



SHEFFIELD CITY COUNCIL

Leaders Report

Report of: Simon Green, Executive Director of Place
Laraine Manley, Executive Director of Communities

Report to: Leader

Date: 12/10/2015

Subject: Greenland Heat Procurement

Author of Report: Diarmuid Egan/Robert Almond - 273 4193

Key Decision: YES

Reason Key Decision: Expenditure over £500,000 over 20 years

Summary:

The wider Greenland estate has approximately 596 properties which are fed from three district heating boiler rooms, Eleanor, Stovin and Greenland. These are Council Housing owned assets managed under the HRA. These schemes are primarily heated from natural gas and currently use approximately 10,000,000 kWh per annum. The three boiler rooms all have gas boilers in different states of repair. Some will need replacing in the next 15 years with the expectation that this will incur costs of up to £400,000. Greenland is the most modern of these sites and includes a standalone 1 MW biomass boiler alongside gas backup/peak provision.

The construction of a biomass power station by E.on at Blackburn Meadows which has been operational since Q4 2014 and its corresponding development of a heat network has prompted the Council to consider new operational models which utilise the range of potential heat suppliers available in the area.

Reasons for Recommendations:

The availability of external funding linked to low carbon technology has prompted the opportunity to undertake a procurement exercise which may lead to significant investment in the Darnall area of the city at no or low cost to Sheffield City Council, lowering carbon emissions, potentially at no extra costs to customers.

Recommendations:

- 1) To approve the procurement strategy for a long term heat contract for the wider Greenland Estate as set out in this Report.
 - 2) To authorise the Director of Housing and Neighbourhoods to take such steps as she considers appropriate to progress and implement the said procurement strategy subject to the Council's Contracts Standing Orders and Financial Regulations (including but without limiting the generality of this authority):-
 - (i) to approve selection of the preferred tenderer selected in accordance with the tender evaluation criteria;
 - (ii) to negotiate and agree the terms of agreements , leases or other agreements with the preferred tenderer for the award of contract on such terms as she may consider appropriate;
 - (iii) to instruct the Director of Legal and Governance to complete the necessary documentation for the implementation of the procurement strategy and award of contract;
 - (iv) to exercise the Council's rights to rescind , terminate or vary any existing agreements for the purpose of the implementation of the procurement strategy; and
 - (v) to give any other consents or approvals and to exercise any powers required or permitted to be exercised by the Council under the terms of any existing agreements for the purpose of the implementation of the procurement strategy;Provided that the authority hereby conferred shall be exercised:-
 - (a) as regards matters falling within paragraphs (i) , (ii) and (iii) above , in consultation with the Directors of Commercial Services, Finance and Legal and Governance; andas regards the terms of any lease shall be exercised in consultation with the Director of Capital and Major Projects.
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Background Papers:

Equality Impact Assessment
Business Case

Category of Report: OPEN

If CLOSED add 'Not for publication because it contains exempt information under Paragraph (insert relevant paragraph number) of Schedule 12A of the Local Government Act 1972 (as amended).'

Statutory and Council Policy Checklist

Financial Implications
YES Cleared by: Paul Schofield
Legal Implications
YES Cleared by: David Hollis
Equality of Opportunity Implications
YES Cleared by: Beth Storm
Tackling Health Inequalities Implications
NO
Human Rights Implications
NO
Environmental and Sustainability implications
YES
Economic Impact
NO
Community Safety Implications
NO
Human Resources Implications
NO
Property Implications
NO
Area(s) Affected
Darnall
Relevant Cabinet Portfolio Lead
Cllr Jayne Dunn
Relevant Scrutiny Committee
Environment & Economic Well-being Scrutiny Committee
Is the item a matter which is reserved for approval by the City Council?
NO
Press Release
NO

REPORT TO THE LEADER OF THE COUNCIL

Supply of heat to Greenland community heating sites

1.0 SUMMARY

- 1.1 The Project seeks to implement a procurement strategy to establish different heat supply arrangements to the Greenland Housing Estate in Darnall which would deliver improved financial and environmental benefits from reduced operational costs and carbon emissions.
- 1.2 The Greenland estate is a good example of a potential 'heat cluster', where there is strong potential to group together a number of smaller sites to achieve operational and carbon-saving improvements. This site had previously been identified as one of a number of new larger clustered sites.
- 1.3 There are different technical and organisational options to manage this, which the business case has identified and these include:
1. Development of standalone biomass or other low carbon heat source attracting external funding (funded by Council).
 2. Development of standalone biomass or other low carbon heat source attracting external funding (funded by private sector).
 3. Do nothing/invest in replacement plant as required
 4. Connect to the E.ON lower don valley heat network with heat from the Blackburn Meadow biomass power station.

It is proposed to implement a procurement strategy for the purchase of heat to replace the current heat arrangements.

