





# TRACE Final Conference: «Improvement of buildings energy performance and efficiency – Sustainable Communities in South East Europe»

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Piraeus Chamber of Commerce and Industry

The City of Zagreb

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Gradski ured za energetiku, zaštitu okoliša i održivi razvoj

The training objectives are tailored to the specific target group of the training, namely the executives within territorial administration participating in the project.





The assessment of training needs takes into account any training programme in the field of energy efficiency in buildings which may have already taken place or it is planned to take place within each territorial administration in order to ensure the complementarity of the training performance.

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#### **Contributing partner:**

- The City of Zagreb, Croatia (task leader)
- Municipality of Piraeus, Greece
- Gabrovo Regional Administration, Bulgaria
- Province of Perugia, Italy
- Centre for Promotion of Clean and Efficient Energy in Romania - ENERO, Romania
- Energy Agency of Savinjska, Šaleška and Koroška Region - KSSENA, Slovenia
- Sarajevo Economic Region Development Agency SERDA, Bosnia and Herzegovina
- Province of Mantova, Italy
- Albania EU Energy Efficiency Centre (EEC), Albania



#### 1st TOPIC: LEGISTLATION

		RATING
	EPBD Directive, the obligations arising under the directive of the	
1	Regional and Local Governments	1
2	Establishing a general framework for	5
	calculation methodology of energy	
	characteristics for a buildings	
3	The application of a minimum	2
	requirements for the energy efficiency in a new and existing	
	buildings	
4	Energy certification for buildings	3
5	Regular inspection for boilers and	4
	air-conditioning systems in a buildings	

#### 2nd TOPIC: STRATEGIES AND PLANS

		RATING
1	Existing EU development strategies and plans relating to the building design and construction	4
2	Development strategies and plans on the national level, in the comparison with EU strategies	3
3	Development strategies and plans at the regional and local level, including existing good practice	1
4	Methodology for the development of a operational plans at regional level	2

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#### 3rd TOPIC: PLANNING OF SUSTAINABLE URBAN DEVELOPMENT

		RATING
1	Planning the energy efficient residential zones  Setting the criteria considering the energy efficiency for obtaining	2
3	permits of buildings construction  Good practice in planning of sustainable urban areas	1

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#### 4th TOPIC: ENERGY MANAGEMENT

		RATING
1	Energy Management	1
2	Infrastructure ( professional staff , equipment )	3
3	Good practice in managing	2

#### 5th TOPIC: MONITORING EXISTING SITUATION

		RATING
1	Monitoring the energy consumption in buildings	1
2	Energy audits for buildings	2
3	Energy certification of buildings	3

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#### 6th TOPIC: RECONSTRUCTION OF AN EXISTING OBJECT

		RATING
1	Determination of cost-effective energy measures and use of a	
	renewable energy	2
2	Encourage reconstruction of existing facilities with the	1
	implementation of energy efficiency and renewable energy	1
3	Capacity Building for the design, construction and supervision of	2
	a building reconstruction	3

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#### 7th TOPIC: CONSTRUCTION OF A NEW BUILDING

		RATING
1	Use of a low-energy or passive house standards for new	2
	buildings	2
2	Promoting the use of a energy efficiency and renewable energy	
	in new buildings	1
3	Capacity Building for the design, construction and supervision of	2
	a building	3

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#### 8th TOPIC: FINANCING EE AND RES IN BUILDINGS

		RATING
1	Preparation of feasibility studies for the buildings construction / reconstruction	2
2	Possible funding sources implementing energy efficiency and renewable energy in buildings	1
3	Monitoring the refunds generated through energy savings	3

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9th TOPIC: USERS EDUCATION

		RATING
1	Workshop for managers and users of the building, a use of building guide	1

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#### 10th TOPIC: REQUIRED CONTROLES

		RATING
1	Control of a project documentation	4
2	Control of the buildings construction / reconstruction	2
3	Inspection of a boilers and air-conditioning systems in buildings	3
4	Monitoring the energy consumption after the renovation	1

#### 11th TOPIC: STAKEHOLDER ENGAGEMENT

		RATING
1	Political Support	1
2	Cooperation with professional institutions	3
3	Involvement of the civil organizations and media	5
4	Education through seminars, workshops, exhibitions	2
5	Organizing the energy weeks	4

**12**<sup>th</sup> **OTHERS:** Topics/subtopics specified by partners which are not included in topics 1 - 11 and it is important for them.

1	EU Energy policies and relevant policies(e.g. Climate change) :
	Initiatives, programmes, networks relevant to energy efficiency (e.g. Covenant of
2	Mayors) : Pireus
3	Energy Efficiency Technologies for Buildings (Pros & Cons) & case studies: Pireus
4	Public Private Partnerships for EE in Buildings (e.g. ESCOs) : Pireus
5	Evaluation of local administration training and personnel: Pireus
6	Obligation of a multi-annual investment plan: ENERO
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#### **RANKING OF TOPICS**

		RATING
1	LEGISTLATION	1
2	STRATEGIES AND PLANS	3
3	PLANNING OF SUSTAINABLE URBAN DEVELOPMENT	5
4	SYSTEMATIC ENERGY MANAGEMENT	5
5	MONITORING EXISTING SITUATION	5
6	RECONSTRUCTION OF AN EXISTING OBJECT	4
7	CONSTRUCTION OF A NEW BUILDING	6
8	FINANCING EE AND RES IN BUILDINGS	2
9	USERS EDUCATION	6
10	REQUIRED CONTROLES	8
11	STAKEHOLDER ENGAGEMENT	7
12	OTHERS	9

**The scope** of the training was capacity building of local and regional administrations in Croatia for successful implementation of legislation, in particular EPBD.

Specific objectives were to present directives and regulations in field of energy efficiency, models and possibilities of energy efficiency investments and to share knowledge resources from different cities in improvement the energy performance of buildings.



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- Participants executieves from different City Officies which have influence in implementation EPBD in buildings;
- A Trainer and lectures experts of Energy Institute Hrvoje Požar, one of the leading research institutions in the field of energy in the region;
- Two parts of the training, one that included presentations and the interactive one that included participation of training participants;
- Presentations included topics concerning legislation (main strategies, directives and laws) regarding energy and buildings, technical possibilities that can be implemented in buildings while being refurbished, management of refurbishment and financing of such projects.

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#### **PROGRAM**

#### 1.Part: lectures

- Introduction in Energy Efficiency
- Legislation in EU and Croatia of implementation EE in building sector
- EE refurbushment of public buildings (example in practice)
- Financing of EE project



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#### **PROGRAM**

#### 2.Part: working in groups

Energy management in public buildings

The participants were divided into three groups:

- Building users in schools, hospitals, etc.
- Energy managers on the city/county level
- Strategic coordinators and developers of EMS



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#### **PROGRAM**

#### 2.Part: working in groups

Stakeholders of energy efficiency refurbishment process

The participants were divided into three groups:

- financial institution
- city/county administration
- Private investors (SWOT analysis)



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Through the Programme of this training the local and regional authorities gained:

- strengthen and build their capacity;
- communicate directly with energy efficiency experts;
- knowledge about replicable methodologies, tools and best practices on energy efficiency and renewable energy issues;
- information about the financial opportunities for funding energy efficiency investments, as well as the potential legal and financial barriers and how to overcome them;
- network and exchange to find out about synergies at national levels.





Transnational Cooperation for the Improvement of Buildings Energy Performance and Efficiency



#### **THANKYOU!**

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