



# Builders' Energy Efficiency Training- BUILD UP Skills BEET

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*FYROM have harmonized energy efficiency policy with European legislation and set national energy savings targets that should be achieved till 2020.*

**The share of building sector's contribution in energy savings targets is 36,13%.**



Co-funded by the Intelligent Energy Europe Programme of the European Union



Duration: 18.07.2014 - 18.03.2016  
Contract N°: IEE/13/BWI/682/ SI2.680171



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## ACTIVITIES UNDERTAKEN WITHIN BUILD UP SKILLS PILLAR 1:

**1. Status Quo Analysis** for building sector - defined the gaps between current situation and needs for skilled on-site workers.

**2. Roadmap**, document endorsed by **National qualification platform**, with more than 60 members - priority measures to be carried out to overcome the gaps and barriers.

**BUILD UP Skills  
BEET**



**The shortage of 9.600 skilled workers for energy efficiency and renewable energy sources should be overcome by implementation of priority measures defined in the Roadmap**



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## What are we trying to achieve? BUILD UP Skills BEET objectives:



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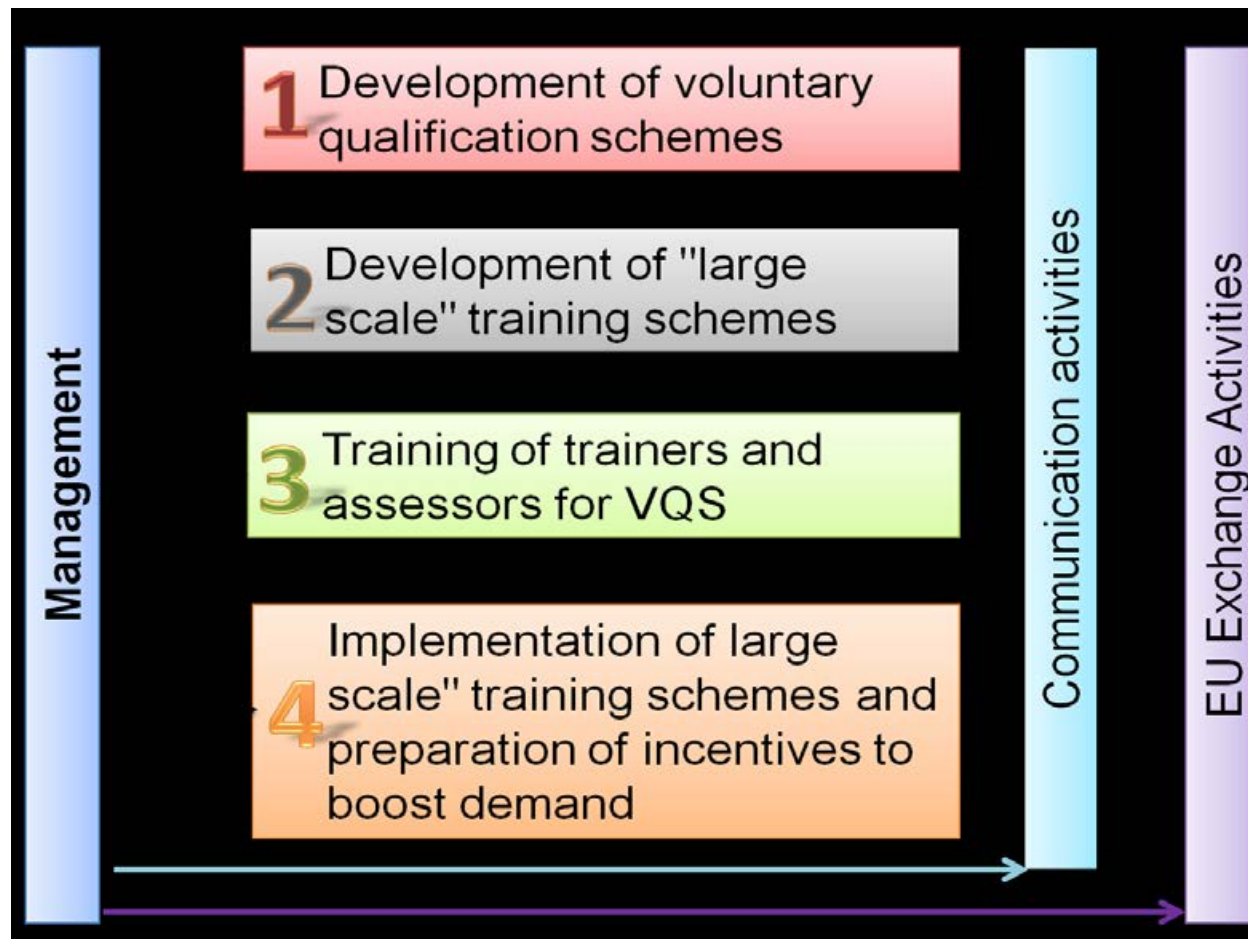


