

**Date: 22 November 2023**

**Item: TfL Energy Purchasing: Crown Commercial Service**

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**This paper will be considered in public**

**1 Summary**

- 1.1 On 25 November 2020, the Committee noted a paper on TfL Energy Purchasing: Crown Commercial Service and Power Purchase Agreements, which set out our Energy Purchasing Strategy (EPS). This strategy outlined a refined approach to procuring renewable energy through Power Purchase Agreements (PPAs) to meet our ambition to operate a zero-carbon railway by 2030. As detailed in the EPS, our existing energy purchasing arrangements with the Crown Commercial Service (CCS) are an essential part of managing our energy price risk and fundamental to the delivery of renewable energy PPAs.
- 1.2 This paper seeks Procurement Authority to extend the current arrangements, which will allow the continuation of the current energy purchasing and risk management strategy through the CCS Energy Framework.
- 1.3 The proposed approach will ensure the ongoing supply of cost competitive electricity and gas supplies for our operations in the near term, while also enabling the transition to renewable energy; our existing EPS sees TfL securing 50 per cent of its energy through renewable PPA tranches over the coming years in line with our ambition to run a zero-carbon railway by 2030.

**2 Recommendations**

**2.1 The Committee is asked to note the paper and:**

- (a) approve Procurement Authority of £1077m for the purchase of electricity and natural gas pan-TfL for supply during the 2026/27, 2027/28 and 2028/29 financial years; and**
- (b) note that the matters for which authority is sought above extend beyond the current Business Plan and Budget and provision will need to be made in future Business Plans and Budgets, including that due to be considered by the Board in December 2023.**

**3 Background – Existing Purchasing Route and risk management strategy**

- 3.1 We have an annual aggregated requirement of around 1600GWhs (gigawatt hours) of electricity and around 80 GWhs of natural gas, which is equivalent to approximately 551,000 average domestic electricity consumers and 6,000 average domestic gas consumers.

- 3.2 We have been utilising the procurement services and frameworks of CCS for energy purchasing since 2013. This has enabled us to have additional commercial leverage by subscribing to the largest procurer of energy in the UK and aggregating our volume with other public sector organisations.
- 3.3 The framework arrangements competitively tendered by CCS are used for energy purchasing by all of central government, many local authorities and other organisations across the public and not-for-profit sectors. Subject to Committee approval, we will contract with CCS through an updated Customer Access Agreement, which will enable us to access the electricity and gas framework let by CCS for supply from April 2026, and subsequently we will enter into the pre-agreed contract terms with suppliers appointed to the framework, currently EDF Energy Customers Limited (EDF) for electricity and Total Energies Gas and Power Limited for natural gas.
- 3.4 The CCS framework obliges the framework electricity supplier (EDF) to deliver (or “sleeve”) energy directly procured by a customer (such as TfL) from a generator via a PPA (with terms including price and duration of the on-sale/sleeving arrangements to be agreed between us and the framework supplier). Therefore, continued use of the CCS framework provides flexibility and is an essential delivery route for renewable energy we will procure via PPAs.
- 3.5 CCS leverages its position and aggregates customer volumes to deliver sustainable savings and to provide an enhanced managed service delivering value directly to its customers.
- 3.6 By combining customer volumes, CCS can exert greater buying power in the marketplace and reduce charges/costs incurred through supplier margin, bid/offer spread and brokerage fees.
- 3.7 The aggregation of volume with other public sector customers creates further benefits for us by reducing the relative proportion of more expensive peak volume versus cheaper baseload volume.

## **4 CCS Risk Management**

- 4.1 As the largest aggregator of gas and electricity purchasing requirements in the UK, CCS has skilled in-house market analysts and risk management specialists.
- 4.2 CCS offers several risk management products for its customers; the current proposal is that we continue to use the product we have used to date, which comprises a minimum purchasing window ahead of delivery. For example, from December 2023, CCS will be looking to procure electricity and gas for the financial year commencing in April 2026, and from December 2024, CCS will be looking to procure electricity and gas for the financial year commencing in April 2027.
- 4.3 The product incorporates a minimum volume profile that CCS must purchase to provide minimum coverage levels closer to delivery; this is designed to mitigate the impact of wholesale market price spikes and provides greater budget certainty.
- 4.4 CCS can also unlock/sell back previously hedged volumes, if it believes the market fundamentals indicate potential upside. This mechanism is limited to and operated within pre-agreed stop loss parameters.

4.5 The effectiveness and operation of the purchasing strategy is overseen by the CCS External Risk and Governance Board; current members include the Ministry of Defence, the Ministry of Justice, the National Procurement Service (Wales), Guy's and St Thomas' NHS Foundation Trust, the Department for Work and Pensions, the Royal Borough of Kensington and Chelsea, and TfL. The board is chaired by an independent expert, Patrick Heren.

## **5 Energy Bill Relief Scheme and CCS performance**

5.1 During 2022, the government announced its intention to shield UK Industrial and Commercial sectors (including transport) from exceptionally high wholesale commodity prices via the Energy Bill Relief Scheme (EBRS).

5.2 The Energy Prices Act 2022 gave the government the powers to establish the EBRS and make regulations for subsequent schemes, resulting in UK I&C users who were expecting to pay energy above £211/MWh for electricity and 220p/therm for gas over the winter 2022 period (October 2022 to March 2023 inclusive), receiving discounts to bring their costs closer to (but not lower than) £211/MWh and around 220p/therm. I&C users who hedged at prices below the above levels were not eligible for additional relief and paid the prices they had achieved.

