



**Heat Risk in London Group**  
December 6, 2018 14:00-16:00  
Room F, London Fire Brigade Headquarters,  
Union Street SE1 0LL

**Actions**

<b>Who</b>	<b>Action</b>
KG	Circulate presentations and follow up materials
KG, VT	MHCLG update on consultation next time
All	Help with sourcing cladding/glass for models for Urban Albedo Calculator project – anyone who can help contact Giri or Kristen
KG, BT	Session on fire risk and plants at future meeting

**Meeting notes**

**In attendance:**

Katherine Drayson, TfL  
Annette Figueiredo, GLA  
Julie Fitcher, Climate 22  
Kristen Guida, London Climate Change Partnership  
Nick Jackson, Defra  
Snigdha Jain, WSP  
Helen MacIntyre, PHE  
Gianluca Pescaroli, UCL/IRDR  
Tim Reeder, LCCP  
Giri Renganathan, Kent University  
Olga Shashkina, GSDM  
Rochelle Schneider, UCL  
Victoria Tink, MHCLG  
Anna Tuddenham, Mott Macdonald  
Briony Turner, IEA Space4Climate

**Apologies:**

Anna Mavrogianni, UCL  
Anastasia Mylona, CIBSE  
Ross Thompson, PHE  
Chris Rapley, LCCP/UCL

**Welcome and Introductions**

Kristen welcomed attendees and led introductions. She noted that Ross Thompson and Chris Rapley have both sent apologies due to illness, so their items on the agenda will be moved to a future meeting.

**Minutes of the last meeting**

The group approved the minutes of the last meeting (June 12). Actions have been completed.

### **Cool roofs modelling – West Midlands**

Helen presented her work (a collaboration with UCL, University of Birmingham, and LSHTM) on mapping and quantifying the urban heat island and assessing the effectiveness of cool roofs in mitigating the effects. The study area for the project was the West Midlands, which was heavily impacted by the heat in 2016.

The presentation is available [here](#).

There is also work on wind shear – to show that taller buildings can have an impact on smaller buildings, by causing circulation of air.

Helen also mentioned that Ross Thompson would come along to a later meeting to present the health impacts of severe weather in 2018 – including the “beast from the east” and the summer heatwave.

### **Translational modelling and guidance**

Snighda told the group about her work for the GLA on a holistic mapping of urban heat, noise, and air quality, considering interactions between these issues.

Survey via ComRes on residential suffering of overheating (October 2015), only 13% of those surveyed had not experienced overheating in summer of 2015.

Referenced Costa et al 2016 on climate change heat stress and labour productivity -[Acoustics ventilation and overheating residential design guidance 2018 ANC](#)

Phase 2 of the project will validate this work with planners, policy makers, etc. LCCP can provide support.

### **Roundtable update**

Rochelle:

- Working on geospatial data for public health with LSHTM.

Victoria:

- MHCLG has committed to consult on a method to reduce overheating in buildings, which may inform building regulations (new or Part L). This is the first stage of the work and different options are being considered. Will update the group next time.

Nick:

- Defra's 25 year plan rollout continues. The Environment Bill is also going through.
- The new UK Climate Projections (UKCP18) were launched November 26.
- Defra also working with the ASC on monitoring and evaluation of the second National Adaptation Programme. The ASC is set to issue one of its regular monitoring reports next summer.
- The Cross-Government overheating group has been on sabbatical, will be revisited in the new year.

Gianluca:

- has recently become a lecturer at UCL IRDR, interested in adaptation of complex interdependent systems, wants to work more on social implications

and cascading effects of disruption. Heatwave could be a possible trigger for disruption, and there are cultural components of risk and resilience.

Katherine:

- in her new role at TfL, part of her work is on developing an adaptation action plan and a baseline and monitoring protocol, which will link with reporting on Mayor's Transport Strategy commitments on heat.
- A new PhD student will be joining to work on the London Underground and heat.
- Looking at existing vegetation/tree stock and risks from climate change.
- Writing TfL response to [Defra Consultation on biodiversity net gain](#).

Julie:

- Will be able to report back soon about results of study – impacts of tall buildings on air quality and local microclimate.
- Trees – often planted without consideration of surrounding buildings and ability to keep them alive. Are they just decoration?

Giri:

- Working on the EPSRC-funded [Urban Albedo calculator](#) project, which had a stakeholder event in October. At the moment the project could use some help in sourcing glass and cladding materials for the London area models. If anyone can help, please get in touch.

Tim:

- Interested in adaptation pathways for heat. Have some threshold information but need more, e.g., when do people become less willing/able to travel?
- Also, gaps around knowledge related to plant types and fire risk. East London fires this year. Katherine: Trees Design Action Group looking at this – how vulnerable is existing tree stock to climate change.

Briony:

- Works with satellite data, offer to look at fire risk – session at next meeting.
- Also, Leicester University has data on land surface temperature – use not just for UHI measurement, but for vegetation health and soil moisture. How well is London's vegetation functioning?
- Remember RHS guidance about planting in a changing climate. Tim – Melbourne has good planting guidance.
- Water – requirements for vegetation, innovative solutions like adaptive facades, water for evapotranspiration, blue evidence base. And consider work on cities and women's health, and "smart" cities work doesn't look at social welfare and inequality.

Helen:

- Planning to include atmospheric composition into her modelling work, to see how cooling may increase air pollution.
- Doing work on health effects of pollen with high temperatures – possible relationship between pollen and climate change.
- A UK/US air quality group experiment in Birmingham to see how trees respond to large concentrations of CO<sub>2</sub>.

Snigdha:

- WSP leading on the Adaptation Sub Committee project on interacting risks (one of six research projects commissioned by the ASC to support the next UK CCRA).

- Working on a H2020 bid on health and wellbeing in cities, urban innovation.

Kristen:

- Hosting a UKCP18 briefing on January 10 at City Hall. Currently oversubscribed, but if you would like to attend, let her know.
- The Met Office is interested in what London needs in terms of climate data.
- Organizing seminar with UWE next year on “less-heard voices” in resilience, may link with London’s new Rockefeller 100 Resilient Cities work.
- LCCP supporting ASC research project on behaviour and climate risk
- London Climate Action Week set for next July 1-8. Will schedule some events, possibly a climate walk with Julie.