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## The main Activities chart



**THE PROJECT OVER-ALL RESULTS HAVE CONTRIBUTED THE BUILD UP SKILLS-BEET TO BECOME A SYNONYM IN THE COUNTRY FOR ENERGY EFFICIENCY IN BUILDINGS AMONG INSTITUTIONS AND COMPANIES.**



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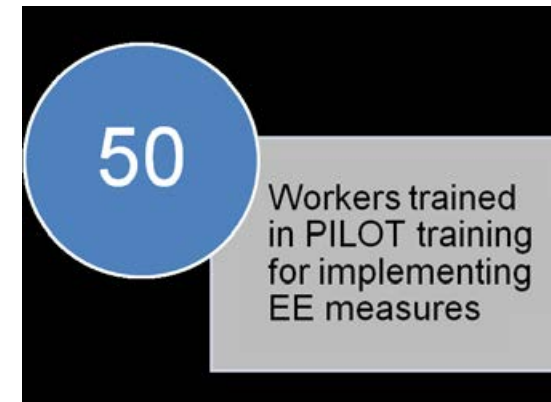
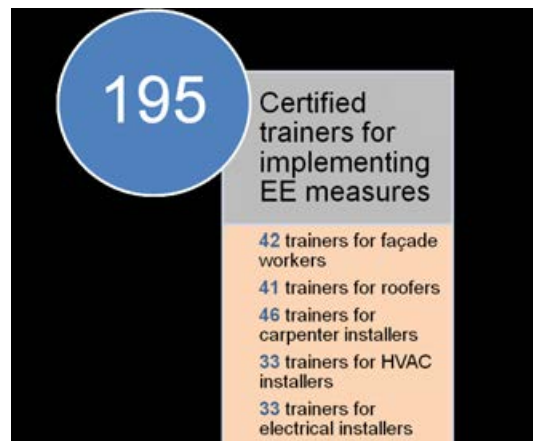
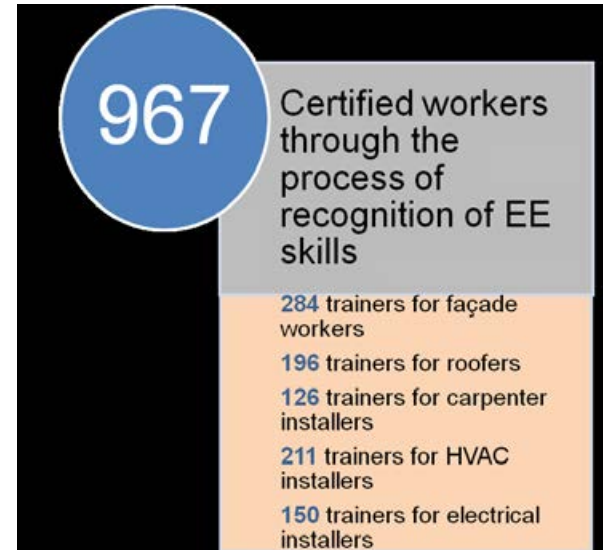


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## RESULTS approving approach



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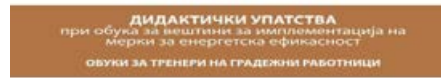


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## case studies and design of documents for reaching project goals



### Monitoring System

Training of construction workers for the implementation of energy efficiency measures



ОБУКА НА ГРАДЕЖНИТЕ РАБОТНИЦИ ЗА ЕНЕРГЕТСКА ЕФИКАСНОСТ  
BUILD UP SKILLS - BUILDERS' ENERGY EFFICIENCY TRAINING - BEET



### COMMUNICATION PLAN

Grant agreement number: IEE/13/BWI/682/SI2.680171  
Duration: 18.07.2014 – 18.03.2016



