

HosPilot: Intelligent Energy Efficiency Control in Hospitals



Hospitals consume enormous amounts of energy. Just think about all the equipment and processes in hospitals; 24/7 heating and lighting teamed with, among others, ventilation, sterilisation, laundry and food preparation. The big question, then, is how exactly do we go about introducing energy saving techniques and materials into our hospitals?

Hospitals are extremely complex institutions with many different types of users and demand several different comfort levels. Focussing on lighting and HVAC (Heating, Ventilation and Air Conditioning), the largest energy consuming areas, the HosPilot project has proven that substantial energy savings – while at the same time improving the level of comfort for the end users - can come from updating and refurbishing certain areas. This has been achieved by identifying the key requirements for hospitals regarding the building itself, its surroundings and usage and then designing a generic methodology addressing the needs, yielding the most energy efficient solution. The state-of-the-art energy technologies have been grouped together to offer one holistic energy saving advice.

To help hospital and facility managers understand the energy saving potential for their hospital and its specific circumstances, the HosPilot project has developed a methodology and tool that can be used by non lighting, heating, ventilation and air conditioning experts. Even with a limited number of input parameters, an accurate assessment of the saving potential is given for a number of energy conservation options. The methodology distinguishes the classical, static improvements from the application of ICT solutions to dynamically adapt the energy consumption. While the first category leads to a fixed savings factor, the latter category is more dependent on the climatic circumstances, the culture, et cetera. A database has been established so that every new project helps to better predict these dynamic factors.

The HosPilot project has obtained two main results: first, the finding that it is possible to realize significant energy savings without major overhauls, and, second, that with the light-weight HosPilot tool those savings can be predicted accurately.

To benefit from the HosPilot results, to find information that allows you to replicate the pilots, to get the tool and become a member of the growing user community simply join the HosPilot alliance at www.hospilot.eu. Here you will also find the HosPilot deliverables, the case studies and all other supporting material.

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