

Date: 28 February 2024

Title: Environment Programme

This paper will be considered in public

1 Summary

Environment Programme					
	Existing Financial Authority	Estimated Final Cost (EFC)	Existing Programme and Project Authority	Additional Authority Requested	Total Authority
Total Expenditure	£1,179.0m	£1,110.7m	£1,012.7m	£64.3m	£1,077.0m
Income	£5.3m	£ 14.7m	£3.5m	£11.2m	£14.7m
Net	£ 1,173.6m	£1,096.0m			
The Financial Authority, Estimated Final Cost and Programme and Project Authority covers the Environment Programme for the Financial Years 2017/18 to 2027/28					

- 1.1 This paper details the request for additional Programme and Project Authority and Procurement Authority for the Environment Programme (the Programme). The paper also provides an update on the progress of projects since March 2023 and planned delivery from April 2024.
- 1.2 The Programme aims to deliver key outcomes in the Mayor’s Transport Strategy, primarily to help tackle the triple challenges of air pollution, traffic congestion and the climate emergency. Benefits include improved air quality and less carbon emissions for London, and a reduction in operational carbon emissions to enable TfL to become net zero by 2030. In addition, our investment in Direct Vision Standards for Heavy Goods Vehicles (HGVs) delivers safety benefits aligned with the Vision Zero commitment.
- 1.3 A paper containing exempt information is included in Part 2 of this agenda. This information is exempt by virtue of paragraph 3 of Schedule 12A of the Local Government Act 1972, in that it contains information relating to the business affairs of TfL. Any discussion of that exempt information must take place after the press and public have been excluded from the meeting.

2 Recommendations

2.1 The Committee is asked to note the paper and the exempt supplementary paper on Part 2 of the agenda and:

- (a) approve additional Programme and Project Authority of £64.3m to support the ongoing delivery of the Environment Programme giving a total Programme and Project Authority of £1.077bn;**
- (b) approve the additional Procurement Authority, in the sums requested in the exempt supplementary paper on Part 2 of the agenda, relating to the contracts with Capita Business Services Limited (Capita) and Yunex Limited to continue activities in support of existing Road User Charging schemes; and**
- (c) note that matters for which Procurement Authority are sought above include commitments that extend beyond the period of the 2024/25 Budget and 2024 Business Plan. Provision will, therefore, need to be made for those commitments in future Budgets and Business Plans.**

3 Environment Programme Performance in 2023/24

London-wide Ultra Low Emission Zone (ULEZ)

- 3.1** On 29 August 2023, the ULEZ was successfully expanded London-wide, achieving the committed public launch date. On 31 October 2023 the First Month Report was published, evaluating the impact of the scheme in its first month. Initial data showed the scheme has reduced the proportion and number of older, more polluting vehicles on London's roads. Key findings include:
- (a) London-wide compliance rate for vehicles subject to the ULEZ standards during the first month was 95.3 per cent, up from 91.6 per cent in June 2023 and 39 per cent in February 2017 when changes associated with the ULEZ began;**
 - (b) compliance rates have increased for cars and vans – 96.4 per cent of cars and 86.2 per cent of vans seen driving in the London-wide ULEZ met the standards in the first month of operation, up from 93 per cent and 80.2 per cent in June 2023 and 44 per cent and 12 per cent in February 2017;**
 - (c) there are fewer older, more polluting cars seen driving in the zone. On an average day, there were 77,000 fewer unique non-compliant vehicles seen detected in the London-wide ULEZ compared to June 2023, totalling a 45 per cent reduction;**
 - (d) there has been an overall reduction in vehicles driving in the zone. On an average day, there are 48,000 fewer unique vehicles driving each day in the London-wide ULEZ compared to June 2023; and**
 - (e) in the expanded outer London area, vehicle compliance has increased by 10 per cent since the launch of the consultation to expand the ULEZ London-**

wide. Vehicle compliance is now 95.2 per cent, up from 85.1 per cent in May 2022, and from 90.0 per cent in June 2023.