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## *1st Voluntary Training schemes HANDBOOKS FOR TRAINING PROGRAMMES FOR 5 OCCUPATIONS*



**1. building envelope**

**2. glassing**

**3. roofing**

**4. energy infrastructure**

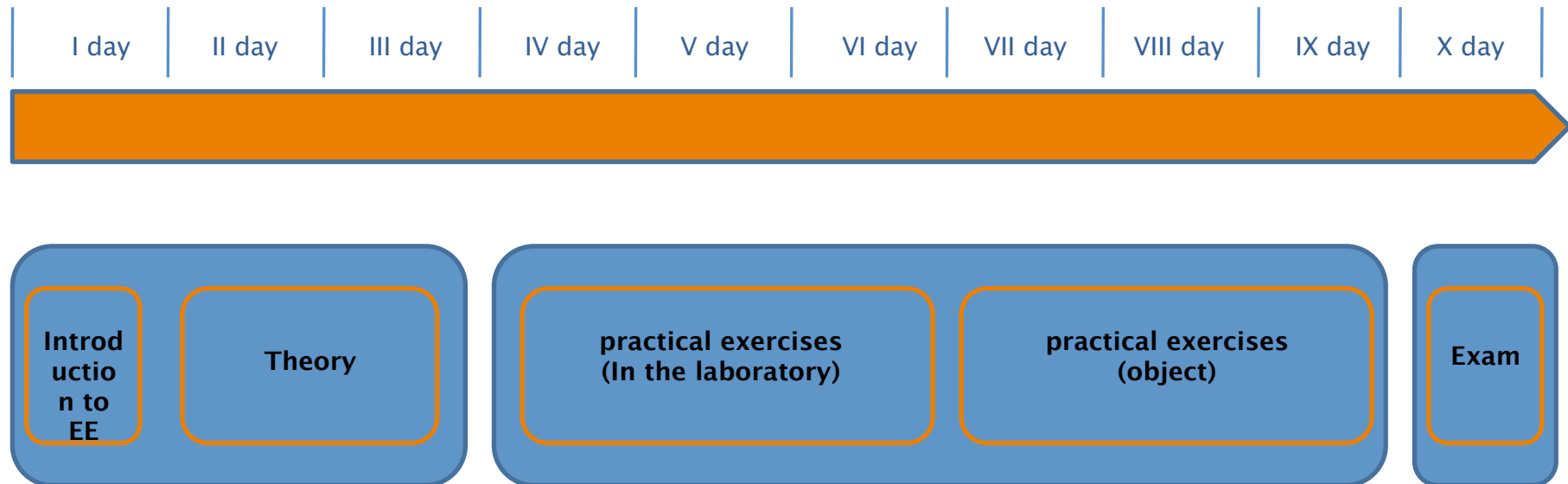
**5. HVAC-heating, ventilation and air-conditioning systems**



