

THE BUILDING KNOWLEDGE HUBS



The Building Knowledge Hubs: Stimulating demand for skilled workers in the building sector

Dragomir Tzanev, Center for Energy Efficiency EnEffect - Bulgaria

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- 1) THE BUILD UP SKILLS LEGACY
- 2) THE NZEB ROADSHOW: DEMO UNITS, GAMIFICATION AND ROADSHOWS
- 3) COMMUNICATION CHANNELS

The BUILD UP Skills legacy

The BUILD UP Skills initiative

1. The BUILD UP Skills legacy

2. The NZEB Roadshow

3. Communication channels



- Pillar I started in 2011 under Intelligent Energy Europe Programme
- Similar projects in 30 EU + associated countries
- Resulting in National roadmaps for improving the skills in the construction sector
- Pillar II started in 2013-2014 focusing on training programmes on EE & RES in buildings
- Last projects being finalized now
- Continued in H2020 Construction Skills

The BUILD UP Skills legacy

Train-to-nZEB: the Building Knowledge Hubs

1. The BUILD UP Skills legacy

2. The NZEB Roadshow

3. Communication channels



- Improving the training facilities: new BKHs in Bulgaria, Romania, Czech Republic, Turkey and Ukraine
- ToRs for equipment and services,
- Business plans
- Innovative training programmes
- Qualified and attractive trainers
- Trainings for 2400 construction workers, 480 designers and 720 non-specialists

The BUILD UP Skills legacy

Fit-to-nZEB: Retrofitting to NZEB-levels

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2. The NZEB Roadshow

3. Communication channels



- Review of existing training programmes and gaps in national VET systems
- Set of learning outcomes on 17 topics
- Model training programmes on **deep energy retrofit** for all qualification levels (under EQF)
- Training materials on all topics
- New training facilities in Italy, Greece and Croatia
- Pilot training courses

The BUILD UP Skills legacy

Major achievements

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3. Communication channels



- Master's programme “Energy Efficiency in Construction” in the University of Architecture, Civil Engineering and Geodesy (UACEG)
- Discipline “Project management of energy efficient building renovation” in the program of the Civil Engineering Faculty at UACEG
- Change of State Educational Standards for professions in “Construction” and “Electrical Engineering and Energy Sector” professional directions

The BUILD UP Skills legacy

New training programmes and materials

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3. Communication channels



- Two dedicated training aids, developed in cooperation with the Pazardzhik Professional High Schools under the auspices of the Ministry of Education and Science:
- ✓ Ecological and energy efficient construction
- ✓ Airtightness and mechanical ventilation with heat recovery in the buildings



The BUILD UP Skills legacy

Training courses for specialists, trainers and students

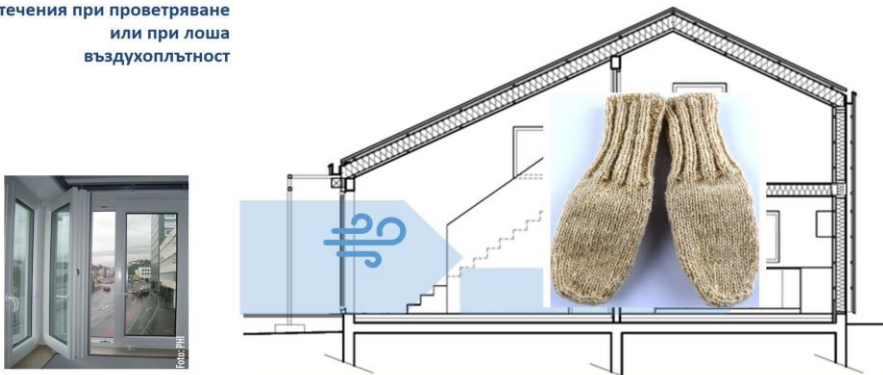
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ЕнЕфект

Влияние на въздушните течения при проветряване или при лоша въздухоплътност



35

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O Олга Христова

P Розалия Петрова

T Theodora

T Таян Любенова

Ц Цветка Басичева

Тема 5: МАТЕРИАЛИ

СЪВРЕМЕННИ МАТЕРИАЛИ ЗА ТОПЛОИЗОЛАЦИЯ. ЕКОЛОГИЧНИ ТОПЛОИЗОЛАЦИОННИ МАТЕРИАЛИ

Класификация според произхода: ОРГАНИЧНИ

Експандиран пенополистирол (EPS)

Екструдирания пенополистирол (XPS)

Пенополиуретан

Дървесно-влакнеста целулоза

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3

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Ralitsa Yordanova

Stefka

Умута Start Video Participants Q&A Polls Chat Share Screen Record More

9:17 9.7.2020 г.

