

# T7.3 National Seminars: Finland



## Learning from the Oulu demo

- Dissemination of E2ReBuild results and new collaboration in sustainable housing, urban development and refurbishment in cold climates.



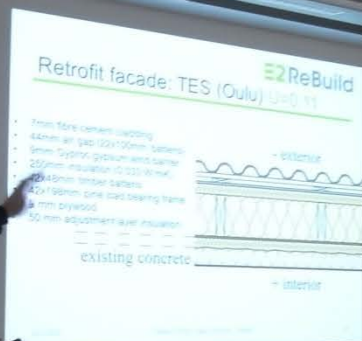
## National seminar for Oulu

- Public Lecture at Aalto University, 10 March 2014



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## E2ReBuild Finland national seminar 2014

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- E2ReBuild national seminar organised by Aalto University on March 10, 2014 to network and disseminate E2ReBuild results.
- Public seminar promoting the dissemination of E2reBuild results and new research and collaboration in the Arctic region for sustainable housing, urban development and refurbishment in cold climates.
- Main presentation by Simon le Roux on experiences from the E2ReBuild Oulu demonstration project.
- Venue: Aalto University School of Arts, Design and Architecture, Department of Architecture, Miestentie 3, Espoo, Finland
- 51 participants, including visitors from Hokkaido University, Japan



**Demonstration and RTD dissemination at national seminar**

## Effect of the work in E2ReBuild and beyond

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- *Good practice examples of energy efficient refurbishment and buildings adapted for today's needs in cold climates*
- *Detailed monitoring provides insight for research*
- *Improving the retrofit facade through building physics analysis*
- *Learning from empirical evidence of construction process*
- *Analysing the cost structure and potential to optimize benefits*
- *Lessons from this building used on four neighbouring houses*
- *Replication on other concrete sandwich element buildings*
- *Identifying strengths and weaknesses in refurbishment strategies*



**Deep retrofit, transparent process, thorough monitoring**

# E2ReBuild

About E2ReBuild

Publications

E2ReBuild – Industrialised energy efficient retrofitting of residential buildings in cold climates



E2ReBuild is co-financed by EU FP7

Theme EeB-ENERGY.2010.8.1-2; Demonstration of Energy Efficiency through Retrofitting of Buildings



**Transforming the retro**  
E2ReBuild is a European colla  
demonstrating industrialised  
buildings in cold climates.



» Read more...

[www.e2rebuild.eu](http://www.e2rebuild.eu)



[08/06/2011]

### E2ReBuild Newsletter No.1 June 2011

First E2reBuild Newslettwr out now! Keep up to date with E2reBuild findings and activities by subscribing to our newsletter.

» Read more...



[07/06/2011]

### First demonstration buildings in Kroeven completed and celebrated

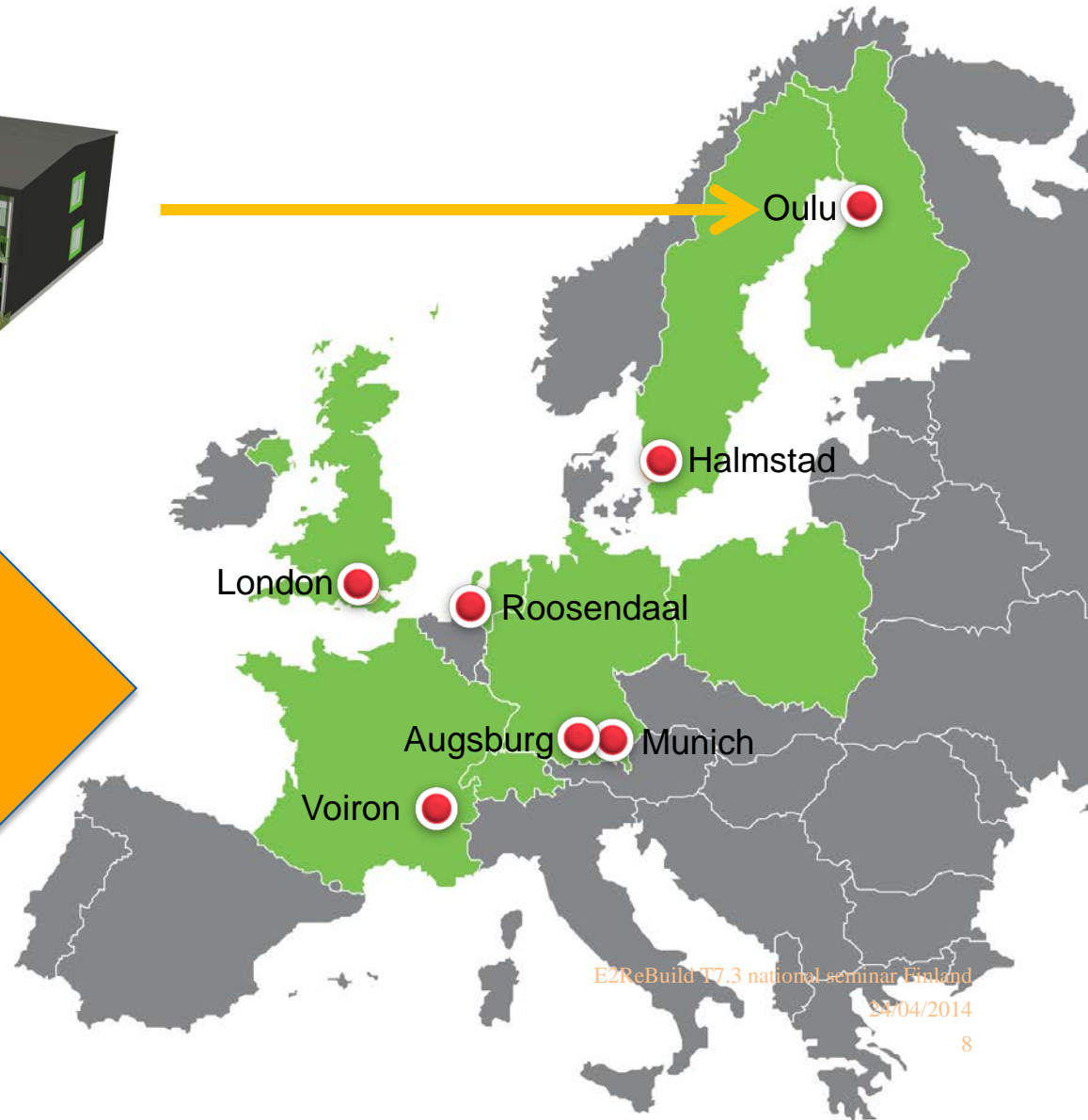
In two adjacent areas in Kroeven.