- 3.2 There continue to be incidents of vandalism on ULEZ cameras and signage. All incidents are reported to the police and arrests have been made. We continue to work closely with the Metropolitan Police Service and our contractors to report all incidents, review prevention measures and repair any damage caused.

Scrappage Scheme

- 3.3 Between the scrappage scheme launching on 30 January 2023 and 14 January 2024, over 45,000 applications were accepted and over £155m has been committed. In June 2023, the Mayor announced the expansion of the scrappage scheme to Londoners receiving child benefit and all small businesses registered in London with fewer than 50 employees. In August 2023, the scheme was further expanded, with the Mayor announcing changes that extended support to all Londoners with a non-compliant vehicle; increased grant payments for scrapping a wheelchair-accessible vehicle, van or minibus; and allowed businesses to scrap up to three vehicles.
- 3.4 In early February 2024, the Mayor agreed for a further £50m to be provided from the Greater London Authority (GLA) to allow the scheme to continue to operate in 2024, making the total funds available for the scrappage scheme £210m. Authorities for the additional funding were secured by a Chair's Action approval on 26 January 2024, reported in the Use of Delegated Authority paper on the agenda for this meeting.

Blackwall and Silvertown Tunnels User Charge

- 3.5 The Blackwall and Silvertown Tunnels User Charge system must be in place for the opening of the Silvertown Tunnel, currently planned for 2025. The power to levy charges is provided for in the Silvertown Tunnel Order 2018 (the Development Consent Order) made by the Secretary of State for Transport in May 2018. The User Charge, once determined, will be implemented via contract variations to the existing Road User Charging (RUC) operating model, with necessary system changes and contact centre support being undertaken by Capita, who commenced resource mobilisation in June 2023, as planned, to enable system design and development activity to start. Detection and enforcement infrastructure is being delivered by Yunex at both Silvertown and Blackwall Tunnels, following a contract variation. Requirements for web development are being progressed internally by TfL.

Business Operations in-house

- 3.6 As set out in previous submissions to the Committee, it is intended to bring the RUC Business Operations (BOps) in-house. Onboarding of specialist technical resources has continued via the Crown Commercial Services frameworks, supporting key activities focused on progressing the BOps system design, build and integration. In June 2023, Phase 1 of the system build was completed as forecast, including testing of key functionality such as signing up for autopay and creation of a RUC account.

RUC Re-let

- 3.7 The RUC re-let project consists of three service contracts which together form the RUC operating model:
- (a) Detection and Enforcement Infrastructure (D&EI);
 - (b) Customer Management Services (CMS) (previously referred to as the BOps service contract); and
 - (c) Enforcement Operations (EOps).
- 3.8 The project has progressed well during 2023/24, overcoming resource challenges to achieve forecast milestones for the overall procurement strategy and market engagement activities. The overarching procurement strategy was endorsed in June 2023, and has informed the individual procurement strategies for each contract. The EOps Procurement Strategy was approved in October 2023, having been informed by the outcome of market engagement activities undertaken in summer 2023. The CMS and D&EI procurement strategies are currently in development, with market engagement for D&EI and CMS undertaken in spring 2023 and autumn 2023 respectively.

Future RUC

- 3.9 Within the public consultation that took place between May and July 2022 as part of the London-wide ULEZ project, a number of high level policy questions were asked on the potential for a future RUC scheme to replace existing charges, such as the Congestion Charge, Low Emission Zone and ULEZ. However, no further work on a future RUC scheme is taking place at this time.

Direct Vision Standard Phase 2 (DVS2)

- 3.10 Public consultation took place between 14 February and 3 April 2023 seeking views on the proposed safety equipment specifications that non-compliant HGVs over 12 tonnes would need to meet from October 2024 to secure a safety permit and operate in London. The final design of this equipment, known as the Progressive Safe System, was subsequently approved by the London Councils' Transport and Environment Committee (TEC) in June 2023, achieving a key milestone for the project. London Councils TEC also approved amendments to the Traffic Regulation Order required to operate the HGV Safety Permit Scheme for DVS2. Progressive Safe System Operator Guidance and Technical Specifications were published in autumn 2023 to help HGV operators prepare for changes in permitting requirements, which will see the minimum DVS star rating threshold increase from 1 star to 3 stars from October 2024.

