

Co<sub>2</sub>Bricks

## Climate Change, Cultural Heritage & Energy Efficient Monuments

INTERREG IVb  
Baltic Sea Region

*How to improve the energy efficiency of historical buildings without losing their identity.*

# Projectstructure

**Workpackage 1: Project Management and Administration**

**Workpackage 2: Communication and Information**

**Workpackage 3: Policy Development**

**Workpackage 4: Technical Innovations**

**WP4.1:**

Collection of Best Practice examples of Energy Refurbished Historic Buildings

**WP4.2:**

Baseline Study on Existing Practice of Energy Efficiency Improvements of Brick Buildings

**WP4.3:**

Research on Physical Parameters of Brick Walls

**WP4.4:**

Development of Refurbishment Concepts

**Workpackage 5: Education and Economic Promotion**

**WP5.1:**

Baseline Study on Educational Situation in the BSR

**WP5.2:**

Advancement of Knowledge of General Public and Stakeholders

**WP5.3:**

Additional Qualification for Energy Experts and Architects

**WP5.2:**

New Training Programme and Qualification Tools and Material for Specialised Craftsmen

# Partnerstructure



## Lead Partner

01 Free and Hanseatic City of Hamburg  
Ministry for Culture and Media/ Department for Heritage Preservation

## Germany

02 Ministry of Urban Development and Environment, Cooperation  
Centre for Climate Issues  
03 Vocational Training Centre Hamburg  
04 City of Kiel, Department of Environment

## Sweden

05 Stadsmuseum Stockholm  
06 Energy Agency Southeast Sweden  
07 Swedish National Heritage Board  
08 Malmö, Environment Department

## Denmark

09 Aalborg University, Danish Building Research Institute

## Estonia

10 Estonian Heritage Society  
11 Kõhla-Järve Town Government  
12 Centre for Development Programs

## Lithuania

20 Vilnius Gediminas Technical University

## Latvia

14 Riga, Infrastructure Department  
15 Riga Technical University

## Poland

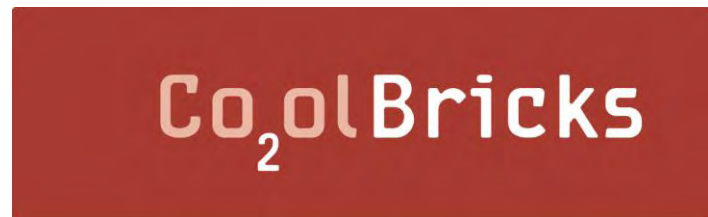
16 European Foundation for Monuments Protection

## Belarus

17 Republican Centre for Technology Transfer

## Finland

18 KIINKO- Real Estate Education





## **Associated members, Finland**

The Baltic Institute of Finland  
Finnish Real Estate Federation  
Ministry of the Environment  
Construction Establishment of Defence Administration  
Confederation of Finnish Construction Industries RT  
The Building Information Foundation RTS  
City of Helsinki  
Finnish Association of Building Owners and Construction Clients RAKLI  
Renor Ltd  
Kruunuasunnot Oy  
National Board of Antiquities  
Tampere University of Technology  
VTT Technical Research Centre of Finland  
Vahanen Group  
The Finnish Landowners' Organisation



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## Suomen taustaryhmä

Suomen Itämeri-Instituutti  
Suomen Kiinteistöliitto  
Ympäristöministeriö  
Puolustushallinnon rakennuslaitos  
Rakennusteollisuus RT  
Rakennustietosäätiö  
Helsingin kaupunki  
RAKLI  
Renor Oy  
Kruunuasunnot Oy  
Museovirasto  
Tampereen teknillinen yliopisto  
VTT  
Vahanan yhtiöt  
Maanomistajain Liitto



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## Projektin kansainväliset kokoukset

Hampuri

Visby

Helsinki

Malmö

Velikij Novgorod

Tallinna / Kohtla-Järve

Kööpenhamina / Malmö

Vilna

Riika

Kiel (tulossa)



















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CENTRAL SCIENTIFIC RESTORATION PROJECT WORKSHOP  
 Institute of Culture of the Russian Federation  
 Центральное Научно-реставрационное Проектное Мастерское  
 объединение Казимиря Российский Федерации

