

<b>THE LONDON BOROUGH OF CAMDEN</b>	<b>WARDS: ALL</b>
<b>REPORT TITLE:</b>	<b>1st Revision of Heating Policy for the Council-owned Stock</b> (Ref: HASC2005/21)
<b>REPORT OF:</b>	Director of Housing and Adult Social Care
<b>FOR SUBMISSION TO:</b> The Executive	<b>DATE:</b> 11 <sup>th</sup> October 2006

**SUMMARY OF REPORT**

The Heating Policy was first approved by Executive in 2004. The Policy has been under review since September 2005, largely due to the increases in wholesale gas prices and the limited capital funds available to pay for energy efficiency improvements with which to offset these. The key issues covered by the Policy and discussed in this report are:

- Camden's ongoing role as a Gas Transporter
- Charging arrangements in the Heating Pool
- Rising gas prices and the difference between Camden and domestic gas prices
- The 'no opt out' rule for dwellings on communal heating and/or bulk gas supply
- The option appraisal methodology used to select replacement heating systems
- Options for promoting energy efficiency and conservation

The report shows that the key conclusions of the 2003 review remain the same. Despite the significant increases in heating charges, the price Camden pays for gas is still lower than domestic direct debit tariffs, and the average annual heating charge for tenants and leaseholders is still lower than the average annual London domestic gas bill. There is no immediate prospect of finding sufficient resources to install in dwelling metering to achieve energy conservation objectives, and there is still a strong case against allowing tenants and leaseholders to 'opt out' of a communal heating system or bulk gas supply. The 1<sup>st</sup> Revision of the Heating Policy therefore contains only minor amendments.

**Local Government Act 1972 – Access to Information**

No documents that require listing were used in the preparation of this report.

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**RECOMMENDATION**

That Executive:

1. Agrees the 1<sup>st</sup> Revision of the Heating Policy contained in appendix 1.
2. Notes that officers will continue to review the issues and options and will discuss these with the Sustainability Task Force before considering how to take these forward.

Signed by Assistant Director of Housing & Adult Social Care: *Catherine Illingworth*  
(Catherine Illingworth)

Date: 29 September 2006

## 1. Introduction

- 1.1 The Heating Policy for the Council-owned Stock was first approved by Executive in January 2004, and a commitment was made that it would be reviewed on an annual basis. There has been an ongoing review since September 2005. This review has taken on additional significance due to rising gas prices and financial pressures on the HRA and the capital programme, with insufficient capital funds available to finance energy efficiency improvements to bulk gas heating systems with which to offset gas price rises. The review was reported to the Joint DMC meeting in January 2006 and a paper on energy conservation proposals was submitted to the June 2006 round of DMCs.
- 1.2 This report provides some background information on the management and operation of the bulk gas network before summarising the key ongoing issues of debate in this area. A 1<sup>st</sup> Revision of the Heating Policy is contained in appendix 1.

## 2. Background

### Heating systems in the council-owned stock

- 2.1 The heating systems in the 33,000 council-owned stock comprise a mix of communal (12,300) and individual gas fired systems (20,200) with a small number of electrically heated properties (500).
- 2.2 15,300 (46%) of these properties are served by Camden's bulk gas network and Camden is a Gas Transporter as identified by the Gas Safety (Management) Regulations 1996. Camden is responsible for the management of the flow of gas through the entire network after the primary meter at each estate. The network consists of 60km of buried and riser pipework, as well as the pipework in dwellings. The network supplies gas to: 180 communal boiler houses serving 12,300 dwellings; 3,000 dwellings with individual boilers; and, over 6,800 dwellings for cooking.
- 2.3 In 2000, Camden submitted a Gas Safety Case to the Health & Safety Executive. This followed a comprehensive survey of all gas mains which established their precise location, their construction material and condition. A risk assessment prioritised replacement of all ductile iron pipework, which is due for completion by 2010. Emergency service and repair provision is provided by a specialist contractor under close supervision from Planned Maintenance Group.

