

**TITLE OF REPORT:** Heat Tariffs for Gateshead HEIGHTs Project

**REPORT OF:** Tony Alder, Acting Strategic Director, Communities and Environment

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### **Purpose of the Report**

1. To update Cabinet on the completion of the Gateshead HEIGHTs project and to approve the heat tariffs chargeable to residents of the Gateshead HEIGHTs project for 2019/20.

### **Background**

2. The Gateshead HEIGHTs (High Rise Energy Infrastructure for Gateshead Housing Tenants) project has installed new district heat and/or power systems to 7 High Rise Housing blocks in the Town Centre and Harlow Green.
3. Under heat supply agreements with residents, the Council is required to revise heat tariffs annually from 1<sup>st</sup> April, in line with energy price inflation.

### **Proposal**

4. The heat tariffs for customers within the HEIGHTs project for 1 April 2019 to 31 March 2020 are due to decrease, and have been set as follows:
  - Regent Court – 4.405 p/kWh (an 11% reduction)
  - Barford, Stretford, Ripley, Willerby, Acomb and Bedale Courts – 7.595 p/kWh (a 5% reduction)
  - No standing charges are proposed and all tariffs are inclusive of VAT

### **Recommendations**

5. It is recommended that the heat tariffs set out in paragraph 4 above be approved.

For the following reasons:

- (i) To comply with heat supply agreements in place with customers
  - (ii) To ensure the HEIGHTs scheme recovers its operating and construction costs over its lifetime
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**CONTACT:** Jim Gillon      **Extension:** 3923

### 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's Thrive Agenda, 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.

### Background to Gateshead HEIGHTs

2. The Gateshead HEIGHTs project has installed low-carbon heat and power generation plant in 7 high rise blocks in Gateshead, to reduce carbon emissions of those homes, and reduce energy costs for residents, as follows:
  - Regent Court – heat only supplied direct to tenants from town centre district energy scheme.
  - Ripley, Willerby, Acomb, Bedale, Angel courts – heat only, supplied from Ground Source Heat pumps.
  - Stretford, Barford – heat and power supplied direct to tenants, from combined heat and power generation plant.
3. The project was funded by the Council's Housing Revenue Account, using £4.5m grant from the European Regional Development Fund.
4. As a result of the Council's objectives for the project, and the terms of the funding:
  - EU funding rules mean the scheme cannot make a profit.
  - The Council wants to reduce tenants and leaseholders energy costs by at least 10%
  - The Council needs to fully recover its investment in the scheme, over the lifetime of the scheme
5. New heating systems were installed, with heat supply to residents commencing from May 2018 and completing in December 2018. A total of 620 homes now receive heat under the Gateshead HEIGHTs scheme.

### Updated scheme costs

6. The HEIGHTs project was funded from a number of sources:
  - a. Housing Revenue Account for fabric improvement works
  - b. External grant funding
  - c. Contribution from Right to Buy receipts.

7. Appendix 2a shows the final capital cost of the HEIGHTs project, which includes both the heating works, and fabric improvement works (roof replacement, window installation and façade replacement).
8. Scheme construction costs increased from the budgeted £19.6m to £22.4m, due to a number of factors:
  - a. Additional enabling costs for the heating installation. This largely reflected extra costs of retrofitting heating into customer properties, which were unforeseen at the start of construction;
  - b. A decision to incorporate additional fabric improvements, which were more cost effective whilst on site, e.g. roof replacements, concrete repairs, enhanced decoration finishes to homes following the works; and
  - c. Additional works identified during the project to improve health and safety of the premises, by removing / treating asbestos wherever found, upgrading fire ratings of the blocks and specifying non-combustible roof and façade insulation.
9. To offset this, income received to fund the scheme was increased by:
  - a. Contributions from leaseholders of £0.78m that were not included in the budget at scheme outset; and
  - b. The Council secured a further £0.44m of Energy Company Obligation funding from Agility Eco.
10. The net effect of the increased costs and income is as follows:
  - a. Housing Revenue Account has incurred an additional £1.0m cost, due to additional fire safety works, asbestos removal, and other fabric; and improvements to the structure and internal condition of the blocks
  - b. An extra £0.5m is required to fund the additional costs of the heating works, to be funded from Right to Buy Receipts.

