breakdown of expected income streams is required: generation income from the sale of electricity to potential private wire users and/or sale of electricity to licensed electricity suppliers, heat sales and Renewable Heat Incentive payments. These income streams should be subjected to future stress modelling to take into account the effect of electricity price changes with an indicator of the sensitivity of the business case to fluctuating electricity prices and values.

The third element of the Business Plan is proposals on suitable corporate governance structures to include appropriate models ensuring high community benefits are available from the income streams, alongside suitable methods of raising the required capital and operating finance. This analysis should include an appraisal of differing debt options, asset ownership, community shares, etc

In line with the criteria for RCEF grants the intention would be to achieve a minimum of 50% community ownership for supported installations at the implementation stage and options for governance structures should be predicated on that basis.

It should be assumed that project equipment is installed from 2022 onwards.

The business plan should also make suggestions as to the next steps and outline obstacles and constraints which may still need to be overcome.

3.3 Grid Constraints Study Requirements

The following sections must all be considered as part of the grid study's output, in the form of a report. Therefore, we would like to know how you propose to deliver against each of the following sections in turn.

- 1 High level assessment of the local grid constraints for connecting 4+MW of local PV from a range of rooftop sites of 100kW+ scale, and land arrays of >500kW.
- 2 Outline of methods to overcome these constraints to a greater or lesser degree, including using local onsite battery storage
- 3 Outline assessment of grid issues around the installation of one of two potential pumped storage options, with indications of scaling issues for step changes in grid connection costs
- 4 Outline of Demand Side Management Options and indications of expected participants from the larger electricity users in the study area
- 5 Outline conditions needed for success in implementing one or more of approaches, including technical and financial issues

6 Proposed next steps for project implementation

4 Budget

Budget will be available for these three sections of work

4.1 Renewable energy technology assessments

4.2 Business plan

4.3 Grid constraints and actions proposed

Please give a time and cost breakdown for each element of work proposed (including any sub-contracted works).

5 Bid requirements and tender evaluation

5.1 Bid Requirements

Please submit CVs of all personnel to be assigned to the project listing relevant experience in the specific areas. Proof of Professional Indemnity Insurance must be provided to the value of at least £1million.

Please submit your bids to the return address by **12.00 noon on Monday 24th August 2020**.

As this is part of a Rural Community Energy Fund application there is no guarantee that any contract will be awarded unless and until a positive grant decision has been received in writing.

5.2 Tender evaluation

Tenders will be assessed against the following evaluation matrix.

Topic	overall weighting	category	category weighting	element	element weighting
Price	20%		20%		20%
Quality	80%	technical	20%	capability	10%
				resources	10%
		service delivery	5%	flexibility & communications	5%
		quality	10%	customer care/quality of service	10%
		environment	25%	low carbon delivery	20%
				environmental targets	5%
		social value	20%	awareness of local issues	10%
				social enterprise capability	10%
Totals			100%		100%

HTC working in partnership with the Helston Climate Action Group is committed to moving the local area to low carbon working as quickly as possible and we see this project as an important part of how we move in that direction. This project aligns with the principles and vision of the Helston Climate Action Plan.

Appendix

RCEF requirements for report of feasibility study

1. Executive Summary
2. Community Engagement
3. Community Benefits
4. Technology
5. Financial Projections
6. Planning & Permitting
7. Site
8. Operation and Governance
9. Scheduling
10. Conclusions

for more details please see the RCEF Guidance Notes