

## A System for Quality Assurance when Retrofitting Existing Buildings to Energy Efficient Buildings

*Dear Sir, dear Madame,*

With this first newsletter we would like to inform you about a newly founded project called SQUARE, which stands for A System for Quality Assurance when Retrofitting Existing Buildings to Energy Efficient Buildings. The objective of the project is to assure energy efficient retrofitting of social housing with good indoor environment, in a systematic and controlled way. Eight European partners are working together in the project and an important task is to adopt a quality assurance system for retrofitting and maintenance in pilot projects in at least four European countries.

We would like to regularly inform you about the progress of this project and you are welcome to use the information produced as well as take part in events arranged within the project.

You can visit our project website at [www.iee-square.eu](http://www.iee-square.eu) or contact us directly.

We shall be glad to hear from you and hope you enjoy reading this first newsletter and get interested in the project.

Kind regards,



**Kristina Mjörnell**

PhD, senior researcher  
SP Technical Research Institute of Sweden  
Co-ordinator of SQUARE



## ➔ A QA system - an important tool for all building owners

### Description of the SQUARE project

A substantial part of the social housing stock in Europe, mainly built in the 60's and 70's, is in great need of major renovations. This provides the owners with an opportunity and challenge to invest in cost-effective energy measures that also ensures a good indoor environment.

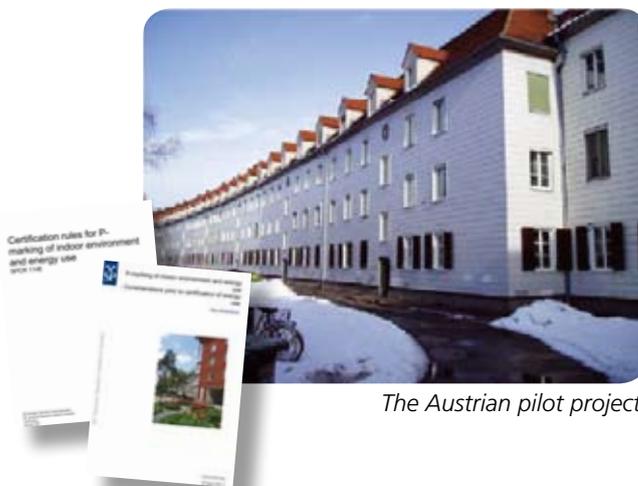
The SQUARE project's aim is to assure that retrofitting of this large number of dwellings is carried out in a systematic and controlled way considering both the energy use and the indoor environment. To achieve this, a quality assurance (QA) system for retrofitting and maintenance is adopted in pilot projects in several European countries. The QA system supports decision-making and ensures that suitable energy efficient retrofitting measures are chosen for each case. The experiences from the pilot projects will be used to improve the QA system and suggest a future European energy and indoor environment management standard adapted to the building sector. The pilot projects will also act as good examples to inspire social housing owners to carry out energy efficient retrofitting projects.

A number of dissemination activities will be made in order to spread knowledge and experience to owners, contractors, consultants, national authorities, municipalities, tenants etc., on local, national and international level.

SQUARE is co-funded by the European Commission, supported by its Programme Intelligent Energy Europe (IEE). It started in November 2007 and will end in April 2010. There are partners from sev-

eral European countries; Austria, Bulgaria, Finland, Netherlands, Spain and Sweden. SP Technical Research Institute of Sweden is the coordinator of the project.

The QA system developed in the SQUARE project will be an important tool available to all building owners in the process of retrofitting their stock!



*The Austrian pilot project*

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## ➔ Kick-off & Workshop

### November 2007 in Borås and Alingsås, Sweden

The **kick-off meeting** of the SQUARE project in Borås offered a good opportunity to get to know the different project partners, who represent different kinds of actors such as research organisations, universities, architects, developers, housing associations, municipalities and building owners. The content of the different tasks of the project was also discussed in further detail.

At the **workshop**, held in Alingsås, the participants could listen to a number of interesting Swedish projects in the field of low energy/passive houses. One of the projects is the housing area of Brogården, which is about to be retrofitted to passive house standard and will be included as a pilot project in SQUARE.

Further, a Swedish quality assurance system for indoor environment and energy use was presented. Experience from implementing the system in three different types of buildings, an office building, a school and a multi-family building, was shared.

[Download fact sheet about SQUARE ▶](#)

[Download presentation about SQUARE ▶](#)

### Interested in more information?

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## ➔ 2nd meeting & Workshop

### March 2008 in Amsterdam, Netherlands

At the **second meeting** of the SQUARE project reports of the different tasks were given. Presentations were made on surveys of national conditions including the status of the social housing stock in each country. For example, in Sweden an energy saving potential of approx. 50% has been estimated if a range of measures are carried out. A similar number has been estimated for Finish buildings. In Spain the estimated savings, if the thermal envelope is upgraded, is around 60%.

In addition, the participants enjoyed an informative guided tour in the South East district of Amsterdam. Here the social housing stock of the 60's is being upgraded in many interesting projects.



An **interesting workshop** was held together with the TRECO group, which is a network of social housing associations/owners. The TRECO members showed great interest in the work of the SQUARE project and gave a lot of input of how they are working today with energy and indoor environmental issues in their buildings.

A second joint workshop is already planned.

### Partners

AEE Institute for Sustainable Technologies (Austria)  
 EAP Energy Agency of Plovdiv (Bulgaria)  
 TKK Helsinki University of Technology (Finland)  
 Trecodome (Netherlands)  
 TTA Trama Tecno Ambiental (Spain)  
 Poma Arquitectura (Spain)  
 SP Technical Research Institute of Sweden (Sweden)  
 AB Alingsåshem (Sweden)



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