

# GreenerBuildings workshop on energy-saving services and enhanced comfort using occupant activity and behaviour

Date & venue: 23<sup>th</sup> April 2013, TU Eindhoven  
<http://www.greenerbuildings.eu/workshop20130423>

We kindly invite you to participate in a workshop on the 23rd of April at TU Eindhoven to explore new applications of GreenerBuildings technology that can add value to your organisation and research.

GreenerBuildings is a European project consisting of universities and industrial partners that has developed a holistic, activity-aware framework for saving energy and enhancing occupant comfort in commercial buildings. The framework utilises already installed and novel sensors to recognise occupant activities, behaviour, and context in office environments affecting energy consumption and comfort. Building-wide distributed context information is processed and used to support system control in existing BMS and to manage office appliances. You can find out more about us via [www.greenerbuildings.eu](http://www.greenerbuildings.eu).

During the morning session of the workshop, we will examine the trends in intelligent buildings and will evaluate the different types of technologies and services that GreenerBuildings can offer from various perspectives (building owner, facility manager, BMS provider, etc). This will be done via presentations of experts in the field and via facilitated break-out sessions together with workshop participants.

We would kindly ask you to select one or two of these break-out topics below and let us know in your email response, so that we can already tailor them to your interests (if you will not attend, we would still greatly appreciate it if you let us know your interest in these topics). Further, if there is a topic that is not listed that you are particularly interested in, please let us know!

## **1. Energy-saving services:**

*Here, we will discuss how activity awareness of the GreenerBuildings system can provide new possibilities for energy saving.*

## **2. Comfort-enhancement services and personal control:**

*Here, we will discuss how thermal dynamic modelling, personal control and task-sensitive building adaptation could enhance the perceived comfort of building occupants without incurring additional energy expenditure.*



### **3. Deployment services:**

*Here, we will discuss the how the GreenerBuildings middleware could be quickly deployed to work with BMS installations by using technologies inspired from the domain of cloud computing and how the self-learning features of GreenerBuildings can automatically refine building*

### **4. Adaptive building control strategies:**

*We will discuss how the end-user-programming environment of GreenerBuildings can be used to tailor building control strategies to meet the needs of the Building Owner and how the self-learning features can be used to propose new strategies.*

### **5. Merging ICT services with building services:**

*We will discuss the new opportunities in comfort and energy saving when ICT enterprise services are combined with building control services offered by GreenerBuildings.*

During the afternoon a special informative session will be held, which will consist of presentations by experts on BIM and current standardization initiatives in this field. Finally a guided tour through the current GreenerBuildings office Living-lab will held.

Your feedback is extremely important to us to tailor our solution to your future needs. If you know of others who might also be interested, please feel free to forward this invitation to them.

## **Detailed time plan**

- 09:00 Introduction and Welcome
- 09:05 The Future of Intelligent Buildings
- 09:20 Presentation on Energy Management/Savings Service
- 09:35 GB Key Technologies and Services
- 09:45 Architecture of GreenerBuildings
- 10:00 *Coffee break*
- 10:15 Parallel sessions
- 11:45 Summary of sessions and final discussion
- 12:30 *Lunch break*
- 13:30 Presentation on BIM and Building Management Systems activities
- 14:00 Project 1 BIM and standardization activities presentation
- 14:30 Project 2 BIM and standardization activities presentation
- 15:00 Project 3 BIM and standardization activities presentation
- 15:30 Assessment of GreenerBuildings data model and potential contributions to standardization initiatives
- 16:30 *End*

Location: TU/e campus, Auditorium building, Lecture room 9; please see *Venue and location details* below.

## Organisers

Oliver Amft, TU/e, NL

Gerardo Glorioso, Advantic Sys, SP

Paul Shrubsole, Philips Research, NL

Ulf Großekathöfer, TU/e, NL

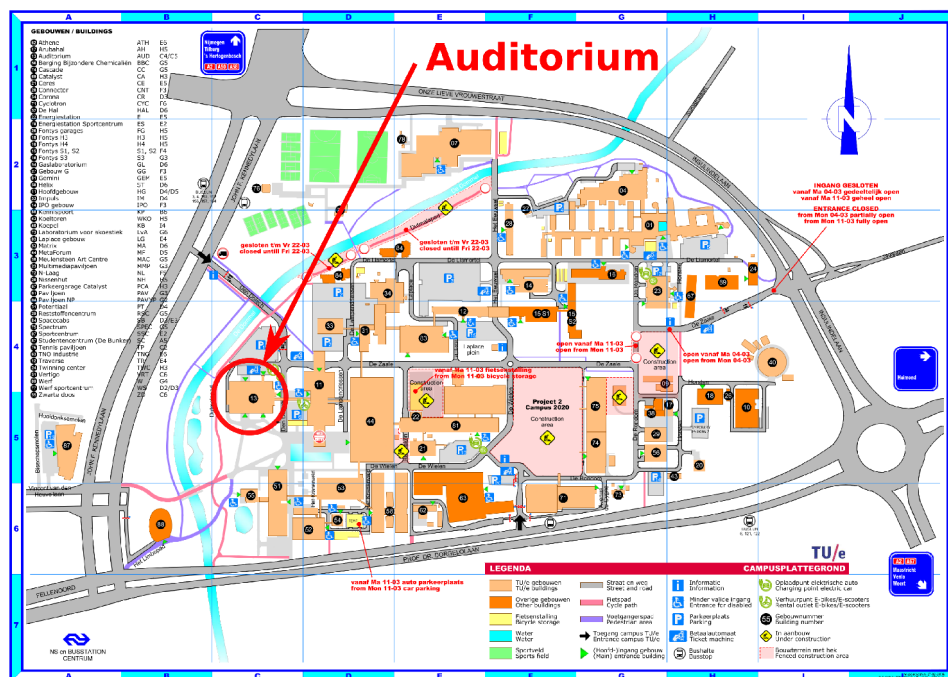
## Venue and location details

The campus of the Eindhoven University of Technology (TU/e) is situated in the heart of Eindhoven, ten minutes walking distance from Eindhoven railway station. TU/e can be easily reached by plain (via Eindhoven Airport or Schipol Airport), train, or car.

For more travelling details and further advises how to come to TU/e, please see:

<http://www.tue.nl/en/university/about-the-university/accessibility-tue-campus/>

The workshop location is on the TU/e campus, *Auditorium building*, Lecture room 9:



A detailed campus map can be found here:

<http://www.tue.nl/en/university/about-the-university/accessibility-tue-campus/map-of-the-tue-campus/>

## Registration and contact

For registration, please use our contact form at <http://www.greenerbuildings.eu/contact> and select the session you are interested in. Alternatively, contact Ulf Großekathöfer by mail:

[U.Grossekathoefer@tue.nl](mailto:U.Grossekathoefer@tue.nl). **Please register until 11th of April.**

Please email all further inquiries concerning the GreenerBuildings workshop to Diana Heijnerman-Douma <[D.Heijnerman.Douma@tue.nl](mailto:D.Heijnerman.Douma@tue.nl)>, phone: +31 40 247 3288, or Ulf Großekathöfer <[U.Grossekathoefer@tue.nl](mailto:U.Grossekathoefer@tue.nl)>.