### Basis of the Heating Pool

- 2.4 Camden uses a procurement agent, Kent County Council (KCC) to tender fuel contracts for the purchase and supply of gas to the 15,300 council-owned dwellings on the bulk gas network<sup>1</sup>. The heating and service charges collected from tenants and leaseholders are paid to the "Heating Pool", which is a self-financing accounting pool within the Housing Revenue Account. These charges include an element for Pool administration costs. The Pool was introduced in the 1970s to achieve the following principles:
- Fairness – because tenants have no control over which district/estate/block/property they are allocated, it was deemed unfair for tenants in one block to pay more than tenants in another block for receiving identical heating services. Furthermore, as tenants have no influence over investment to the heating systems, fuel savings resulting from energy efficiency programmes are shared across the Pool.

<sup>1</sup> Camden was ranked 3<sup>rd</sup> out of 27 authorities in London & the South East as part of an independent review of gas procurement, sponsored by the London Centre of Excellence and carried out by LB Haringey in 2005

- Protection - the need to protect vulnerable tenants from high fuel bills, hence the procurement of fuel at bulk discount, with no VAT, and the flat rate charging regime.
- 2.5 Tenants pay a 'flat rate' related to the standard of heating provided, the annual and daily availability of heating provided, the number of bedrooms, and, the combination of heating, hot water and gas cooking provided. Tenant heating charges do not include costs associated with the maintenance and repair of communal systems. These costs are paid for out of general Housing Revenue Account budgets.
  - 2.6 89% of the dwellings on communal heating have 'full' heating. The remaining 11% have either 'partial' heating (1 to 2 heat emitters) or 'background' heating (heating to all rooms at a lower temperature).
  - 2.7 56% of communally heated and 92% of individually gas heated tenanted dwellings in the Heating Pool have some form of in-dwelling heating control (either thermostatic radiator valves [TRVs] or a room thermostat as minimum). 713 tenanted dwellings on communal heating have full independent heating and hot water controls in dwelling (programmer and temperature control).
  - 2.8 The majority of central boilers are time-programmed via Boiler Energy Management Systems (BEMS), remotely controlled and monitored by Planned Maintenance Group. 60% of communally heated tenanted dwellings are on a 52 week heating regime and charge, with 40% on a heating season only (39 weeks) regime and charge. In terms of daily availability, 2,833 (33%) of communally heated tenanted dwellings have a 24hr a day regime and charge, 55% of dwellings are on a 'night set back' regime (heating is set to a lower temperature overnight), while 12% have a 'night shut down' regime.
  - 2.9 Analysis undertaken in 2001 confirmed that the scales were logically formulated and broadly accurate. The ratio between heating, hot water and cooking costs is in line with typical energy use for these services in the home. Also, the charges increase in correct proportion to the number of bedrooms, the level of heating service (partial, background and full) and the level of daily and annual availability.
  - 2.10 Leaseholders' heating charges include a proportion of the actual fuel costs of their block, based on meter readings, and a proportion of the heating maintenance/repair costs for their block. Both of these heating charge elements take account of the number of bedrooms and the level of service to the dwelling. Leaseholders on the Pool are not charged VAT.

#### **Energy efficiency of the council-owned stock**

- 2.11 Between April 1999 and March 2006, the Council installed over 14,600 energy efficiency measures (improved heating, insulation and glazing) in the council-owned stock. This has saved over 14,000 tonnes of carbon dioxide, the main contributing gas to climate change, and the equivalent energy required to heat 3,900 homes.
- 2.12 Camden's council-owned dwellings are more energy efficient than its private and housing association homes, with a SAP<sup>2</sup> energy rating of 68 compared to 58. However, despite being more efficient, Heating Pool dwellings consume on average 13% more gas than the average London home, because of the higher availability of heating and the fact that Pool users have less incentive to save energy than residents with in dwelling meters.

<sup>2</sup> SAP is the Government's recommended method for calculating the energy efficiency of dwellings. It is based on space and hot water costs at standard occupancy using a scale of 0-120, with 120 being best.

