GREATERLONDONAUTHORITY

REQUEST FOR ASSISTANT DIRECTOR DECISION – ADD2611

Title: Identification of Vulnerable Properties For Climate Preparedness and Prioritisation

Executive summary:

To procure consultancy support to establish a database identifying vulnerable properties for climate preparedness and prioritisation.

This work will establish a database showing:

- which of London's homes, buildings, workplaces, and critical infrastructure – such as care homes, GP practices, schools, early-years settings and hospitals – are vulnerable to heat risk due to climate change
- where they are located
- where data for the above two items sits, relative to the indices of deprivation for each of the 32 London boroughs, to support targeted interventions in: areas of high deprivation and inequality; and properties to which climate change poses the greatest heat risk.

Decision:

That the Assistant Director of Environment and Energy approves the procurement of a consultancy service, to the value of up to £50,000, to carry out the activities associated with the 'Identification of Vulnerable Properties for Climate Preparedness and Prioritisation' project.

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: Catherine Barber	**Position:** Assistant Director Environment & Energy
Signature: 	**Date:** **12/12/2022**

PART I – NON-CONFIDENTIAL FACTS AND ADVICE

Decision required – supporting report

1. Introduction and background

1.1 Global average temperatures have risen by over 1°C since 1850. If the world continues emitting greenhouse gases at today's levels, then by the end of this century average global temperatures could rise by up to 5°C. Average temperatures in London are already getting higher.

1.2 Projected increases in average monthly temperatures in London until 2050 show an increase of between five and six degrees in summer and winter averages. This will have an impact on health infrastructure, comfort, and the operation of the city. As demand for cooling increases, there may be stresses on power supply networks, with increasing electricity demand threatening London's sustainability. Increases in temperature will have consequences for public health, particularly for at-risk groups. This was highlighted in the 2022 Global Report of the Lancet Countdown.[1]

1.3 In summer 2022, the UK saw its first ever UK Health Security Agency Level 4 heat alert, and its first Met Office Red extreme heat warning. This meant that impacts were expected beyond the health and social care system; and that, even fit and healthy people were at risk. The heatwave was far more intense and widespread than previous comparable heatwaves, and marked the first time the UK had recorded a temperature of 40°C. The heatwave also caused, for the first time, fires at significant scale, which destroyed some London properties.

1.4 The UK Health Security Agency has estimated that there were 2,803 excess deaths during the periods of heat at the national level last summer 2022 – the highest number since 2016.

1.5 The recent UK Climate Change Risk Assessment identified risks for health and well- being from high temperatures as a risk that requires urgent action.

1.6 In December 2018, the Mayor declared a climate and ecological emergency. He released one of the world's first climate action plans that was compatible with a 1.5ºC degree pathway in support of the Paris Agreement.

1.7 London also generates its own microclimate, known as the 'Urban Heat Island' (UHI), which can result in the centre of London being up to 10°C warmer than rural areas outside the city. The temperature difference is usually higher at night than during the day. Even within the UHI, there are further microclimates. Increased development, population growth and urbanisation have the potential to intensify the UHI effect and increase temperatures, alongside climate change.

1.8 It is not clear if climate change itself will increase or decrease intensification of the UHI. However, the UHI is another temperature increment on top of the expected rise due to climate change.

1.9 The purpose of this systematic collection of data is to make the management of data, for the purpose of identifying vulnerable properties for climate preparedness and prioritisation, easier and, to provide the evidence to enable the Greater London Authority (GLA) to make informed decisions on targeted interventions focusing on areas of high deprivation and inequality, and properties that are vulnerable to heat risk due to climate change. The project will be procured competitively in line with the 'Contracts and Funding Code'.

1.10 The project will be divided into two parts:- Part 1 of the project will scope what data is available to avoid duplication and to identify data gaps. And part 2, will capture data on building typologies in neighbourhoods (type and height of building), by sector, function (what the building is used for and

[1] The Lancet, The 2022 Global report of the Lancet Countdown, October 2022

by whom), and location (including proximity to the UHI, and green and blue infrastructure), for implementation. The database will include the levels of deprivation and inequalities by borough

1.11 This project will build on the work of the 'London Datastore's Climate Risk Mapping', which comprises a series of London-wide climate risk maps. These have been produced to analyse climate exposure and vulnerability across Greater London. The work will also build on other datasets, such as the UK Buildings dataset and the Ordnance Survey MasterMap.

