



*Courtesy: Dr Danielle Densley Tingley, University of Sheffield*

## Circular Economy

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- **The circular economy statement guidance by the GLA aims to reduce construction waste by demolition and associated emissions by requiring circular principles to be incorporated.** These can be incorporated into the design, construction, and operation of a development, encouraging reuse and recycling of existing building materials, which reduces the need to import raw materials.
- **Retrofit, apart from having a lower carbon footprint compared to new build, can also reduce energy bills, which is extremely important in the current energy crisis.** In this way, there are also social and health benefits tied to retrofit, which can only be significant if there is a whole house retrofit plan, and not just shallow or single measures retrofit. The latter hides risk that can lead to unintended consequences, which the [LETI Retrofit Guide](#) has drawn out, made clear to understand, and suggested how to minimise these risks, while outlining good principles of good retrofit. An encouraging move towards retrofit is the pre-development audit by the GLA, where the reasoning for demolishing buildings is assessed.
- **Building and its infrastructure represent the world's largest resource footprint.** In London alone, over 50% of the waste generated is created by the building environment sector, with materials accounting for 10% of consumption-based emissions. In a more circular economy, that waste will become a resource and the value of materials will be stored and used in the long term, which is essentially a process of urban mining. The pre-demolition audit by the GLA is a move towards that direction, where the opportunities to reclaim materials are assessed, while design for adaptability and disassembly is also very important in that regard.
- **Manufacturing materials that can be reused or composted, or materials made from waste can significantly reduce the need for raw materials and feed into the circularity of the economy.** The rate in which new materials are being used is not viable for sustainability, while there is also raising concern around volatile materials, that are chemical, carcinogenic etc. The manufacturers need to meet and pre-empt this increasing demand for sustainable products, models, and services.



*Courtesy: Dr Danielle Densley Tingley, University of Sheffield*

## **Speakers:**

**Katie Lindsay**, Principal Policy & Programme Officer, GLA

**David Cheshire**, Director, AECOM

**Simon Sturgis**, Founder, Targeting Zero

**Clara Bagenal George**, LETI, Associate, Elementa Consulting

**Attendees: 157**