

GREATER LONDON AUTHORITY

REQUEST FOR ASSISTANT DIRECTOR DECISION – ADD2389

Title: Energy Systems & Flexibility Support Services

Executive Summary:

Making London net zero carbon requires simultaneously decarbonising our energy supply and demand across power, heat and transport at a rapid pace (London Environment Strategy and 1.5C Compatible Climate Action Plan). Integrated and flexible clean energy systems can help deliver the lowest cost, resilient and fair net zero transition for all Londoners by cutting energy bills, generating, storing and using more clean energy and reducing the need for costly investments in energy network upgrades.

The Greater London Authority (GLA) Energy Systems & Flexibility (ESF) team is delivering a programme to achieve the Mayor's objective for smart, flexible and integrated energy systems utilising local and renewable resources to decarbonise supply & demand across power, heat and transport. This programme includes work on policy, and advocacy, better and fairer energy markets and delivery of the right physical and digital infrastructure.

Human resource changes within the team mean there is a requirement for external services to support delivery of the London Environment Strategy energy objectives and policies up to April 2020.

Decision: That the Assistant Director for Environment approves:

Expenditure of up to £25,000 on external services to support delivery of the London Environment Strategy energy objectives and policies.

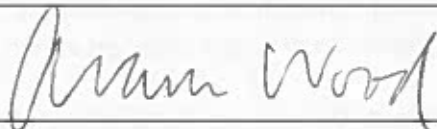
AUTHORISING ASSISTANT DIRECTOR/HEAD OF UNIT

I have reviewed the request and am satisfied it is correct and consistent with the Mayor's plans and priorities. It has my approval.

Name: Aram Wood

Position: Assistant Director – Environment

Signature:



Date:

19/11/19

PART I - NON-CONFIDENTIAL FACTS AND ADVICE

Decision required – supporting report

1. Introduction and background

- 1.1. The Mayor has made a commitment for London to be zero a carbon by 2050. To help achieve this aim, the London Environment Strategy sets objective (6.2) to develop clean and smart, integrated energy systems utilising local and renewable energy resources. This will be delivered by clean generation, energy storage, electric vehicles and flexible use of energy enabled by consumers products and services.
- 1.2. There is accepted evidence from policy makers, industry and academia as to the value of integrated energy systems and flexibility in enabling the UK's quickest and lowest cost decarbonisation pathway (BEIS, Ofgem, National Infrastructure Commission, Committee on Climate Change reports, 2019). This relies on the necessary flexibility being built in now – requiring planning and intervention at local levels.
- 1.3. As flexibility is predominantly a local issue, there is a need for the GLA to understand what flexibility is needed in London, including the potential impacts and values of building it in, and the policy tools available to drive optimal outcomes. Cities and their public interest actors have not traditionally played an active role in the energy system since market privatisation, however with the need to achieve the '4 D's (decentralisation, decarbonisation, digitisation and democratisation), this is changing.
- 1.4. Working collaboratively to integrate local, flexible energy systems and technologies offers the opportunity to deliver new consumer-friendly energy services, markets and experiences that are cheaper, cleaner, flexible and more resilient to environmental and social change.
- 1.5. The Mayor's energy systems and flexibility programme is pushing forward a fair and equitable net zero energy transition by working with Londoners to improve the way we generate, store and use clean energy to decarbonise London quicker, at lower cost with less disruption. This requires wider reform to national energy markets, which are currently not adequately regulated or incentivised to deliver the 1GWe of demand side flexibility opportunity in London by 2050 (London Environment Strategy 2018).
- 1.6. The programme has four workstreams covering policy and advocacy; better and fairer markets; delivery of the right infrastructure and unlocking value from data, with the objectives of:
 - making best use of existing and new **clean energy generation**, i.e. making solar provide more clean power (combined with storage) at lower cost for domestic and non-domestic consumers.
 - supporting the decarbonisation of heat by having flexible heat pumps, heat networks with thermal **storage**; clean electricity for heat, and minimising energy required to heat homes and hot water.
 - **rapid transport decarbonisation** by enabling more electric vehicles (EV) to be in **use** with smart flexible charging and integrating EVs with clean generation.
 - helping to solve the fundamental problem of exchanging and acting upon **digital energy information and data** between energy organisations and with other stakeholders. This problem is a critical one to solve in order to help London achieve its net zero emission ambitions.
- 1.7 It is proposed that the ESF team procures and manages external services to support the delivery of the workstreams set out in paragraph 1.6 up to April 2020. These will be procured in accordance with the GLA's Contracts and Funding Code. The total cost to the GLA will be up to £25,000 with services concluded during financial year 2019/20.