Electric Vehicle Infrastructure Delivery (EVID)

- 3.11 EVID continues to progress delivery of rapid and ultra rapid charge points to support projected demand in London to 2030. In the previous submission to the Committee in March 2023 we set out a target to sign the first contracts with electric vehicle charge point operators in 2023/24. The first contract was signed in

May 2023 and by the end of November 2023, a further two contracts had been signed. These contracts aim to have installed 100 rapid charging bays by summer 2025. Commencement on the first site is planned for spring 2024. Feasibility work for a second tranche of charging bays has been initiated to continue delivery of the rapid and ultra rapid chargers that London needs.

Bus Opportunity Charging Trial

- 3.12 We reported to the Committee in March 2023 that bus route 358 between Crystal Palace and Orpington would become fully electric by May 2023. However, the achievement of this milestone has been subject to significant delays primarily due to a need to accommodate electric vehicle charging infrastructure on third party land and agree associated contractual terms. Infrastructure works have now been completed at Crystal Palace, with snagging, testing and commissioning due to conclude in March 2024. This includes minor changes to the bus stand layout and driver training. Infrastructure at the Orpington end of the route is now almost complete, following works to connect to the UK Power Network system undertaken in February 2024. The charging infrastructure will be powered and ready to use when documents are approved in March 2024. The route is estimated to operate with a full fleet of zero-emission buses from June 2024 following final commissioning and testing. Lessons learnt from this pilot project are being gathered to ensure they inform any future similar schemes.

Waste Heat

- 3.13 A significant project milestone was achieved on 16 November 2023, with a preferred delivery and commercial approach confirmed to harness thermal energy from a first site in Southwark. Stakeholder engagement continues for the site and will be used to finalise the procurement strategy and compile a delivery schedule. Plans for identifying future sites are underway. As part of this aim for future sites, a further round of market engagement was concluded in December 2023, to standardise the level of information that is publicly available on our waste heat opportunities. We are currently responding to a consultation led by the Department of Energy Security and Net Zero for a new national heat zoning initiative that is expected to significantly influence our longer-term strategy.

Solar Private Wire

- 3.14 In our previous submission to the Committee, we stated it was our intention to launch an Invitation to Tender (ITT) by autumn 2023. Though we achieved approval of the procurement strategy in September 2023, the ITT is delayed until May 2024 due to the need to commission specialist resources to validate the content of procurement documentation, namely the technical specification and case study to ensure a competitive procurement process.

Zero-Emission TfL Support Fleet (ZEF)

- 3.15 The aim of ZEF is to decarbonise TfL's support fleet of approximately 1,000 vehicles to align with our objective of becoming operational Net Zero by 2030. A new delivery team was successfully mobilised in summer 2023 and the scope of the programme confirmed in December 2023. Initial workstreams have focused

on analysing telematic data to understand how the current fleet operates, to help inform decisions on leasing zero emission alternatives and associated infrastructure – namely, charging points. Some quick win opportunities are also being explored at specific locations, to integrate plans with broader activities to reconfigure these sites.

Building Decarbonisation – Heat

- 3.16 The programme aims to support an objective to decarbonise operations across our estate by 2030 by eliminating the use of fossil fuels and improving energy efficiency. A delivery team was mobilised in summer 2023. Feasibility studies for an initial eight prioritised sites were completed in March 2023 with a further 14 sites commissioned in October 2023, with the aim to complete feasibility for the 22 sites by June 2024. Grant funding has been secured through the Public Sector Decarbonisation Scheme and a second bid for funding was submitted in November 2023. If successful, this will accelerate delivery of heat decarbonisation projects at three sites by March 2026. The programme achieved a significant milestone on 20 December 2023 (Pathway Gate A), which confirmed programme scope, requirements and areas of focus for 2024.
- 3.17 Other solution-specific decarbonisation delivery in 2023 included the installation of LED lighting in 20 small London Underground stations, and solar panels on both terminals of the IFS Cloud Cable Car. In terms of benefits, the conversion to LEDs at small stations achieved a 60 per cent reduction in energy usage and associated costs, as well as making the stations brighter and more welcoming for customers. The 95 solar panels installed at the cable car terminals will save approximately £4,000 in energy costs and seven tonnes of carbon per year. The new panels will generate the equivalent of 13 households' electricity consumption, delivering a reduction in carbon emissions comparable to planting 326 trees.

