Calculation of Flat Rate Charges and Metered Tariff Methodology

Flat Rate Charges

The Council has put the various communally heated blocks into several heating pools.

The weekly flat rate charge for each heating pool will be based on:

[1] the projected eligible costs for operating the heating system in all of the blocks in a given pool in the coming financial year (excluding the share of any such costs which are attributable to leaseholders or other customers);,

[2] the actual surplus/deficit in heating charges received vs. heating costs for the relevant pool in the previous financial year. Note that the Council may decide to allocate funds from other sources to reduce a deficit if it is felt to be appropriate.

and

[3] the number of tenanted flats in that pool

The flat rate charges for each pool will be:

([1] + [2]) / ([3] x 52)

If the Council wishes to discount flat rate charges, the same discount will be applied to all flat rate charges, however, it is not anticipated that a discount would normally be applied.

Metered Tariff Calculation

Overview

The Council will determine a single metered tariff to be applied to all metered blocks.

The tariff will be split into a unit charge and a standing charge. The split between the unit charge and the standing charge will reflect the actual costs the Council faces in providing the service. If the Council wishes to discount charges, the same discount will be applied to both the standing and unit charges (and this will be the same as any discount applied to flat rate charges), however, it is not anticipated that a discount would normally be applied.

The standing charge will be levied per dwelling (regardless of size) and will include the following costs which are incurred irrespective of energy use.

- A share of the cost of providing customer service to customers and billing residents for their heat
- A share of the landlord's fixed gas costs
- A share of any heating system-specific Business Rates paid by the landlord
- An allowance for the gas that is lost in the heating systems as distribution losses
- An allowance for the management of the customer service and billing service, business rates and gas contracts

The unit charge will be per unit of heat consumed. It will include the costs the Council incurs to produce a unit of heat but also any surplus/deficit from the previous year will be charged as part of the unit charge. That is because the main reason a surplus or deficit will accrue will be due to variations between the forecast cost of producing a unit of heat and the actual unit cost of doing so.

- The cost to produce a unit of heat (i.e. for gas based systems, the weighted average unit cost of gas divided by the boiler efficiency)
- Any surplus/deficit from the previous year will be carried over and applied to the unit charge. The cost of this will be the previous year surplus/deficit divided by the total forecast heat use at all schemes in the current year.
- Note that the Council may decide to allocate funds from other sources to reduce a deficit if it is felt to be appropriate.

Exclusions

It is important to note that the charges to tenants will not include:

- Any capital costs for providing the heating system
- Any costs for maintaining and repairing the heating system
- Any management costs associated with the maintenance/repair of the system

That is because it is the landlord's duty to provide and maintain a working heating system and so the cost of doing this is met from rent charges collected separately to heat charges.

Furthermore, the charges to tenants will not include:

- Any costs associated with providing the heating service to the Council itself, leaseholders or any other of the Council's heat customers

Also note that the Council may decide to pay compensation to residents (or be required to by a future regulator) for poor service or may be fined by the regulator. Similarly, in recognition of impending regulation and potential for compensation payments and fines, the Council is seeking to put contracts in place with operators where compensation will be paid to the Council for poor performance by the service provider.

These costs / compensation should be excluded when assessing the surplus/deficit (and broadly, they are expected to balance).

When and how will the tariff be calculated?

Typical Year
The tariff for each financial year (April to March) will normally be agreed as part of the Council's budget process which is approved in February. All tariff calculations will therefore normally need to be completed by the beginning of January. This means that the calculation will need to be based on several assumptions. The details of the calculation and the inputs are set out in Appendix 1.

Metering and what happens in the absence of metered data?

The Council has installed heat meters at relevant properties and these meters are designed to be read remotely. A meter reading will be taken on the day the service starts and this will be the opening meter reading for each household.

Following this, the Council will take periodic readings. The Council will also ensure that meters remain calibrated. These meter readings will be used to determine the charges to the household for the energy used based on the calculated tariff. If the meter cannot be read remotely for an initial meter read, the Council will:

1. estimate energy use and charge residents on this basis until a meter read is taken. This will be calculated based on:
   - Time of year
   - Historic use for the property (where available) otherwise average use for properties at the site
2. The Council will also need to access the property to take a reading and repair the meter. An opening meter reading will be taken once the meter is repaired and residents will then be billed as below.

Once an initial meter read is made, if the meter cannot subsequently be read remotely for some reason, the Council will:

3. Make an estimate of energy use. This will be calculated based on:
   - Time of year
   - Historic use for the property (where available) otherwise average use for properties at the site
4. Access the property to take a reading and repair the meter. Normally the meter will still have been taking readings, it is just that the data could not be read remotely. Therefore, once the meter is repaired, the estimated energy use will be replaced by actual energy use. If the meter has not been recording consumption, the bill will be charged based on the estimate and a new opening meter reading will be taken once a working meter is in place.