- Training course on high-quality windows installation with the participation of engaged market actors
- Training course for teachers in professional high schools of architecture and civil engineering from the whole countries
- Pilot courses planned in the high schools or via the CraftEdu database



NZEB ROADSHOW

Key concept: nZEB days

1. The BUILD UP Skills legacy

2. The NZEB Roadshow

3. Communication channels



- Streamlined marketing and stakeholder engagement strategies
- Rigorous application of a monitoring and evaluation scheme
- Document and develop case studies of the national cases
- Deliver a monitoring report with recommendations for replication of the campaigns

NZEB ROADSHOW

Toolbox: mobile demo units

1. The BUILD UP
Skills legacy

2. The NZEB
Roadshow

3. Communication
channels



- Design and build mobile housing units aiming at training visitors about: energy efficiency, materials and comfort;
- Offer visitors the possibility to directly experience the high internal comfort;
- Demonstrate real-time energy efficiency performances.

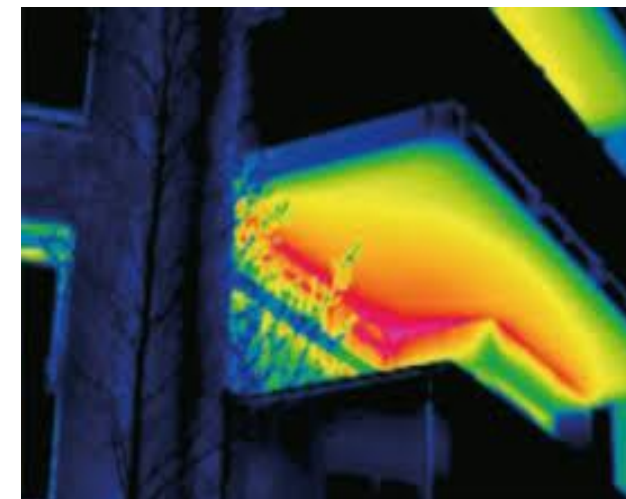
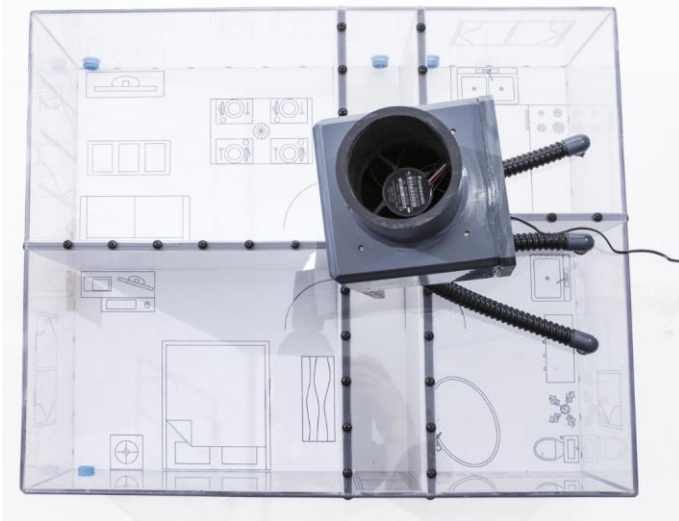
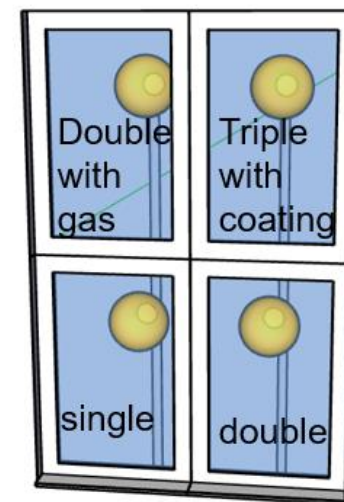
NZEB ROADSHOW

Toolbox: gamification (1)

