

Education and vocational training for implementation of energy efficiency measures in historic masonry buildings

VGTU prof. dr. Marija Burinskienė

Malmö, 2012-09-17



Projektas finansuojamas Europos Sąjungos lėšomis pagal Europos Sąjungos struktūrinių fondų paramą





Education and Economic promotion

- The aim of the baseline study of Work package 5 “Education and Economic Promotion” was to provide a basis for further project development.
- The main task in compiling this document was to collect and present descriptive information and comparable data in Baltic Sea Region.

Target groups



- The main target groups can be: General public, stakeholders, building companies, officials (like building conservation officers, municipality representatives responsible for culture heritage and national building refurbishment programs), architects, building conservators, building supervising staff, energy auditors, teachers in universities, teachers in polytechnics, vocational training centres etc., students, working craftsmen, apprentices.
- Co₂olBricks project interests concentrate mostly in higher education for craftsmen, university education, education of working professionals and education for general public (house owners, stakeholders, etc.).

Experts

- Experts from Co₂olBricks project partner institutions have concluded that by today the general public is missing knowledge mostly from all target groups.
- The knowledge gaps are in history of brick masonry, understanding the value and need of preserving original facades, understanding the dangers and damage which can be made by adding insulation to brick walls.
- The general public is usually very interested about the possible subsidies for refurbishment of historical buildings and it can be the way to attract them to seminars, workshops or other educational events.

The common problem

- There is a common problem with calculating energy efficiency in comparable way.
- This problem is met by energy auditors and is relevant when dealing with buildings with historical value.
- Such recommendations can be developed during project period.



Specific knowledge

- There is usually a misunderstanding between architects and conservators on the parts of building to be preserved.
- Although building conservators usually don't lack knowledge of historical masonry, they require knowledge:
 - ✓ of damage patterns of brick masonry construction,
 - ✓ of moisture regimen and insulation types,
 - ✓ alternative solutions for improving indoor climate without changing the building outlook.



Strong specialization

- Architects specialize strongly in either new construction or refurbishing.



Summing – up

- The new lecture materials must be developed to give the information to the different target groups and raise their level of understanding.



Lecture groups:

- The missing knowledge can be divided into four main groups:
 1. Cultural heritage and historic constructions.
 2. Energy efficient refurbishment measures and technical services (heating, ventilation, indoor climate).
 3. Quality Management and work planning.
 4. Market opportunities.

Cooperation of partners

- In the connection with the results of the baseline study which defines a set of necessary material are developed;
- the participating project partners are currently working on set of activities that are in many cases closely connected with the other work packages;
- the same target groups are addressed (stakeholders) or the findings of the technical work package are directly integrated into lecture material.



Aims of WP5



- To create a general knowledge based on aspects of energy efficiency in the building sector and heritage protection;
- During the workshops to promote sustainable and future-oriented decisions for general public, house owners and other stakeholders;
- To upgrade the knowledge of architects and energy experts on innovative techniques and products concerning the energy efficient refurbishment of historical buildings.

Content of lectures

- Best practices and guidance manuals have been or will be established and shared by the Co₂olBricks website;
- Innovative training modules and curricula for energy experts and architects will be developed.
- VGTU and RTU has already drafted modules for 15 different new training materials.

Lectures for craftsmen

- To upgrade the skills of craftsmen of different trades involved in the realisation of energetic refurbishment measures;
- New and advanced training programmes for craftsmen will be developed.
- Under the lead of the Vocational Training Centre (AZB) in Hamburg a Guideline „Training and Education of Craftsmen Within the Energy-saving Refurbishment of Historical Buildings“ will be developed;
- To support the mobility of labour in order to spread the mediated qualification and knowledge and to give innovative SMEs the possibility to implement their techniques and products, the curricula of craftsmen have to be harmonised.



Public relation activities

- To strengthen the possibilities for innovative small and medium enterprises to implement their techniques and products in the Baltic Sea Region;
- The frequently international seminars conducted in context with the transnational meetings of Co₂olBricks have the same objectives:
 - ✓ To discuss with the mainly local experts and stakeholders the findings of the project
 - ✓ To present alternative technical solutions and products for the energetic refurbishment of historic buildings.
- All these measures will be accompanied by public relation activities:
 - ✓ as articles in local newspapers (general public),
 - ✓ expert magazines (architects, engineers, etc.),
 - ✓ special interest publications (e.g. Education)
 - ✓ scientific journals (publicising the results of activities and researches).





VILNIAUS GEDIMINO
TECHNIKOS UNIVERSITETAS

Thank You for Your attention!



Co₂olBricks