Appendix A – Background on Gas supply contract renewal

1. Procurement strategy

Why Flexible Procurement?

As approved at the January 2022 Cabinet, Bristol City Council (BCC) uses a flexible procurement mechanism for its gas and electricity supplies. Under flexible procurement, the volume of gas or electricity required is secured through a series of small purchases over an extended period, with traders following the market to secure the best price for the quantities required. The volume required can be fully brought out in advance of the supply period (Purchase In Advance - PIA), which effectively gives a fixed price at the start of the supply period, but without the risk of setting a price for the whole volume based on the market price on the contract renewal date (as would happen under a fixed price contract). Under PIA, there is a possibility that the market price might fall favourably after the supply has started, so an alternative is not to secure the full volume required before the supply starts, but hold some volume back to trade within the supply period (Purchase Within Period – PWP). PWP allows opportunity to further improve the price, with safeguards in place under a risk strategy against the need to secure remaining requirements if the market price rises. The final price under a PWP approach cannot be confirmed until the end of the supply period, so a reference price is used, with a reconciliation at the end of the supply period.

Gas and electricity under flexible procurement are bought in 'clips' on the GB energy trading market. This is a specialist skill best undertaken by qualified and experienced market traders. Energy suppliers have their own traders, but cannot trade on behalf of a customer as this creates a conflict of interest. For flexible procurement, the options are for customers to self-trade (ie make their own buying decisions), or to rely on a third party trading desk. A flexible procurement contract set up directly with a supplier will be based on making tools available for customers to manage their own trades and make their own trading decisions. For BCC, this would be a risky approach, the Energy Supply team are not energy market traders (this is a specialist skill), and would not have the time to devote to monitoring markets for the best prices. However, most Public Sector Buying Organisations (including Laser) have their own trading desk, which operates independently of their appointed framework supplier (so can trade in the best interests of their framework customers). This allows specialist full-time resources (traders) to make better trading decisions on behalf of customers, whilst maintaining the necessary separation from the supplier.

The decision to move from fixed to flexible procurement was based on risk reduction and improved pricing. Laser's performance reports indicate that they typically achieve a 6% reduction over market average prices. The move to flexible procurement has also reduced the risk inherent in a fixed price contract of setting a price for an extended period based largely on the market price on the day of the contract renewal. Under a fixed price contracts, there is a risk that the market price will fall (lost opportunity for better prices), equally there is an opportunity to lock in at a lower price in a risking market. Flexible procurement spreads this risk over a number of smaller purchases.

The council currently procures its gas on a flexible procurement PWP basis and it is proposed that this arrangement continues under the contract extension. Scenario modelling of Fixed/Firm pricing and Flexible procurement (both PIA and PWP models) has been conducted which supports this proposal. However, in order to maximise the benefits of a flexible procurement model robust ongoing monitoring of gas demand is essential.

There are 2 main alternatives to continuing with a flexible procurement strategy for gas under a Public Sector framework (i) run a call-off under BCC's Dynamic Purchasing System (DPS), or (ii) run a tender for a fixed price contract directly with a supplier.

Call off under a DPS

The Council's DPS is a fast-track procurement mechanism with a panel of pre-selected suppliers who can be asked to make bids to supply gas or electricity under a call-off contract. This has worked well for the Council in the past, but the panel has a limited number of suppliers, who have been reluctant to offer bids since the energy crisis. It should also be noted that the current DPS expires at the end of October 2023, with no intention to renew this mechanism for energy supplies. Accordingly, this option is not recommended.

