PRIORITY ACTION THREE

LIGHTING SYSTEMS

WHAT ARE LIGHTING SYSTEMS?

Lighting systems use both artificial light sources like lamps, luminaires and light fixtures, as well as natural illumination by capturing daylight, using windows, skylights or light shelves to achieve practical or aesthetic effects. Proper lighting can enhance task performance, improve the appearance of an area and increase security.

WHAT ARE THE BENEFITS OF THE ENERGY SAVINGS ACHIEVED?

Energy savings achieved via lighting systems provide a reduction in the associated costs of electricity and in carbon dioxide emissions. The replacement of old technologies with LED (light-emitting diode) light sources extends the lifetime of savings and reduces maintenance costs.

WHAT ARE THE ENERGY SAVINGS OPPORTUNITIES?

One major opportunity is the replacement of installed technologies with more energy efficient light sources, such as LEDs, and with lighting control systems. The streamSAVE project developed a methodology to adequately account for the savings achieved through the implementation of such energy efficiency measures.

WHAT MAKES CALCULATING ENERGY SAVINGS CHALLENGING?

Lighting systems differ from one another and existing calculation methodologies are not harmonised across Member States. Calculating savings through the use of lighting controls, behavioural aspects, data scarcity and the consideration of standards for a proper baseline definition are also main challenges.

WHAT IS NEEDED TO IMPROVE ENERGY SAVINGS CALCULATIONS?

There is a need to define a methodology including indicative values in order to establish a harmonised baseline to properly calculate energy savings. This methodology should be based on quality standards and account for the use of new and more efficient technologies and lighting control systems.

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