### **Updated scheme financial model**

11. Appendix 2b updates the financial business model for the heating scheme. The principle applied at the outset has always been that the Council would seek to recover the additional investment made to the scheme, from Right to Buy receipts.
12. Whilst the project has yet to operate for a full year, the operating model has been updated with actual performance and costs observed to date, extrapolated for the life of the scheme. At present, the model indicates:
  - a. All operating costs are covered; and
  - b. Up to £3.4m of Right to Buy receipts are repaid over the life of the scheme, with a shortfall of £1.5m.
13. The reasons for this are as follows:
  - a. Increased capital costs. As outlined above, an extra £0.5m funding from RTB receipts was required.
  - b. Heat consumption. Residents are currently using less heat than estimated to achieve a comfortable home. This indicates residents are still under-heating their homes due to financial constraints, or unfamiliarity with the new heating

system, or that with new smart heat meters, they are monitoring and reducing their heat consumption more than previously

- c. Heat losses. The distribution pipework within blocks to each flat loses more heat than modelled at design stage. Whilst the lost heat will warm communal areas, it doesn't generate income.

- 14. As the scheme continues, the Council will continue to explore ways to mitigate these issues, as follows:
  - a. Running awareness raising sessions on the new heating systems, to help understand how to operate and budget;
  - b. Optimising the system to reduce heat losses;
  - c. Optimising the system to reduce operating costs;
  - d. Exploring the business case for using spare capacity to supply heat to other nearby homes and public buildings, to increase income; and
  - e. Considering alternative tariff structures for next year, that could help residents use the scheme more – for example, lower tariffs may actually increase usage, and generate additional income (from electricity sales, or renewable subsidies) that offset the lower tariff rates.

### **Lessons learnt and project success**

- 15. The Gateshead HEIGHTs project has been the Council largest single investment in energy efficiency improvements to date. The scheme has faced many challenges, but has provided many successes and lessons learnt, should the Council decide to embark on further energy efficiency and generation schemes.
  - Resident feedback – already, the scheme has received considerable positive feedback from residents (see Appendix 2c)
  - Grant funding – the scheme secured £4.5m of ERDF grant funding, and was successfully audited, and has been completed with no grant clawback.
  - Project management – the Energy Services team were trained to take on the project management role, and successfully managed the scheme, which completed to time, with no delays, and with no ongoing disputes. Learning around unforeseen costs, that can be included in future project business cases.
  - Procurement – the Council's choice to appoint Wilmott Dixon Construction through the SCAPE framework proved a success, with a competent, safe contractor delivering the scheme on time, and delivering additional community benefits (see appendix 2c).
  - Health and Safety – the scheme, which was on site during the Grenfell disaster and experienced a fire during works at Regent Court, has led to many fire safety improvements (removing wooden façade and removing gas supplies at Regent Court), as well as reducing/removing asbestos risks.
  - Carbon emissions – the scheme secured an additional £0.44m grant funding for its carbon emissions savings, estimated at 31,600 tonnes saving over

scheme life. Learning around compliance issues, which can benefit future schemes.

- Given the challenges and success, the project has been submitted for the Social Housing Project of the Year, within the National MJ Award scheme.

### **Proposed Heat Tariffs**

16. In March 2018, the Council set the first heat tariffs for the HEIGHTs project, as follows:

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

- Customers receive heat at a price set 5% below the average night-rate electricity tariff (which was their previous heating fuel)
- Customers would further benefit from switching away from the expensive day rate economy 7 tariff
- No extra standing charge is proposed as part of the heat supply

#### **Regent Court**

- Customers receive heat at the same price as their current cost of heat, from a gas boiler (which was their previous heating fuel),
- Gas supplies were disconnected, to remove the gas standing charge,
- No extra standing charge is proposed as part of the heat supply