2. Objectives and expected outcomes

- 2.1 The objective is to provide GLA officers with specific technical knowledge, expertise, experience and capacity to deliver the Strategy. This will ensure the ESF team maintains effective delivery of smart, integrated energy systems utilising local and renewable energy resources.
- 2.2 Expected outputs will be:
- supported design of a new delivery programme for integrated energy systems and flexibility to start from April 2020, informed by internal and external stakeholder workshops. The new programme to include:
 - a data exchange and actuation project, testing the idea of an ‘open local energy data platform’ to facilitate energy systems and flexibility projects
 - alignment with GLA Retrofit Accelerator programmes. Understanding how (where is the optimal sweet spot of interventions across different building typologies and locations), and then taking forward, combined flexibility and energy efficiency business cases and activities that combine and integrate to decarbonise London’s building stock.
 - engagement with the GLA Group, London boroughs, and public and private organisations across London to deliver Strategy objectives and Mayor’s commitments.
 - maintaining the pipeline of flexibility projects and essential stakeholder engagement underway in readiness for the start of the new programme from April 2020.
 - securing external investments and grant funding from stakeholders and funding organisations respectively to match and increase the GLA’s investment in integrated energy systems and flexibility from April 2020.
- 2.3 The support services will contribute to the expected outcomes of the ESF programme:
- Supporting delivery of an integrated, flexible clean energy system delivering the lowest cost, most resilient net zero London for all Londoners.
 - Delivering a joined-up Energy for Londoners programme that maximises resource efficiencies, reduces project lead time and acquisition costs and delivers an integrated approach to decarbonisation across power and heat for buildings and transport for a net zero London.
 - Unlocking values locally including lower energy bills, reduced emissions, more and better use of distributed energy resources (including improving the investment case for energy storage – an enabler for connecting more renewable energy).
 - Readying London’s energy networks for increases in local clean generation and use of electricity for heat, power and transport.
 - Increasing the use of flexible energy technologies and solutions needed to unlock London’s spare and valuable electricity grid capacity.
 - Creating clean energy business opportunities including London’s small and medium size clean tech enterprises.
 - Enabling electricity grid operators to better manage their networks, making them more resilient, improving utilisation of congested network capacity and displacing part of the need for new (costly) infrastructure upgrades.
 - Advocating the Mayor’s priorities and GLA’s work with key local and national stakeholders to design markets that meet Londoners and London’s needs.

3. Equality comments

- 3.1. As public authorities, the Mayor and the GLA must have due regard to the Public Sector Equality Duty; namely the need to eliminate unlawful discrimination, harassment and victimisation, and to advance equality of opportunity and foster good relations between people who share a protected characteristic and those who do not. Protected characteristics under the Equality Act comprise age, disability, gender re-assignment, pregnancy and maternity, race, religion or belief, sex, sexual orientation, and marriage or civil partnership status.
- 3.2. The GLA will ensure that (as part of its on-going legal responsibility to have due regard to the need to promote equality, in everything it does, including its decision-making), barriers are

