



IEA-SHC Task: Information for interested industry

Integrated Solutions for daylight and electric lighting

This new task of the International Energy Agency (IEA) will focus on the identification of the potentialities of strategies combining daylighting and appropriate lighting control systems to lead both

- to very high energy-efficient lighting schemes, and
- also to solutions offering the best lighting conditions for human being.

This programme will bring together, during 3,5 years 30-40 international experts and companies, involved in dynamic daylighting and lighting controls.

Useful knowledge and results from research will be gathered, concerning the perception of users concerning lighting quality, human interfaces and control strategies. We will propose models of lighting controls integrating user behaviour and expectations. We will identify best possible approach of control solutions for lighting and daylighting (movable components of windows), with wireless and wired controls, open loop and closed loop, IoT, etc.). We will conduct on-site and laboratory monitoring of innovative solutions and publish results to document benefits.

Part of the work will lead to deliverables to be forwarded as standardization proposals, in relation to CEN and ISO.

The task will require participating members to meet twice a year (once in Europe, and possibly once outside Europe). Meeting of participants will be regularly organized at the national level, as a mirror group to allow professionals to monitor progress, comment results, and possibly bring contribution to the task.

Final results will be publicly available. But participating members will have access to all progress documents.

IEA Task / Annex Proposal
Integrated solutions for daylight and electric lighting
From component to user centered system efficiency
Task organizer: J. de Boer, Germany

Subtask A	Subtask B	Subtask C	Subtask D
B. Matusiak, Norway User Perspective, Requirements	M. Fontoynt, Denmark Integration and optimization of daylight and electric lighting	D. Geisler-Moroder, Austria Design support for practioners (Tools, Standards, Guidelines)	N. Gentile, Sweden W.Osterhaus, Denmark Lab and field study performance tracking

Joint Working Group	Evaluation method for integrated lighting solutions
	Virtual reality (VR) based Decision Guide

Structure of the Task