

Information Paper

# Delivering energy efficiency in commercial buildings

A guide for facilities managers

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This Information Paper draws on the combined knowledge and experience of BRE and the Swiss Institute of Facility Management (ZHAW) to provide targeted guidance on how to deliver energy efficiency through improved facilities management. It is the first in a series of publications providing guidance for facilities managers, maintenance contractors and building owners on a number of issues relating to the operation and management of commercial buildings.

The original design and construction of a building will determine the potential for energy-efficient operation. To achieve this potential and minimise energy use, it is necessary to understand how the building was originally designed to operate and where the main energy uses are. Armed with this information, it is possible to determine how well different building areas and systems are performing, and to identify potential opportunities for making energy savings.

This publication will provide the reader with an overview of the basic processes and techniques that can be used to identify building energy uses and determine overall building energy performance. It provides guidance on how to identify the causes of poor energy efficiency and make energy savings in the areas that typically account for the majority of energy use in commercial buildings. As a result of reading this Information Paper, the reader will gain an understanding of some of the key issues that impact on energy efficiency and know where to find more detailed technical guidance should it be required.

## Gaining an overview

Most buildings are designed to incorporate some degree of energy efficiency measures, if only to comply with mandatory requirements at the time of construction. However, buildings can be complicated and the original design intentions are not



**Figure 1:** The Empire State Building is expected to make substantial energy savings following a recent major refurbishment and upgrade. However, it is often possible to make significant savings through improved facilities management with relatively little financial investment