Appendix B: Flex Energy Cost Scenarios 23/24 Energy Purchase

The table 1 below shows the current forecast energy costs for 22/23 with and without the EBRS (Energy Bill Relief Scheme) and shows the forecast Energy Costs for 23/24 (floor and ceiling prices)

Assumes:

- 100% of the energy volume is consumed
- no energy optimisation and efficiency programme
- no asset disposal or asset transfers in year (23/24)
- no change in operating practices, hours of operation
- no building closures

Table 1 Forecast Energy costs for 23/24 floor and ceiling prices

Corporate Energy Contracts	2022/23 Purchases Cabinet approved 27.07.22 Bought 28.07.22	2022/23 current forecast costs with EBRS 01.10.22- 31.03.23 applied	2023/24 Floor trading price 150p/therm £150/MWh 100% volume purchased	2023/24 Ceiling trading price Cap Price 300p/them and £250/MWh 100% volume purchased			
			Floor Price	Ceiling Price			
	Flex Energy Contracts (include PFIs and Council)			Budget Range			
Flex HH Commercial	£2.38m	£1.79m	£2.15m	£2.70m			
Flex Gas Commercial	£1.43m	£1.07m	£0.61m	£1.05m			
Forecast Flex Energy Costs	£3.81m	£2.86m	£2.76m	£3.75m			
Fixed Energy Cont	Fixed Energy Contracts only affected by EBRS						
Street Lighting UMS	£0.94m	£0.92m	£0.94m	£0.94m			
HH Housing	£0.05m	£0.05m	£0.05m	£0.05m			
NHH Commercial	£0.28m	£0.27m	£0.28m	£0.28m			
NHH Housing	£0.75m	£0.74m	£0.75m	£0.75m			
Gas Housing	£0.41m	£0.38m	£0.41m	£0.41m			
Forecast Fixed Energy Costs	£2.43m	£2.36m	£2.43m	£2.43m			
Total Energy Cost Forecast	£6.24m	£5.22m	£5.19m	£6.18m			

These tables show the significant fluctuation in annual spend against various energy market cost scenarios these cover the range of fluctuations in market prices we have experience to date in 22/23.

Appendix B: Flex Energy Cost Scenarios 23/24 Energy Purchase

Flex Electricity - Scenarios (2023-24)	Scenario annual spend 2023-24
£650/MWh	£4,816,296
£550/MWh	£4,282,259
£450/MWh	£3,748,222
£350/MWh	£3,214,184
£250/MWh	£2,680,147
£150/MWh	£2,146,110
£50/MWh	£1,612,073

Gas - Scenarios (2023-24)	Scenario annual spend 2023-24
750p/therm	£2,374,571
650 p/therm	£2,080,469
550 p/therm	£1,786,367
450 p/therm	£1,492,264
350 p/therm	£1,198,162
250 p/therm	£904,060
150 p/therm	£609,957
50 p/therm	£315,854

A market £1/MWh increase/decrease in price is equivalent to an increase/decrease of energy costs of £5,340 to the consumer.

A market 1p/therm increase/decrease in price is equivalent to an increase/decrease of energy costs of £2,941 to the consumer.

Note. That consumer costs are also made up of non-commodity costs i.e. standing charges, meter costs, distribution costs which are included in the forecast costs, these are fixed against each meter/supply and included within the energy cost scenarios.

They currently make up only a small component of the total energy costs, but as energy prices reduce this non-commodity cost element increases in % terms. These costs, even if a building is closed. The costs only stop if the meter is changed to a new tenant or physically disconnected and removed from the site.

These fixed costs are £212,203 for our Half Hourly Contracts.

These fixed costs are £185,873 for our Gas Contracts.

Lowest/Highest Energy Market Costs during 22/23 (April 22 – January 23)

Appendix B: Flex Energy Cost Scenarios 23/24 Energy Purchase

Energy Market costs change hourly and the daily fluctuations can be large during 22/23 up to £20/MWh and 30p/therm daily movements have been noted on the month ahead and season ahead prices. Table 2 below shows the lowest market prices for sum-23 and win-23 and the highest market costs for sum-23 and win-23 and how they would impact the associated energy spent annual spend if we bought all our energy of these days. This is based on the energy market prices between 1 April 22 and 27 January 23.

It can clearly be seen how volatile the market is the annual spend on energy is between £2.66m and £6.76m for our two flex contracts based on sum-23 and win-23 prices. When you add the cost of the fixed priced energy contracts you can clearly see the range is £5.09m to £9.19m for 23/24 purchases. This is why it is important to set a floor and ceiling price cap, noting the floor price is very close to the lowest market price and the ceiling is set must lower than the highest potential market cost.

Table 2 Energy Market Prices (April 22 – Jan 23) for sum-23/win-23 purchases:

Energy Durchass	Market	Lowest Potential	Market	Highest Detential
Energy Purchase	warket		warket	Highest Potential
period		Annual Spend		Annual Spend
Sum-23	Lowest Price	£	Highest Price	£
Power (£/MWh)	133	1.03m	583	2.23m
Gas (p/therm)	143	0.12m	726	0.46m
Win-23	Lowest Price		Highest Price	
Power (£/MWh)	134	1.03m	583	2.23m
Gas (p/therm)	147	0.48m	723	1.84m
Flex Energy	23/24 Costs	2.66m	23/24 Costs	6.76m
Contracts				
Fixed Energy	23/24 Costs	2.43m	23/24 Costs	2.43m
Contracts				
Total Energy		5.09m		9.19m
Costs				

Assumes:

- 100% volume consumed
- 50% consumption electricity (sum-23) 50% consumption electricity (win-23)
- 80% consumption gas (win-23), 20% consumption gas (sum-23)