24/04/2014

# E2ReBuild



*7 demonstrations*







## Finland



*7 demonstrations*

## Germany





## Germany



## France

# E2ReBuild



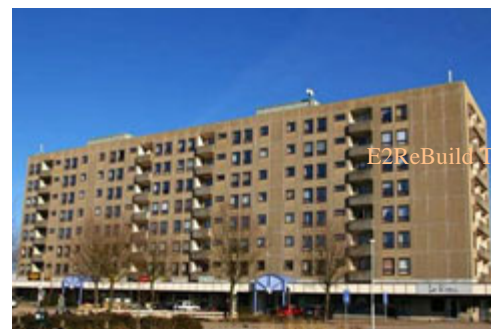
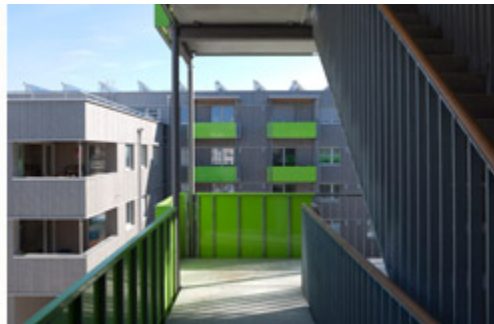
## Britain

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# E2 ReBuild



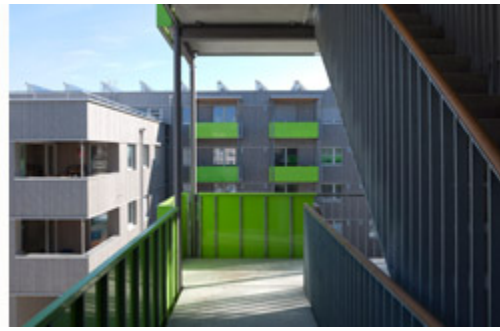
## Sweden

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# Netherlands



# Virkakatu 8, Oulu, Finland

- Refurbishment of student family apartments by PSOAS
- Student Housing Foundation of Northern Finland



# Virkakatu 8, Oulu, Finland























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# New architecture



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# PSOAS Virkakatu 8AB



# PSOAS Virkakatu 8AB

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# Oulu retrofit project team

- Owner: **PSOAS**
- Contractor: **NCC Rakennus Oy**
- Architect: **Arkkitehdit M3 Oy**
- Structural design: **Insinööritoimisto Putkonen Oy**
- HVAC design: **Taltekon Oy**
- Electrical design: **Oulun Sähkö-Aika Oy**
- Energy simulation: **NCC Finland / Optiplan**
- Building Automation: **Fidelix Oy**
- TES manufacturer: **Suomen Rakennustuote Oy**
- E2ReBuild research: **Aalto University**

# Thank you!

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*Aalto University School of Arts,*  
*Design and Architecture*  
*Department of Architecture,*  
*Chair of Wood Construction*

# A?

Aalto University  
School of Arts, Design  
and Architecture