

## Workshops at CLIMA 2019

### Workshop n. 08

#### REHVA-SHASE workshop on NZEB and ZEB Ready concepts in Europe and Japan

Monday, 27 May, 16:00 - 17:30,  
Meeting Room TBC

#### Workshop organizer(s)

Jarek Kurnitski



**Additional information at:**  
[www.rehva.eu](http://www.rehva.eu)

REHVA Technology and Research Committee

Gyuyoung Yoon



公益社団法人 **空気調和・衛生工学会**

The Society of Heating, Air-Conditioning and Sanitary Engineers of Japan  
**Additional information at:**  
[www.shasej.org](http://www.shasej.org)

Special Committee for  
Joint Study on NZEB  
between SHASE and  
REHVA

#### Presenters

##### Chair(s)

Jarek Kurnitski

Tallinn University of Technology

Gyuyoung Yoon

Nagoya City University

##### Speakers

Hideharu Niwa

NIKKEN SEKKEI RESEARCH INSTITUTE

Martin Thalfeldt

Tallinn University of Technology

Gyuyoung Yoon

Nagoya City University

## Scope

Recent developments of nearly zero and zero energy requirements in EU and Japan are discussed and possibilities to benchmark European NZEB and Japanese ZEB Ready performance levels will be analysed. A reference office building is used to simulate energy use in Oceanic and North European and Japanese Sapporo climate. When moving from one to another climate building envelope U-values are adjusted according to economic insulation thickness approach and national input data and calculation rules are applied. The aim is to show how energy performance requirements are set and how these can be compared so that climatic differences, national input data and calculation rules are taken into account. The proposed methodology enables to benchmark energy performance requirements of these countries. More widely the results contribute to the development of a common energy performance scale applicable for European energy performance certificate enabling also global benchmarking of non-residential buildings.

## Audience

All practitioners, researchers and public sector representatives affected by energy performance requirements or working with the aim to improve energy performance and indoor climate of buildings are welcomed to the workshop.

## Expected results

This workshop is aiming to build knowledge and general understanding which factors are needed and how they are to be taken into account to enable an objective comparison of energy performance requirements in different countries and climates. The results reported will show how NZEB requirements from two European countries and ZEB Ready requirement from Japan stand against European Commission recommendation for NZEB in different climate zones.

## Programme

<b>10 min</b>	<b>ZEB current activities in Japan</b> Hideharu Niwa, NIKKEN SEKKEI RESEARCH INSTITUTE
<b>10 min</b>	<b>ZEB best practices in Japan</b> Speaker tbc
<b>10 min</b>	<b>NZEB best practices and European energy performance scale</b> Martin Thalfeldt, Tallinn University of Technology
<b>15 min</b>	<b>Japanese energy assessment procedure and performance levels</b> Gyuyoung Yoon, Nagoya City University
<b>15 min</b>	<b>Comparison of energy performance requirements for Japanese and European office buildings</b> Jarek Kurnitski, Tallinn University of Technology
<b>30 min</b>	<b>Open discussion</b>