

Briefing Note: DHN Heat Tariffs
30 April 2021

Purpose

This briefing note sets out the proposed DHN heat tariff and the rationale behind it.

Heat Tariff Principles

The key principles for setting the heat tariff are:

- The heat tariff has to be affordable for all tenants, so CBC is targeting a heat tariff that is no more than the equivalent gas heating price. This is determined by referencing the Heat Trust Gas Comparator price.
- It has to be affordable for current John Brackpool Court residents, who have been paying their current heating bills for over a year.
- It has to be commercially viable for CBC, realising an acceptable IRR over 40 years.

Elements of the Heat Tariff

The Heat Tariff is made up of both a **fixed charge** payable per day and a **variable charge** payable per unit of heat used.

The **fixed charge** includes the costs of operating, maintaining and repairing the DHN together with the costs of running the billing and metering service.

The **fixed charge** is split into 2 elements:

- Standing Charge – for billing & metering costs
- Maintenance Charge

This is because, under the Landlord and Tenants Act, tenants can only be made to pay the cost of the billing & metering service, with the landlord picking up the maintenance charge.

	Fixed Charge	
	Standing Charge	Maintenance Charge
Social Tenant	✓	✗ paid by landlord
Owner Occupier/ Shared Ownership	✓	✓

The **variable charge** reflects the cost of producing the heat, i.e. the gas and electricity used to power the energy centre plant.

Proposed Heat Tariff

The proposed Heat Tariff is set out in the table below:

T	Fixed Charge £/year		Variable Charge p/kWh
Social Tenant	£126	(£224 paid by landlord)	6.85
Owner Occupier/ Shared Ownership	£350		6.85

This is in line with Heat Tariffs from other DHN in England that are typically charging in the region of £310 to £365 in fixed charges and 6.3 to 7.35 p/kWh.

Rationale

The tariff was set as a balance of affordability and commercial viability.

In order to evaluate the affordability of the proposed heat tariff, it was compared to the equivalent gas price using the Heat Trust gas comparator cost considering the typical heat consumption of the different property types. The Heat Trust comparator cost includes the full cost of maintenance, repair and lifecycle replacement for a gas boiler system, and is compared to the bills that would be experienced by owner occupiers liable for the full fixed heat charge of £350.

Heat tariff (inc VAT @ 5%)				Suggested Tariff		IRR	2.59%
Fixed Heat Charge				350.00	£/unit/yr.		
Unit Heat Charge				6.85	p/kWh		

Property Type			Incl VAT		Modelled Heat Tariff				Property Mix
Apartment Size			Comparator	Heat Trust Cost*	Fixed Charge	Unit Charge	Annual Cost	HT Var	
<i>Beds</i>	<i>m2</i>	<i>kWh/yr.</i>	<i>£/yr.</i>		<i>£/yr.</i>	<i>p/kWh</i>	<i>£/yr.</i>	<i>%</i>	
1B2P	55	1,836	500		350	6.85	476	-4.85%	40%
2B3P	70	2,669	533		350	6.85	533	-0.03%	44%
2B4P	85	3,500	567		350	6.85	590	4.01%	12%
3B4P	95	4,000	588		350	6.85	624	6.20%	4%
Average (weighted)		2,489	534		350	6.85	520	-2.53%	100%

* from Heat Trust website
27-Apr-21

For the average heat consumption, the proposed tariff is 2.5% below the Heat Trust comparator price. This will apply to 84% of the properties, as both Geraint Thomas House and John Brackpool Court are predominantly 1 and 2 bedroom dwellings.

It has to be remembered that social tenants will not pay the full fixed charge, so their bills will be considerably lower. The balance of the fixed charge, the maintenance charge, will be paid by the landlord.

In fact, tenants of John Brackpool Court will on average save £63 over their current heat bills.

The table below shows the typical total annual cost for a social tenant for heat from the DHN compared to the current heat charges at John Brackpool Court.

Heat tariff (inc VAT @ 5%)				Suggested Tariff		IRR	2.59%
Fixed Heat Charge				126.00	£/unit/yr.		
Unit Heat Charge				6.85	p/kWh		

Property Type			Incl VAT		Modelled Heat Tariff					Property Mix
Apartment Size			Comparator	Heat Trust Cost*	Fixed Charge	Unit Charge	Annual Cost	Current Bill	Saving	
<i>Beds</i>	<i>m2</i>	<i>kWh/yr.</i>	<i>£/yr.</i>		<i>£/yr.</i>	<i>p/kWh</i>	<i>£/yr.</i>	<i>£/yr</i>	<i>£/yr</i>	
1B2P	55	1,836	500		126	6.85	252	322	70	40%
2B3P	70	2,669	533		126	6.85	309	369	60	44%
2B4P	85	3,500	567		126	6.85	366	416	50	12%
3B4P	95	4,000	588		126	6.85	400	444	44	4%
Average (weighted)		2,489	534		126	6.85	296	359	63	100%

With this tariff, the IRR over the lifetime of the project (40 years) is estimated to be 2.59%. This is based on estimates for gas and electricity contract prices and predicted operating efficiencies for the DHN. It is hoped that we will be able to improve on the gas and electricity contract prices when these are put in place later this year. This should mean the IRR being closer to the 3% target.

Heat Tariff Review Process

The heat agreements signed by each of the tenants clearly set out the review procedure for the Heat Tariff.

- The first review will be on commissioning of the DHN in early 2022. This will take into account the operational efficiencies that are established during commissioning and the gas and electricity contract prices that have been negotiated for the DHN operation.
- The Heat Tariff will thereafter be reviewed annually.

Timescale

The Heat Tariff will come into force in May 2021 in time for first occupation of Geraint Thomas House.