## Warmth for All Scheme

- 2.13 Camden received a Beacon Council award in 2002-03 for its Affordable Warmth Strategy, known as Warmth for All, which helps residents heat their homes to the level required for health and comfort. Warmth for All is a partnership between the Council, the North & West London Energy Efficiency Advice Centre, EAGA Partnership Ltd (managing agent of the Government's Warm Front grant), Camden Primary Care Trust, Age Concern Camden, Citizens Advice Bureaux and other community groups and caring agencies that are well placed to refer vulnerable householders for help.
- 2.14 The Warmth for All scheme involves an ongoing information campaign which promotes a freephone helpline offering free advice on: saving energy in the home, keeping homes warm and dry, choosing and changing fuel suppliers, benefit entitlements; and, provides eligibility checks and referrals for grants for heating and insulation measures. The key achievements of Warmth for All (for all homes in the borough) since its launch in January 2001 include the following:
- Energy awareness sessions provided to 1,232 council staff, health and care practitioners, voluntary sector staff and community group representatives
  - 2,027 calls (from 1,851 different callers) have been made to the Warmth for All Helpline. 31% of callers have been from non-white groups
  - 1,530 callers were referred for grants for heating and insulation
  - 922 homes (all tenures) received grants for heating and/or insulation
  - 14,000 energy efficient light bulbs and appliances have been distributed
  - 517 people were referred by the Helpline for benefits/money matters advice
- 2.15 This coming winter's campaign will include: a 'Walk for Warmth' event, taking place on October 13<sup>th</sup>, in partnership with Age Concern and 18 other local authorities; the launch of a Fuel Supplier Switching Affinity Deal (currently at tender stage); and, the inclusion of a grant promotion letter with Camden PCT's flu jab mailout to all residents aged 65 or over.

## 3. A summary of the key ongoing issues

### Camden's role as a Gas Transporter

- 3.1 Transporting gas is not part of the Council's core business and we are therefore exploring whether the private sector would be interested in taking over the operation and maintenance of the bulk gas network, possibly through the formation of a joint venture energy service company (ESCO). Early discussions indicate that this does not appear to be a viable commercial proposition, owing to the aged gas infrastructure, the decentralised nature of our communal heating systems and the lack of meters within 50-75% of the dwellings involved. However, these investigations are ongoing.

### Charging arrangements for the Heating Pool – flat rate charging vs individual metering

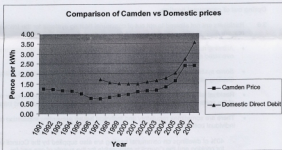
- 3.2 The Council's policy remains to retain the 'flat rate' heating pool charging arrangements for tenants, rather than install in-dwelling metering and charge for actual usage, for the following reasons:
- Conservative estimates indicate that it would cost £15 million to install heat meters and the infrastructure/controls necessary to allow residents to manage their costs
  - Meter reading and billing services would be chargeable to the Pool and would offset resident fuel bill savings
  - The heating scales that make up the heating charges are logical and accurate
  - The Pool is broadly fair and protects the most vulnerable tenants from hardship

- 3.3 This is likely to remain the advice from officers until the Council is able to identify the resources required to finance the installation of individual metering and controls and a full upgrade of the communal heating network.

#### Rising gas prices

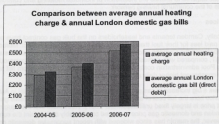
- 3.4 Historically, Camden tenants and leaseholders on the bulk gas contract have on average always paid less for their fuel than residents who pay for their fuel direct. Moreover, the margin between the Camden price for gas, bulk procured at commercial rates and exempt from VAT, compared with domestic rates, has been wide enough to accommodate the Heating Pool administration costs and the extra consumption arising from flat rate charging and the consequent higher daily and annual demand.
- 3.5 There was a big increase in gas prices when the last gas contract was let in Autumn 2005, as the price bore the full cost of actual and projected increases in wholesale gas prices (the contract price is largely fixed until September 2007). This meant that the margin between the Camden and domestic gas price narrowed considerably at the point the contract was let. However, the margin has since widened with recent successive domestic price increases (see Figure 1 below - the Camden price for gas includes Pool management and electricity costs and the British Gas domestic direct debit gas tariff includes VAT and standing charges; figures for 2005-07 are provisional).