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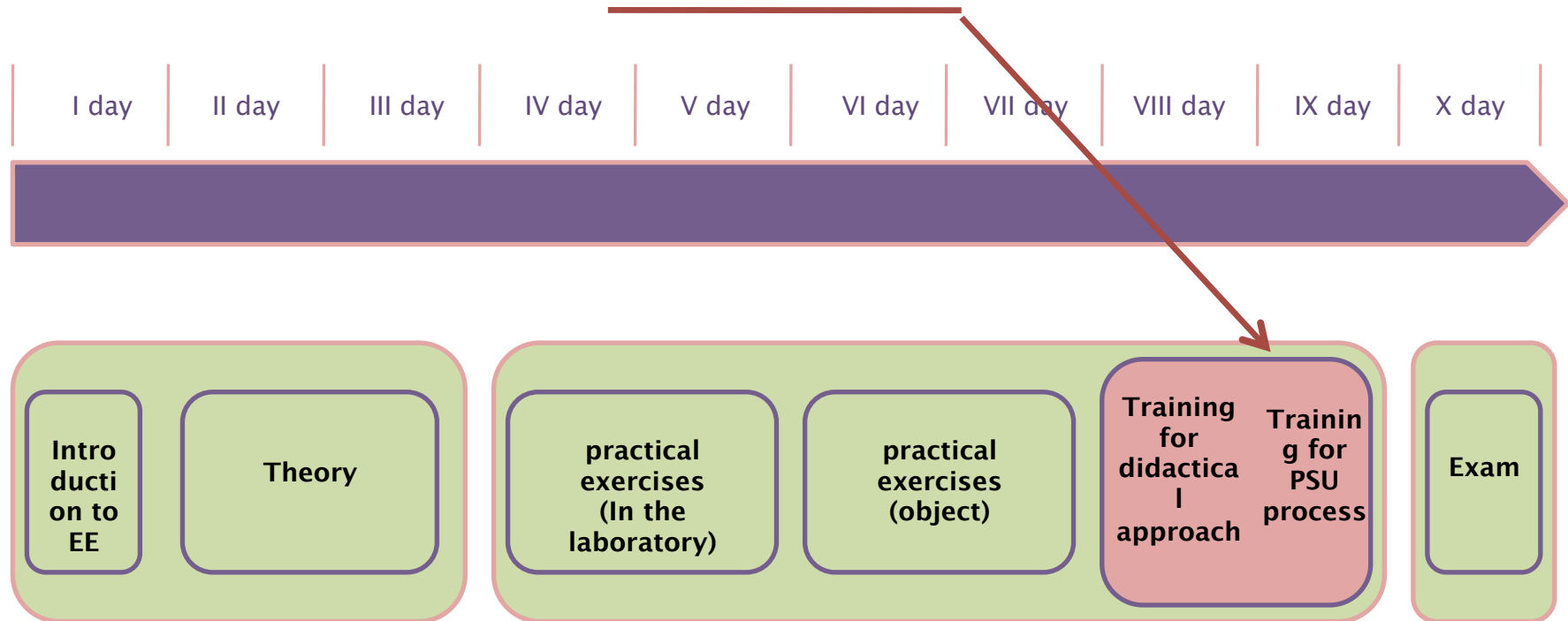
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## Duration / Planning program for Training of installers of energy efficient electrical installations (Training of workers)





## Duration / Planning program for Training of installers of energy efficient electrical installations (Training of Trainers)





# 2<sup>nd</sup> Voluntary Training Scheme Recognition of previous learning

Обука на градежните  
работници за енергетска  
ефикасност  
BUILD UP Skills BEET - Builders' Energy Efficiency Training

## METHODOLOGY

IDENTIFICATION PRIOR KNOWLEDGE  
AND SKILLS ACQUIRED FORMAL AND  
INFORMAL EDUCATION  
- RPL PROCESS



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IEE/13/BWI/682/ SI2.680171 -  
Intelligent Energy Europe

 Проектот е финансиран од Европската Унија  
This project is funded by The European Union

