

TITLE OF REPORT: Heat Tariffs for Gateshead HEIGHTs Project

REPORT OF: Paul Dowling, Strategic Director, Communities and Environment

Purpose of the Report

1. To approve the heat tariffs chargeable to residents of the Gateshead HEIGHTs project.

Background

2. The Gateshead HEIGHTs (High Rise Energy Infrastructure for Gateshead Housing Tenants) project will install new district heat and/or power systems to 7 High Rise Housing blocks in the Town Centre and Harlow Green, as follows:
 - Regent Court – heat only supplied direct to residents from town centre district energy scheme.
 - Ripley, Willerby, Acomb, Bedale courts – heat only, supplied from Ground Source Heat pumps.
 - Stretford, Barford – heat supplied from gas combined heat and power plant, direct to residents, and electricity offered separately (through a licenced supplier).
3. With heat supply to the first customer due to commence in February 2018, the Council is required to establish the heat tariffs chargeable to customers of the scheme.

Proposal

6. For all HEIGHTs customers, heat will be supplied through a newly installed heat exchanger unit. Customers will have a heat meter, and smart prepayment unit, fitted, to ensure customers only pay for the heat they use.
7. The project is funded from the Council's capital receipts arising from previous Right to Buy disposals, and EU grant funding. The heating scheme is estimated to cost £13m, with ca £5m paid for by EU and other grants. The scheme has financial conditions applied to it as follows:
 - the scheme cannot make a profit due to EU funding rules
 - The scheme aims to reduce residents' energy costs by at least 10%
 - The Council is seeking to fully recover the initial £8m investment, over the lifetime of the scheme.
8. The following heat tariffs have been set to meet all of the conditions outlined above:

Acomb, Bedale, Barford, Stretford, Ripley and Willerby Courts

- Customers receive heat at a price set 5% below the average night-rate electricity tariff (Economy 7, which is their current heating fuel), equivalent to 7.985p/kWh, inclusive of VAT in the first year
- In addition, customers can switch away from the expensive day rate economy 7 tariff
- No extra standing charge is proposed as part of the heat supply
- We estimate total energy costs will be reduced on average by 19%

Regent Court

- Customers receive heat at the same price as their current cost of heat, from a gas boiler (which is their current heating fuel), equivalent to 4.94p/kWh, inclusive of VAT in the first year.
- Gas supplies are to be disconnected, to improve safety, and remove the gas standing charge, which will provide a saving of £75 - £100 per year
- No extra standing charge is proposed as part of the heat supply
- We estimate heating costs will be reduced by 19%, and total energy costs by 10%

9. Heat prices will be adjusted annually in line with the relevant benchmark tariff. If schemes start to over or under recover in any year, heat tariffs will be adjusted for the following year, to ensure profits or losses do not accumulate.

Recommendations

14. It is recommended that Cabinet approves the heat tariffs as set out in appendix 2a to this report and as summarised above at paragraph 8.

For the following reasons:

- (i) To ensure the residents of the HEIGHTS scheme can benefit from lower cost heat.
- (ii) To ensure the HEIGHTs scheme recovers its operating and construction costs over its lifetime.
- (iii) To ensure ERDF grant obligations are met.

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Policy Context

1. On a local level, the proposals will contribute to the delivery of many targets within Vision 2030, strategic interventions within the Council Plan, the Council's Climate Change Strategy and other Council strategies and commitments, specifically:
 - Helping to alleviate fuel poverty for residents, by providing lower cost heat
 - Reducing energy consumption and carbon emissions of homes and public buildings in the borough
 - Reducing carbon emissions of homes and public buildings.
2. The proposal will also accord with the provisions of the Corporate Asset Strategy and Management Plan 2015 – 2020. In particular; ensuring that the Council's properties are fit for purpose and the continuous improvement of the sustainability of the Council's assets.

