



## Invitation to Tender:

# Installation and commissioning of Biomass Boiler System at Lyth Arts Centre, Caithness

Contract Name:	Installation and commissioning of Biomass Boiler System at Lyth Arts Centre, Caithness
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Tender response date	5pm on Monday 17 June 2019
Attached Documents	Appendix 1: Main Building Floor Plan Appendix 2: Accommodation Floor Plan Appendix 3: Possible Location of Biomass Plant

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## **1. INTRODUCTION**

Lyth Arts Centre (LAC) is the UK's most northerly mainland multi-arts centre. Every year we host a 10 month programme of music, theatre, dance and visual arts, usually from March to December. We also host artists residencies where artists stay at LAC for a prolonged period of time and create new work.

LAC is sited over two individual buildings; the Arts Centre (referred to in this document as 'Main Building') and the Accommodation block.

In 2018, Resource Efficient Scotland conducted an energy consumption review and identified Biomass as a financially and economically sustainable heating alternative to the current system of expensive and inefficient electric storage heaters, which account for around 75% of the organisations energy consumption.

Subsequently, LAC has successfully received funding from Highland LEADER to install a biomass boiler and wet radiator system, to the value of £68,000 (£81,600 including VAT).

This document forms the specification for the works to be carried out. The contractor is ultimately responsible for designing and installing a working system that provides adequate heat into the property. Since the funding is coming from public sources, LAC will not be eligible for the Renewable Heat Incentive (RHI).

It is considered essential that site visits are undertaken to adequately respond to this tender.

## **2. EXISTING SITUATION**

LAC is currently heated using costly and inefficient electric storage heaters, in both the main building and the accommodation block.

These are in the following areas:

### **Main Building:**

- Foyer: 4 x 3.4 Kwh
- Entrance: 1 x 3.4 Kwh
- Male Toilets: 1 x 2.4 Kwh
- Female Toilets: 1 x 2.4 Kwh
- Office: 1 x 3.4 Kwh
- Backstage: 3 x 3.4Kwh; 1 x 2.4Kwh

### **Accommodation:**

- Kitchen: 2 x 3.4 Kwh
- Living Room: 2 x 3.4 Kwh
- Entrance Hall: 1 x 3.4 Kwh
- Single Rooms: 3 x 2.4 Kwh
- Twin Rooms: 4 x 3.4 Kwh
- Twin Room Ensuite Bathrooms: 4 x 1.4 Kwh

There is also an additional working fireplace in the main building.

These storage heaters are currently the sole sources of heating.

### **3. SPECIFICATION**

#### **3.1 - System Design**

The Resource Efficient Scotland report initially recommended Two Grant Spira 26 kW Wood Pellet Boiler, one to heat each building. LAC subsequently also received quotes to support the Highland LEADER applications for a single larger biomass boiler (60 – 88kW), connecting the heating system across both buildings.

We are open to possibilities of either of these options: 2 smaller boilers or one larger boiler.

Tenderers shall allow for the complete system design including the boiler, flue, pipework, valves, radiators and any additional structures which would house a larger biomass boiler. The contractor will work closely with the architect (appointed by LAC) as well as LAC in drawing up plans for the installation.

#### **3.2- Proposed boiler(s) and sizing.**

LAC would like to install a Biomass boiler(s) of an appropriate size for the property, and with sufficient capacity to heat both the Main Building and the Accommodation.

The tender evaluation will consider the specification of the boiler(s) as part of the evaluation.

To allow accurate boiler(s) sizing, plans of the heated space at the property are included in drawings.

#### **3.3- Boiler location**

2 smaller boilers:

Please let us know where these boilers could be located, and if there are any implications including Planning Permissions and Building Warrants.

1 larger boiler:

There are several outbuildings at LAC that can be repurposed as a Biomass Plant room. Please see Appendix 3 for photos of these buildings.

Any adaptations to the buildings will require Planning Permission and a Building Warrant to be secured from the Highland Council. LAC will lead on the application process, supported by the appointed Biomass contractor.

#### **3.4 – Fuel Store**

A suitable fuel store shall be supplied and installed within the biomass system. The store shall be of appropriate size to the boiler(s) and the demands of LAC's projected energy consumption. This can be a proprietary product or constructed to suit the space. All fuel feed mechanisms shall

be included within the installation.

### ***3.5- Installation of wet radiator system and pipework***

The existing heating system is electric storage heaters, and there are no wet system radiators on the premises. These will be installed as part of this project. Pipework can be external as required for ease of installation and to reduce overall costs.

These radiators can be placed wherever is more effective for heating the premises, and do not need to be like-for-like replacements of the existing electric storage heaters.

If excavation is required in order to connect pipework across both buildings, please account for this in the project budgeting and delivery plan.

### ***3.6- Removal of existing equipment***

All existing electric storage heaters will be removed and disposed of by the contractor. All waste shall be disposed of in full accordance with all regulatory requirements and using licensed contractors.