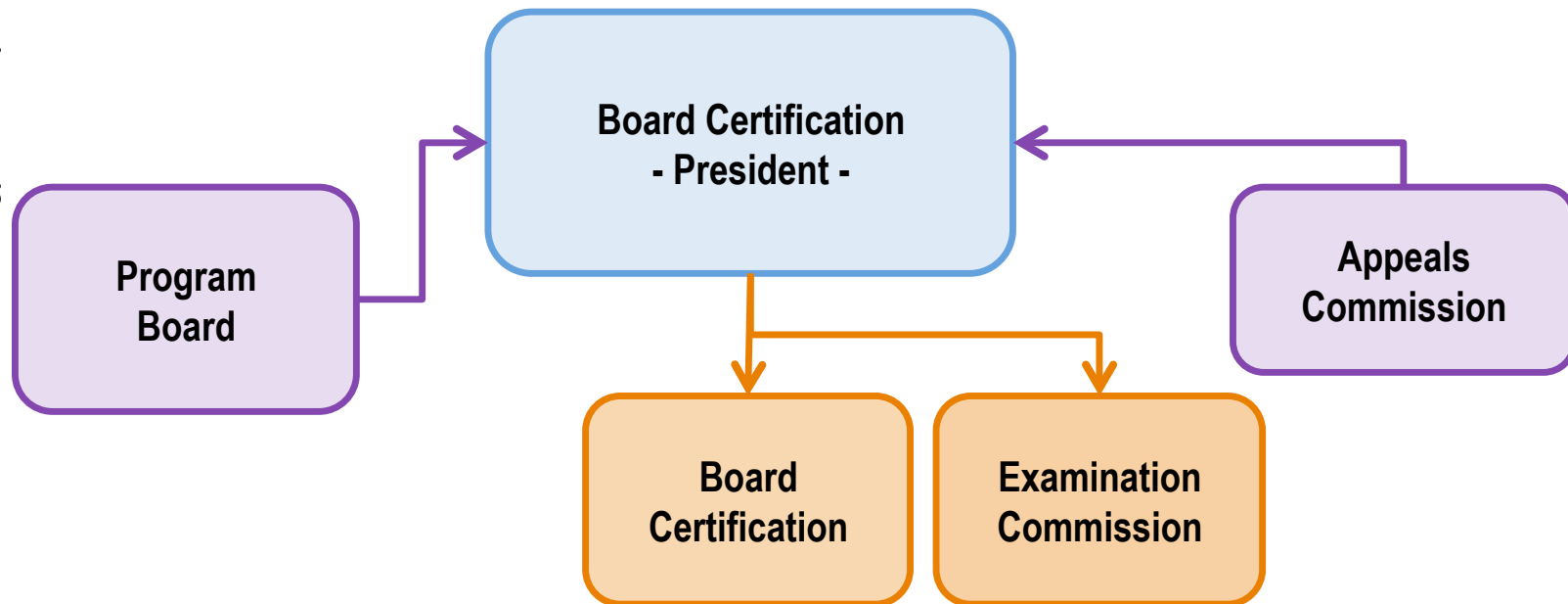


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# STRUCTURE OF CERTIFICATION BODY

Обука на градежните  
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# RECOGNITION PROCESS

## CONTEXT

**institution** which will run the process required **level of qualifications**, establishing an **official body** for implementation of the process

## INFORMATION

publishing the information, explaining the process, attracting and animation of the target groups

## APPLICATION

filling the **registration / application**, submission of **evidence** of previous knowledge and skills

## EVALUATION

interview

test

practical exam

## DECIDING

**decision** on the recognition of previous knowledge and skills

## RESULT

**CERTIFICATE OF QUALIFICATION**

**ADDITIONAL TRAINING / TRAINING**



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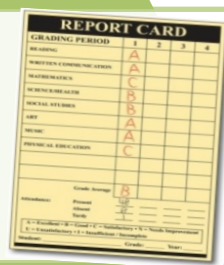


# RESPONSIBILITIES OF CERTIFICATION BODY

Обука на градежните работници за енергетска ефикасност  
BUILD UP Skills BEET - Builders' Energy Efficiency Training



