HIT2GAP - H2020 – an IT platform for more energy-efficient buildings

In association with about 20 public and private partners throughout Europe, UPPA's IT research centre (LIUPPA) is working on the design of an intelligent platform aimed at improving the energy efficiency of buildings.

Monitoring of energy consumption in buildings shows significant differences between the design energy requirements and the real energy consumption observed once the buildings are in use. This difference in performance is a problem that manifests itself in the long term through a significant increase in energy costs.

The Nobatek technological resources centre in Anglet, very close to the university campus, has decided to take up the challenge. Monitoring of buildings is now one of its main activities. Nobatek has got into the habit of developing, for each of its projects, specific computer applications enabling it to monitor energy performance more efficiently.

"Nobatek's task is proving, however to be as fastidious as it is useful", says RichardChbeir, Full Professor at LIUPPA. *"In fact, each new building requires the design of tailor-made tools."* Whence the idea of designinga single, intelligent, easily reusable platform so that it will no longer be necessary to develop ephemeral applications every time.

This objective has now taken the form of a European H2020 project entitled HIT2GAP (Highly Innovative building control Tools Tackling the energy performance GAP). Apart from Nobatek and UPPA, 20 or so academic and industrial partners from 10 different countries are associated with this programme, launched in September 2015.

The objective is clear: to develop, over the next four years, a new generation of tools for surveillance and verification of construction in order to reduce the difference between theoretical and real energy performance.

LIUPPA's role is well-defined and involves the design of the IT platform and in particular the data modelling aspect.

"We want to invent a unique tool capable of generating applications on the fly and processing data from such varied sources as texts, PDF files, images...", adds the future director of LIUPPA with enthusiasm.

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