Tender for direct supply

A tender for a direct supply could be completed before the current gas supply contracts run out, but is a significant undertaking. BCC benefits from being part of a much larger portfolio under the Laser framework (£500M pa energy spend covering 200 customers¹); this size of portfolio allows Laser to secure a better price than BCC would with just its own demand. It is likely that a tender for a direct supply would not achieve the same prices as Laser can secure. Although the energy market is stabilising, there is still reluctance by suppliers to take on new business, and it is unlikely that BCC would be able to secure a fixed price contract beyond two years. Longer term fixed price contracts are unavailable in the current market, and are likely to result in the council incurring additional costs as suppliers will seek to transfer cost risks to the council. Scenario modelling has been completed using estimates of the prices that the Council might be able to achieve over a 2 year contract as compared to the flexible procurement option. This shows that on balance fixed/firm price contracts are likely to be more expensive than using a flexible procurement mechanism.

Overall, a tender for a direct supply is not recommended.

Why Are Laser recommended as the Public Sector Buying Organisation?

The Energy Service team has compared offerings from 6 different framework providers, considering the procurement options including the length of contract available, energy supplier, type of flexible purchasing mechanism available, whether a trading desk is available and whether green gas is available. The team has concluded that Laser offer the best match for the Council's gas supply requirements.

2. Demand reduction measures

The starting point for the demand profile has been based on current gas demand. This has been determined by two different methods, a weather-corrected 4 year average, and projecting forward last year's demand, although the two methods arrive at a very similar volume.

In setting the expected volumes for the new gas supply contract, the Energy Supply team has made assumptions on the impact of planned measures that will reduce demand for gas below current levels over the contracting period (Oct 24 – Sept 28). These include:

- Sites connecting to the growing District Heat Network (DHN), replacing current gas-fuelled heating systems
- Gas boilers coming to the end of their operational life being replaced with either a DHN connection or with electric heating (heat pumps/electric boilers)
- Improvements in energy efficiency are achieved as a result of City Leap-delivered projects
- BCC sites being closed or disposed of as a result of estate rationalisation.

Detailed programmes for all these areas of work are still in development, and subject to their own approval process (including measures set out in the accompanying Corporate Estate Decarbonisation Programme report), so assumptions have had to be made on the levels of reduction that can be expected from these measures, based on an average annual % reduction.

Key Assumptions	All other	HRA			
	sites				
			Sites with a DHN connection - gas demand stops when connection		
District Heat Network			is made (no backup gas boiler retained on site) – site by site based		
connections			on draft programme		
			Annual Energy efficiency reductions based on % of current		
Energy efficiency	3%	3%	demand		
		Annual Boiler replacement reductions based on % of current			
Boiler replacement	3%	0%	demand - assumes old gas boiler replaced by Heat Pump		
Site Closures	3%	0%	Gas no longer used at disposed sites		
By Season, pro rata	9%	3%	Total reduction per year		
			Excludes Crematoria		

¹ Home (laserenergy.org.uk)

A sensitivity analysis shows that no single factor has a significantly greater impact on the overall gas demand and resultant costs, a combined programme is required to achieve the best overall results.

Assumption	Change (all other factors remaining constant)	Whole contract demand (kWh)	Whole Contract Cost ²
Baseline (as per table above)		161,697,342	£18,839,335
District Heat	All new connections delayed by 1 year ³	167,288,356	£19,513,668
Network connections	All new connections advanced by 1 year (where possible)	156,651,721	£18,226,120
Gas prices	5% increase in gas prices	161,697,342	£19,748,498
	5% decrease in gas prices	161,697,342	£17,930,172
Energy Efficiency	Only a 2% increase in efficiency achieved (including HRA)	165,514,641	£19,279,610
	4% increase in energy efficiency achieved (including HRA)	157,956,487	£18,407,871
Boiler replacement	Only a 2% gain from replacement of old gas boilers achieved	163,468,791	£19,048,592
	4% gain achieved from accelerated programme of old gas boiler replacement	159,961,593	£18,634,287
Site Closures	Only a 2% gain from site closure/disposal achieved	163,468,791	£19,048,592
	4% gain achieved from accelerated site closure programme	159,961,593	£18,634,287
Combined effect	5% increase in gas prices, 2% energy efficiency gain, 2% boiler replacement gain, 2% site closure gain	169,166,922	£20,662,037
	5% decrease in gas prices, 4% energy efficiency gain, 4% boiler replacement gain, 4% site closure gain	154,589,840	£17,140,802

3. Risk and risk management

Appendix D sets out the risk register associated with this contract renewal.

