

# MAYOR OF LONDON

**Emma Howard Boyd CBE**

Chair

London Climate Resilience Review

**Date:** 24 July 2024

Dear Emma,

I would like to express my gratitude for the work of you and your team in delivering the London Climate Resilience Review over the last year. The breadth and depth of evidence you have gathered and the stakeholders you have engaged are clear from the report itself. You have made a pertinent case for action to ensure our city's resilience in the coming years as the reality of climate change becomes increasingly disruptive. 2023 was the hottest year on record, and this year is likely to exceed it. With these accelerating climate impacts, these Review recommendations are very welcome.

In my manifesto I committed to work to take forward the recommendations of the Review to make our city more resilient to the impact of climate change, and to prioritise nature-based solutions for climate adaptation. This Review will be instrumental in keeping London safe and ensuring the city can withstand and thrive amid growing extreme weather.

I accept the recommendations made by the Review that require action by the Greater London Authority (GLA) or the GLA Group. I have set out below how I intend to take them forward and my officials are exploring how these can be supported by partners in London and central government. I recognise that the Review makes legitimate criticisms of the national government, which has not progressed in this space over the last few years. London stands ready to work with the new government, which pledged in its manifesto to improve resilience.

Where I have the powers, for example, through the London Plan, I commit to act. Where I do not, I will work with partners, including national and local government, businesses and London's diverse communities, to take forward the Review. My team looks forward to keeping you updated as my adaptation delivery plan is fully developed. Action to adapt London to our changing climate will also ensure London remains competitive globally and can continue to attract global talent and investment, as well as better protect its infrastructure and people.

Early this year, as co-chair of C40 cities, I signed the Planetary Protocol for Climate Change Resilience alongside other global climate leaders. The Protocol recognises the urgent need for action on climate change adaptation as well as net zero. I have an unwavering determination to ensure that London remains at the forefront of climate action and will continue to encourage other cities to do the same.

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I thank you again for your work and the work of your team in preparing this Review.

Yours sincerely,

A handwritten signature in blue ink, appearing to read 'Sadiq Khan', with a small '2' written below the 'h'.

**Sadiq Khan**  
Mayor of London

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## Mayor of London actions

### Chapter 1 – Enabling London to lead

**Recommendation 1: Lead collaborative work with local authorities, the private sector and others to set out a clear strategic vision for what it means for London to be adapting well to climate impacts by 2030 and beyond.**

**Recommendation 2: Work collaboratively to develop an adaptation delivery plan to support London’s strategic vision and lead an exercise to map roles and responsibilities.**

As a priority, I have asked officers to consider options for how to progress the creation of a clear strategic vision for a climate-resilient London that is supported by the widest possible group of partners (recommendation 1) and a delivery plan that lays out the actions and organisations responsible for making them happen (recommendation 2). My officers will also ensure any delivery plan is situated as part of the work of the London Resilience Partnership. As co-chair of C40 cities, I will draw on best practices from other cities in this area.

**Recommendation 3: Build on work already underway to embed climate adaptation as a cross-cutting organisational priority across the GLA’s work and funding, where the GLA has discretion.**

**Recommendation 4: The GLA and London boroughs’ finance processes should include a set of questions about climate risks to ensure spending is climate resilient, and the GLA Group’s functional bodies should set adaptation plans and measurable targets.**

Embedding climate adaptation across the GLA Group is critical. The GLA Act places a duty on the organisation to take account of climate adaptation and mitigation in undertaking its duties. I will use the Review to engage the GLA and Group to ensure climate change adaptation is supported through the GLA Group’s work.

The GLA is currently rolling out Climate Literacy training to its staff, which includes climate change adaptation. This will help embed an understanding of climate change and the actions the organisation can support in delivering its functions. This training has recently been accredited by the independent Carbon Literacy Project. Alongside this, my officers have developed a Climate and Equalities Tool, which will also ensure climate mitigation and adaptation are considered in GLA programmes and projects from the outset.

We are embedding climate change adaptation into the GLA Group’s financial budget process. The 2024-25 budget included climate change adaptation actions for the first time. We will explore how this can be developed further in the coming years. The climate budget is used to monitor how our spending contributes to a climate-resilient London and identify where we must do more. We will continue to work across the GLA Group to improve our understanding of climate risks and impacts on operations and identify measures to mitigate them.

Transport for London (TfL) continues to implement its [Adaptation Plan](#) as well as improve its understanding of climate risks through work on its fifth Adaptation Reporting Power submission to Defra. This will aid TfL’s prioritisation of adaptation measures.