- 1.4 Early soft market testing has confirmed that other supply options exist in the market which could improve value for money and reduce the cost of supply for this site.
- 1.5 It is however, a diverse and fast-moving market place with recent changes to the key external funding regimes (the Renewable Heat Incentive (RHI) and Energy Company Obligation (ECO) grant) impacting on the different business models possible.
- 1.6 The business case has also confirmed the potential for both cost and carbon reductions of a tender. This will offer the opportunity to carry out a full appraisal of all of the options available and to assess the financial viability of each as well as their qualitative impacts on wider policy objectives, including our carbon reduction targets.
- 1.7 The appraisal will consider:
- Cost of infrastructure and cost of change
 - Price of heat and maintenance / repair.
 - Resilience and continuity of supply, back up arrangements

- The ability of a partner to attract 3rd party funding to subsidise the scheme or works.
- Revenue from heat sales and any government incentives.
- Impact on the HRA including the Community Heating Account and resident's heating bills.
- Most economical period / term for investment.
- Carbon reductions and other positive benefits towards established SCC targets and agreed strategic outcomes
- Compatibility with developing policies and strategies to expand district and community heating networks in the city
- Any investment from the Council in existing or new assets

2.0 WHAT DOES THIS MEAN FOR SHEFFIELD PEOPLE

- 2.1 District heating offers area wide heating which in general is cheaper to run and has lower emissions than individual heating solutions.
- 2.2 In the case of the Greenland estate the proposal to cluster the three existing boiler rooms will lead to reduced capital costs as well as reduced operational costs.
- 2.3 It is also likely to support lower carbon emissions supported by the current funding opportunities offered through the Energy Company Obligation (ECO) and Renewable Heat Incentive (RHI).

3.0 OUTCOME AND SUSTAINABILITY

- 3.1 We envisage developing a modern, efficient community heating scheme which provides low carbon, low cost heat to our customers via an enlarged area network encompassing the three existing boiler rooms and generating low carbon heat.
- 3.2 We hope this scheme will provide us with a blueprint for further development of other community heating sites across the city.

4.0 BACKGROUND AND STRATEGY

- 4.1 Sheffield City Council has in recent years been working towards lowering the carbon content of its district and community heating networks as well as reducing capital and operational costs through greater energy efficiency and better controls in each property.
- 4.2 A wider strategic objective is to expand existing sites and facilitate arrangements which support new low carbon heat generation. Within the community heating network it is envisaged that this will mainly take the form of clustering existing networks to form larger heat islands whilst expanding these island to new properties.
- 4.3 This would facilitate better efficiencies, lower capital and operational costs, lower carbon emission whilst also contributing to work to reduce fuel poverty.

- 4.4 The wider Greenland housing estate has approximately 596 properties which are fed from three district heating boiler rooms, Eleanor, Stovin and Greenland. These schemes are primarily heated from natural gas and currently use approximately 10,000,000 kWh per annum. The properties are mainly owned by the Council for the purposes of Part 2 of the Housing Act 1985 (Provision of Housing Accommodation) and managed within the HRA. Some freehold houses have been sold under the right to buy and though freehold are still connected to the district heating system. In addition there are leasehold flats/ maisonettes sold under the right to buy which are connected to the district heating system.
- 4.5 The three boiler rooms all have gas boilers in different states of repair. Some will need replacing in the next 15 years with the expectation that this will incur costs of up to £400,000. Greenland is the most modern of these sites and includes a standalone 1 MW biomass boiler alongside gas backup/peak provision. In April 2015, Cabinet approved a £1.5m scheme for the renewal of the community heating pipework at Eleanor (and another site that is not part of the Greenland estate).
- 4.6 All existing community heating sites are currently undergoing a changeover to heat metering, and we expect the energy costs following this for the three networks on the estate to be in the region of £300,000 per annum.
- 4.7 The project seeks to review and assess the viability of establishing different heat supply arrangements to the Greenland Housing Estate able to deliver improved financial and environmental benefits from reduced operational costs and carbon emissions.

Whilst the initial prompt to consider this has come from the opportunity to connect to the new heat network being built by E.ON along the Lower Don Valley we expect there will be other heat proposals made. These have been reviewed in the business case modelling. The Greenland estate is also a good example of a potential 'heat cluster', where there is potential to group together a number of smaller sites to achieve operational and carbon-saving improvements.

Procurement Strategy

- 4.8 The cost of heat that would be consumed at these 3 sites is around £300,000 per year and the formal valuation of this contract would be a multiplier of this. The clear advice from officers in Commercial Services and Legal Services is that this would therefore need to be tendered through OJEU.
- 4.9 This tender is for the purchase of heat.

Although the focus is on the provision of heat we also require that heat to have a very low carbon content, not have a detrimental effect on the cost of heat to our customers or on the cost to Sheffield City Council to provide that heat and achieve our aims of forming a larger low carbon

heat island cluster for the Greenland area by having the source of low carbon heat and back up from a single source.

Key to this will be the ability to access funding support mechanisms such as the Energy Company Obligation (ECO) and the Renewable Heat Incentive (RHI) that will reduce costs compared to a 'Do Nothing' option.