The meters can also detect where they have been tampered with. If residents tamper with meters, they are in breach of their tenancy agreement. Residents who tamper with their meters can be charged for repairing the meter and are at risk of losing their home.

How will residents be charged?

A credit billing system will be operated where residents will pay for energy after it has been used.

Residents will be offered two options for how they will be billed – namely:

1. Billed monthly in line with consumption – a monthly bill will be provided based on actual energy use in the previous month and the annual fixed charge / 365 * number of days in billing period;
2. Levelised billing where 12-equal monthly bills will be sent – the bill will be based on a projection of the specific resident's energy use across the year. The projected energy use will be based on either:

   a. the resident's actual energy use over the previous 12-months; or

b. if this is unavailable either:

    i) for existing blocks, projected use will be based on the average heat use for a typical property at the site over the last 12-months x 130%

    ii) For new blocks, the average predicted heat use for the site (based on as built SAP calculations for the development) x 130%

Every 6-months, all households receiving levelised billing will have their actual energy use vs. projected energy use assessed and

    i) A Balancing charge will be applied to the account. Where the balance is in credit, residents will be refunded. Where the balance is in debt, the monthly charge will be adjusted to include the debt/12 to allow the debt to be repaid in 12-months; and

    ii) The projected energy use will be adjusted along with a corresponding change in the levelised charge.

Initial Tariff

The initial metered tariff will be put in place in the summer of FY2023/24 with a flat-rate charge in place before then.

The calculation of this initial metered tariff will follow the principles set out under Typical Year above.

The flat-rate tariff for metered blocks for the start of FY23/24 will be charged on a weekly basis.

It will be made up of:

1. the weekly fixed charge per dwelling as calculated with the metered tariff; and
2. an estimate of the average weekly energy use per dwelling at the site during the period where the flat-rate applies multiplied by the variable charge. This estimate will be based on historic energy use for the site where available.

Note
The flat-rate charge will be the same for all dwellings at a given site but may vary from site to site (although the fixed rate charge and the variable charge will be the same at all sites, the estimated average weekly energy use per dwelling may vary from site to site).

The flat-rate charge will apply only during the spring and summer ahead of the introduction of metered charging. Therefore, the average weekly energy use during the period will tend to be lower than for autumn/winter when homes use more heat.

A similar process will be used in the future if a site moves from flat-rate charging to metered charging mid-way through the year.

Appendix 1 Details of Calculation

The standing charge will be calculated as follows:

[Standing charge in GBP per dwelling] = A/B

Where

A = [Total fixed costs in GBP] ; And

B = [Total number of metered tenanted dwellings across all metered sites]

[Total fixed costs in GBP] = C + D + E + F + G

Where

C = [Total cost of customer service and billing residents for their heat at all relevant metered sites in GBP] minus [any costs for providing customer service and billing to leaseholders for their heat at all relevant metered sites in GBP]

D = [the sum across all relevant metered sites of {[the landlord's fixed gas costs at each site in GBP] x [number of metered tenanted dwellings at each site] divided by [total number of dwellings at each site] }]

E = [the sum across all relevant metered sites of {[the landlord's heating system-specific Business Rates at each site in GBP] multiplied by [number of metered tenanted dwellings at each site] divided by [total number of dwellings at each site] }]

F = [the sum across all relevant metered sites of {F1/F2}]

Where

F1 = [the total heat losses at each metered site in kWh] x [the variable cost of gas at each metered site in GBP per kWh] x [number of tenanted metered dwellings at each metered site] ; and

F2 = [total number of dwellings at each metered site] multiplied by [the boiler efficiency at each metered site]

G = [total cost for the management across all relevant metered sites for i) the customer service and billing service, ii) dealing with business rates and iii) dealing with gas contracts in GBP] minus [any costs associated with providing these services to leaseholders in GBP]

The variable charge will be calculated as follows:

[Variable charge in GBP per kWh] = H + J

Where

H = [weighted average unit cost of delivered heat in GBP per kWh]; and

[weighted average unit cost of delivered heat in GBP per kWh] = K x L divided by M

where

K = [variable cost of heat at each metered site in GBP per kWh] = K1/K2 and for gas boiler based systems

K1 = [unit cost of gas at each metered site in GBP per kWh] and

K2 = [the boiler efficiency at each metered site in %]

Noting that the methodology will need to be adapted as gas boilers are replaced by other systems

L = [total forecast heat delivered at each metered site in kWh] and

M = [the sum across all relevant metered sites of {L}]

And

J = N divided by M where

N = [the total annual surplus or deficit from the previous year in GBP]

If the Council has decided to offer a discount on the charges, both the standing charge and the unit charge will be reduced to take account of the agreed discount.