The key risks are:

- BCC incurs deemed rates as a result of not renewing contracts in time
- BCC has to agree transition rates due to joining the flexible procurement buying cycle late
- The cost of gas increases
- There is insufficient availability of green gas to offset residual carbon emissions from sites within scope of the 2025 carbon neutrality strategy
- The cost green gas to offset residual carbon emissions from sites within scope of the 2025 carbon neutrality strategy is unaffordable
- Gas demand does not fall as rapidly as forecast

The deemed rates and transition price risks are considered unlikely to happen given that work on the renewal of the supply contracts has started well before the current contracts expire.

The long-term cost of gas is difficult to determine, so prices have been estimated conservatively, based on current and recent rates. It should also be noted that the effective price for gas is higher in the summer, as fixed standing charges are spread over fewer units of gas consumed in the summer months. The energy market seems to have

² Based on using Flexible Procurement, Purchase within Period

³ Excluding sites already connected to a District Heat Network

settled at around twice historic rates, and is expected to stay at around this level for the remainder of the decade⁴. A flexible procurement trading strategy will secure the best available price from the market, but cannot fully protect against situations such as the recent energy crisis.

The gas reduction measures set out above will not eliminate the use of natural gas in all BCC sites within the scope of the 2019 Mayor's Climate Emergency Action Plan⁵, there will be significant residual carbon emissions from the continued use of natural gas in a number of these buildings. Green Gas (biomethane) is seen as a means to offset the residual carbon emissions from these buildings, as set out in the Corporate Estate Decarbonisation report. The availability and cost of Green Gas is hard to determine over the contracting period. The Green Gas Levy is intended to provide funding to increase the availability of green gas in the GB gas network⁶, but it is too soon to determine the likely impact of these measures on the future availability and affordability of Green Gas. An assessment will need to be made on the extent to which Green Gas can be used to offset residual carbon emissions nearer to the target 2025 compliance date.

The gas demand reductions set out above are not based on a detailed programme of works over the contracting period, but have taken into account the expected measures put forward in the Corporate Decarbonisation Strategy cabinet report. This is largely because this level of detail has not yet been determined beyond the current and next Financial Year. The contractual profile has therefore been based on an assumed average level of reduction as a result of these measures.

The consequences of this reduction profile being over optimistic (gas demand not reducing as quickly as expected) is that gas costs would remain higher than forecast due to higher than predicted demand, and so aggregate purchase price increases. This has an immediate impact on direct costs to BCC, and will need to be regularly monitored both within year and over the Medium Term Financial Planning cycle. There is also a contractual risk if BCC's actual demand is significantly different from the forecasts provided to the supplier. To protect against contractual risk, demand forecasts will be set on a season-by-season basis with the supplier, and there will be regular opportunities to revise the predicted demand as each buying cycle starts. BCC is also protected by being part of a larger portfolio, where variations in demand can be balanced out over a wider group of customers. Usage tolerance is usually +/- 10% of forecast demand, but to date no Laser Customer has incurred any penalty charge for using more or less energy than predicted. The only significant risk would be a substantial in-season change in demand beyond what can be managed by the supplier; it is very unlikely that this level of change would happen without some prior warning ahead and the council's energy supply team would seek to minimise this risk through regular demand monitoring.

⁴ Energy prices to remain significantly above average up to 2030 and beyond - Cornwall Insight (cornwall-insight.com)

⁵ Bristol City Council Mayor's Climate Emergency Action Plan 2019 - file (bristol.gov.uk)

⁶ Green Gas Support Scheme (GGSS): open to applications - GOV.UK (www.gov.uk)