Background to Heat Supply Arrangements

3. For all customers, heat, both for space heating, and hot water needs, will be supplied through a newly installed heat exchanger unit. Customers will have a heat meter, and smart prepayment unit fitted, to ensure customers only pay for the heat they use.
4. Payment can be made in many ways:
 - Top-up prepayment cards at Paypoint outlets
 - On-line top up, via debit/credit card, either via a website or smartphone app
 - Direct debit of a standard monthly amount
5. The Council has engaged Switch2 to manage the heat metering, billing and customer liaison. Switch2 currently provide this service to over 70,000 heat customers across 500 different schemes nationwide, and have a complete service package, both for the Council and customers. Switch 2 will collect all incomes received from prepayment units, and pass this on to the Council.
6. In terms of progress to commencing heat supplies to residents, construction of the HEIGHTs scheme is progressing well, as follows:

Regent Court

- a. Plant room due for completion mid February 2018
- b. First external pipe risers complete
- c. First customer heat connections due mid-late February, with all 160 flats due to be connected by Sept 2018

Harlow Green

- d. Plant rooms in construction – Acomb, Bedale, Barford and Stretford due to be operational from mid April 2018
- e. Ripley/Willerby plant room due to be operational by July 2018
- f. Heat connections will commence mid April, with all customers (ca. 470) connected in a phased manner over 7 months to Nov 2018

7. Due to this progress, the Council needs to set the heat tariffs chargeable to customer, once heat supply commences.

Proposed Heat Tariffs

8. The project is funded from the use of the Council's capital receipts arising from previous Right to Buy disposals, and EU grant funding. The heating scheme is estimated to cost £13m, with ca £5m paid for by EU and other grants. The scheme has several requirements:
- EU funding rules mean the scheme cannot make a profit
 - The Council wants to reduce residents' energy costs by at least 10%
 - The Council is seeking to fully recover its initial £8m investment, over the lifetime of the scheme
9. The heat tariffs proposed to meet these requirements, and their impact on residents bills, are outlined in Appendix 2a as follows:

Harlow Green blocks

- Customers receive heat at a price set 5% below the rate for night-rate electricity (which is their current heating fuel)
- In addition, customers can switch away from the expensive day rate economy 7 tariff
- No extra standing charge is proposed as part of the heat supply
- We estimate total energy costs will be reduced by 19%, on average, or ca. £260 per year

Regent Court

- Customers receive heat at the same price as their current cost of heat, from a gas boiler (which is their current heating fuel)
- Gas supplies are to be disconnected, to improve safety, and remove the gas standing charge.
- No extra standing charge is proposed as part of the heat supply
- We estimate heating costs will be reduced by 19%, and total energy costs by 10% on average, or ca. £81 per year.

10. Heat prices will be adjusted annually in line with the benchmark tariff – Night rate electricity tariff for Harlow Green Blocks, and the gas tariff for Regent Court. If schemes start to over or under recover in any year, heat tariffs will be adjusted for the following year, to ensure profits or losses do not accumulate.

Financial model update

11. The HEIGHTs project is part of a wider scheme, being delivered under a single contract, by Wilmott Dixon Construction. The works commenced in September 2017, and subject to no significant delays being encountered, are due to complete by November 2018.
12. The wider scheme is comprised of 3 main elements:

- a. HEIGHTs project – installation of new heating systems and heat network. This element receives a £4.5m ERDF grant, with remainder funded from capital receipts
- b. Ground Source Heat Pumps (GSHP) – installation of new heating plant for 4 of the blocks, 100% funded by the Council from capital receipts (no ERDF grant)
- c. Fabric improvements – window, roof and façade replacement across the 7 blocks, all funded 100% by the Housing Revenue Account (no ERDF grant)

13. The current cost projection of the scheme elements are shown below

	HEIGHTS – Energy Scheme	GSHP – Energy Scheme	Total
Construction cost	£10.53m	£2.69m	£13.22m
Council funding	£5.67m	£2.69m	£8.36m
ERDF grant	£4.56m		£4.56m
ECO Funding	£0.30m		£0.3m
Leaseholder contributions	n/a*		

*Leaseholder contribution of ££0.126m are expected towards the HEIGHTs element, but are treated as revenue income under ERDF rules

** In addition to the HEIGHTs energy scheme, ca. £7.7m of investment is being made to improve windows, roofs across the blocks. This element does not need to be recovered by heat charges.

