

Date: 24 November 2021

Item: TfL Energy Purchasing: Crown Commercial Service

This paper will be considered in public

1 Summary

- 1.1 As set out in the September 2020 Committee paper, TfL has developed an Energy Purchasing Strategy in line with the Mayor's Transport Strategy, the London Environment Strategy and TfL's own carbon ambitions as set out in the Corporate Environment Plan.
- 1.2 In line with the TfL Energy Purchasing Strategy, this paper:
- (a) Seeks Procurement Authority to extend the existing arrangements with Crown Commercial Services (CCS) to allow the continuation of the current energy purchasing arrangements and risk management strategy, albeit reduced to allow for energy volume to be purchased through a Power Purchase Agreement (PPA), and
 - (b) updates the Committee on energy purchases since December 2020 through the CCS agreed frameworks.
- 1.3 This approach ensures the ongoing supply of cost competitive electricity and gas supplies for TfL's operations in the near term, while also enabling the transition over coming years to renewable energy, in line with our commitment to run a zero-carbon railway by 2030 as set out to the Committee in September 2020. Continued use of CCS and authority sought in the paper also supports planned future PPA procurements as set out in paragraphs 3.9 and 5.1.

2 Recommendations

2.1 The Committee is asked to:

- (a) **note the paper and approve Procurement Authority of £402m¹ for the purchase of electricity and natural gas across TfL during the 2024/2025 and 2025/2026 financial years, via the existing frameworks competitively procured by the Crown Commercial Service (CCS); and**
- (b) **note that future TfL Business plans will need to continue to make provision for the supply of energy updating each year to the latest forecast based on TfL's requirements.**

¹ ~87.5% of expected annual electricity demand and 100% of expected gas demand for financial year 2024/2025 and 2025/2026.

3 Background – purchasing route and risk management strategy for the financial years 2024/25 and 2025/26

- 3.1 TfL has an annual aggregated requirement for the supply of electricity of ~1600GWhs (gigawatt hours) and ~80 GWhs of natural gas, which is equivalent to approximately 420,000 average domestic electricity consumers.
- 3.2 TfL has been fully utilising the procurement services and frameworks of CCS for energy purchasing since 2013. This has enabled TfL to have additional commercial leverage by subscribing to the largest buyer of energy in the UK and aggregating its volume with other public sector organisations.
- 3.3 The competitively tendered framework arrangements set up by CCS are used for energy purchasing by all central government, local authorities, and many other organisations across the public and not-for-profit sectors. TfL has a contract with CCS which enables it to access the electricity and gas frameworks let by CCS and enter into the pre-agreed contract terms with suppliers appointed to the framework, currently EDF Energy (EDF) for electricity and Corona Energy for gas (Total Gas & Power (TGP) for gas from April 2022).
- 3.4 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.
- 3.5 By combining customer volumes, CCS is able to exert greater buying power in the marketplace and reduce charges/costs incurred through supplier margin, bid/offer spread and brokerage fees. TfL saves around £5.9m per annum through this aggregation with the wider public sector.
- 3.6 The aggregation of volume with other public sector customers creates further benefits for TfL by reducing the relative proportion of more expensive peak volume versus cheaper baseload volume. This, together with a reduction in overall residual volume (unpredictable electrical usage), further reduces TfL’s expenditure by around £1.1m per annum.
- 3.7 On average and based on the last five years’ trading performance, CCS has outperformed the market traded average. This delivers an annualised saving of £0.8m per annum for TfL. A summary of CCS energy savings applicable to TfL are detailed below.

TfL CCS Benefit Summary	Savings
Aggregation	£5.9m
††Trading Performance	£0.8m
Load-Shaping (residual)	£1.1m
Total	£8.1m per annum

††Annualised performance based on 5-year average. Figures provided by CCS in accordance with agreed benefits methodologies and are subject to independent audit by the Government Internal Audit Agency.

- 3.8 From March 2020 to June 2020 and due to the restrictions caused by the pandemic, TfL consumption was some 30 per cent lower than forecast. As the CCS supply arrangements do not have any financial penalties for reduced or increased consumption this had no financial impact on TfL, other than to reduce electricity operational expenditure during this period.

3.9 The CCS framework also obliges the framework supplier (EDF currently) to deliver (or “sleeve”) energy directly procured by a customer such as TfL, from a renewable generation source via a Power Purchase Agreement (PPA) (with price, duration and other terms of the on-sale/sleeving arrangements to be agreed between TfL and the framework supplier). Therefore, continued use of the CCS framework provides both flexibility and an essential delivery route for any renewable energy TfL procures via a PPA.

