

Seminar Programme

Boosting sustainability of the urban water cycle: energy harvest in water industry using micro-hydropower technology



12 September 2023, Hotel Daugirdo, T. Daugirdo str. 4, LT-44279, Kaunas, Lithuania,
<https://www.daugirdas.lt/en/>

9:30 -10:00	Reception & Welcome coffee, Tuesday, 12 th September	
10:00 -10:05	Welcome, and introduction.	Raquel M. Lopez Fernandez, CARTIF Technology Center, LIFE NEXUS project Coordinator, Spain. Janusz Steller, Institute of Fluid-flow Machinery of Polish Academy of Science (IMP PAN), Polish Hydropower Association, President.
10:05-10:15	Renewable energy policy in Lithuania.	Lina Sveklaite, Ministry of Energy. Sustainable energy development policy group, Head.
10:15-10:25	Small hydropower in Lithuania – challenges.	Dainius Markauskas, Lithuanian Hydropower Association, President.
10:25-10:35	LIFE programme for the environment.	Aušra Šmitienė, LIFE IP EnerLIT project „Increasing energy efficiency in Lithuania“, Leader
10:35-10:45	Municipal water industry: Energy demand and its recovery.	Darius Gražys, Kaunas Water Company (UAB Kauno vandenys), Technical Director.
Session 1: Life NEXUS: Assessment of the hidden potential in Spain, Poland and Lithuania (Chair Petras Punys).		
10:50-11:10	Raquel M. Lopez Fernandez, CARTIF Technology Center, Spain.	LIFE NEXUS: First European inventory of micro-hydro energy recovery potential in the water industry.
11:10 -11:30	Janusz Steller, Z. Krzemianowski, M. Hajdarowicz, Institute of Fluid-flow Machinery of Polish Academy of Science (IMP PAN), Gdansk, Poland.	Hydraulic energy harvesting in the municipal water cycles – selected technological aspects
11:30-11:45	Discussion	

11:45 -12:00	Coffee break	
Continuation of session 1: LIFE NEXUS: Assessment of the hidden potential in Spain, Poland and Lithuania. IMP PAN, Polish Hydropower Association (chair Janusz Steller).		
12:00 - 12:20	P. Punys, A. Radzevičius (VMU Academy of Agriculture, Kaunas)	Assessment of Hydropower Potential in Wastewater Systems in a Lowland Country, Lithuania.
12:25-12:35	Raquel M. López, Jesús Samaniego, Luis Angel Bujedo, Victor Iván Serna CARTIF Technology Centre, Spain	Energy recovery in a DWTP using an innovative micro-hydropower system based on integrating a Pump as a Turbine and an energy storage.
12:35-12:55	Mariano Mirete (AQUATEC), Spain	Maximizing the amount of annual energy obtained based on real PAT curves and real data from the installation (flow and pressures). Online or pre-recorded.
12:55 - 13:15	Discussion	
13:15-14:00	Lunch	
Session 2: Technology – fundamentals and examples focused on Lithuania (training session, in Lithuanian). Moderator: A. Radzevičius		
14:00 - 15:40	Locations for installing turbines in urban water networks.	
15:40 - 16:00: Closure of the Seminar Debates. Moderator: Petras Punys		
<i>For project partners, guided tour in Kaunas downtown (14:00- 16:00)</i>		
Excursion		
16:15-20:00	Boat tour down the Nemunas River.	
13 September, 2023		
Farewell (9:00 - 12:00)		

* Session 1 – Simultaneous interpretation will be provided up to lunchtime.

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Supporting:

Water Engineering Department of Vytautas Magnus University Agriculture Academy.

Lithuanian Hydropower Association.

Lithuanian Association of Land Management and Hydraulic Engineers.

