

International Conference on Sustainability in Energy and Buildings

Invited Sessions

Title of Session: The Urban Environment as a carbon sink

Name of Chair: Dr Graham Ormondroyd, Head of Materials Research, BioComposites Centre, Bangor University

Vice-chair: Dr Morwenna Spear, BioComposites Centre, Bangor University

Vice-chair: Dr Andreja Kutnar, Innowrenew, CoE, University of Primorska

Description:

This session will explore the potential of the urban environment to act as a carbon sink and help in the mitigation of climate change.

Whilst there have been, and still are, great advances in the reduction in the carbon emissions of living, if we are to achieve the goal of net zero emissions by 2050 there is still a great challenge ahead. This challenge cannot be met unless there is a coming together of many research areas and addressing the challenge holistically.

The urban environment had long been seen as a carbon emitter, with the focus on minimising emissions in service, or within construction activities. However with a change of materials used, and advances in strategy for urban design or building performance, the built environment may now function as a store of carbon or a tool for emissions mitigation. The reduction in the energy needed to allow us to lead our modern lives, and the greening of our cities could flip the paradigm and create an urban environment that acts as both a carbon store and a carbon sink.

The development of the urban environment as a carbon sink, whether through the correct selection of materials or the development of carbon intensive green spaces, represents a great opportunity to lock away a significant amount of carbon within the built environment

This session invites contributions from academics, practitioners, researchers and scientists on all areas relating to the issues mentioned above. Quantification of effects achieved by design, policy change or innovation is especially welcomed. Submissions are welcomed from the industrial and research community in the areas of low carbon construction materials, the urban environment as a carbon sink and materials as a carbon store.

Website URL (if any):

Email & Contact Details:

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