1.12 This procurement will support the following items from the London Environment Strategy (LES):

- Policy 8.4.2: Ensure critical infrastructure providers and occupants of homes, schools, hospitals, and care homes are aware of the impacts of increased temperatures and the UHI, to protect health and reduce health inequalities.

- Proposal 8.4.2.a: Provide neighbourhood specific data and modelling to demonstrate and evidence the impacts of the UHI.

1.13 The Green New Deal (GND) Mission sets the challenges of tackling the climate and ecological emergencies, and improving air quality, by doubling the size of London's green economy by 2030 to accelerate job creation for all. The Mission's themes include decarbonising and transforming the built environment, and greening London's transport and public realm. This work supports these two ambitions.

1.14 The proposal supports a cleaner, greener London and narrowing the social, economic and health inequalities, two outcomes of the London Recovery Programme and the cross-cutting theme of improving the health and well-being of Londoners.

1.15 London is already delivering against a wide range of activities that contribute to reducing the impact of increasing temperatures and heatwaves in London. This includes targeting those most at risk – such as older people, children, and those with pre-existing health conditions. However, there is limited data assessing the neighbourhood locations, types of buildings and sectors most at risk. Better data is needed to inform a long-term and sustained approach to locate and target interventions in London's built environment.

1.16 Access to better data will enable the GLA (and others) to make better-informed decisions on where to target interventions for long-term climate adaptation. This has the aim of reducing risks; narrowing inequalities arising from heat impacts that disproportionally affect certain groups; protecting Londoners; and enabling those responsible for the management of critical infrastructure to prepare for, respond to and recover from the impacts of climate change, particularly the impacts of extreme heat. It will also assist in identifying opportunities to integrate with other GLA programmes.

1.17 Better evidence of the challenge will help make the case for more action from the government; and for the need to retrofit at scale and integrate climate adaptation with the GLA's net-zero ambitions.

1.18 Through the C40 Cities network, we know that many cities are beginning to develop long-term planning for adaptation to climate change-related heat.

1.19 For example, Washington, DC, has developed a 'Keep Cool DC' strategy to reduce the drivers of extreme heat and protect residents from the risk of high temperatures. 'Climate Ready DC' calls for the reduction of outside air temperatures through measures such as increased green space, tree planting and cool roofs. London is already doing/planning to do these things; but with better data on building typologies, function, and location, it can take a more targeted approach to protect critical infrastructure, residents, and users of services such as care homes, hospitals, GP practices, etc.

1.20 Existing staff resources have been identified within the GLA's Climate Change team to manage and take forward the project. The successful bidder will also be expected to work with various GLA teams to access data and information that could inform the work of this project. For example, the GLA's City Intelligence team has access to various datasets that could be of use – including the UK Buildings dataset, the Ordnance Survey MasterMap and the GLA's climate risk maps.

1.21 Links will be made with other pieces of climate adaptation work undertaken by the GLA, such as the care home overheating audit pilots; guidance on how schools and early-years settings can adapt to climate change; and the ongoing work on climate-resilient schools.

2. Objectives and expected outcomes

2.1. Approval for expenditure of up to £50,000 is sought to establish a database identifying vulnerable properties for climate preparedness and prioritisation. The objectives and expected outcomes are to:

- reflect the ambition of the Mayor to improve London's climate adaptive capacity
- protect critical infrastructure from the impacts of climate change with a focus on overheating risk
- enable Londoners to be better prepared for extreme heat events
- target heat adaptation interventions focused on: areas of high deprivation and inequality; and neighbourhood properties that are most vulnerable to heat risk due to climate change, for climate preparedness in the long term and,
- target interventions that will likely contribute to reducing intensification of London's UHI effect.