Figure 1: Comparison between Camden and regional domestic direct debit gas prices



- 3.6 Figure 2 below compares tenant heating charges with estimated regional gas bills for 2004-07. It shows that Pool tenants paid less for their gas than average London users, despite using 13% more gas.

Figure 2: Comparison of annual gas costs



- 3.7 At the time of writing, it is estimated that, despite using on average 13% more gas, leaseholders in the Heating Pool are currently paying an average of £520 per annum for their gas, compared to an average bill of £667 per annum for the average London British Gas direct debit customer.

#### Opting out of communal heating

- 3.8 Residents are not allowed to opt out of communal heating systems for the following reasons:

- Allowing residents to opt out would lead to the district heating system becoming grossly oversized and inefficient.
- Some systems run in 'series' rather than in 'parallel', with the result that changes to 1 dwelling can have implications 'downpipe'.
- Residual leaseholders on the communal system would have to pay a higher proportion of the costs associated with the maintenance of the centralised plant and infrastructure.
- There are sometimes regulatory and technical issues preventing installation of individual boilers:
  - 40% of dwellings on communal heating are also supplied by the Council with gas for cooking and the Council is responsible for the supply of gas and for maintenance of the infrastructure. This pipework would have to be upgraded and expanded to allow gas for heating, yet in the Gas Safety Case submitted to the Health and Safety Executive, Camden gave an undertaking not to increase the gas loading on the bulk gas network
  - There may be a range of fluing constraints: there are regulations preventing individual boilers from being discharged into communal flues; there may be planning objections relating to external flues in conservation areas; or, warranties on external cladding systems may be compromised

#### Opting out of bulk gas supply

- 3.9 The Council does not permit individual tenants and leaseholders from opting out of the bulk gas network and switching to an individual supply. This is because a separate gas supply

would need to be run in parallel to (and bypassing) the Council's bulk gas meter. This pipework would have to be installed by National Grid (formerly Transco) and paid for by the Council or leaseholder. The costs of fuel for the resident would likely be more expensive with the new supplier. Breaking up the Pool would have knock on effects on the fuel price for remaining users including other corporate users, through the reduction in bulk negotiating power.

#### Heating option appraisals – individual vs communal heating

- 3.10 The Council assesses heating options based on their 'whole life cost', taking account of capital, maintenance and replacement costs over a 25 year period. The selected option is determined by the least negative net present value (NPV). 'Whole life cost' option appraisals are used to take account of future investment requirements and to achieve value for money for the Council over the long term.
- 3.11 Heating option appraisals tend to recommend the retention and upgrading of communal systems rather than conversion to individual heating. While communal heating infrastructure is normally more expensive to install than individual heating systems, where you have an existing communal heating system, the costs of conversion can be equally high because gas infrastructure for individual heating needs to be either upgraded or installed from scratch within the block, and the communal system has to be decommissioned. Furthermore, replacement costs are higher for individual heating as boilers need replacing after 10 –15 years, whereas the communal system will last for 30 years.
- 3.12 Owing to the current lack of capital funding and the investment gap required to bring the communal heating infrastructure up to scratch, there is a tension between achieving short term and long term financial objectives, particularly where an option with the least negative NPV over 25 years requires the most capital up front. The Heating Option Appraisal Methodology, and in particular the whole life cost approach and timeframe, will therefore be reviewed once we have a better understanding of investment needs from results of the Stock Condition and Mechanical & Electrical Surveys which are due in February 2007.