Research and Restoration of  
 ARCHBISHOP'S PALACE IN NOVGOROD-KREMLIN  
 ВЛАДЫЧЬЯ ПАЛАТА НОВГОРОДСКОГО КРЕМЛЯ  
 Исследования и реставрация



ARCHBISHOP'S PALACE  
 Владычья палата Новгородского Кремля  
 1480-1490

ВЛАДЫЧЬЯ ПАЛАТА НОВГОРОДСКОГО КРЕМЛЯ  
 Владычья палата Новгородского Кремля  
 1480-1490



ВОСТОЧНЫЙ ФАСАД



СЕВЕРНЫЙ ФАСАД



ЗАПАДНЫЙ ФАСАД















WP 3  
Baseline  
Study



The Situation of  
Climate Protection and  
Cultural Heritage

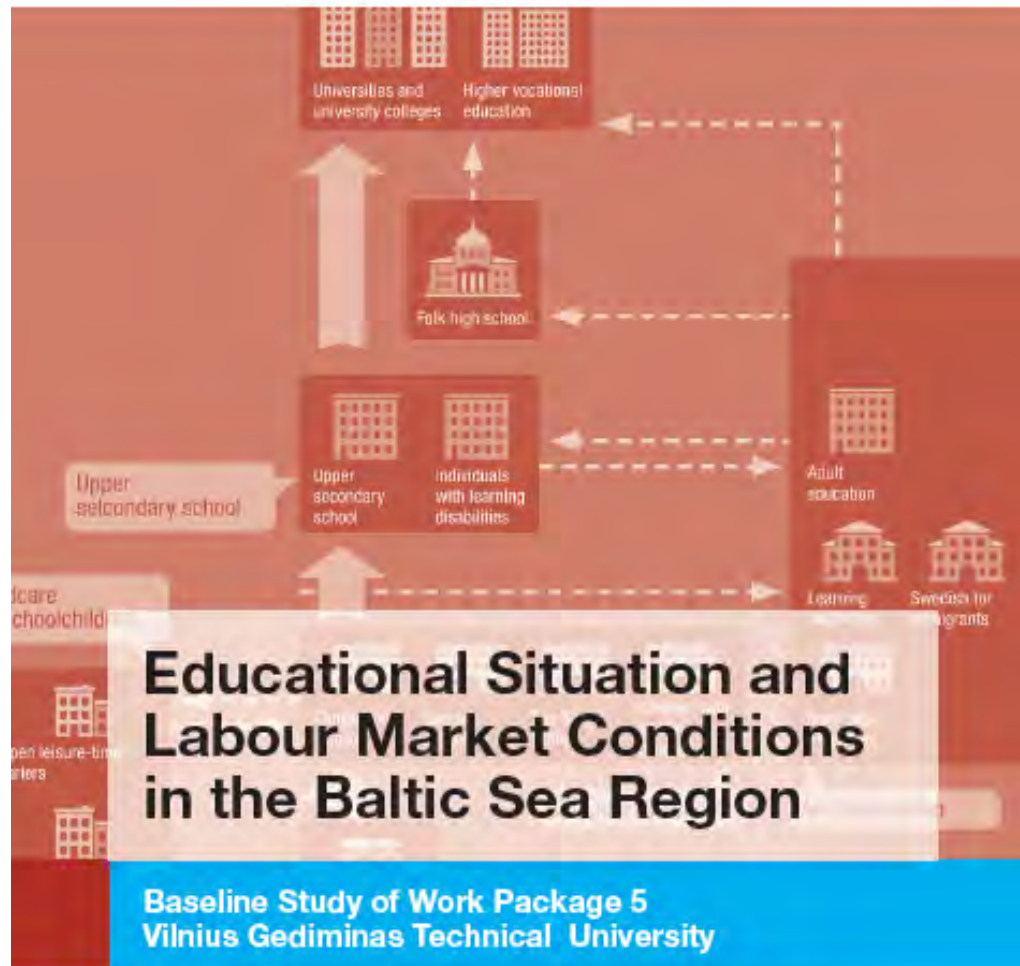
Baseline study of  
Work Package 3 Policy Development