3. Equality comments

3.1 Under section 149 of the Equality Act 2010, as a public authority, the Mayor of London must have 'due regard' of the need to eliminate unlawful discrimination, harassment, and victimisation; as well as to advance equality of opportunity, and foster good relations, between people who have a protected characteristic and those who do not.

3.2 Climate change will disproportionately affect those least able to respond and recover from it. Poorer Londoners will find it more difficult to recover from heat events and will suffer more from the impacts of the UHI. Extreme heat events will have greater impacts on older people, very young children, socially isolated people, people with existing health conditions and those living in poorly adapted housing and/or where climate mitigation is poor.

3.3 This project stems from the LES, which was informed by a full 'Integrated Impact Assessment' that includes consideration of equalities. This project will specifically look to maximise the positive impact on Londoners by reducing the health impacts and health inequalities of climate change risks due to overheating risk and extreme heat events.

3.4 The design of the policies set out in the LES will benefit all Londoners. However, due to the unequal impacts of climate change on the most vulnerable Londoners, there is likely to be a positive effect in tacking social and health inequality of this project's activity.

3.5 This project will look to maximise a positive impact on all Londoners by ensuring the resilience of London's critical infrastructure and protecting vulnerable communities.

3.6 Equalities implications will be kept under ongoing review and considered as the project is delivered. This will be done at the Project Steering Group meetings which will be established as part of the governance structure for project delivery.

4. Other considerations

Key risks and mitigation actions

4.1 The key risk is outlined below:

Risk description	Probability (low, medium, high)	Impact (low, medium, high)	Mitigation
Delays to project delivery timescales	Low	Low	A work plan will be agreed, including a timetable to meet the project deliverables and main milestones. We will obtain competitive quotes using the appropriate procurement method. A risk register will be established setting out risks and actions to mitigate.

Links to Mayoral strategies and priorities

4.2 The project has direct links to many of the Mayor's strategies including the LES and the London Plan. Each of these strategies has been consulted on, and has policies aimed at addressing the environmental issues faced in London.

4.3 The London Plan policy SI4: Managing Heat Risk sets out an approach on how London must manage heat risk in new developments, including minimising adverse impacts on the UHI. The same approach could be adopted for existing properties that this procurement focuses on. Objective 8.4 of the LES is that: 'London's people, infrastructure and public services are better prepared for and more resilient to extreme heat events.' The associated proposals include reducing intensification of the UHI; and that the Mayor will work to minimise overheating in existing buildings through his energy-efficiency programmes.

4.4 This project has direct links to the priorities of the London Recovery Board – specifically its GND mission, which aims to double the size of London's green economy by 2030.

Conflicts of interest

4.5 GLA officers involved in the drafting or clearance of this form are not aware that they have any conflicts of interest with the proposed project. If any conflicts of interest arise during the delivery of the project, they will declare that interest and manage it in accordance with the guidance for GLA staff.

5. Financial comments

5.1 The estimated cost of £50,000 for this consultancy project will be funded from the 2022-23 Climate Adaptation budget held within the Environment Unit as approved as part of the 2022-23 budget setting process.

5.2 This consultancy project is expected to be completed by 31 March 2023.

6. Legal comments

7. Planned delivery approach and next steps

7.1. *Set out how the project will be delivered and complete the outline timetable*

Activity	**Timeline**
Procurement of contract	Early January 2023
Announcement	Early January 2023
Delivery start	Early/mid-January 2023
Main milestones	February 2023
Final evaluation starts and finish	Early March 2023
Delivery date	Mid-March 2023
Project closure	Mid-March 2023

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

Part 2 – Sensitive information

Only the facts or advice that would be exempt from disclosure under the 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: Annette Figueiredo, Principal Policy & Programme Officer, Good Growth has drafted this report in accordance with GLA procedures and confirms the following:	✓
Corporate Investment Board A summary of this decision was reviewed by the Corporate Investment Board on 12 December 2022.	✓

ASSISTANT DIRECTOR OF FINANCE:

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

Signature

Date

12/12/2022