Educational materials and tests  
PROGRAMMING BOARD



Application and the preparation of  
report evaluation  
TEST COMMISSION



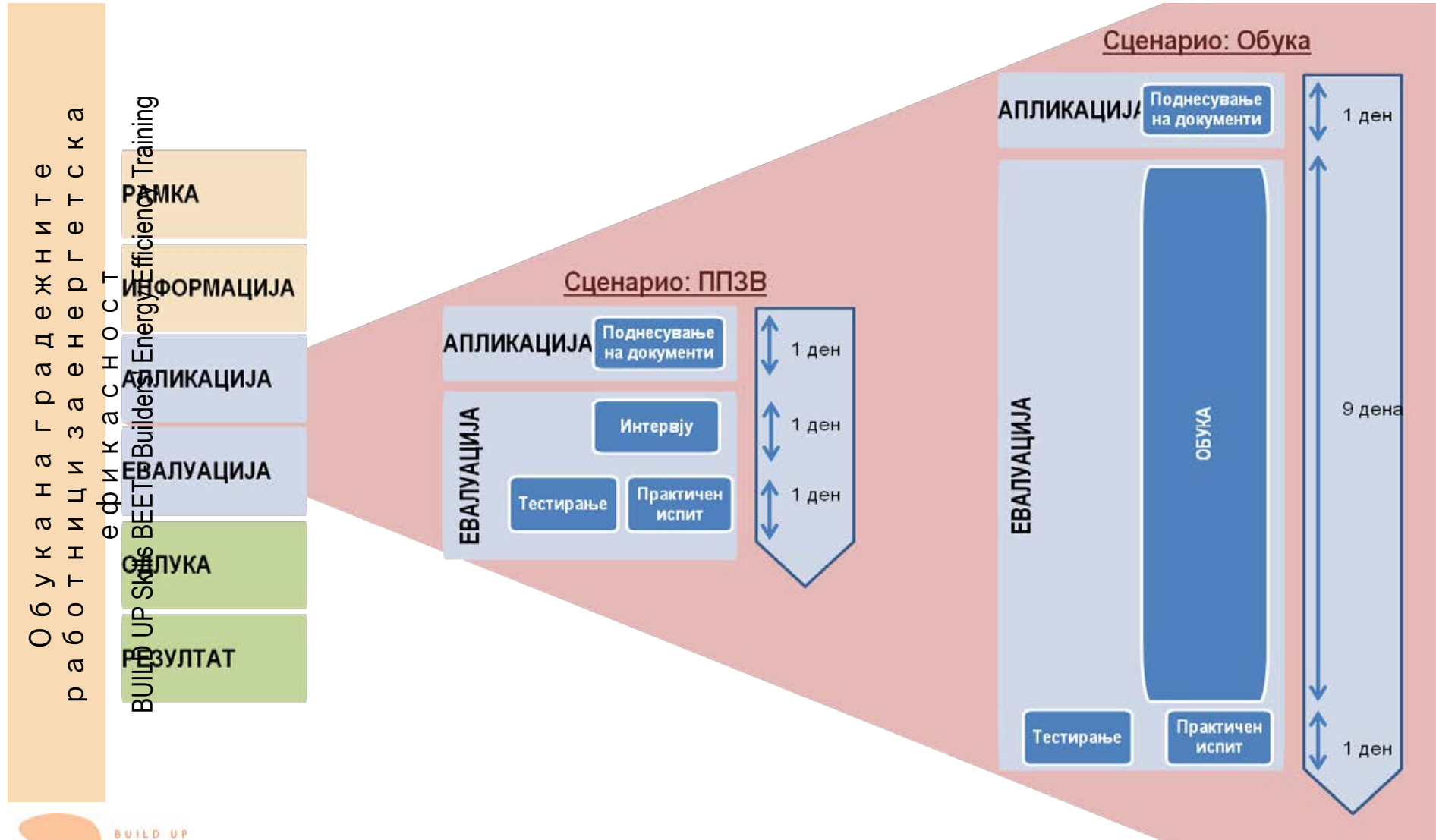
**Certificate**  
PRESIDENT OF THE BOARD CERTIFICATION  
PRESIDENT OF PROGRAMME COMMITTEE



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# DURATION OF RECOGNITION



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*EU Exchange activities cover  
re-sources to create added value  
at the European level*

## Communication activities involves:

- development of tools for effective communication within consortium and shareholders;
- defined procedures for internal and external communication;
- preparation of promotion materials and training materials in order to involve target groups in the project activities.



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## Expected impacts:

- Found official Awarding Body for recognition of previous learning
- 1000 workers with Certificates for recognized previous learning
- Capacity building of training providers for energy efficiency with 200 trainers trained
- After the project end, 300 courses will be organized in the period of 5 year or 60 courses per year.
- Reduction of greenhouse gas emissions 34.592 tCO<sub>2</sub>e/year
- The project results will accelerate the number of qualified workers to 1.050 with chances to reach number of 7.000 workers till 2020.

| Expected Performance Indicators       | Target within project duration:     | Target by 2020:      |
|---------------------------------------|-------------------------------------|----------------------|
| Primary energy savings                | Toe/year<br>4332                    | Cumulative<br>21660  |
| Reduction of greenhouse gas emissions | Ton CO <sub>2</sub> e/year<br>34592 | Cumulative<br>172960 |

| By 2020   |                |                    |   |
|---|----------------|--------------------|---|
| Common Performance indicator                      | Planned target | Actual achievement | Comment on performance  |
| Cumulative investment (Euro)                      | N/A            |                    |   |
| Renewable Energy (toe/year)                       | N/A            |                    |   |
| Primary energy savings (toe/year)                 | 21660          | 38175              | Savings are cumulative by 2020. Number of additional up skilled workers every year were taken into consideration. Every year new 258 EE workers, or 1032 by 2020. |
| Reduction GHG emissions (tCO <sub>2</sub> e/year) | 172960         | 304511             | Lower planned target is due to not considered additional up skilling of # of workers every year as result of project training schemes.                            |