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**Recommendation 7: In the context of cascading failures due to increasing climate-related risks, consider how the new London Resilience Unit can further strengthen the GLA's approach to managing systemic interdependencies and risks.**

London Resilience has in place a framework for conducting exercises that highlight interdependencies that could lead to knock-on failures from infrastructure disruption. This framework informs planning for and responding to climate-related incidents. As the GLA's new Resilience Unit is established, it will consider how to build on this existing framework, including through enhanced communications and engagement efforts that help raise awareness of key risks with key partners and build their capacity to improve London's resilience. The improved information sharing will also help organisations identify and address interdependencies.

**Recommendation 9: A regional strategic plan for adapting to higher temperatures in London to be developed with a governance framework that sets out roles and responsibilities.**

A strategic London-wide plan for heat will be considered as part of the vision and delivery plan for a climate-resilient London (recommendations 1 and 2).

**Recommendation 10: Conduct an exercise to test London's preparedness for a severe heat episode and identify potential cascading and concurrent risks.**

In response to this recommendation from the interim report, I commissioned a multi-agency extreme heat exercise that took place on 27 June and was named [Exercise Helios](#). This exercise explored a wide range of impacts across sectors and communities and laid the groundwork for the development of long-term extreme heat actions (see recommendation 9).

## Chapter 2 – People and Communities

**Recommendation 12: Increase action to engage Londoners on climate risks and build their capacity to adapt. Initiatives should be informed by behavioural science, insights based and targeted to ensure that interventions result in behaviour change.**

Our new London Resilience Unit has already built a strong basis of engagement with community, voluntary, faith, and equalities sector organisations to enable Londoners to prepare for risks and find help when they need it. Climate resilience has been a major feature of this activity, including training, briefings, and seed funding to enable local projects. The GLA will scale up this work and ensure that it reaches communities in every corner of London.

The London Resilience Unit is also currently recruiting a Risk and Resilience Communications Coordinator to support the unit in ensuring that risk and resilience communications are robust, evidence-based, in line with recognised good practice, and consistent across resilience partners.

My Youth team has recently commissioned the London Metropolitan University Centre for Applied Research in Empowering Society to lead behavioural science research into the barriers and facilitators to engaging young Londoners in social action and develop a systems map for London. Future youth initiatives will be informed by this behavioural science research and insights to ensure that interventions result in behaviour change.

As the risk of flash flooding due to climate change increases, I have already written to Londoners in 45,000 basement properties to urgently raise awareness and help them prepare in the event of a flood. I will continue this outreach to reach all basement dwellers in London.

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## **Recommendation 13: Long term and consistent investment must be made available for sustained community engagement and capacity building on adaptation across London's community and voluntary sector.**

A new programme is in development with the London Resilience Unit with the aim of engaging and promoting climate action to improve the resilience of London's communities.

I will also work closely with the government to ensure there is long term investment in local resilience forums, which enables effective community engagement and capacity building on all aspects of resilience, including climate adaptation.

Alongside this, in January 2024, I commissioned Communities Prepared and Groundwork London to create the first London Community Resilience Toolkit. The toolkit will include guidance on climate resilience for community partners and what they can do to respond to local climate risks. The toolkit is due to launch in summer 2024.

## **Recommendation 14: Continue to grow London's spaces for resilience initiatives and drive a coherent approach.**

My Cool Spaces Map provides Londoners with a network of places where they can find respite during hot weather and summer heatwaves. It also supports important messaging and awareness-raising about heat risk to help Londoners stay safe. The network of spaces has grown each year and receives strong engagement and coverage during hot weather periods.

Building on the Cool Spaces project, the London Resilience Unit has commissioned insight work and a pilot to learn how community spaces can better support local resilience to a wider range of risks and impacts. These projects will report their findings and recommendations in the autumn.

## **Recommendation 19: Work with the London Health Board to mainstream adaptation action by ensuring that climate mitigation and adaptation are included in any future London Health and Care Vision or strategy, and by considering adaptation in its meetings in 2024/2025 (and beyond).**

The London Health Board remains an important forum where health and care leaders work together to improve the health and wellbeing of Londoners.

As Chair of the Board, I welcome this recommendation and recognise the important leadership role the Board can play in championing action across the system. The Board will seek to include an agenda item on climate mitigation and adaptation at a future meeting.

## **Chapter 3 – The built environment and infrastructure**

## **Recommendation 22: Build on the London Plan's leading adaptive policies and ensure that climate change, both adaptation and mitigation, are given greater weight in planning decisions.**

London's built environment must be fit for the future. I have started work on the next London Plan, and the London Climate Resilience Review will be an important piece of evidence to inform its development.

