



## **Urban climate resilience: tackling microclimates and dwelling overheating A UK panel response**

### **A joint London Climate Change Partnership/Buildings & Cities event 30 June 12:00-13:30pm**

The design of our cities, streets, open spaces and homes impacts on the local climate (microclimate) as well as on the health of citizens. Compact urban form is often argued to be a more sustainable approach, but can cause adverse consequences on local microclimates, including increasing energy demand and potential health risks due to still air that traps pollutants.

At the scale of the individual building, summertime internal overheating in new and existing dwellings is widespread and increasing, even in the UK's temperate climate. There is an urgent need to solve the problem. Urban flats and small dwellings are particularly affected, presenting new health risks to elderly and vulnerable residents.

This event examines some interacting consequences that arise from modern demands (e.g. increased density, increased floor area ratios, economic drivers) and explores how resilience can be created and what this means for modifying existing cities. It showcases new knowledge and solutions.

#### **Aims of the event:**

- Launch/raise awareness of the briefing papers
- Convey to decision-makers what needs to change in this space
- Convey to practitioners that things can be done differently, and hear from them what is needed
- What needs to be done and who needs to do it? How do we operationalise it? Which decisions take account of this? How is it mainstreamed into professional practice?
  
- For built environment professionals
  - What can be done to better understand the consequences of built form on its surroundings
  - Designing dwellings that do not overheat
  - Identifying dwellings that need retrofitting to reduce their overheating in summer
  - Ensuring energy retrofit does not exacerbate summer overheating
- For planners
  - Should neighbourhood-scale assessment of impacts on local climate be part of the decision process?
  - What are appropriate metrics and principles to account for the microclimate impacts of built form?
  - Should plans be assessed for their overheating impacts?
- For building owners
  - What is the duty of care owed to tenants to prevent summer overheating?
  - What guidance or training should be given to tenants about how to reduce overheating?
- For government
  - What protection can be provided to improve air quality and health of streets and neighbourhoods?
  - What standards and regulations would reduce overheating?
  - What safe havens or 'cool rooms' should be provided for extreme events?

## Audience

- Built environment practitioners
- Housing associations and dwelling owners
- Local authorities

## Agenda

12:00	<b>Open, Welcome</b> Richard Lorch, Editor in Chief, Buildings and Cities
12:03	<b>Opening remarks</b> Gemma Holmes, Senior Analyst in Adaptation, Climate Change Committee
12:10	<b>Part 1: Urban Microclimate in Temperate Climates</b> Rohinton Emmanuel, Glasgow Caledonian University
12:25	<b>Urban Microclimate responses:</b> Bhakti Depala, Development Liaison Manager, City of London Joanna Averley, Chief Planner, MHCLG
12:40	<b>Part 2: Summertime Overheating in Dwellings</b> Kevin Lomas, Loughborough University
12:55	<b>Overheating responses:</b> Paul Ciniglio, Refurbishment Lead, National Energy Foundation Joe Baker, Head of Carbon Management, London Borough of Haringey Karin Stockerl, Director of Asset Strategy and Services, Optivo
13:10	<b>Discussion</b>
13:25	<b>Wrap up, next steps</b>
13:30	<b>Close</b>