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2. The NZEB Roadshow

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NZEB ROADSHOW

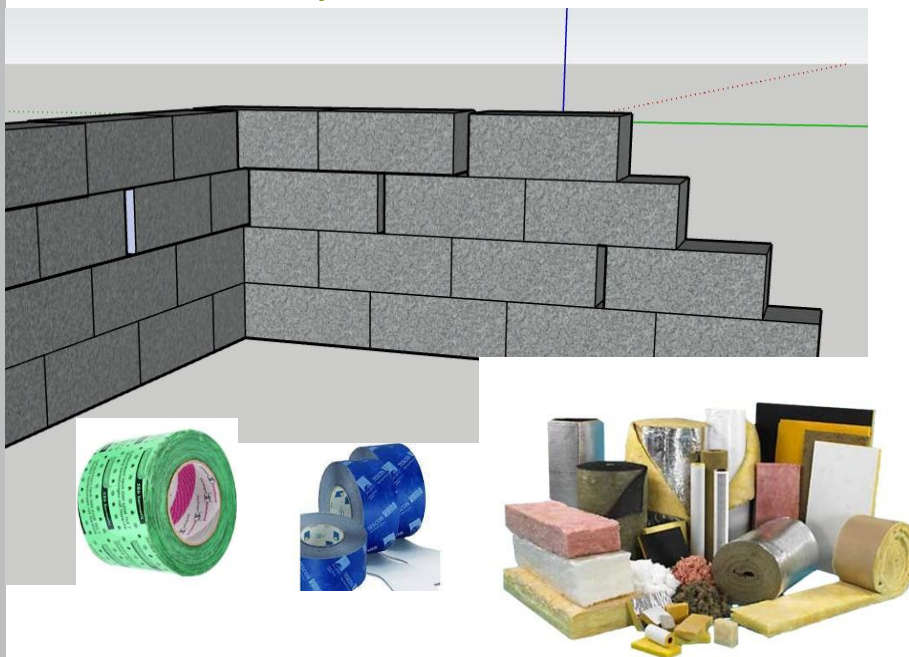
Toolbox: gamification (2)

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❑ Final stop – Grand Finale



Mockups based on safe materials to give the opportunity to children to play with. Creation of the 2/3 of a small mockup, giving the children the chance to finish it by using the materials properly

NZEB ROADSHOW

Main results: MUZA project, Croatia

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NZEB ROADSHOW

Main results: nZEB days in Greece

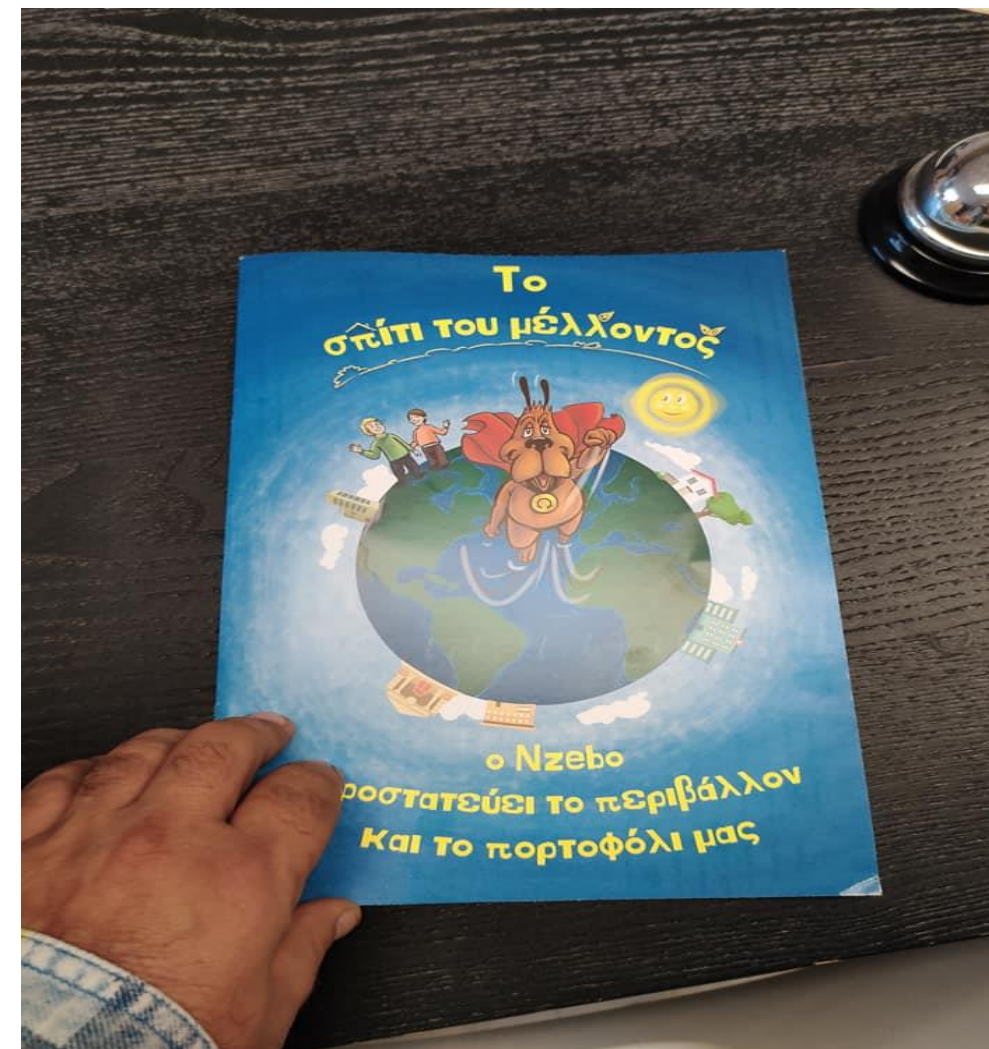
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NZEB ROADSHOW

