

The London Sustainable Development Commission's response to the London Climate Resilience Review's call for evidence

Introduction

The Mayor of London has commissioned an independent assessment of London's preparedness for the effects of climate change - the 'London Climate Resilience Review'. This note presents the LSDC's response to the Review's call for evidence.

The impacts of climate change on London

- By 2070, it is projected that UK summers will be [1 – 6°C warmer and up to 60% drier](#). London is likely to experience a [29cm sea level rise by the 2050s](#), and extreme weather events will become more frequent and severe, causing myriad social and economic impacts.
- Hotter temperatures and extreme weather will disrupt infrastructure including transport networks, impacting logistics and supply chains and damaging trade and economic productivity. Global crop production will be damaged, heightening food insecurity. Increased fire and flooding will damage property and agriculture, causing economic loss – with knock-on losses felt in the City's finance and insurance sectors, in turn impacting pension funds. Public services such as education and healthcare will be affected – 90% of hospital wards are at risk of overheating in hot weather.
- 2022 saw the UK's highest ever number of deaths due to excess heat (2,985), according to the [UK Health Security Agency](#). London has the most heat-related deaths in the UK, and these will increase as temperatures rise.^{1,2} In London you are more likely to die from overheating than cold. The opposite is true elsewhere in the UK – but this is likely to switch as temperatures continue to rise.
- These complex risks will interact and multiply with each other, creating a wicked problem greater than the sum of its parts. And the Londoners who are already the most marginalised – those on low-incomes, frontline workers, in precarious housing and employment, and with caring responsibilities – are likely to be hit hardest.

In this context, the LSDC presents five recommendations to tackle these urgent challenges.

1. Green finance

Funding for climate adaptation must be more joined up, and integrated with funding for other aligned priorities including climate mitigation.

- From the Thames Estuary 2100 Strategy development, we learnt the main blocker to funding climate adaptation measures is rules on finance that limit holistic use between mitigation and adaptation. Funding rules should therefore change to enable multiple benefits to be considered within projects.
- There is significant government funding available, but it is fragmented. Different funding mechanisms must work together better to achieve shared benefits, and a unified funding platform should be set up for organisations to access.
 - For example, flood management is funded by a combination of government funding via the Thames Regional Flood and Coastal Committee, Government Grant and Aid money, and council levies. But because these pots only fund flood management and SUDS, they cannot fund integrated measures to also address heat-risk.

There needs to be a uniform, accepted way to determine the costs of inaction on heat, in order to determine the value of action.

- Avoided costs of managing flood risk have been analysed by academics and the insurance sector. What dataset should be developed / used on which to base a cost-benefit analysis of heat resilience? This must include lost business due to failure of services such as transport, IT, etc.

New funding models must be developed to deliver climate adaptation measures where there isn't an immediate return on investment.

- Current green finance models often rely on ROI from savings on energy bills. How can we develop models that work for climate resilience, particularly nature-based solutions?
- Innovative approaches are needed to cross public / private boundaries, such as funding to 'green' paved gardens in private homes.

Funding models must be fair. This is not just a moral imperative, but crucial to creating the public support needed to tackle climate change.

- New, progressive taxation should be raised to pay for the level of action needed, and do so fairly. Examples of how this could be done include:
 - A new 'resilience tax', ringfenced to pay for climate adaptation measures.
 - Making council tax payments partly determined by the climate resilience of the property, to deter homeowners from paving over their front gardens.
- More funding is needed to offset costs of any inconvenience to Londoners.

2. Governance

London's governance is very complex and lacks a coordinated way to make strategic, long-term, London-wide decisions on climate resilience.

- There is no designated body with overall responsibility for addressing heat risk, and no 'controlling mind' to coordinate climate resilience.
- A multi-agency approach is needed including central government, and connecting bodies managing heat with those managing flooding including the Strategic Surface Water Group.
- The London Resilience Forum's remit should expand to look ahead to future risks in order to take action now. It is currently only set up to address issues a few months or years away – we need to look 25-50 years ahead to manage climate change risks.
- The Environment Agency's flood advice is ignored despite being a statutory consultee.
- The London Fire Brigade is currently the de facto body tasked with responding to flood emergencies – but it is not their statutory responsibility, so they don't get funding to do so. Flood response remits should be clearly allocated, along with funding for delivery.

There must be greater support for boroughs to take local action, while ensuring a coordinated pan-London approach.