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The Planning for London Engagement programme over the last two years has highlighted growing concerns from Londoners around climate change risks as well as significantly reducing greenhouse gas emissions. Through the London Plan development process, we will consider how policies can be even more effective in ensuring London is better adapted for climate change.

## **Recommendation 27: Prioritise action to adapt existing buildings and create climate ready streets and roads.**

In January 2024, I published the “[Properties vulnerable to heat impact](#)” report, which maps London's heat risk across homes, neighbourhoods, and essential properties. The study focused on settings especially vulnerable to heat-related hazards, including schools, hospitals, care homes, residential properties and neighbourhoods.

The GLA Group already has significant commitments relating to adapting streets. For example, my Green and Healthy Streets programme has enabled TfL and 11 boroughs to implement Sustainable Drainage Systems (SuDS) and greening across London. The London-wide surface water flooding strategy, delivered with partners, will also contribute towards delivering this recommendation. SuDS Opportunity Modelling, of which the GLA and TfL are part-funding as part of our contribution to the London Surface Water Strategic Group, will help partners prioritise where SuDS should be delivered to reduce surface water flood risk most effectively.

In 2022, I established the £3.1m Trees for London programme with the aim of increasing London's resilience to extreme weather of the type experienced that summer. The programme has funded the planting of more than 115,000 trees in areas of high heat and flood risk. To maintain this momentum, I have awarded the Trees for London Programme an additional £1m to help make London a fairer, greener, more resilient city.

Other recommendations (including 3 and 4) support the delivery of this recommendation through embedding adaptation across the GLA. For example, in partnership with Arts Council England, my culture team is working on a Sustainable Space for Culture Study to enhance sector resilience through climate adaptation, energy efficiency compliance, and carbon reduction.

## **Recommendation 28: Create an “adaptation accelerator” programme which supports organisations to develop climate adaptation plans, as well as the development and delivery of projects.**

My programmes, such as Future Neighbourhoods 2030, the Climate Resilient Schools Programme, and my extensive green infrastructure programmes, have provided support and a strong foundation for London's organisations to take adaptation action. My climate risk maps and analysis, such as Properties Vulnerable to Heat, enable organisations to consider climate risks, put in place plans, and take adaptation action.

My officers will review the options and rationale for developing a targeted support offer, such as an accelerator. I will engage the GLA Group, local authorities, London's anchor institutions, and other key organisations to understand what support is needed and how it can accelerate the delivery of adaptation actions.

## **Recommendation 30: Public bodies in London should incorporate subsidence risk into their plans and take a risk-based approach.**

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I support the recommendation that public bodies, including the GLA Group, should incorporate subsidence risk into their plans. I will ensure that we highlight to others subsidence as a risk, including those with responsibilities for managing the built environment and land managers, and signpost to appropriate resources.

**Recommendation 32: Continue work on the development of sub-regional integrated water management strategies (IWMS) and convene partners to deliver the East London pilot strategy.**

My subregional IWMS for east London has been a success, convening partners to integrate planning and infrastructure across water resources, wastewater, water quality and flooding. It provides a coordinated strategy to support cross-organisational collaboration to deliver sustainability across the subregion. Priority actions have been selected, and I am supporting partners to identify potential projects to deliver these priority actions.

Initial scoping is underway for future IWMS locations; lessons learned from the east London IWMS will inform this future work.

**Recommendation 36: Support the Transport Adaptation Steering Group to connect with transport providers in other cities nationally and internationally to develop best practice adaptation for city transport.**

TfL's Transport Adaptation Steering Group is a strong model of stakeholder engagement and collaboration. TfL already works closely with the International Association of Public Transport (UITP) to share learning from the Transport Adaptation Steering Group. TfL is also an active member of the Infrastructure Operators Adaptation Forum and the Rail Safety and Standards Board's Climate Change Adaptation Working Group, both of which include a range of other UK transport authorities and operators as members, and provide opportunities for shared learning. The GLA will continue to work through networks such as the M10 and C40 Cities to share best practices.

**Recommendation 38: The GLA and those who own land bordering the Thames west and east of the Thames Barrier conduct an audit of land they own on the riverbank. They should understand where defences need to be raised and maintained and develop an action plan by 2025 setting out financing and delivery options for raising defences, creating nature-based solutions and sacrificial zones, before 2040.**

I support the aims and ambitions of the updated Thames Estuary 2100 plan. My officers supported the review of the plan. I am progressing work with TfL and GLA Land and Property to audit tidal flood defences in London under GLA Group ownership. This project will determine the work needed at each site and develop a prioritised programme of work to ensure that the GLA Group is working towards the updated TE2100 deadlines for upgrading river defences where needed.

