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QUANTUM Press Release - the project debuted at CLIMA 2016, in Aalborg

Closing the gap between actual and designed energy performances of buildings through quality management

The estimated **average gap between calculated and actual energy performance** of the European building stock **is 25% for energy performance** and 1.5% for comfort performance (as scored by building occupants). Comprehensive research has shown that poorly commissioned and operated building management systems are often responsible for this gap, generally caused by the lack of appropriate and coherent **Quality Management** Systems (**QMS)** for building performance.

To tackle these challenges, within the next 4 years the project QUANTUM (www.quantum-project.eu/) will develop and demonstrate **pragmatic services and appropriate tools with high replication potential** supporting QM for building performance in the design, construction, commissioning and operation phases

The core mechanism is to **"design for testability"** by specifying transparent performance targets with cost effective testing methodologies. The project will apply three innovative ICT-driven tools to enable effective quality management in all relevant services within the building life cycle.

- HPS/NG9 (by Energy Team SPA, Italy). Cost effective and easy to install in-situ energy metering devices with online data analysis
- Performance Test Bench (by Synavision GmbH, Germany). First tool for the specification and automated validation of BMS functions using Active Functional Specifications (AFS)
- Comfortmeter (by FACTOR 4 BVBA, Belgium). First completely web-based questionnaire for perceived user comfort

The tools will be demonstrated in a representative set of typical European buildings from 7 countries in order to support the **market uptake of the tools and services**.

QUANTUM organised its first **workshop** at CLIMA2016, the 13th REHVA World Congress on 24th May in Aalborg. The workshop informed participants about the potential of QM and presented the three innovative ICT tools. The presentations were followed by interesting debates, and QUANTUM organisers collected feedback from the audience through an on-site poll. The presentations and the workshop report are available on the REHVA website.

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