- Boroughs often don't have the capacity or specialist skills to work on adaptation. There is major variation between boroughs' capacity, and between which boroughs apply for adaptation funding.
- Boroughs' carbon offset funds are focused on mitigation not adaptation. The brief should be widened.
- Catchment area-level solutions to flooding and drought are needed that cut across borough boundaries, factoring in the relationship between different tributaries of the Thames.

- In this way, flood governance faces different challenges to heat, which can be managed locally (though still needs a pan-London strategy).
- More funding and powers for the Mayor would help – but would cut administration of the Thames Basin catchment area in half.
- The London Plan has several climate adaptation policies, but they are often not enforced due to funding cuts in borough planning enforcement. More resources are needed to take action against those who break the rules, potentially including ‘naming and shaming’.
- Planning policies must also resolve the tension between managing combustible building materials for fire safety reasons, while supporting green roofs and walls where suitable.

We need better analysis and quantification of the risks of overheating, flooding, and performance of resilience measures – including mapping mortality risks.

- Overheating on the tube and other transport networks grinds the city to a halt, and is ultimately a risk to life. Analysis is needed of potential mortalities in under given conditions (temperature humidity), across key locations (the tube, buildings of different types, etc.)
- Analysis is needed of how much water SuDS projects remove from the water system in order to justify bringing new schemes forwards.
- Academics should be commissioned to rapidly review the existing evidence to draw conclusions. Several highly capable research institutions in London could do this research.
- However, the research should support action, not delay it: we do not want paralysis by analysis.

3. Social value and the just transition

We must show Londoners how climate resilience directly improves their quality of life (now as well as in future).

- Adaptation measures must be integrated with social value measures that benefit communities, e.g. improve equality of access to green spaces, liveable neighbourhoods.

Climate resilience must drive fairness, tackling the unequal impacts of climate change.

- Climate change impacts are still strongly linked with social inequalities. (Though there is currently no evidence of correlation between deaths caused by overheating and social deprivation, unlike in the US. It is thought this is because few people use A/C in the UK^{1,2}.)
- Rising temperatures will likely see wealthy households installing air-con, using more energy (which must be green). Meanwhile, low-income Londoners can’t afford air-con and renters don’t have permission to install it.
- Those who have frontline / outdoor jobs are more exposed to heat risks and can’t work from home. There is not escape from, heat stress in a poor tower block or hospital. We are already seeing outdoor workers in Italy threaten to strike during the heatwave.
 - We need to keep frontline workers safe as they’re the ones keeping the city moving – creating a practical as well as a moral imperative.

- The majority of New Yorkers affected by basement flooding were in illegal dwellings. London's Strategic Surface Water Group is analysing the equivalent social impacts of flooding in London; the LSDC endorses this work.
- But more research is needed for heat: although the GLA's Climate Risk Map shows us the locations of the worst heat and deprivation, more detailed analysis is needed to understand the full social implications and inequalities of overheating. For example, identifying specific buildings or types of building where heat is difficult to dissipate.
- Overheating affects inner and outer London differently. Outer London has a higher fire risk because of proximity to larger green spaces. Inner London is more affected by density.

4. Green infrastructure

Green infrastructure should be enhanced – and maintained.

- Green infrastructure management has several interconnected benefits:
 - urban cooling,
 - surface-water flood mitigation,
 - supports biodiversity,
 - enhances human health and wellbeing (physical and mental).
- However these assets must be maintained – or we risk losing them, e.g. to drought.

5. Public engagement

We must build trust through public engagement.

- A wide-reaching communications programme, targeted at a range of communities, must explain the benefits of climate resilience (as per the social value point above).
 - We must explain the role of individuals and communities in taking collective responsibility, such as looking after neighbours, not paving over their gardens. People want to do more than acquiesce to a top-down policy.
 - This should engage with existing community groups and could also build on the boroughs' Community Resilience Forums.
 - Engagement must be in addition to strategic pan-London action – we must avoid the perception that comms or individual actions replaces that.
- Communities should have more input to local adaptation projects / decisions.

References:

1. Antonio Gasparri et al, 2022: Small-area assessment of temperature-related mortality risks in England and Wales: a case time series analysis. *Lancet Planet Health*, 6: e557–64
2. James E. Bennett et al, 2014: Vulnerability to the mortality effects of warm temperature in the districts of England and Wales. *Nature Climate Change*

