

Cities, Communities and Homes: Is the Urban Future Livable?

- **Paper / Proposal Title:**

PIECES of the puzzle: Systematic integration of resource efficiency and resilience in planning

- **Format:**

Written paper / verbal presentation

- **Author(s) Name:**

Kemi Adeyeye¹, Tao Wang², Eleni Tracada³, Stephen Emmitt¹

- **University or Company Affiliation:**

1. University of Bath
2. Beijing Institute of Technology, China
3. University of Derby

- **Abstract (300 words):**

Environmental change impacts on the quality of the physical (built) and natural (ecosystems) environments. Living with environmental change therefore requires actions and response on all socio-political and economic domains and planning scales i.e. macro (city), meso (neighbourhood) and micro (building).

This work utilises theoretical methods to investigate resource efficiency and resilience (RE+R); two important strategies highlighted in planning policies and frameworks as necessary to address the causes and effects of climate change - now and in the future. The study explores the efficacy and applicability of the "PIECES" framework, proposed by JC Wetherbe* for requirements-elicitation and problem solving. The framework is applied for the systematic evaluation and integration of policy strategies for RE+R within

the context of housing development and urban planning, particularly in the UK. In doing this, it examines the extent to which this framework can be used to resolve policy and process fragmentations, information and communication deficiencies and quality of service within this sector. It also presents opportunities to better engage the individual and the collective on either side of the professional spectrum in anticipatory planning and foresight activities. That is, to improve the capacity of stakeholders to better understand the overall level of risks, and to make informed judgements about the required level of preventative action.

The paper concludes with recommendations which can be applied to test the efficacy of its findings for 'piecing together' better, liveable and resilient urban environments.