removed that may prevent those with protected characteristics benefiting from the programme. This will require the GLA and others supplying services to identify those protected groups who could benefit, determine whether barriers exist and take measures to remove those barriers. This will include estimating the numbers involved for each relevant characteristic and assisting the GLA in discharging its duties under the Public Sector Equality Duty (PSED). In undertaking this action, the GLA's procurement is carried out on its behalf by Transport for London (TfL) which is part of the GLA Group. The TfL Group Policies contain equality and diversity policies as part of its procurement procedures. The GLA adopts those policies. TfL requires all organisations seeking to prequalify to receive tenders meet its policy requirements. Respondents are required to complete an equalities questionnaire and achieve a minimum score in order to qualify to receive the tender documentation.

- 3.3 The GLA Environment Unit commissioned an Integrated Impact Assessment (IIA) on the draft London Environment Strategy. This evaluated the social, economic, environmental, health, community safety and equality consequences of the strategy's proposed policies to ensure they are fully considered and addressed. A post-adoption statement showing how the IIA influenced the final strategy and Equality Impact Assessment (EqIA) report has been published: <https://www.london.gov.uk/what-we-do/environment/london-environment-strategy>.
- 3.4 Integrated energy systems and flexibility can ensure those protected groups that are currently excluded from certain benefits of the current energy system (i.e. how you can buy and use energy more flexibly to cut bills and reduce demand) are able to start benefitting. The installation of smart meters across London will help Londoners to understand their energy use and make informed choices about how they could cut their bills and reduce demand. This technology upgrade, along with the increasing electrification of heat and transport (away from fossil fuels) will enable all Londoners to benefit from a changing energy system that is becoming more decentralised, decarbonised, digital and democratised.

4. Other considerations

- 4.1 By ensuring the ESF team maintains effective delivery of a programme and projects, London local authorities, businesses and households will be supported to decarbonise London by implementing smart, integrated energy systems utilising local and renewable energy resources. This will help London become a cleaner and greener city and work towards the Mayor's ambition for London to be zero-carbon by 2050. These support services will also advance the evidence base underpinning the policies and proposals of the Strategy and support the Mayor's leadership role in helping others to develop their decentralised energy projects.
- 4.2 There are no conflicts of interest to note for any of the officers involved in the drafting or clearance of this decision form.

5. Financial comments

- 5.1 Approval is sought to spend up to £25,000 to procure external services in support of the GLA's work to develop and deliver smart, integrated energy systems utilising local and renewable energy resources. This will be funded from the ESF Team's 2019/20 programme budget.

6. Planned delivery approach and next steps

Activity	Timeline
Procurement of services	December 2019
Delivery Start Date	December 2019
Delivery End Date	31 March 2019

Appendices and supporting papers:

None

Public access to information

Information in this form (Part 1) is subject to the Freedom of Information Act 2000 (FoIA) and will be made available on the GLA website within one working day of approval.

If immediate publication risks compromising the implementation of the decision (for example, to complete a procurement process), it can be deferred until a specific date. Deferral periods should be kept to the shortest length strictly necessary. **Note:** This form (Part 1) will either be published within one working day after it has been approved or on the defer date.

Part 1 - Deferral

Is the publication of Part 1 of this approval to be deferred? NO

If YES, for what reason:

Until what date: (a date is required if deferring)

Part 2 - Sensitive information

Only the facts or advice that would be exempt from disclosure under FoIA should be included in the separate Part 2 form, together with the legal rationale for non-publication.

Is there a part 2 form - NO

ORIGINATING OFFICER DECLARATION:

Drafting officer to
confirm the
following (✓)

Drafting officer:

Daniel Barrett has drafted this report in accordance with GLA procedures and confirms the following:

✓

Corporate Investment Board

This decision was agreed by the Corporate Investment Board on the (insert date)

ASSISTANT DIRECTOR OF FINANCE AND GOVERNANCE:

I confirm that financial and legal implications have been appropriately considered in the preparation of this report.

Signature



Date

18.11.19

