

Committee(s)	Dated:
Barbican Residential Committee	9 th December 2022
Subject: 2022/23 Electricity price Forecast Update	
Which outcomes in the City Corporation's Corporate Plan does this proposal aim to impact directly?	2,4,5,11
Does this proposal require extra revenue and/or capital spending?	N/A
If so, how much?	N/A
What is the source of Funding?	N/A
Has this Funding Source been agreed with the Chamberlain's Department?	No
Report of: City Surveyor	For Information
Report author: Graeme Low	

Summary

This report presents the view of expected electricity costs for CoL BEO housing sites. Prices are yet to be finalised for the full year. This is contingent upon the PPA which is expected to begin operating in January. Once the PPA is live, the unit rates are expected to remain below the published price cap.

Recommendation(s)

- Note the increase in budget without the PPA
- Note the PPA will provide significant budget relief
- Note that consumption and costs will be validated via the new procurement contract with Sigma, the City's current energy monitoring software
- Note continued work towards carbon reduction
- Note the continued work on demand side response
- Note the Energy Bill Relief Scheme (EBRS) has been passed into law

Main Report

Background

1. Electricity market prices have increased by approximately 700% since December 2021. As part of an agreed approach to managing price risk, the City Corporation purchases energy in advance through our Broker, LASER Energy and their publicly procured framework. This helps to mitigate the risk of purchasing during the market peaks by procuring small amounts over a given period.
2. The Energy Team continue to support reduction efforts including fabric measures at the BEO. This will support carbon and kWh reduction. In addition, GLA funding (Local Energy Accelerator funding) has also been awarded to City of London to undertake a study to investigate further improvements to the underfloor heating system, including controls improvements and exploring demand side response. This is expected to begin in the new year and the results of the feasibility study will be presented back to Committee once finalised in 2023.
3. Alongside the Supply agreement, the City of London Corporation have entered into a 15-year agreement to purchase approximately 56,566 MWh per annum from South Farm Solar Ltd (known

as the Power Purchase Agreement or PPA). This figure reduces slightly with performance each year and by the 15th year the output is expected to be 50,664 MWh. This currently represents approximately 63% of the Corporations electricity volume, including the Barbican Residential volume.

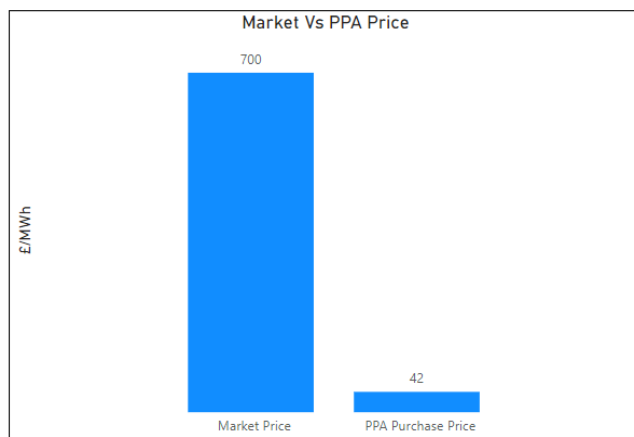
- Chart 1 and 2 demonstrates the importance of the PPA. It shows how much electricity prices have risen since December of 2021 and demonstrates that current prices had reached around the £700/MWh mark for the October 2022 period.
- Under the PPA our purchased commodity price (excluding non-commodity costs) will be £41.68/MWh for the first two years. Approximately 63% of our volume will be provided once it reaches its Commercial Operations Date.
- The expected energisation date is now 1st January, this remains dependent upon the District Network Operator and final safety tests. Additional volume has been procured for November and December to cover this gap.
- The electricity from this PPA is provided at a set price which increases after the 2nd year of operation in line with indexation.

Rising Markets

Chart 1. Rising Electricity Prices Since December 2021 (05/09/2022)



Chart 2: Comparison of PPA versus Market price



Expected Tariff price October 2022 -September 2023

4. Data has been sourced from by Total Energies and represents recent data covering 2021-2022. The budget spreadsheet in the appendix has used a unit rate of an estimated 34p/kWh for the period of October to December due to expected EBRs relief. The unit rate of 25.58 p/kWh is anticipated for the period January to September due to the PPA. This means that the estimated cost avoidance is approximately £1M for the period January to September. This is dependent on numerous factors, including consumption. **A list of some caveats are included in the “Assumptions” tab in the appendix.**
5. The Energy and Sustainability hosted an information session to sites to advise of the updated invoice validation process. Team Energy Auditing Ltd. will be taking over from Mitie in the validation and verification of invoices in 22/23.

Corporate and strategic implications

6. **Financial implications:** The likely impacts of higher energy prices will have a significant impact on both residents and Commercial tenants at the Barbican Residential Estate. The City Corporation are working to mitigate the impacts of these rises through the introduction of a Power Purchase Agreement and a purchase in advance approach.

Conclusion

7. Whilst we expect there to be a rise in electricity costs for residents at the Barbican, the introduction of the PPA will go far to mitigate the effects.

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