

Parallel session 3B-2.3

**Co-designing urban infrastructures**

Tuesday 12 November, 16.00 – 17.30

Garden Room

Speakers:

**Prof. Sarah Bell**, Professor of Environmental Engineering, The Bartlett School of Environment, Energy and Resources, UCL

**Robin Brown**, Just Space

**Slaney Devlin**, Chair, Somers Town Neighbourhood Forum

**Dr Charlotte Johnson**, Senior Research Fellow, The Bartlett School of Environment, Energy and Resources, UCL

**Joanna Vignola**, Kipling Estate Tenants and Residents Association

Conventional design and management of infrastructure for cities have divided attention between supply and demand. Engineers and experts designed systems of supply; individual consumers drove demand. Decentralised supply has become an important element of sustainable infrastructure, as have technologies to improve resource efficiency. The lines between supply and demand have become blurred. Citizens and local communities can meet some or all of their own demand, and even become suppliers for water, energy, food and transport. The relationship between supply and demand, and the role of technology and infrastructure, is ever more complex. Citizens are vital elements of dynamic urban infrastructure systems, and yet they are rarely involved in decisions about them.

The Engineering Exchange at UCL has been experimenting with community-based co-design methods for urban infrastructures. The Engineering Comes Home project aimed to design infrastructure residents of the Meakin Estate in south London. A series of workshops brought together residents, engineers and designers to design infrastructure from the bottom up. New software tools put powerful engineering analysis techniques, such as lifecycle assessment, into the hands of novice co-designers. The project raised residents' knowledge of the infrastructures that serve them, and incorporated their expertise and values into engineering system design. Co-design methods were also used with the Somers Town Neighbourhood Forum to develop local plans to improve air quality, and with residents of the Kipling Estate to design a community garden that also functions as surface water drainage infrastructure.

This session will showcase projects, methods and tools for co-designing infrastructure. Community partners will contribute their knowledge of the projects and experiences of co-design processes, and participants will be able to test software and physical design tools used during the workshops.

Schedule:

16.00 **Welcome & introduction to Engineering Exchange**, Sarah Bell

- 16.10 **Using experimental methods and participatory approaches**, Charlotte Johnson
- 16.15 **Air Quality in Somers Town project**, Slaney Devlin, STNF chair (with Charlotte Johnson)
- 16.30 **Green Infrastructure report**, Robin Brown, Just Space (with Sarah Bell)
- 16.45 **Kipling rooftop garden**, Joanna Vignola, Kipling Estate TRA (with Charlotte Johnson)
- 17.00 **Open discussion with panel**, chaired by Sarah Bell / Charlotte Johnson
- 17.30 **Session end**