

# D-LeaP Capacity Development Program for improvement of Energy Efficiency in Public Utility Companies (PUCs)

## First two-day workshop for PUCs in B&H

Hotel "Rekic" Bihac, Ribarska no. 1, 77000 Bihac, Bosnia and Herzegovina  $10^{th}\, \text{and}\,\, 11^{th}\, \text{October}\, 2018$ 

### **AGENDA**

#### Wednesday, 10 October 2018

Time	Activity	Duration
09:00 - 09:30	Session no 0: Introduction	30 min
	Welcome speeches	10 min
	Objectives, expected results and agenda	10 min
	<ul> <li>Introduction of participants and expectations by PUCs' representatives</li> </ul>	10 min
09:30 - 10:20	Session no 1: Introduction to Energy Efficiency	50 min
	<ul> <li>D-LeaP Capacity Development Program for improvement of Energy Efficiency in PUCs</li> </ul>	15 min
	<ul> <li>Energy Efficiency in water supply systems</li> </ul>	20 min
	<ul> <li>Questions and answers, discussion</li> </ul>	15 min
10:20 - 11:00	Session no 2: Relevant legislation	40 min
	Relevant legislation	15 min
	<ul> <li>Motivation and barriers for improvement of Energy Efficiency in PUCs</li> </ul>	10 min
	<ul> <li>Questions and answers, discussion</li> </ul>	15 min
11:00 – 11:30	Coffee break	
11:30 – 12:30	Session no 3: Procedure for conducting Energy Efficiency Review of pumping systems including development of the Preliminary report on Energy Efficiency Review of pumping systems	60 min
	<ul> <li>Energy Efficiency Review of Pumping systems – praxis example:</li> <li>Development of questionnaire for data collection about pumping systems</li> <li>Step 1. Data collection (questionnaire fulfilling)</li> <li>Step 2. Field measurements (questionnaire fulfilling)</li> <li>Step 3. Data analysis (hydraulic and electrical calculations)</li> <li>Step 4. Identification of possibilities for energy savings + measures for energy saving</li> </ul>	35 min
	<ul> <li>Development of Preliminary report on Energy Efficiency Review of pumping systems (report structure)</li> </ul>	10 min
	<ul> <li>Questions and answers, discussion</li> </ul>	15 min
12:30 – 13:30	Lunch	





13:30 – 15:00	Session no 3: Procedure for conducting Energy Efficiency Review of pumping systems including development of the Preliminary report on Energy Efficiency Review of pumping systems - Continuation	90 min
	<ul> <li>Practical exercises:</li> <li>Analysis of electricity consumption based on electricity bills</li> <li>Pump hydraulic calculation</li> </ul>	75 min
	<ul> <li>Questions and answers, discussion</li> </ul>	15 min
15:00 – 16:30	Session no 4: Equipment for thermographic measurement and measurement of mechanical, hydraulic and electrical items	90 min
	<ul> <li>Presentation on Equipment for thermographic measurement and measurement of mechanical, hydraulic and electrical items</li> </ul>	15 min
	<ul> <li>In-class presentation of equipment and methods of its use</li> </ul>	60 min
	Questions and answers, discussion	15 min
16:30	End of first day	

## Thursday, 11 October 2018

Time	Activity	Duration
09:00 - 09:15	Session no 5: Review of first day of the two-day workshop	15 min
09:15 – 11:45	Session no 4: Equipment for thermographic measurement and measurement of mechanical, hydraulic and electrical items - continuation	150 min
	<ul> <li>Meeting of participants and field visit to pumping station within water supply system of Bihac City</li> </ul>	30 min
	<ul> <li>Use / practical work with field measurement equipment</li> </ul>	90 min
	<ul> <li>Meeting of participants and returning to the hall where the workshop is held</li> </ul>	30 min
11:45 – 12:30	Coffee break and check-out from hotel	
12:30 – 13:15	Session no 6: Energy Efficiency measures for improvement	45 min
	<ul> <li>Energy Efficiency measures for improvement of existing pumping systems</li> </ul>	15 min
	<ul> <li>Energy Efficiency measures for improvement of new pumping systems</li> </ul>	15 min
	<ul> <li>Questions and answers, discussion</li> </ul>	15 min
13:15 – 14:00	Session no 7: Next steps	45 min
	<ul> <li>Explanation of homework and support by the certified thematic centre trainers</li> </ul>	15 min
	<ul> <li>Questions and answers, discussion</li> </ul>	15 min
	Summary and evaluation	15 min
14:00 – 15:00	Lunch	
15:00	End of two-day workshop	