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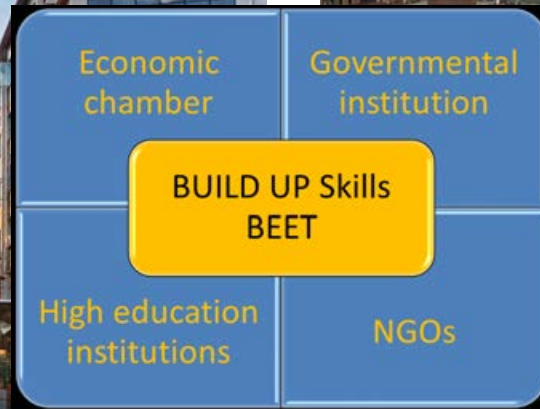


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Skopje, capital city of Macedonia



*...we are trying to make things better and to move thing foreword for the common benefit.*

*...we are trying to make **achievement of EU 20-20-20 goals POSSIBLE.***



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# CERTIFICATION BODY

Обука на градежните  
работници за енергетска  
ефикасност  
BUILD UP Skills BEET - Builders' Energy Efficiency Training



**Jadranka Arizankovska**  
- Project Manager and Financial Coordinator -



**Risto Ivanov**  
- Project coordinator -



**Christina Spasevska**  
- Chairman of the Board for Certification -



**Lazar Gechevski**  
- Chairman of the Program Committee -



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This project is funded by The European Union



# CERTIFICATION BODY

Обука на градежните  
работници за енергетска  
ефикасност



Sladjana Stojanovska



Boris Trimchev

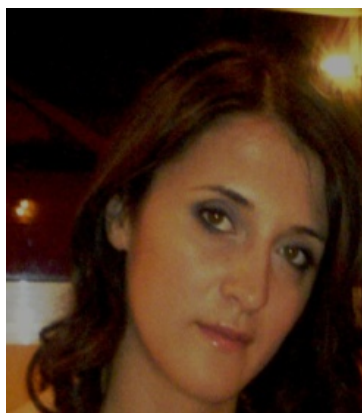


Ivana Petkanovska

**MEMBERS OF THE  
COMMITTEE  
CERTIFICATION**



Ljindita Qazimi



Irena Milkov

**APPEALS COMMISSION**



BUILD UP  
SKILLS  
ENERGY TRAINING  
FOR BUILDERS



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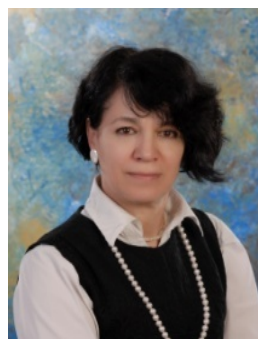
# CERTIFICATION BODY - PROGRAMMING BOARD

Обука на градежните  
работници за енергетска  
ефикасност

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**Irena Mojsovska**



**Antonia Josifovska**



**Simona Ristoska**



**Zanina Stamenkova**



**Lihnida S. Georgievska**



**Svetlana Petrovska**



**Ivana Sandeva**



**Zivko Dimov**



**Igor Panchevski**



**Ljupco Vangelski**





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**Project Coordinator:**  
**Jadranka Arizankovska**  
E-mail. [jadranka@mchamber.mk](mailto:jadranka@mchamber.mk)  
Phone. +389 2 3244038

**QUESTIONS & ANSWERS:**

???



СТОПАНСКА КОМОРА  
НА МАКЕДОНИЈА  
ECONOMIC CHAMBER  
OF MACEDONIA



**Project consortium partners:**



Faculty of electrical engineering  
and information technologies

**КРЕАЦИЈА**

ЗДРУЖЕНИЕ НА БИЗНИСИ И КОНСУЛТАНТИ

Association of Business  
and Consultancy – CREATION



Republic of Macedonia  
ADULT EDUCATION CENTER

PI Adult Education Center– Skopje



Integrated Business Faculty



Center for promotion of sustainable  
agricultural practices and rural  
development



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