#### Achieving affordable warmth and combating climate change - energy efficiency

- 3.13 Financial pressures on the capital programme have led to insufficient capital funds being available to finance energy efficiency improvements to bulk gas heating systems, with funding having to be prioritised for essential security of supply and health and safety measures. This has meant that we have had to consider alternative approaches to reducing fuel usage in the Pool, and these are set out below.
  - i) **Insulation Programme.** The Council routinely installs wall and loft insulation wherever feasible when blocks are scaffolded as part of the Raising the Standard (RTS) programme. The costs are met from the £2.1m 2003-11 Insulation Programme. Further to this, we have recently let a dedicated contract, drawing on this funding, to install insulation in the remaining cavity-walled blocks which have not been included in RTS or scaffolded. This programme has so far attracted £170,000 in match funding from energy suppliers through the Energy Efficiency Commitment scheme.
  - ii) **Investigation into the use of prudential borrowing to fund additional energy efficiency measures in 2005-10 M & E Capital Programme schemes.** Whilst the M & E district heating budget for 2005-10 has had to prioritise investment in security of supply and health and safety measures, feasibility studies on programmed schemes now include consideration of the use of prudential borrowing to fund additional energy efficiency measures, such as in-dwelling controls, the costs of which would be met from future savings arising from reduced fuel and maintenance costs.

- iii) **Installation of boiler energy management systems (BEMS).** 79 out of the 91 boiler houses on the 'Overs' contract (this covers the largest heating estates, consuming 90% of all fuel used on the whole bulk gas network) now have boiler energy management systems (BEMS). These are intelligent boiler/burner management controls that reduce unnecessary firing of burners and exercise tighter control on temperatures. This is an ongoing programme which should be completed by the end of 2006. BEMS tend to reduce fuel consumption by 20%.

#### **Achieving affordable warmth and combating climate change – energy conservation**

- 3.14 Due to insufficient resources to fund individual metering, which is clearly the most effective way to incentivise residents to save energy, we have explored alternative approaches to promoting energy conservation (ie reducing consumption through changes in behaviour) that are likely to produce tangible results. These approaches are summarised below.

*Option 1: Changing the heating regimes of blocks from 52 weeks to heating season only.*

- 3.15 This option has been examined but is not being recommended. Analysis of summer monthly meter readings on 52 week sites has shown that on average, only 3% of annual fuel usage is used for space heating over the summer period (this is largely due to the fact that the BEMS controls shut down the central boilers when external temperatures rise to 21°C). The savings would therefore not justify the substantial technical measures that would be required to shut off hot water supply for space heating while allowing ongoing provision for hot water.

*Option 2: Incentive scheme to encourage tenants to use heating controls*

- 3.16 Another option that has been considered is a heating charge rebate scheme. Blocks could be monitored and where tenants use less fuel, a proportion of the reduction in fuel costs could be paid as a rebate directly to the tenants occupying these blocks, with the option of another proportion being set aside to fund a programme to install controls in those blocks without them. However, it was felt that this would be difficult to monitor and administer, and that fuel cost savings would to an extent be offset by administrative costs which are rechargeable to the Pool.

*Option 3: Changing the heating regime from 24hrs a day to 3 hrs night setback from 2.00am to 5.00 am in the 2,563 communally heated homes currently on 'full' heating 24hrs a day*

- 3.17 If implemented, this would apply to all communally heated dwellings on either an 'A' scale (full heating, 52 weeks, 24 hrs a day) or a 'K' scale (full heating, 38 weeks, 24 hrs a day). Setting back the heating for 3 hours overnight would not result in any loss of comfort but would bring energy consumption of these dwellings in line with that of individually heated dwellings on the same heating scales. As there would be no loss of comfort and there would still be a difference in service from the standard night setback (6 hrs) regime ('B' and 'L' scales), it is not proposed that this measure be accompanied by a revision of the heating charges. The savings in fuel will be shared across the Pool.
- 3.18 Whilst this option was recommended to, and supported by, DMCs in a report in June 2005, it has since been called into question due to noise issues. The heating up and cooling down of pipe work causes it to expand and contract, which can create noises which disturb residents' sleep. We are therefore reviewing the feasibility of this option.

*Option 4: Energy awareness campaign*

- 3.19 We will be running a campaign to raise awareness of the fact that, whilst tenants who use their heating controls do not benefit from a direct reduction in their heating charge, the use



of heating controls in 7,000 tenanted dwellings on the bulk gas network could reduce overall consumption by as much as 18%, which would in turn reduce the scale of future increases in heating charges. Rather than offering a direct rebate, a prize will be awarded to the estate(s) that conserves the most energy.

