

## WORKSHOP – Tuesday 7<sup>th</sup> June 2016

### Outdoor full-scale test facilities for envelope components : how to get the best from them?



Outdoor full-scale test facilities aim at reducing the gap between design phase and real buildings energy consumptions. With dynamic numerical simulation, these facilities allow to assess the performances of envelope components, systems or whole building. They are complementary tools permitting to validate simulation models, specifically developed for new and innovative components (ex. adaptive facades). Test facilities also largely contribute to the widespread of new technologies in the construction market, by showing real scale integration.

CEA-INES is currently building a new facility named FACT (FACade Tool) on its experimental platform that counts today 4 test cells (PASSYS), 4 houses and 10 roof benches. This new versatile tool will be dedicated to building envelope components testing: opaque and transparent elements, light-weight and massive façades, different thickness (from 10 to 60 cm) and heights (up to 8 m) and different geometry of the indoor environment.

**Scope of the workshop is to create the opportunity to exchange around best practices and our common experiences of this kind of facility.**

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**9:00** Registration  
Lynx 3

**9:30 – 10:00 Welcome**  
CEA-INES activities presentation  
*Olivier Flechon*  
(Head of energy and building division – CEA)  
Lynx 4 – room 302

**10:00 – 10:30**  
New test facility description: FACT  
*Lorenza Bianco*  
(post-doc researcher - CEA)  
Lynx 4 – room 302

**10:30 – 11:30**  
Presentation of participants and their facilities  
Lynx 4 – room 302

**11:45 – 12:30**  
FACT on-site visit  
*Patrice Schneuwly*

**12:30 – 13:30** Lunch  
Helios building

**13:30 – 14:30**  
IEA Annex 58: feedback and new annex project  
*Hans Bloem*  
(Joint Research Centre - Renewable Energy Unit)  
Lynx 4 – room 302

**14:30 – 16:30**  
Discussions and brainstorming around best practices for use of full-scale test facility – working group around specific topics  
moderator *Virginie Renzi*  
(Head of building envelope lab. – CEA)  
Lynx 4 – room 302

**16:30 – 17:00**  
Visit of the buildings division facilities

**17:00**  
Visit of INES site (PV fabrication, PV modules, battery testing)