LEEDS SUSTAINABILITY INSTITUTE International Energy Agency: Annex 58

After building a strong reputation in building performance characterisation, the Centre for the Build Environment (CeBE) at Leeds Beckett University were invited to participate in the International Energy Agency Annex 58. The ultimate goal of the Annex is to develop the necessary knowledge, tools and networks to achieve reliable in situ dynamic testing and data analysis methods that can be used to characterise the actual energy performance of building components and whole buildings. To reach this goal, an international collaboration is needed on different issues:



International Energy Agency Energy Conservation in Buildings and Community Systems Programme

- Development of quality procedures for full scale testing
- Development of quality procedures for dynamic data analysis
- Production of guidelines for building performance characterisation and predictions
- Gathering well documented high quality dynamic data for validation purposes
- Application of dynamic whole building tests

At the same time, an operational network of excellence on full scale testing is created that can provide advice on the whole process and specific on the dynamic data analysis handling. To realise these goals, work has been broken down into several subtasks:

- Subtask 1 State of the art on full scale testing and dynamic data analysis
- Subtask 2 Optimising full scale dynamic testing
- Subtask 3 Dynamic data analysis and performance characterisation
- Subtask 4 Application of the developed framework
- Subtask 5 Setting up a Network of excellence

CeBE in collaboration with the University of the Basque Country have taken the lead on Subtask 2, and are currently developing a roadmap to cover test procedures for whole building performance characterisation. When finished, this will serve as a tool for researchers and industry alike, aiding correct experimental design and execution.



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