14. The total Council investment in the HEIGHTs and GSHP schemes amounts to £8.36m. Appendix 2b illustrates the projected 25 year cashflows for each of these elements, and subject to the proposed heat tariffs, conservative assumptions around customer energy use, energy price inflation, both schemes broadly cover all operating costs and recovery of the Council’s initial investment over 25 years. A small loss of £0.2m is projected overall and the schemes will not generate surplus income in the following way:

- a. HEIGHTs - incomes from heat sales, and some electricity generation seek to cover all operating costs (purchase of gas and power) whilst recovering the Council’s initial investment in full
- b. GSHP – incomes from receipt of Renewable Heat Incentive and provision of heat to main plant rooms cover all operating costs, whilst recovering the Council’s initial investment in full.

15. To monitor scheme finances, the 4 locations (Acomb/Bedale, Barford/Stretford, Ripley/Willerby, and Regent Court) will be monitored individually by the Energy Services Team. Income will be used to cover the costs of the scheme. This enables ERDF to audit each block in isolation in the first 3 years of operation to ensure the terms of the ERDF grant are not breached.

Alternative Options

31 Set lower heat tariffs. In this scenario, whilst residents would benefit from reduced bills, the Council is unlikely to recover the full costs of the scheme.

- 31 Set higher heat tariffs.** In this scenario, the Council would recover costs sooner and be able to generate financial reserves to offset future financial risks which may be incurred in the event that income generation is lower than expected, but this could lead to potential grant clawback from ERDF. Also, savings to residents would be reduced or removed which would be contra to one of the core objectives of the scheme.

Consultation

- 31 Cabinet Members for Housing and Economy together with ward councillors have been consulted and support the proposals.

Implications of Recommended Option

32. Resources:

- a) **Financial Implications** – The Strategic Director, Corporate Resources, confirms that the heat tariffs proposed represent the optimal way for the Council to meet its objectives outlined in Section 6 above and supports a base case model which is anticipated to generate sufficient revenue income to meet the ongoing operating costs and recover the Council's initial investment in the scheme construction costs in full.

To comply with the ERDF funding conditions, ERDF auditors will monitor the scheme to confirm that no profit has been generated by the scheme, this will include compliance audits in each of the first three years of operation. The risk of clawback is assessed as low as any additional revenue generated above current projections will be used to either reduce future year's tariffs to residents or make additional repayments to the Council...

- b) **Human Resources Implications** – Scheme administration will be provided by existing staff within Energy Services, and non-specialists scheme maintenance is expected to be required from Construction Services.
- c) **Property Implications** - The scheme will provide a modernised heating system for 7 tower blocks included in the scheme including new wet distribution systems, radiators and heat meters within resident's flats. It will also provide low carbon heat and power supplies to 3 Council buildings, and 1 external partner.

- 33. Risk Management Implications** – As with other energy projects the Council is delivering, there are a number of significant risks inherent in delivering energy projects. In addition, seeking ERDF grant funding adds further risk to the project. The current risks, and how they are mitigated, are below:

- State Aid. State Aid was considered at length, within the final grant application, but analyses showed the project not to be considered as State Aid.

- Cashflow. Scheme incomes and costs are based on the best knowledge available at the present time. However there is a risk that incomes could be less than projected for the following reasons:
 - i. Voids increased, leading to less heat use – model assumes 5% void level.
 - ii. Customers use less heat than estimated – heat use estimates have been conservative, and backed up by meter readings where possible, and factor in efficiencies arising from the fabric improvements.
 - iii. Renewable Heat Incentive is not achieved – at present, the Council can register the scheme once GSHP systems are commissioned. To date, the Government continues to support GSHP schemes, and shows no sign in reducing tariffs available.
 - iv. Costs are subject to energy price inflation. However, heat tariffs will be adjusted in line with energy fluctuations, mitigating cost increases to some extent.