17. Under the terms of the heat supply agreement between the Council and each customer, heat tariffs are to be revised annually on 1<sup>st</sup> April, in line with changes – whether increase or decrease – to their previous heating fuel.
18. For Regent Court, as shown in Appendix 3, average gas prices for the Big Six have decreased by 11%. Hence the proposed heat tariffs for Regent Court are:
- Regent Court – 4.405 p/kWh (a reduction from 4.94 p/kWh last year)
19. For other blocks, the benchmark tariff, Economy 7, has increased by 14%, but it is noted that there is large variability in Economy 7 tariffs (between 7.5 – 12.2 p / kWh). In comparison, other tariffs (single rate, day rate) have seen a decrease. The Council has various options:
- f. Inflate prices by 14% in line with the benchmark tariff, which would increase tenant costs far more than operating costs would increase
  - g. Match the cheapest big Six economy 7 tariff, which would be a reduction of 5%
  - h. Change the benchmark tariff to Single Rate, which shows much less variability, and would be a reduction of 1%.
20. Option b. is proposed to avoid unnecessary increases in the heat tariff, but also to keep to the principle applied last year, to ensure residents are on a tariff that compares to the cheapest on the market. The proposed heat tariffs are as follows:

- Acomb, Bedale, Barford, Stretford, Ripley and Willerby Courts – 7.595 p/kWh

21. The Council will also maintain the policy of not levying a standing charge.

22. Full details of the calculation of tariffs are given in the table in Appendix 3.

### **Alternative Options**

23. **Set lower tariffs.** The Council could be in a position to set lower tariffs than inflation, if it chooses to, however given current projections, this would further increase the shortfall in recovering Right to Buy receipts.

24. **Set higher tariffs.** In this scenario, the Council would be able to recover the shortfall. However, this would be against the terms of the heat supply agreement, reduce or remove any savings to residents, and severely impact on the satisfaction that residents would have for the scheme.

### **Consultation**

25. The Cabinet Members for Environment and Transport and ward councillors have been consulted on these proposals, and supported them.

### **Implications of Recommended Option**

26. **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.

To comply with the ERDF funding conditions, the Council will be monitored to confirm that no net revenue will be generated through the first three years of operation. This is expected, as any revenue remaining after covering operating costs is required to repay loans from the Right to Buy receipts.

b) **Human Resources Implications** – Scheme administration will be provided by existing staff within Energy Services, and specialist services have been procured.

c) **Property Implications** - The scheme is to provide a modernised heating system for 7 tower blocks, including new wet distribution systems, radiators and heat meters within resident's flats. It will also provide low carbon heat and power.

27. **Risk Management Implications** – none.

28. **Equality and Diversity Implications** – none

29. **Crime and Disorder Implications** – None.

30. **Health Implications** – The quality and standard of maintenance of the properties and the heating scheme will contribute to the health and wellbeing of the tenants.

- 31. Sustainability Implications.** - The scheme will reduce domestic carbon emissions in Gateshead by reducing energy consumption and replacing existing heating with lower carbon alternatives.
- 32. Human Rights Implications** - Nil
- 33. Area and Ward Implications** - The schemes are in Bridges Ward and Chowdene Ward.

### **Background Information**

ERDF Low Carbon grant funding applications, Cabinet Report, July 2016. ERDF grant award, Nov 2016, Fabric Scheme contract award, March 2017. Heat tariff setting, Feb 2018. Licenced supplier contract award Dec 2018

## Appendix 2a. HEIGHTs capital costs

SUMMARY TABLE (£000)	HEIGHTs	FABRIC	Total	Original
MAIN SCHEME COST	£14.95	£6.45	£21.40	£19.69
Grants	£4.81	£0.19	£5.00	£4.56
Leasehold contribution	£0.25	£0.53	£0.78	-
Net cost to HRA	£9.90	£5.73	£15.63	£15.13
HRA budget initially	£2.18	£8.55	£10.73	£10.73
RTB funding to repay	£7.72	-£2.82	£4.90	£4.41
OTHER HRA COSTS				
Asbestos	£0.19	-	£0.20	-
Fire Safety	-	£0.20	£0.20	-
Condition / decoration	£0.41	£0.21	£0.62	-
Total other costs	£0.61	£0.41	£1.02	-