- 4.10 The following items are in scope of the tender:
- The supply of heat to Sheffield City Council for the wider Greenland community heating estate, incorporating three existing networks and boiler rooms; Greenland, Eleanor and Stovin.
 - The maintenance of all heat supply equipment up to the point of exit from the respective boiler rooms, including the delivery of heat around the estate in any new pipework to reach existing boiler rooms.
 - The maintenance of the Eleanor, Stovin and Greenland boiler rooms (buildings).
- 4.11 The following elements are not included within the scope of this tender:
- The supply of heat direct to tenants or leaseholders.
 - Specifically, the local distribution networks from the three boiler plant rooms to the housing served by these will remain the responsibility of the Council Housing Service and managed through existing arrangements.
- 4.12 The heat contract may have an effect on the Housing Maintenance Contract as it may require the removal of some of the boiler rooms from the current maintenance schedule. The impact of removing the gas boiler maintenance from the Kier contract will need to be assessed
- 4.13 The Council will evaluate the tenders it receives on the basis of the service proposals and price.
- 4.14 The evaluation criteria and weighting proposed are:
- Price - 60%
 - This will include the proposed price, the mechanism for developing the price and the timing and mechanism for the price review. The price will be base-lined to the current cost of heat which is approximately to £0.06589 per kWh for heat delivered (approximately 6,200,000 kWhs).
 - Proposal and Sustainability - 20%
 - This will include what technology is being proposed, the carbon content of the delivered heat, the clustering arrangements and the ownership of the system.
 - Operation, Maintenance and Lifecycle - 15%

- This will include the approach to the operation of the system, the preventative and reactive maintenance schedule as well as the approach to lifecycle replacement.
- Carbon related funding - 5%
 - This is asking for an indication of any potential carbon related funding, such as ECO, that the company may have access to, including funding details, levels of funding (£/tCo2) and potential levels of funding for this scheme. This funding will be paid directly in full to the HRA.

5.0 LEGAL IMPLICATIONS

- 5.1 The Council's powers to provide housing accommodation and to manage it are contained in Part II (Provision of Housing Accommodation) of the Housing Act 1985. In addition , In addition , under the Local Government (Miscellaneous Provisions) Act 1976 the Council has the power to buy, produce and sell heat , and establish the infrastructure for a heat network.
- 5.2 Officers are mindful of the importance of putting into place appropriate arrangements to secure the desired outcomes, ensure compliance with legal requirements and protect the Council's position.
- 5.3 The Council's Contracts Standing Orders and the European Union Procurement Rules will be adhered to throughout the procurement. The tender process will be competitive and follow the principles of transparency and non-discrimination to facilitate the achievement of value for money.
- 5.4 The preferred tenderer, will be required to enter into a formal written contract with the Council which will provide for effective service delivery at levels which accord with the Council's requirements.

6.0 FINANCIAL IMPLICATIONS

- 6.1 The specific implications cannot be stated at this stage until the result of the procurement exercise has been assessed and incorporated in the full financial appraisal of the different options
- 6.2 The council may avoid capital investment in replacement if the long team heat supply contract offers a more advantageous economic deal.

7.0 ALTERNATIVE OPTIONS CONSIDERED

- 7.1 The age of the current boilers have meant that two of the boiler rooms would need to be upgraded in the next 15 years. We have taken this opportunity to investigate the potential savings from rationalising the three boiler rooms into a larger network.

7.2 The business case evaluation for this site also reviewed: 1. A 'Do Nothing' option that would simply maintain the existing gas boiler plant and not cluster these sites together, and 2. Direct investment by SCC in biomass.

8.0 REASONS FOR RECOMMENDATIONS

8.1 The purpose of the procurement strategy is to achieve the submission by tenderers of heat supply proposals that will reduce both the costs and carbon emissions from these sites.

9.0 RECOMMENDATIONS

9.1 To approve the procurement strategy for a long term heat contract for the wider Greenland Estate as set out in this Report.

9.2 To authorise the Director of Housing and Neighbourhoods to take such steps as she considers appropriate to progress and implement the said procurement strategy subject to the Council's Contracts Standing Orders and Financial Regulations (including but without limiting the generality of this authority):-

(i) to approve selection of the preferred tenderer selected in accordance with the tender evaluation criteria;

(ii) to negotiate and agree the terms of agreements , leases or other agreements with the preferred tenderer for the award of contract to the preferred tenderer on such terms as she may consider appropriate;

(iii) to instruct the Director of Legal and Governance to complete the necessary documentation for the implementation of the procurement strategy and award of contract;

(iv) to exercise the Council's rights to rescind , terminate or vary any existing agreements for the purpose of the implementation of the procurement strategy; and

(v) to give any other consents or approvals and to exercise any powers required or permitted to be exercised by the Council under the terms of any existing agreements for the purpose of the implementation of the procurement strategy;

Provided that the authority hereby conferred shall be exercised:-

(a) as regards matters falling within paragraphs (i) , (ii) and (iii) above , in consultation with the Directors of Commercial Services, Finance and Legal and Governance; and

as regards the terms of any lease in consultation with the Director of Capital and Major Projects.

Author Diarmuid Egan/Robert Almond

Date 12/10/2015