4 Key Environment Programme Deliverables 2024/25

London-wide ULEZ

- 4.1 Following successful launch of the project in August 2023, transition to operations is underway ahead of project close out in 2024. Monitoring reports for the scheme six and 12 months post-delivery will be published in 2024/25 and will highlight the air quality impacts since implementation of the scheme, as well as latest compliance levels within the zone.

Blackwall and Silvertown Tunnel User Charging

- 4.2 Installation plans are continuing to be developed by our contractors Yunex, Kier and Riverlinx for the Silvertown and Blackwall Tunnels, with necessary detection and enforcement infrastructure due to be installed by June 2024. System development is underway with Capita and technical go-live is scheduled for October 2024 to allow sufficient time for testing ahead of tunnel opening. We will engage with the Silvertown Tunnel Investment Group (representatives from London's boroughs, the GLA and National Highways) on the proposed charges, discounts and exemptions in the summer. A minimum of three months will be provided for customer registration on the system. A Statement of Charges

containing detail of the charges, discounts and exemptions and rules of the schemes will also be published no fewer than 56 days before tunnel opening.

BOps in-house

- 4.3 System design, build and integration continue, with necessary testing and system releases due to take place in 2024/25. This includes completion of functionality that will allow customers to set up and manage a RUC account, register for autopay and apply for a vehicle based discount. It will also enable us to detect journeys and manage vehicle data and diversions. Commencement of data migration testing and initial integration are also planned during 2024/25. There continues to be close working with the RUC Re-let project to carefully plan, manage and track dependencies.

RUC Re-let

- 4.4 The three contracts within the RUC Re-let scope (EOps, CMS and D&EI) are scheduled go out for competitive tender in 2024. Pending the successful completion of the procurement processes, the contracts are planned to be awarded in spring 2025. This will support a minimum 12-month mobilisation period ahead of formal handover for each element by September 2026. The integration of these procurements with the in-house development of the BOps system is critical and is being closely managed to ensure a smooth transition to the new RUC operating model and provide continuity of service for all existing RUC schemes.

DVS2

- 4.5 Enhancements to the existing DVS technical solution are continuing to progress which will facilitate the increase in DVS star rating threshold from one star to three stars in October 2024. Operators will be able to pre-register for permits three months before this date. System changes will enable processing of the expected volumes of applications while also seeking to address some of the technical difficulties experienced by users of the current system, including the introduction of a permit look up tool. In June 2024 consideration will be given at London Councils TEC to the duration of the post-October grace period, informed by engagement undertaken with industry stakeholders in early 2024 to understand levels of readiness for the change in star rating.

EVID

- 4.6 For the first tranche of delivery, commencement on the first site is planned for spring 2024 and the first 39 bays (out of the 100 bay target) are scheduled for delivery by September 2024. The remaining bays are scheduled for delivery by summer 2025. The first batch of the second tranche is due to be issued to the market by summer 2024.

Bus Opportunity Charging Trial

- 4.7 Following the planned introduction of fully electric buses in June 2024, the project will be closed and benefits realisation will be undertaken. The conversion of route

358 to a fully electric fleet will provide an opportunity to inform plans to upgrade some of London's longest routes to become zero emission. As mentioned above, a lessons learnt exercise will be carried out for this pilot project.

Waste Heat

- 4.8 A review of the technical and commercial viability for the first site in Southwark will be finalised by July 2024, with the information produced used to inform the execution of the final procurement strategy. The development of a wider programme to establish a pipeline of projects will commence from summer 2024, acknowledging the need to accommodate any recommendations arising from the heat zoning consultation referenced in paragraph 3.13.

