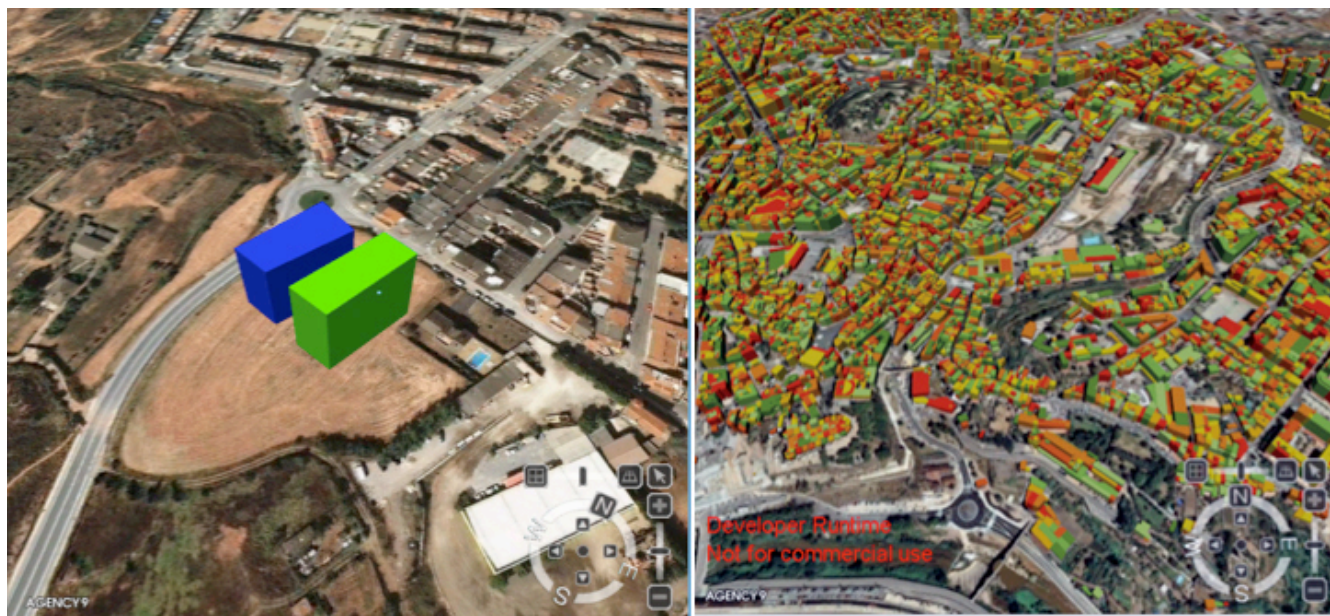


## Session of the AIDA's Final Conference: How to promote "nearly" Zero-Energy Buildings for new and retrofitting buildings in the municipal context



**Congress: World Sustainable Building 2014 - WSB14**

**Date: 29th of October 2014.**

**Session: 74**

**Time: 15:00 - 16:30**

**Room : A**

**Place: Palau de Congressos de Catalunya (Diagonal), Barcelona**

### Interim program

10 min.

#### Introduction

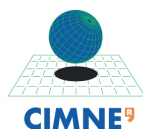
*The main goal of the session is to establish a discussion among energy experts and public technicians or municipal authorities on how to promote "nearly" Zero-Energy Buildings in their municipalities. Results of several European projects (AIDA, SEMANCO), as well as some conclusions on how the nZEB definitions can be included in urban planning and in Strategic Energy plans, such as the SEAPs of the covenants of majors, will be presented to the audience*

Moderator: Cipriano, Jordi (director of CIMNE-BEEGROUP, partner of the AIDA project, Barcelona, Spain)

10 min.

#### Powerhouse Kjørbo: The experience of a Plus-Energy office building in refurbishment.

*The first Powerhouse renovation building is built at the Kjørbo site in Bærum, and the two office buildings were ready in spring 2014. A Powerhouse is a building that shall produce more energy from onsite renewables than it uses in its life cycle. Energy efficiency measures and materials with low embodied energy have been crucial for obtaining the energy goal. A very efficient ventilation concept has been developed. A geothermal heat pump, in addition to waste heat from the data/server room, will cover the heating and cooling demand. PV panels will balance the energy needed during its lifetime. The two buildings will thus export more electricity than it will use*



for operation. There will be no export of thermal energy. Calculations indicate that the energy balance during the building's lifetime, and within the defined definition, fulfils the goal of plus-energy.

Speaker: Sartori, Igor (senior researcher of NTNU - Norwegian University of Science and Technology, Trondheim, Norway)

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10 min.

#### *Zero-Energy Urban Buildings and Zero-Energy Communities*

*The presentation aims to discuss the main problems and features of urban buildings. The characteristics of the actual energy consumption, the main challenges on the urban built environment and the future prospects will be discussed and analysed. The main technological and political priorities regarding the implementation of urban zero-energy buildings and settlements will be discussed.*

Speaker: Santamouris, Mat (professor of NKUA - National and Kapodistrian University of Athens, Athens, Greece)

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10 min.

#### *Simulating intervention scenarios for carbon reduction in urban planning (SEMANCO Project)*

*The aim of this section is to present the web-based platform developed by the SEMANCO project. The platform facilitates the access to dispersed information on building characteristics, systems and occupation, and uses it to calculate the energy performance of buildings and urban areas. It also enables the user to create energy efficient interventions and to evaluate and compare them using a multidimensional set of performance indicators. In this way, the platform helps to meet the challenges of energy efficient urban planning and CO2 emission reduction.*

Speaker: Cipriano, Xavi (researcher of CIMNE-BEEGROUP, partner of the SEMANCO project, Barcelona, Spain)

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10 min.

#### *The nZEB promotion within SEAP (AIDA Project)*

*A methodology have been developed to promote public buildings as nZEBs within municipal roadmaps. It is based in the definition of needed actions to obtain the accomplishment of nZEB targets in urban scale mentioned by the EPBD Recast [1]. It mainly proposes to use different simplified analysis techniques at building level and then gives an orientation of values to achieve regional nZEB criteria for each construction whether for new buildings or renovations.*

Speaker: Lopez, Jose Santos (researcher of CIMNE-BEEGROUP, partner of the AIDA project, Barcelona, Spain)

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30 min.

#### *Discussion Forum*

*Do you agree with the EU engagement for municipalities in the nearly Zero-Energy Building's promotion?*

Moderator, speakers and public

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10 min.

#### *Conclusions*

*Strenghts, weaknesses and new development towards nZEBs have to be considered*

Moderator

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**This activity is open to the public and the registration to the World SB14 Barcelona Congress is required (it will be in English language).**

