GREATER**LONDON**AUTHORITY

REQUEST FOR ASSISTANT DIRECTOR DECISION – ADD2352

Title: Implementing the London Plan 'be seen' energy monitoring requirement

Executive Summary:

Ensuring that the actual energy and carbon performance of buildings is aligned with the estimated energy and carbon performance will be a key factor in achieving a zero carbon London.

As such, in line with the 'be seen' element of the new Draft London Plan Sustainable Infrastructure (SI) policy 2, planning applicants will be required to monitor and report on the energy performance of their developments for at least five years post construction.

To ensure that all developments are monitoring-ready, the GLA wishes to identify and resolve technical issues relating to the implementation of the post construction monitoring process. This ADD seeks approval to pay for services on behalf of the GLA to:

- Prepare a report which will be used internally by the GLA to determine and overcome common monitoring issues.
- Produce comprehensive and public guidance which will provide support and direction to developers to ensure they comply with GLA policy.

Decision:

That the Assistant Director, Environment approves expenditure of up to £24,000 on consultancy services to support the development of a post construction, in-use monitoring methodology for new building and the development of public guidance, thereby supporting planning applicants to meet the London Plan's 'be seen' monitoring requirement.

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: Luke Bruce	**Position: Interim** Assistant Director, Environment
Signature:	**Date:** 15 02 19.

PART I - NON-CONFIDENTIAL FACTS AND ADVICE

Decision required – supporting report

1. Introduction and background

1.1. New buildings are a significant source of carbon emissions in London. The Mayor has powers to establish planning policy for new development through the London Plan and a responsibility in scrutinising referable planning applications. It was estimated that in 2015 36% of London's carbon emissions were generated from homes and 40% from workplaces[1]. Reducing carbon emissions from new build will require all new buildings to be built to high standards so they are very energy efficient, maximise the use of renewable energy and waste heat and minimise the need for cooling.

1.2. The London Plan currently set outs an energy hierarchy that requires major developments to be zero carbon through a series of steps. The energy hierarchy asks first for increased fabric and energy efficiency ('be lean'), then consideration of low carbon and secondary heat sources ('be clean') and finally maximisation of on-site renewable energy generation ('be green').

1.3. The new Draft London Plan introduces a fourth step under the existing energy hierarchy, the 'be seen' stage. As part of the policy update, major developments will be required to monitor their energy performance and report to the Mayor for at least five years post construction via an online portal. This will be secured through a legal agreement between the respective local authority and the applicant during the planning determination.

1.4. It is widely accepted that a gap exists between the building design stage and the actual building performance and that this will need to be bridged to ensure buildings are operating as efficiently as they are expected to. There is growing concern that buildings currently use as much as 2-5 times[2] the amount of energy they are meant to and this 'performance gap' is undermining the move to zero emission buildings under the Mayor's London Plan policies. Numerous studies (e.g. the Committee on Climate Change's (CCC) UK Housing: Fit for the Future) have also highlighted the importance of closing the performance gap and making actual energy performance data available. According to the CCC housing report, closing the energy use performance gap in new homes could save between £70 and £260 in energy bills per household per year.

1.5. In use post construction monitoring is considered cutting edge practice and London is at the forefront of both national and city led energy policy by securing actual energy performance data. The proposals were welcomed during public examination by both experts, NGOs and industry stakeholders with a range of both small and larger developers supporting the initiative.

1.6. To enable the actual energy use and carbon emissions of new developments to be monitored, the GLA is developing a post construction monitoring platform which applicants will use to upload their energy data. The monitoring platform will be publicly available to help raise awareness both for developers and occupants on actual energy performance and enable a comparison to design standards. This will help to ensure developments meet their specified performance, help to improve design methods and inform future GLA policy. It is intended that the platform will be integrated into the London Building Stock Model that the GLA has already developed, in collaboration with UCL. This is currently in discussion with procurement and legal but regardless of the decision it does not impact on the subject of this ADD as this work will still need to be undertaken; it is not dependent on the use of the LBSM to gather data.

1.7. To inform the implementing of the new monitoring requirement, industry expertise has been gathered through a series of roundtable discussions and key industry stakeholder meetings to get insight into current practice and possible approaches to developing the post construction monitoring process. GLA

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[1] Association for the Conservation of Energy: Energy Efficiency in London

[2] PROBE studies archive - http://www.usablebuildings.co.uk/Pages/UBProbePublications1.html and - Carbon Trust's Closing the Gap Publication - http://www.carbontrust.co.uk/publications/pages/publicationdetail.aspx?id=ctg047

officers have engaged with developers, housing associations, government bodies and energy companies to get their views on the best approach and any issues that might arise. Whilst the overall approach has been welcomed, this initial stakeholder engagement has also highlighted some issues that could inhibit the provision of data onto the platform due to technical limitations (such as data protection and anonymity, developer incurred costs, third party data verification, and data ownership issues).

1.8. The proposed study will explore these issues in more depth and develop solutions, while the platform is being developed. This will ensure that there will be a smooth roll-out of the post construction monitoring policy and that clear guidance will be provided to both developers and the contracted energy and other specialist companies who will design and install the monitoring arrangements of new buildings to comply with the policy.

1.9. The value of the contract is based on previous work undertaken to help inform and provide guidance on London Plan policy:

- London Carbon Offset Price (AECOM, Jun 2017)
- The Future Role of the London Plan in the Delivery of Area-Wide District Heating - final report (Buro Happold, Jun 2017)
- The Future Role of the London Plan in Delivery of Area-Wide District Heating - executive summary (Buro Happold, Jun 2017)
- Driving Energy Efficiency Savings Through the London Plan - data analysis report (Buro Happold, Aug 2017)
- Driving Energy Efficiency Savings Through the London Plan - summary report (Buro Happold, Aug 2017)
- AECOM - GLA energy efficiency target - development case studies (AECOM, Nov 2017)

1.10. The implementation of the 'be seen' policy to date has been carried out in house. However, there is a need for expertise in energy monitoring in order to finalise the technical requirements of the policy's implementation and the best practice guidance. External consultancy support is therefore needed to complete the final stages of the work.

