



### Design and development of an Energy Efficiency Management and Control System with cost-effective solutions for residential and educational buildings

## Energy Programme in Romania Focus area: Research & Development

# Final Workshop in DOITSMARTER Project with partners achievements and costeffective solutions for residential and public buildings

Date: Tuesday, 9 April 2024

Venue: Aula Tertea, Barițiu 25, Cluj-Napoca

Dear colleagues, partners, and collaborators of DOITSMARTER research and development project,

We would like to invite you on Tuesday 9<sup>th</sup> of April 2024 to our final workshop in Cluj-Napoca, Romania

at our TUCN Hub.

The workshop aims to present our main achievements in DOITSMARTER project.

The workshop goal is to create synergy with other projects and network partners and will include a full day of presentations, study cases and networking, technical discussion, and presentations of DOITSMARTER research project partners.

The agenda for the workshop is detailed below.





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#### WORKSHOP AGENDA

MORNING SESSION	DOITSMARTER CONSORTIUM CONTRIBUTIONS AND ACHIEVEMENTS
09:00 – 9:15	Bun venit și introducere – prezentare sumară proiect DOITSMARTer (Prof. Dan Micu, Director of ETHM Department, Director of EnTREC, Dr. Andrei Ceclan – <b>TUCN</b> )
9:15 – 10:00	IoT Lab Platform design and development using NxTech and Høiax low-cost solutions for residential buildings - the <b>Norwegian pilot</b> – algorithms and tools-based AI and ML for building's EMS optimization ( <i>Professor Lucian Mihet</i> – <b>HIOF</b> , John Breiland – <b>NxTech</b> )
10:00 - 10:45	Design and development of an energy management system for educational buildings – <b>Cluj-Napoca TUCN pilot</b> – demo case – DOITSMARTer energy optimization ( <i>Dr. Andrei Ceclan, PhD. Stud. Timea Farkas, PhD. Stud. Alexandru Berciu, PhD. Stud.</i> <i>Mircea Lăncrănjan, Dr. Ștefan Ungureanu, Dr. Levente Czumbil – <b>TUCN</b>)</i>
10:45 - 11:00	Coffee break
11:00 – 11:45	Cost-effective solutions for social buildings energy management and monitoring system – <b>Alba Iulia pilot</b> – demo case – DOITSMARTer opensource robust software and hardware platform ( <i>Assoc. Prof. Cristian Vasar, Dr. Dorin Bordeiaşu – UPT, Dr. Dorin Leţ – HIOF, Eng.</i> <i>Valentin Voinica – Apulum</i> )
11:45 – 12:00	Urban energy poverty – <b>Alba Iulia case study</b> , facts and figures ( <i>Dr. George Jiglău – <b>CSD</b></i> )
12:00 - 13:00	Lunch break and networking
AFTERNOON SESSION	Project partners and collaborators
13:00 - 13:30	Building a Smarter Grid: Exploring Demand Response and Edge Offloading Strategies for AI integration (Prof. Tudor Cioară – <b>TUCN</b> )
	EnergoBit – soluții pentru energie curată la utilizatori
13:30 - 14:00	Energobit – soluții pentru energie curată la utilizatori
	(Dr. Mihaela Coroiu – <b>Energobit</b> )
14:00 - 14:30	<i>(Dr. Mihaela Coroiu – Energobit)</i> Research & devepment and research capacity strengthening projects in Electrical Machines and Drives Department <i>(Prof. Claudia Marțiș – TUCN)</i>
	Research & devepment and research capacity strengthening projects in Electrical Machines and Drives Department
14:00 – 14:30 14:30 – 15:00	Research & devepment and research capacity strengthening projects in Electrical Machines and Drives Department (Prof. Claudia Marțiș – <b>TUCN</b> )
	Research & devepment and research capacity strengthening projects in Electrical Machines and Drives Department (Prof. Claudia Marțiș – <b>TUCN</b> ) RENERGIA – the residential energy users smart app for decarbonization
14:30 – 15:00	Research & devepment and research capacity strengthening projects in Electrical Machines and Drives Department <i>(Prof. Claudia Marțiș – TUCN)</i> RENERGIA – the residential energy users smart app for decarbonization <i>(Dr. Dacian Jurj – Energy Advisory)</i>
14:30 - 15:00 <b>15:00 - 15:20</b>	Research & devepment and research capacity strengthening projects in Electrical Machines and Drives Department (Prof. Claudia Marțiș – TUCN) RENERGIA – the residential energy users smart app for decarbonization (Dr. Dacian Jurj – Energy Advisory) Coffee break

Looking forward seeing you in Cluj. Prof. Lucian Mihet, Prof. Dan Micu, Dr. Andrei Ceclan

Iceland  $\square$ Liechtenstein Norway Norway grants grants





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