WP 4  
"Handbook"



Refurbishment for the  
energy efficiency of historic  
buildings in member states  
in the Baltic Sea Region

A handbook of the "most common methods  
for improvements to energy efficiency"



A.Blumberga, D.Blumberga, K.Zvaigznitis, G.Zogla  
**Handbook of Energy Consumption  
in Historical Buildings**

Training material for specialists: planners, engineers, architects  
Draft



2012

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# Fästningens Materialgård



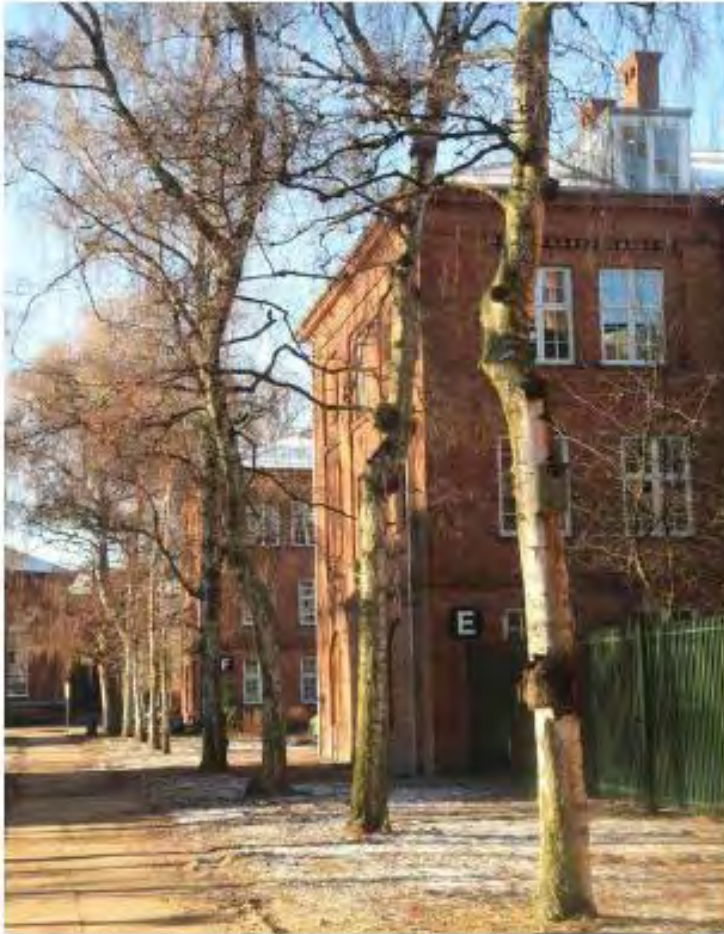
**Baltic Sea Region**  
Programme 2007-2013

Part-financed by the European Union  
(European Regional Development Fund)