1.11. Given the value of the contract (£24K) the procurement will be managed by GLA officers following TfL Commercial team guidance. In line with procurement guidance we will invite 3-4 organisations to tender who have the expertise and experience to undertake the work.

2. Objectives and expected outcomes

2.1. The objective of this work is to establish a methodology and approach for post-construction monitoring that overcomes common technical issues and to develop a guidance document which will support developers in their building design to allow for monitoring to be undertaken. This will involve two outputs:

- GLA 'Implementing the be seen monitoring requirement' study:

  a. A review of GLA's proposed monitoring metrics and units and proposals for translating these metrics to carbon and cost.

  b. Identify the best comparison method between planning submission and post-construction data collection based on current best practise in London and internationally.

  c. Work with stakeholders to identify common technical issues and possible solutions relating to data provision, including but not limited to:

     - Consideration of the different metrics for residential and non-residential units;

- Consideration of occupancy levels (particularly in apartments) and how to account for its impact on the data submitted;
- Data protection limitations and data anonymity;
- Options for third party data verification;
- Estimate of costs to developers of monitoring;
- Landlord/tenant ownership relationship limiting the provision of data and solutions to address this; and
- Other identified technical issues based on the analysis of other methods of post-construction monitoring data collection (e.g. Carbon Buzz).

d. Provide support to the GLA to update all available planning tools (e.g. Energy Assessment Guidance, carbon factors spreadsheet, planning conditions etc.) to align with the new monitoring platform and metrics.

- 'Be seen' best practice guidance for planning applicants, developers, building owners and occupants

The consultant would work with GLA officers to provide a short external guidance document that would include:

a. An introduction to the London Plan 'be seen' policy, GLA's vision and the socio-economic benefits of in use energy monitoring;

b. Chapter for planning applicants/developers/owners on designing a building to perform as intended, from a metering perspective, and the tools necessary to properly manage the buildings' operation;

c. Chapter on best practice metering (and sub-metering) arrangements to be able to monitor effectively for residential and non-residential developments;

d. Chapter on best practice approaches to 'handing over' the development to building owners/occupants;

e. Chapter for occupants;

f. A description of best practice monitoring methodologies (e.g. Soft landings, Design for Performance) that could be followed and how these link to the 'be seen' London Plan requirement; and

g. An FAQ which answers the most common technical issues and how to overcome them.

2.2. The expected outcomes are:

- Effective implementation of the 'be seen' policy as the technical issues noted above will be resolved;
- Compliance with the 'be seen' policy as planning applicants understand the requirements;
- A better understanding of the performance gap in London to help inform future policy; and
- Increased responsibility among developers and building owners of the need to ensure buildings perform as they were intended to, leading to lower emissions and energy consumption.

3. Equality comments

3.1. No direct equality issues have been identified. The contract requires the consultant to undertake desktop research and stakeholder engagement to inform London Plan policy implementation.

3.2. Where this activity highlights issues where there may be a disproportionate effect on groups with protected characteristics, the GLA will address them to ensure compliance with its duty under the 2010 Equality Act.

4. Other considerations

Key risks and issues

Risk/issue	Mitigating actions
1. Consultants are unable to meet the deadline for the report and guidance submission in time for the London Plan adoption	• There will be regular meetings and engagement with the consultants to monitor progress • There will be an agreed project programme. • We will be allowing for some contingency in the proposed timescales with an end date a month before the London Plan adoption
2. The study cannot provide solutions on certain areas and therefore there is still uncertainty around the implementation of the policy	• There will be an implementation period (i.e. 2-3 years until new developments are constructed and thus are in a position to submit post monitoring data) which will allow enough time for the industry to adjust. • During this implementation period, through trials on existing buildings, we will receive valuable feedback and create a user-friendly process tackling all points of uncertainty • We will further supplement this consultancy work with additional stakeholder engagement activities with developers and energy companies to identify the easiest methods of implementation
3. Allocated budget is not sufficient to complete the work.	• The budget is based on experience of previous, similar work. • Tender submissions will be reviewed closely to ensure the scope is sufficiently covered within the allocated budget. • At the kick-off meeting the agreed outputs will be confirmed with the consultant • Fortnightly meetings held with appointed consultant to ensure project costs are kept within budget.

4.1. This work links the Mayor's Environment Strategy, new draft London Plan energy policies and the ambition for London to be zero carbon by 2050.

4.2. This work is expected to involve the processing of energy performance data from residential buildings and has been discussed with the Information Governance Team. To ensure the GLA complies with the

GDPR, data will be held and processes at an aggregated level: the energy data will be per Class Use (ie. area weighted energy data for all residential uses within a development rather than individual data per dwelling).

5. Financial comments

5.1. Assistant Director's approval is sought for the expenditure of up to £24,000 on consultation services to support the London Plan.

5.2. This will be funded from the Zero Carbon Policy Team's 2019-20 budget.

6. Planned delivery approach and next steps

Activity	Timeline
Publish invitation to tender	July 2019
Award contract	August 2019
Inception meeting	August 2019
Draft report	October 2019
Review meeting	November 2019
Final study and guidance produced	December 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: Ioanna Mytilinaiou 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 15 July 2019.	

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** 15-07-19