- Grant Clawback. Should the scheme make surplus income, the Council would need to pay back up to 50% of net income, in the first 3 years. However, we project that all surpluses will need to be used to recover the Council's initial investment.

- Construction Cost increase. At present, works are broadly on budget, and the scheme is 5 months into a 15 month build programme. However, should costs increase, there is a risk that it will take longer than 25 years for the Council to fully recover the capital receipts invested in the scheme. The most significant risk to construction is currently access to flats to complete the internal works without delay. Internal works are due to commence in April 2018, and significant resident liaison has been provided to maximise access as much as possible.

- Leaseholder contributions. The Council has confirmed, via a tribunal hearing, that it is entitled to seek costs totalling £0.126m from the 62 leaseholders for the HEIGHTs scheme. Various means are being offered, to help leaseholders cover this cost. However, not all the works can be mandated, and there is a risk that not all leaseholders will participate in the heating replacement works (except in Regent Court, where participation is mandatory, to ensure gas is removed from the block).

34. Equality and Diversity Implications – The heat and power supplies will be offered to all residents across the named blocks, with tenant liaison services supporting the engagement of all customers groups, including all equality and diversity groups. Customers will be allowed to register as vulnerable, to benefit from additional protection (e.g. increased emergency credit)

35. Crime and Disorder Implications – None.

36. Health Implications – The quality and standard of maintenance of the properties and the heating scheme will contribute to the health and wellbeing of the residents.

37. **Sustainability Implications.** - The scheme will reduce domestic carbon emissions in Gateshead by reducing energy consumption and replacing existing heating with lower carbon alternatives.
38. **Human Rights Implications** - Nil
39. **Area and Ward Implications** - The schemes are in the Bridges Ward, Central area (Regents, Leisure Centre Cluster), Chowdene Ward South area (Harlow Green blocks).

Background Information

40. ERDF Low Carbon grant funding applications, Cabinet Report, July 2016. ERDF grant award, Nov 2016, Fabric Scheme contract award, March 2017.

Appendix 2a. Heat tariff tables

	Ripley and Willerby Courts	Barford/ and Stretford Courts	Acomb and Bedale Courts	Regent Court
CURRENT ENERGY COSTS				
Cost per flat, £/yr	£1,291	£1,291	£1,291	£908
Electricity standing charge, £/yr	£74	£74	£74	£74
Heat standing charge, £/yr				£74
Day electricity tariff, p/kWh	20.17	20.17	20.17	20.17
Heat tariff, p/kWh	8.4045	8.4045	8.4045	4.940
FUTURE COSTS UNDER THE HEIGHTS SCHEME				
Cost per flat, £/yr	£1,031	£1,031	£1,031	£827
Electricity standing charge, £/yr	£74	£74	£74	£74
Heat standing charge, £/yr		£0		
Day electricity tariff, p/kWh	16.28	16.28	16.28	16.28
Heat tariff, p/kWh	8.0	8.0	8.0	4.9
SAVINGS TO RESIDENTS				
Reduction in electricity day tariff, %	19%	19%	19%	19%
Discount on heat tariff, %	5.0%	5.0%	5.0%	0.0%
Discount on heat standing charge	0%	0%	0%	100%
Total Saving per year, £/yr	£260	£260	£260	£81
Total Saving per year, %	20%	20%	20%	9%

Appendix 2b. 25 year financial cashflow projection

All figures in £000s	ERDF scheme – HEIGHTS	Non-ERDF scheme – Ground Source Heat pumps	Total
Costs			
Repayment of Council investment over 25years	5,674	2,689	7,913
Central Plant Refurbishment costs	150		150
Heat costs	2,557		2,557
Gas Costs	2,767		2,767
Electricity Costs	936	1,908	2,843
Operating Costs - Maintenance	2,935	157	3,092
Total costs	15,017	4,754	19,772
Income			
Heat income	-12,540	-1,254	-13,794
Electricity Income			
Leaseholder Income	-126		-126
RHI Income		-3,881	-3,881
Electricity Export income	-1,751	0	-1,751
Total Income	-14,417	-5,135	-19,552
Total Cashflow	600	-381	219