Main results: nZEB days in Greece

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NZEB ROADSHOW

Main results: nZEB days in Croatia

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NZEB ROADSHOW

Main results: nZEB days in Croatia

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NZEB ROADSHOW

Main results: nZEB days in Romania

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NZEB ROADSHOW

Main results: nZEB days in Romania

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NZEB ROADSHOW

Main results: nZEB days in Italy

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NZEB ROADSHOW

Main results: nZEB days in Bulgaria

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NZEB ROADSHOW

Main results: nZEB days in Bulgaria

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NZEB ROADSHOW

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NZEB ROADSHOW

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NZEB ROADSHOW

Main results: personal engagement

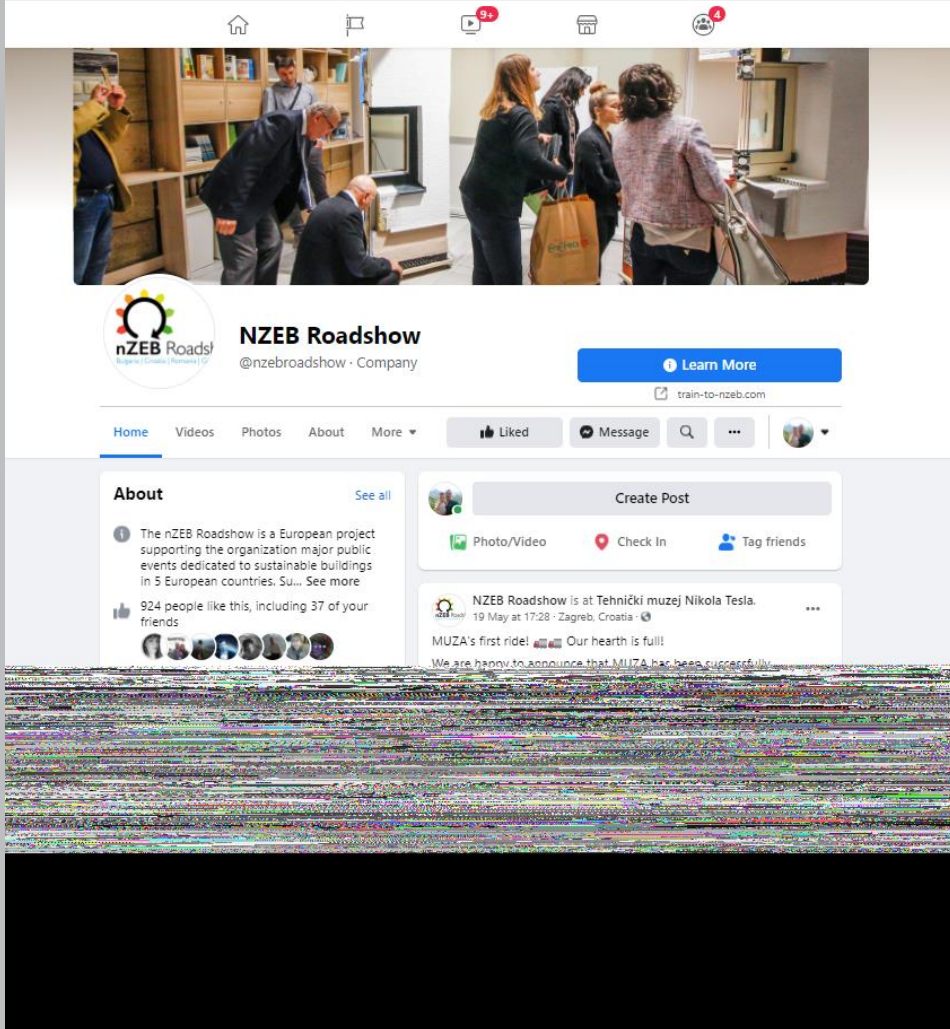
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NZEB ROADSHOW

Communication and dissemination

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www.train-to-nzeb.com

www.fit-to-nzeb.com

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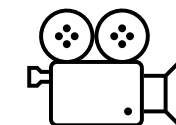
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