5.3 Most of CCS' customers, including TfL, did not receive any relief under the scheme as CCS prices achieved for winter 2022 were considerably lower than the EBRS cap. The total benefit against the EBRS price for TfL is estimated to be £84.7m. (This is the additional amount we would have been paying at EBRS levels of £211/MWh and 220p/therm).

5.4 The EBRS scheme was replaced in April 2023 by the Energy Bills Discount Scheme (EBDS). This revised scheme continues to provide some support with energy bills for eligible non-domestic consumers, however, similar to EBRS, we remain ineligible due to prices achieved through CCS continuing to be considerably below the eligibility thresholds.

### **CCS Performance for Financial Year 2022/23**

5.5 A key component of the strategy that we operate through CCS is price stability; this is achieved by having a long buying window (up to 42 months ahead of delivery).

5.6 The long buying window provides the CCS trading team flexibility in timing its purchases and the ability to start setting our energy costs well in advance, but the strategy also allows for some exposure to shorter term markets.

5.7 Annual market prices for Financial Year 2022/23:



5.8 The above graph shows how market prices for year starting April 2022 moved over the effective buying window, from October 2019 when purchasing started through to the end of the delivery year in March 2023. The graph highlights how markets moved from relative stability in the initial 18 months of the buying period to extreme volatility over the closing 18 months, with a transition period over the summer of 2021 when prices initially started pushing higher.

5.9 Our achieved prices for the financial year April 2022/2023 were more than 40 per cent below the traded market average.

## 6 Procurement Authority for Financial Years 2026/27, 2027/28 and 2028/29.

6.1 In line with the gating procedure considered by the Committee in December 2017, this paper seeks Procurement Authority of £1,077m to continue with the procurement of energy for financial year 2026/27, and in addition, financial years 2027/28 and 2028/29 through the CCS framework. Agreeing a further three years of this arrangement now will enable the necessary on-sale/sleeving arrangements for our under-tender renewable energy “new build” PPA to be agreed up front and implemented at the appropriate time with the supplier. The on-sale/sleeving arrangements are critical to the delivery of our proposed ‘new build’ PPA from 2026 onwards, and having at least a three-year period agreed upfront will ensure these arrangements are in place and ready for the commissioning and operational phase. This will also allow us to continue our purchasing and risk management strategy alongside PPA procurements, which protects us against wholesale market price volatility, while providing opportunities to secure the wholesale energy at a low market price. Financial years 2027/28 and 2028/29 will not be traded any further ahead than usual (30 months ahead of the start of each financial year); the extended duration is purely so on-sale/sleeving terms for our PPAs can be executed at the appropriate time.

- 6.2 The amount requested includes five per cent risk (in line with previous years), is aligned with the draft Business Plan which is due to be considered by the Board in December, and is based on the Department for Energy Security & Net Zero wholesale energy price forecast plus all expected Non-Energy Costs (NECs) i.e. transmission, distribution, system costs and environmental levies.
- 6.3 This amount also includes energy volume (around ten per cent of estimated total) in the process of being procured via PPA (PPA Comet), this is to ensure requisite authority is in place (for the period April 2026 to March 2029) if PPA Comet is not awarded. The delivery window for PPA Comet is April 2025 to December 2028.
- 6.4 NECs for CCS volumes and delivery period are expected to make up at least around 60 per cent (or £646m) of the fully delivered of the cost we pay. These charges include statutory environmental charges intended to support and incentivise new zero carbon energy generation, which are payable on all electricity delivered via the grid.
- 6.5 Continuing to source through the CCS framework for this period will provide the opportunity to purchase energy ahead of delivery (if financially beneficial to do so), while managing price risk and providing flexibility to source renewable energy alongside this arrangement.
- 6.6 Funded measures from building decarbonisation in TfL's Climate Budget are expected to lead to a reduction in gas consumption of approximately 45 per cent by 2030. The majority of this reduction will be due to heat electrification, and therefore cost savings from reduced gas usage are expected to be partly offset by increased spend on electricity. At the same time, investment in energy efficiency improvements in building fabric, lighting, equipment and operations across the estate will lead to reduced energy consumption and overall cost savings, though further site-specific analysis and feasibility studies are required to fully quantify and cost this opportunity. Given this uncertainty in projected changes to TfL's electricity and gas consumption, the current proposal for energy purchasing is a prudent approach to managing future requirements, and does not lock TfL into buying specific volumes long term.
- 6.7 Separate authority requests for purchases beyond March 2029 will be made in line with our commitment to move to zero carbon sources of electricity for our rail operations and will be submitted to the Committee in due course.

## **7 Update on Revised TfL Energy Purchasing Strategy**

- 7.1 A revised EPS will be brought to the Committee in March 2024. The EPS has two primary objectives: achieving our ambition of operating a zero-carbon railway by 2030 by procuring renewable grid electricity for power consumption that cannot be reduced through energy efficiency measures, or displaced by onsite and near-site renewable power generation; and achieving value for money for our energy purchasing. The energy market is dynamic, complex and challenging to forecast beyond a limited time horizon, and therefore we will need to retain a degree of flexibility in how we best pursue these objectives.
- 7.2 The revised EPS will set out: the total target volume of our power consumption to be met through corporate PPAs out to 2030; our approach to collaboration with the Greater London Authority Group Functional Bodies; and key market and regulatory risks to achieving our objectives, and risk mitigation strategies.

**List of appendices to this report:**

None

**List of Background Papers:**

Finance Committee 25 November 2020, paper on TfL Energy Purchasing: Crown Commercial Service and Power Purchase Agreements

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