**Recommendation 40: Build on existing tools to develop a strategic framework for the delivery of Blue Green Infrastructure (BGI) across London; use this to inform funding programmes and convene partners to drive a strategic approach to BGI across London.**

My Green Infrastructure team is commencing work on the London Green Infrastructure Framework, which will provide up-to-date spatial data and priorities for green and blue infrastructure across London. This will enable decision-makers to prioritise strategic locations and types of intervention for investment in green infrastructure, understand trade-offs, ensure vital green space



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is protected, and provide new opportunities to address climate resilience. The framework will also help the GLA Group, borough planners, green space landowners, managers and developers to plan, fund, design and deliver green infrastructure across London.

I am preparing a Local Nature Recovery Strategy for London that seeks to restore, create and connect habitat over this Mayoral term. My manifesto pledges, through a London Green Roots Fund, to work with councils and communities to support Blue Green Infrastructure.

## **Chapter 4 – A climate resilient economy**

### **Recommendation 44: Commission work to strengthen the evidence base on the costs and benefits of adaptation and climate resilience.**

We know that adapting London to climate impacts will have costs, but evidence indicates that the benefits of early adaptation action overwhelmingly outweigh the costs of inaction.

The Review shows that organisations in London want to better understand the costs of current and future climate impacts to support their decision-making. I will ask officers to consider if the GLA is well positioned to commission more analysis at a regional scale.

### **Recommendation 45: The Mayor's London Climate Finance Facility takes forward approaches that can mobilise greater levels of private finance into climate adaptation projects, this could include launching a green bond.**

Work has just begun on this recommendation. My Green Finance team is exploring options to unlock private investment for nature-based solutions and adaptation as part of work to develop the London Climate Finance Facility further.

This recommendation also links to the delivery of other recommendations. Recommendation 27 (climate-resilient built environment) and recommendation 28 (Adaptation Accelerator) are enabling actions that build a pipeline of adaptation projects.

### **Recommendation 46: Include climate resilience as part of Grow London Local's offer to small businesses.**

My officers are working with London and Partners to undertake the initial scoping of this recommendation. We will explore if the current climate resilience advisory support responds to the most urgent needs of London's small and medium enterprises.

### **Recommendation 47: Work with public and private sector organisations to introduce a market-based system to enable the delivery of Sustainable Drainage Systems (SuDS) with funding through planned Street Works Programme.**

The GLA has secured funding from Ofwat, in collaboration with Thames Water, London's utilities and local authorities to develop and pilot a market-based mechanism that incentivises utility companies to install SuDS via planned street works. This innovative piece of work will enable the delivery of schemes that can help reduce surface water flood risk across London. Implementing such an approach at scale will enable local authorities to save money and deliver their SuDS programmes more efficiently. The project will launch in September 2024, lasting for 18 months.



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We need to scale up the use of nature-based solutions to improve the natural environment and help clean London's waterways. This contributes to my pledge to work with key stakeholders to produce a plan that will clean up our waterways within a decade.

**Recommendation 48: Ensure the Mayor's skills agenda addresses climate adaptation. This includes the use of the Mayor's Adult Education Budget and other skills programmes to ensure adaptation is addressed across all skills provision, including the Mayor's skills academies. Work with London employers through existing structures, like the London Partnership Board and the Jobs and Skills Business Partnership, to coordinate delivery of training and apprenticeships to provide employment pathways which support London's climate resilience.**

I will continue to invest in green skills to support climate adaptation. My Adult Education Budget funds a range of green skills provision, including in horticulture and forestry, understanding climate change, environmental awareness and sustainability in construction. My Green Skills Academy's Green Spaces hub continues to deliver high-quality training, including in landscaping, horticulture and arboriculture.

The Skills Bootcamps for Londoners programme delivers short, higher-level skills training. Earlier this year, I ringfenced a minimum of £4m in the latest stage of the programme (Wave 5) for green skills.

My officers are working to incorporate climate adaptation and green/blue skills and jobs in the next update on London's low-carbon market. The report will provide analysis and long-term forecasts for London-specific priorities.

The GLA is also expanding its definition and measurement of the low-carbon, environmental goods and services to better understand the value of adaptation, greening and resilience to London's economy. This will be published this financial year.

**Recommendation 50: Launch a Climate Resilience Challenge to promote innovation in the capital and help find solutions to address the impacts faced by Londoners as a result of climate change.**

I agree that innovation can bring new perspectives on big challenges such as climate change. My Challenge LDN programme champions a learning-by-doing approach by prototyping, testing, and iterating ideas to create practical solutions to real-world problems.

My climate change adaptation team is working with the Challenge LDN team to explore a possible challenge in this space.