# UPGRADING THE ENERGY PERFORMANCE OF ELMEHUSET IN THE OLD PEOPLE'S TOWN

REPORT - PRODUCED FOR SBI OCTOBER 2012



KANT ARCHITECTS A/S / RYESGADE 19C, 2.SAL / 2200 KØBENHAVN N / RIKKE MUNCH

Danish Building Research Institute (SBI), Aalborg University



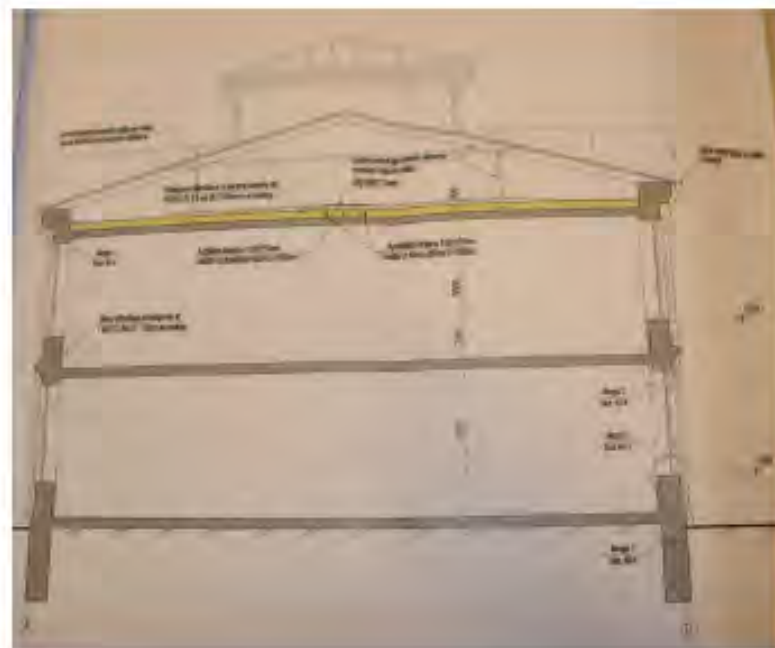
December 2012

## CO<sub>2</sub>OL BRICKS

Upgrading the energy performance at Kavalergården

# Energy efficiency measures: Liepaja Art School

- Wall insulation from inside with mineral wool (70 mm)
- Damaged bricks have to be fixed before renovation
- Attic insulation with mineral wool 200 mm
- New heating system with thermoregulators on every radiator





Wall tempering

Photo: Schwan & Spehr  
Energy management

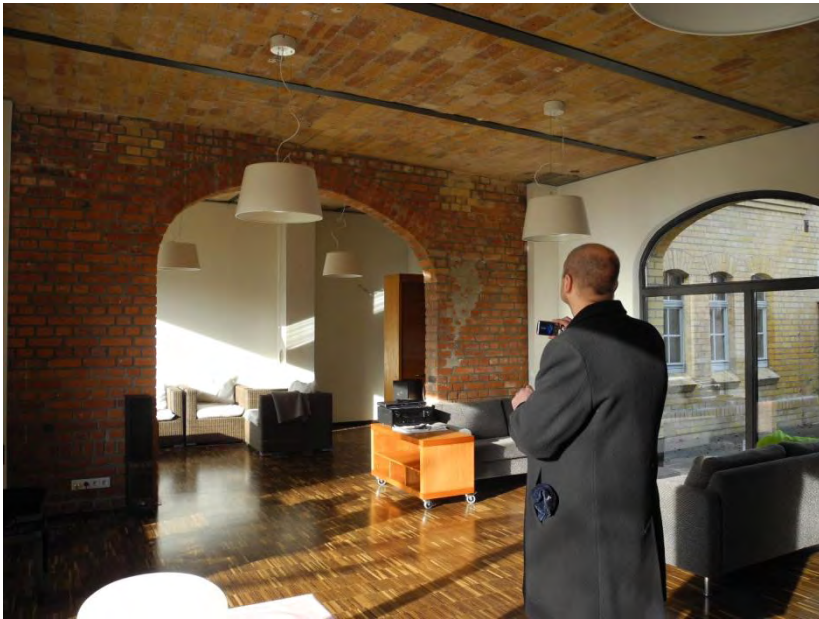
# Co<sub>2</sub>Bricks



## Leipzig Denkmal-Messe 23.11.12



Part-financed by the European Union  
(European Regional Development Fund)





# Co2olBricks – Kiinko excursion to Stockholm

## 22.-24.4.2013

**Monday 22.4. Arrival to Stockholm,** Hotel not yet decided

**13:00 -14:00** Travel from hotel to Värtan

**14:00- 15:30** Gasverket i Värtan by Per Andersson, City Development Administration who guides us through refurbishment challenges from the project manager/ owner point of view. A lecture about the redevelopment of "The old gas works area" of Hjorthagen by Tomas Örn from the Stockholm City Museum and the project Co2ol Bricks.

**15:30 - 16:00** Coffee break

**16:00 - 18:00** Visit of the old Gaswork area. The gas works area contains cultural historical values with Swedish architect Ferdinand Boberg's brick gasholders from late 19th century as important landmarks.





## Construction Establishment of Finnish Defence Administration



## Käpylä Primary School, City of Helsinki





Kruunuasunnot Oy



[www.co2olbricks.eu](http://www.co2olbricks.eu)

Kiitos!