## Appendix 2b. HEIGHTs business model

	Ripley, Willerby, Angel	Streford Barford	Acomb, Bedale	SubTotal	Regent Court	Total Scheme
<b>Costs</b>	GSHP	CHP	GSHP		District Heat	
Plant Refurbishment	0	175	0	175	0	175
RTB repayments				0		4,902
Gas	364	1,454	304	2,122	897	3,019
Electricity	1,178	1,144	839	3,160	114	3,274
Maintenance	629	936	629	2,193	543	2,736
<b>Total</b>	<b>2,170</b>	<b>3,708</b>	<b>1,771</b>	<b>7,650</b>	<b>1,554</b>	<b>14,106</b>
<b>Income</b>						
Heat Sales	-1,316	-971	-971	-3,257	-829	-4,087
HRA Savings					-386	-386
RHI Income	-3,078	0	-2,203	-5,281	0	-5,281
Electricity Export	0	-2,638	0	-2,638	0	-2,638
Leaseholder contributions	-140	-47	-66	-253	0	-253
<b>Total</b>	<b>-4,535</b>	<b>-3,655</b>	<b>-3,239</b>	<b>-11,429</b>	<b>-1,215</b>	<b>-12,644</b>
<b>Overall Net (Surplus)/Deficit</b>	<b>-2,364</b>	<b>53</b>	<b>-1,468</b>	<b>-3,779</b>	<b>339</b>	<b>1,461</b>



## Appendix 2c. Customer feedback and Contractor community support

At recent Service Improvement Groups for tenants and leaseholders in January 2019 residents made the following comments about the scheme:

- “Life-changing, I can now heat the whole flat rather than just a couple of rooms. I think it costs about 65p for two hours of heating and then I have to turn it off because the flat is lovely and warm.”
- “Whoever put this project together, especially getting the funding from Europe, is to be commended.”
- “I’m a pensioner and I think I’ll save about £400 a year which will make a huge difference to me.”
- “Before the project I went on price comparison websites and I couldn’t get anything near 8p/kWh for Economy 7, so I think the tariff is very good value.”
- “The new windows are brilliant.”
- “Heating is first class.”
- “The new façade [at Regent Court] looks great.”

From site walk arounds and events, customers at Regent Court have also commented as follows

- One residents commented that she has a disabled access shower, but the old system wasn’t great. With the new system, the water pressure is so much better and makes her showers much nicer
- Another commented that, with the heat meter, he can see how much it costs to run a full bath – only 20p. If he wants to treat himself, he sometimes has a 25p bath.

The construction works themselves, while disruptive and challenging at times, has provided opportunities to improve peoples lives. Willmott Dixon in particular went the extra mile to support communities and people in need, for example:

- Finding a resident with no carpets or furniture in one flat in Harlow Green, they managed to source a carpet, sofa and other furniture to turn her empty flat into a home. The lady was incredibly grateful, cooking the workers a curry in return!
- They also accessed funding to support the employment of 2 Apprentice Resident Liaison Officers, one of which is now planning to pursue a career in the Construction industry.
- They donated a defibrillator, from the working cabins to a nearby sheltered housing unit.
- They held a number of customer tea parties, to say thanks for the residents’ tolerance and patience with the works, which were well attended, and provided further opportunities for Council staff to gauge feedback and pick up issues.

### Appendix 3. Heat tariff calculation 2019/20

	Harlow Green			Regent Court
Benchmark	Single rate	Day rate	Economy 7	Gas
npower	16.01	17.76	12.23	3.57
British Gas	17.89	21.65	10.06	3.57
SSE	16.85	19.21	10.08	3.84
EDF	15.88	20.26	7.57	3.56
Eon	14.92	17.17	8.84	3.30
Scottish Power	14.93	18.21	8.93	3.35
Average 2019/20 benchmark	16.08	19.04	9.62	3.52
Average 2018/19 benchmark	16.28	20.02	8.40	3.95
% change	-1.2%	-4.9%	14.4%	-10.8%
2018/19 tariff	7.985	7.985	7.985	4.940
2019/20 tariff	7.887	7.595	9.139	4.405