Solar Private Wire

- 4.9 The tender documents are planned to be issued in May 2024 once procurement documentation has been validated and the tender process for appointing a delivery partner is anticipated to be completed by December 2024.

ZEF

- 4.10 Following the confirmation of programme requirements in December 2023, the focus will be on developing a baseline schedule, including specific work packages to ensure we achieve publicly committed targets. The first of these targets is to have no petrol or diesel cars in the fleet by 2025. A revised cost estimate will be produced once a schedule is approved by summer 2024. The project team will continue to seek opportunities to deliver quick wins at locations such as Acton Works Depot.

Building Decarbonisation – Heat

- 4.11 Twenty-two sites have been prioritised for feasibility studies, with the first outputs of these reports due by April 2024. Following the receipt of all studies by June 2024, a prioritisation methodology will determine an initial 10 sites to commence design activities through 2024/25. As the programme moves towards defining and phasing of delivery packages in summer 2024, a procurement and delivery strategy will be completed by autumn 2024.

Rapid Charging Infrastructure

- 4.12 Following ministerial consent, the Office for Zero Emission Vehicles agreed to repurpose previous underspend of a 2014/15 grant to deliver rapid charge points, to encourage the taxi trade to take up zero emission alternatives in line with our licensing requirements. In 2024/25 we will initiate the project and agree the best option to deliver rapid charge points that support the taxi trade.

5 Challenges and Opportunities

- 5.1 **Resourcing:** Availability and level of experience remains an issue within TfL and for suppliers, with resources needing to be prioritised across projects. This is being carefully monitored, with actions taken where possible to ensure we can attract and retain the necessary quality and quantity of resource. A specific

challenge relating to Environment projects has been our ability to access subject matter experts (SME) to support procurement activities. An example relates to launching the tender for Solar Private Wire, against a backdrop of finite support. For instance, this restricted pool of expertise has led to a need to prioritise the wider Power Purchase Agreements programme at an organisational level. Similarly in RUC, there is a SME constraint particularly with end user involvement that is critical to feed into technical requirements, tender documentation, and evaluation. This is accentuated by current recruitment freezes, the detailed knowledge requirements and the volume of workload creating competing demands across RUC and schemes outside the Environment Programme.

- 5.2 **Funding:** With clear targets being set that align with our Corporate Environment Plan, a challenge will be to match these ambitions with the funding available. This is amplified by our current financial position, coupled with relatively short timescales for achieving some of our key outcomes. An example is the decarbonisation of our buildings by 2030. In the short term, funding is available to progress activities to build a pipeline of interventions; however, a total budget of £39m is unlikely to achieve the outcomes in the available timeframe. Further work therefore must be undertaken on exploiting a variety of funding sources, namely, the submission of additional bids to third party initiatives such as the Public Sector Decarbonisation Scheme.
- 5.3 **Stakeholder Support:** The Programme remains a key driver for achievement of targets set by TfL and delivery of the Mayor's Transport Strategy. However, the outcome of national or London elections could mean reviewing strategies and therefore programme outcomes.
- 5.4 **RUC Interdependencies:** There remain complex inter-dependencies between RUC schemes, most notably the BOps in-house and RUC Re-Let projects. The successful introduction of the new BOps system is critically dependant on careful integration with the suppliers appointed via the contract re-lets. Timescales for both projects are being carefully managed to ensure the necessary mobilisation, integration and testing durations are accounted for. Project teams are continuing to work closely together to coordinate the projects effectively, including management of assumptions, requirements, scope and risks.

6 Financial Implications

- 6.1 In March 2023, £77m Programme and Project Authority was approved by the Committee. Since then, two further Programme and Project Authority requests have been approved by Chair's Action, the first request of £59m in August 2023 and the second request of £40m in January 2024. These requests covered two extensions to the scrappage scheme, deployment of mobile enforcement cameras and recruitment of additional call centre staff to support the expansion of ULEZ London-wide. Across the Programme, we are forecast to spend £309.5m by the end of the financial year.
- 6.2 The Programme conducts periodic reviews of the actual performance versus last year's submission expectation as shown in Table 1 below. There is a £29.4m variance between 2023/24 budget up to Period 11 and 2023/24 actuals up to Period 11, predominantly as a result of additional funding and related authority

approvals for the scrappage scheme. The scrappage figures have been detailed in a separate line in the table for clarity.