### ***3.7- System controls and commissioning***

The system shall be supplied and installed with the on-board boiler controls and room sensor with display. All system controls are to be set up and training provided to LAC as part of the commissioning process.

The contractor shall be responsible for system commissioning and any required training for LAC. A copy of all operation manuals and any further information that is deemed appropriate shall be provided to LAC and the contract administrator upon completion.

### ***3.8- Future maintenance***

Contractors shall provide a single cost for a 12-month maintenance service consisting of a single maintenance visit or visits as required to meet the manufacturers recommended maintenance regime. This should not include regular maintenance that will be carried out by LAC.

## **4. PROJECT MANAGEMENT**

The appointed contractor may be the only contractor on site for the duration of the installation process. If the contractor intends to sub-contract elements of the contact (e.g. erection of boiler room housing), the contractor will work alongside the architect / LAC.

## **5. PROJECT TIMESCALES**

Project funding is now confirmed, and the installation of the Biomass system must happen before Autumn 2019. Installation will need to be flexible around the public facing nature of

activity at LAC. There are several (flexible) windows where installation can be phased, or completed, depending on the length of the installation process.

The timeline is as follows:

- Monday 17 June 2019: Tender response deadline
- Friday 21 June 2019: Award and sign contract
- Installation timeline to be established between LAC and the contractor.

## 6. TENDER PROCESS

Contractors must conduct a site visit prior to submitting a tender. Please note the dimensions and information attached within the plans (appendix 1 & 2) are for pricing purposes only and should not be relied upon on site.

The Tender response should include the following:

- Total cost of project works, broken down as appropriate
- Whether the application is for a single larger biomass boiler, or two smaller biomass boilers
- Proposed timescales of the project, and availability through Summer / Autumn 2019
- Confirm make and model of proposed boiler(s) and capacity
- Any previous experience of similar projects and references (where possible)
- Any information on preferred sub-contractors (if relevant)
- The lead company contact and their CV
- Employers, Public & Product Liability Insurance certificates
- Any further works required to those listed above, and their cost.

For reference, LAC will be using the following assessment criteria:

Criteria	Weighting
Price	40%
Previous Experience	20%
Methodology/Approach	20%
Management and Technical Skills	15%
Final design sympathetic to site aesthetics	5%

**Applications are to be sent to [info@lytharts.org.uk](mailto:info@lytharts.org.uk) (addressed to Charlotte Mountford & Tom Barnes) by 5pm on Monday 17 June. Interviews will be held in the w/c 17 June 2019.**

The following information should also act as a guide:

- The contractor must price each item separately, including VAT
- Clarifications: should any significant contradiction be apparent between the specification and the site conditions the discrepancies should be brought to the clients attention immediately. The Contractor shall include for all necessary work to complete the contract in accordance with the intent of the specification.
- Location of Services: The contractor is responsible for identifying and locating all on site services. If the contractor is unsure of the location of any services / runs a full survey should be undertaken to ensure that the proposed works won't damage any uncovered or hidden services.

- **Protection of Services:** The Contractor is to allow for full protection of any services uncovered or otherwise encountered during the course of the works. Any subsequent damage caused due to non-compliance with this provision will be met at the Contractors expense.
- **Protection of Surfaces:** The Contractor is to allow for suitable protection of all existing surfaces adjacent to the working area during the course of the contract. Suitable protection is to be laid over all floor coverings to provide protection from paint splashes, dust and debris etc. Any damage caused due to non-compliance with the above provisions will be met at the Contractors expense.
- **Rubbish & Nuisance:** Allow for daily cleaning up and clearing away all rubbish as it accumulates during the course of the works. At completion of each day, clear away all superfluous materials or plant leaving the whole of the works and site clean and tidy. Prevent nuisance from dirt, rubbish, water or any other cause to occupants and neighbors.
- **Enclosure of Work Areas:** The work area is to be suitably protected at all times. Safety barriers and appropriate warning notices are to be placed around any scaffolding, working platforms, ladders and/or areas.
- **Vehicle and Pedestrian Movements:** The Contractor will be responsible for the safety and control of all vehicles and pedestrians within the site boundary and areas affected by the works including visitors, operatives and clients / client's representatives.
- **Materials & Workmanship:** All goods, materials and workmanship used in the execution of the Contract shall comply with the relevant European Standard(s) where such exist or in their absence with a current British Standard(s) or relevant Code of Practice.
- **Health & Safety:** It is the responsibility of the Contractor to ensure that all current Health & Safety legislation is complied with whilst undertaking the works and at no time should the health and safety of operatives, staff or the general public be compromised.
- **The Project Site:** the extent of the works is indicated on the project drawings





# Appendix 2: Accommodation Floor Plan



# Appendix 3: Possible Location of Biomass Plant (for single larger boiler, if required)



