Smart cities and waste innovation

The presentation will report on this Network which brings together waste/biomaterials scientists, industry, city government, and artists to address challenges to waste management. Waste is a significant problem facing an urbanizing world, with challenges from waste prevention, treatment/management, to recycling and reuse, and the health impacts of poorly managed waste. In Europe waste production amounts to over 2.5 billion tons, but only a limited share (36%) is recycled, with the rest land-filled or burned. Of the 600m tons of products and materials that enter the UK each year, only 115m is recycled - 60% of all waste generated in London is currently exported for treatment or disposal outside of the area. This is contrary to the UK Government's Waste Strategy, requiring waste to be managed as close as possible to the point of production. The total volume of waste generated globally is expected to increase by 50% over the next decade; however there are major variations in landfill disposal – Copenhagen (2%), Paris (11%) to New York (64%). A recent UK government report stated: “We need to make more efficient use of the increasingly valuable resources available to us...where less waste is created, delivering real financial, environmental and social benefits. We need to develop the concept of a circular economy, where one person's waste becomes another's valuable resource...Making the changes requires innovation and creative thinking”. This also stresses the importance of community/stakeholder-led approaches which the Network is developing through citizen's science projects such as anaerobic digesters, construction materials re-use and creative recycling schemes.

Biography

Graeme Evans is Professor of Design and Director of the Art & Design Research Institute, Middlesex University. He also holds the Chair in Culture & Urban Development at Maastricht University Department of Science Technology Society studies (STS) where he directs the Centre for Euregional & Urban Studies (CUES). He is an Investigator on the AHRC Research Network on Smart Cities and Waste, as well as the Hydrocitizenship research project funded under the AHRC Connected Communities program. Prior to academy, he worked in project management in the international energy and transport industries.

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