- 6.3 Of the £26.9m underspend in RUC, approximately half is due to cost reductions and efficiency savings on London-wide ULEZ and the replan of final installations and close out activities. The majority of the remaining variance can be attributed to the BOps in-house and tunnel user charging projects, which both underwent re-profiling of forecasts to align with revised delivery schedules. The final part of the underspend relates to wider cost reductions, efficiency savings and the close down of projects.
- 6.4 Of the £3.9m underspend highlighted in other Environment schemes, the majority is as a result of the Ash Grove project not starting as forecast due to ongoing commercial issues at the site.

	2023/24 Budget to P11	2023/24 Actuals to P11	Difference
RUC	134.0	107.0	(26.9)
Scrappage	93.7	153.9	60.2
Environment	10.7	6.8	(3.9)
Total	238.4	267.7	29.4

Table 1: Summary of Forecast Spend against Budget (£m)

- 6.5 Since the last submission to the Committee, there have been some changes to EFCs, details of which are included in the related paper on Part 2 of the agenda.
- 6.6 Previous Programme and Project Authority approved by the Committee for schemes no longer being progressed will be reallocated to other budgeted projects within the Programme. As a result, the authority values requested by this submission are in addition to existing authority already secured.
- 6.7 Total expenditure (excluding income) for which Programme and Project Authority is being sought is set out in Table 2:

Activity Areas	Current Financial Authority to 2027/28	Current Programme and Project Authority	Additional Proposed Programme and Project Authority	Authority Request (£m)						
	£m	£m	£m	17/18 to 22/23	23/24	24/25	25/26	26/27	27/28	17/18 to 27/28
Road User Charging	941.5	828.0	20.2	353.1	286.4	87.6	89.5	31.6	-	848.2
Environment	237.5	184.7	44.1	155.6	10.5	17.4	24.6	18.1	2.7	228.8
TOTAL	1,179.0	1,012.7	64.3	508.7	296.8	104.9	114.1	49.7	2.7	1,077.0

Table 2: Constituent activity areas and Programme and Project Authority requested

7 Equalities Implications

- 7.1 Section 149 of the Equality Act 2010 (the Public Sector Equality Duty) provides that, in the exercise of their functions, public authorities such as the Mayor and TfL must have due regard to the need to:
- (a) eliminate discrimination, harassment, victimisation, and any other conduct that is prohibited by or under the Equality Act 2010;
 - (b) advance quality of opportunity between persons who share a relevant protected characteristic ¹and persons who do not share it; and
 - (c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.
- 7.2 Compliance with the Public Sector Equality Duty is considered on an ongoing basis in all projects delivered as part of the Programme supported by Equality Impact Assessments as appropriate.

8 Assurance of the Environment Programme in 2023/24

- 8.1 The annual Integrated Assurance Review of the Programme was finalised in January 2024 by the TfL Project Assurance team and the Independent Investment Programme Advisory Group. No critical issues were raised.
- 8.2 The Integrated Assurance Plan was updated in January 2024, and it sets out all proposed assurance reviews scheduled for projects and programmes within the Environment Programme over the next 12 months.

List of appendices to this report:

Exempt supplementary information is included in a paper on Part 2 of the agenda.

List of Background Papers:

London-wide Ultra Low Emission Zone and Scrappage Scheme (Programmes and Investment Committee Chairs Action August 2023)

Independent Investment Programme Advisory Group (IIPAG) Report and Management Response

TfL Project Assurance and Management Response.

Contact Officer: David Rowe, Director of Investment Delivery Planning
Email: DavidRowe@tfl.gov.uk

¹ Protected characteristics under the Equality Act are age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex, sexual orientation, and marriage or civil partnership status (the duty in respect of this last characteristic is to eliminate unlawful discrimination and other prohibited conduct under the Act only)