Building Energy Modelling

There is growing demand for modelling of the energy flows into and out of buildings.

Whether to solve a tricky design problem, demonstrate compliance with regulations, investigate poor performance or generate an Energy Performance Certificate, building energy modelling is an essential service for designers, owners and operators alike.

BRE's Building Energy Modelling Team offers a wide range of knowledge and expertise. Our current core business is providing government with technical support on the UK's National Calculation Methodology for assessing the energy performance of buildings. This includes software development and maintenance services for SBEM: the Simplified Building Energy Model used to demonstrate compliance with Building Regulations and generate Energy Performance Certificates for non-domestic buildings.

Having developed SBEM specifically for UK government, we are now being approached by other countries across Europe to provide bespoke versions in order to assist with the implementation of the Energy Performance of Buildings Directive.

Our experts also advise on energy-related issues in individual public or commercial buildings. We have extensive experience in operating a variety of energy modelling tools and are adept at providing the optimum solutions, matching particular tasks to the most appropriate tool.

We help our clients by providing specialist services which:

- Assess alternative design and ventilation strategies
- Diagnose overheating problems
- Explore potential improvement options
- Evaluate the implications of EPCs for new and existing buildings
- Assess the energy performance of building portfolios.

For further information or an informal discussion of your needs, contact:

energy@bre.co.uk
www.bre.co.uk
01923 664200

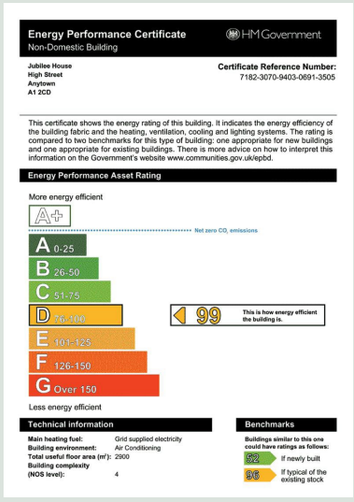
Improving building design and operation

As energy performance legislation becomes more stringent, it is necessary to better understand the way that our buildings behave.

Changes in building design and occupation affect the energy and thermal performance of buildings and building energy modelling enables a deeper understanding of the likely effects of these changes. Energy consumption and risk of overheating are particularly pertinent issues.

In new buildings, energy modelling should be carried out at an early stage of the design process in order to inform further development of the design and construction.

In existing buildings, modelling can help to evaluate and prioritise the options for reducing carbon emissions cost effectively.



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