#### 4. Finance comments

- 4.1 Since 2004/05, large increases in contract prices for gas have meant that charges to tenants have increased substantially. In February 2006, Executive approved an average increase in heating charges of £2.81 per week for 2006/07 from 3rd April 2006. The average weekly heating charge in 2006/07 is now £9.82 per week.
- 4.2 New contracts for the supply of gas commenced in August and September 05 for two years. The cost of supply to relatively high use sites (the "overs" contract) increased by 44.5%, whilst the lower use sites (the "unders" contract) saw an increase of 90%. The most recent information suggests that on renewal in August 2007, contract prices are likely to increase by approximately 30%. Measures to increase efficiency and reduce consumption, such as those set out in Options 3 and 4, would help to mitigate against the increases in market prices and consequently help to reduce to some extent the level of increases in charges within the pool.
- 4.3 Investment options requiring prudential borrowing would need to be agreed by Executive as part of the council's overall capital strategy.

#### 5. Legal Comments

- 5.1 In respect of Council owned housing stock that is let on secure tenancies, the Council is statutory obliged pursuant to section 11 of the Landlord & Tenant Act 1985 to keep in repair and proper working order the installations in the premises for the supply of gas (but not fixtures, fittings and appliances for making use of the supply of gas); and to keep in repair and proper working order the installations in the premises for space heating and heating water. Section 11 does not apply to the Council's residential leasehold dwellings, although covenants similar to section 11 are contained in the Council's standard right to buy lease.

## Appendix 1 - 1<sup>st</sup> Revision of the Heating Policy for Council-Owned Housing

### Scope

This Policy applies to all 33,000 council-owned homes, covering both tenanted and leasehold dwellings and individually and communally heated properties. The Policy was first approved by Executive in January 2004 and is reviewed annually.

### Aims and Objectives

The Council is committed to providing council homes with affordable, controllable space and water heating systems that are easily and economically maintainable, that provide value for money and that contribute to the Council's energy efficiency and environmental targets.

In order to achieve these aims, the Council will:

- Invest in heating improvements according to the following priorities:
  - Measures required to ensure health and safety and security of service
  - Replacement of individual open-flued appliances with modern boilers
  - Replacement of individual and communal warm air heating with wet central heating
  - Conversion of communal sites with less than 10 dwellings to individual systems
  - Upgrade of partial and background communal heating to full communal heating
- Explore prudential borrowing as a means to finance additional energy efficiency measures in the communal heating network, including reconfiguring pipework to enable the installation of in-dwelling heating controls and possibly the addition of combined heat and power.
- Undertake a 'whole life cost' option appraisal when considering improvements to whole block heating. The selected option will be determined by the least negative net present value (NPV). Where the NPV of 1 or more options are within 5% of the lowest cost option, the recommendation shall be determined using an economic, social and environmental impact assessment.
- Continue to explore ways to divest our transportation and management responsibilities for the bulk gas network.
- Continue to retain existing heating pool charging arrangements for secure tenants and block-based charges for leaseholders, but also continue to explore methods of financing the installation of meters and heating controls in dwellings.
- Continue to monitor the difference in gas prices between the Council's commercial bulk purchasing contract and London domestic gas rates in the unlikely event that residents become disadvantaged through participation in the Heating Pool, and to take advice from energy specialists to determine our gas procurement strategy.
- Continue to prevent individuals from opting out of the bulk gas network for their heating, although they will be allowed to switch their cooking supply to electricity and have their heating charges adjusted accordingly. We will, however, assess the cost-benefits of removing certain expensive sites from the network following full appraisal.
- Not allow tenants and leaseholders with communal heating to be disconnected from the communal heating system or install their own individual gas heating system, unless an options appraisal shows that it is better for the whole block to be disconnected and switched to individual systems. This will not be applied retrospectively to leaseholders who acted with Council permission, but any leaseholders who switch without Council permission will be deemed to have breached their lease and the Council will determine an appropriate course of action. Leaseholders may however install additional electric heating.
- Develop a robust and transparent policy relating to the specification of individual heating systems including consideration of when system or combination boilers are most appropriate.
- Ensure that all individual heating improvements comply with Part L of the Building Regulations.