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 and has robust independent governance procedures in place.
- 4.2 The CCS frameworks offer several risk management products for its customers. The current proposal is that TfL continues to use the product it has used to date which comprises a minimum purchasing window ahead of delivery e.g. from December 2021 CCS will be looking to procure electricity and gas in respect of the financial year commencing in April 2024, and from December 2022 CCS will be looking to procure electricity and gas in respect of the financial year commencing in April 2025.
- 4.3 The product incorporates a minimum volume profile that CCS must purchase in order 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. This strategy is complemented by a stop loss mechanism which limits customers’ exposure to wholesale electricity and gas price volatility where market prices reach a certain threshold.
- 4.4 CCS also has the ability to unlock/sell back previously hedged volumes, if it believes the market fundamentals indicate potential upside. It should be noted that this mechanism is limited to and operated within the established 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, Ministry of Justice, National Procurement Service (Wales), Guy's and St Thomas' NHS Foundation Trust, Department for Work and Pensions, Royal Borough of Kensington and Chelsea, and TfL. The board is chaired by an independent expert, [Patrick Heren](#).

5 Financial Years 2024 to 2025 and 2025 to 2026

- 5.1 In line with the gating procedure considered by the Committee in December 2017, this paper seeks Procurement Authority of £402m to continue with the procurement of energy for financial year 2024/2025, and in addition financial year 2025/2026, through the CCS frameworks. Under the CCS arrangements TfL can contract with EDF until the end of financial year 2025/2026 if this instruction is given prior to expiry of the existing framework (October 2023). Agreeing the available two years of this arrangement now (rather than the previous one year arrangement), will also facilitate PPA procurement and enable the necessary on-sale/sleeving PPA delivery route arrangements to be agreed and implemented at the appropriate time in the procurement and delivery programme. This will also allow TfL to continue its purchasing and risk management strategy alongside PPA procurement, which

protects TfL against wholesale market price volatility whilst providing opportunities to secure the wholesale energy at a low market price. Note that CCS trading for financial year 2025/2026 will start no earlier than December 2022 i.e. no earlier than the usual annual authority would have been requested.

- 5.2 The amount requested is included in the business plan plus five per cent risk (in line with previous years), and is based on business demand and the Department for Business Energy and Industry Strategy (BEIS) wholesale energy price forecast plus all expected Non-Energy Costs (NECs) i.e. transmission, distribution, system costs and environmental levies for CCS procured volumes.
- 5.3 The amount requested does not include energy volume to be procured via a renewable energy PPA, and under the CCS arrangement, TfL has the flexibility to adjust the volume requirement (amount to be purchased) 4 months ahead of each delivery year i.e. the total volume to be hedged through CCS for financial year 2025/2026 could be adjusted at any time up to approximately December 2024.
- 5.4 NECs for the CCS volumes and delivery periods are expected to make up approximately £95.6m for 2024/2025 and £97.9m for 2025/2026 of the cost TfL pays, with approximately £156.3m of the total amount for both years resulting from statutory environmental charges intended to support and incentivise new zero carbon energy generation, which are payable on all electricity delivered via the grid.
- 5.5 Continuing to source through the established 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 zero-carbon energy alongside this arrangement.
- 5.6 Separate authority requests for purchases beyond March 2026 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.

6 Market update and impact on TfL energy purchasing

Market Update

- 6.1 As reported to the Committee 6 October 2021, near-term wholesale electricity market prices have increased significantly over the last 6 months and remain at elevated levels. Whilst higher levels of wind generation provided some downside to power prices, natural gas fundamentals remain tight with European gas storage inventories still well below the corresponding levels observed 12 months ago as the global gas crisis continues.
- 6.2 Spot Liquefied Natural Gas (LNG) prices in Asia continue to trade at a premium, reducing the number of LNG cargoes arriving in North West Europe, whilst outages in Norway also contributed to the tight gas supply which is supporting both current spot gas and electricity prices.
- 6.3 In contrast, gas prices for delivery periods further out moved lower across the market, some of these decreases were based on the anticipation that Nord Stream 2 could commence gas flows to Europe following regulatory approval in January 2022, and that domestic gas inventories in Russia are nearing 100 per cent capacity, which could enable further flows to Europe.

6.4 Natural gas flows from Russia and the weather will be the two key factors influencing wholesale power and gas price over the coming months. The market sentiment remains concerned that tight supply margins and the price volatility observed last winter will also be a factor this winter.

Impact on TfL energy purchasing

6.5 For the current contract year; April 2021 to March 2022, TfL has not been impacted by any of the recent market volatility, as TfL's requirements were secured prior to recent market events.

6.6 For future contract years; April 2022 to March 2023 and April 2023 to March 2024, TfL has a significant hedge through the CCS arrangements, which were secured before recent market price rises, this is protecting TfL from any significant financial impact posed by the current market situation.

6.7 All mark to market positions including all Non-Energy Costs remain below the previous Authority granted by the Committee.

7 Power Purchase Agreements for renewables

7.1 As set out in the September 2020 Committee paper, TfL has also developed an Energy Purchasing Strategy in line with the Mayor's Transport Strategy and London Environment Strategy carbon objectives for the incremental procurement of renewable energy direct from generators is in line with our commitment to move to zero carbon sources of electricity for our rail operations by 2030.

7.2 An update on the progress of this strategy was provided to the Committee on 6 October 2021; a further PPA update will be provided in Spring 2022.

List of appendices to this report:

None

List of Background Papers:

None

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