Details of inputs

Input to calculation in December of Financial Year X to calculate the tariff starting in April of FY X+1	Data Source
Number of metered tenanted dwellings at each site	The number of tenanted metered dwellings at the site on 1st July of FY X
Number of dwellings at each site	The number of dwellings at the site on 1st July of FY X
Total cost of customer service and billing residents for their heat at all relevant metered sites in GBP	The allocated budget for this service in FY X+1 including internal and external costs for the service including any software or data costs for delivering the service
Any costs for providing customer service and billing to leaseholders for their heat at all relevant metered sites in GBP	The allocated budget for this service to leaseholders in FY X+1
The landlord's fixed gas costs at each site in GBP	[The fixed gas costs at each site in GBP for FY X] multiplied by [a recent estimate from the Council's energy supplier for the increase in fixed gas costs for the following year in %] or where a recent estimate is unavailable from the supplier, a reasonable estimate of the increase in fixed gas costs in %
the landlord's heating system-specific Business Rates at each site in GBP	Where available, the actual Business Rates applicable at each site in FY X+1 otherwise The Business Rates applicable at each site in FY X multiplied by a reasonable estimate of the increase in Business Rates for the following FY in %

Input to calculation in December of Financial Year X to calculate the tariff starting in April of FY X+1	Data Source
the total heat losses at each metered site in kWh	Where available, the difference between measured heat production in kWh (from primary bulk heat meter) in FY X-1 and measured total heat delivered at the site in kWh (from the sum of all residential consumption) in the FY X-1 using reasonable estimating processes to fill any data gaps. Otherwise an assumption of 800kWh per dwelling at the site.
the variable cost of gas at each metered site in GBP per kWh	[The variable gas costs at each site in GBP for FY X] multiplied by [a recent estimate from the Council's energy supplier for the increase in variable gas costs for the following year in %] or where a recent estimate is unavailable from the supplier, a reasonable estimate of the increase in fixed gas costs in %
the boiler efficiency at each metered site in %	Where available the Efficiency derived by dividing the total measured heat output from boilers at each site in FY X-1 divided by the total measured gas input at the site in FY X-1 using reasonable estimating processes to fill any data gaps Otherwise an assumption of 85%
total cost for the management across all relevant metered sites for i) the customer service and billing service, ii) dealing with business rates and iii) dealing with gas contracts in GBP	The allocated budget for this service in FY X+1
any costs associated with providing these services to leaseholders in GBP	The allocated budget for this service to leaseholders in FY X+1
Total forecast heat delivered at each metered site in kWh	the average across 5 years of data of the total measured heat delivered to dwellings at each site in FY X-1 to FY X-6 using reasonable estimating processes to fill any data gaps. Where data is unavailable for the FY in question, the heat delivered at each metered site in a FY shall be estimated based on either: Method 1 heat delivered at each metered site in a FY in KWh = (A x 0.85) minus (B x 800kWh) Where A = [Actual gas use at each site in the FY in question in kWh]

Input to calculation in December of Financial Year X to calculate the tariff starting in April of FY X+1	Data Source
	B = [number of dwellings at each site]

Method 2

Heat delivered at each metered site = 3500kWh per dwelling for dwellings completed after 2015 or heat delivered at each metered site = 10000kWh per dwelling for dwellings completed before 2015 |
| the total annual surplus or deficit from the previous year in GBP | Surplus = [actual income from tenants for the heating service during the calendar year ending in December of FY X] minus [tenants share of total actual costs incurred for delivering the heating service during the calendar year ending in December of FY X]

Income shall include

- all standing and variable charges, late payments,
- interest, etc.

but shall exclude

- any compensation received by the landlord for poor operation by service providers

The costs shall include but not be limited to (tenants share of the following taking into account shared service delivery with leaseholders)

- Fixed and variable gas use,
- customer service and billing,
- business rates
- appropriate management overheads

but shall exclude

- any compensation paid by the landlord to the residents for poor service or any fines levied on the landlord for poor delivery of the service
- capital costs for initial provision of equipment, maintenance and repair
- maintenance costs of the heating system |
| Agreed discount | A percentage discount to be applied to both the standing and variable charges. Note, it is not expected that the Council will normally offer a discount. |