

WORKSHOP in Norway/Fredrikstad 26-28 June 2023, as part of dissemination and exploitation results in 3 EEA and Norway Grants

Main Objectives:

- Create synergy with other projects and network partners**
- seminars with study cases, sites visit, relevant companies visit, networking**
- deliver short training sessions on energy efficiency and renewable energy sources for the top decision makers and management teams of: Arad County Council, Buteni Commune, Tomesti Commune, “Aurel Vlaicu” University of Arad, Technical University of Cluj-Napoca, SME’s National Association-IMMpact and Association of Communes from Romania-AcoR**
- promote the project objectives, solutions and measures which must be consider for energy efficiency in smart buildings**

Project 1: Empowering Energy Efficiency Awareness through a Holistic Educational Approach -ENERGEIA

Main objective: ENERGEIA aims to increase the level of desirability and knowledge on renewable energy and energy efficiency in a holistic approach based on three dimensions: 1) *economic (companies)*, 2) *social (general public)* and 3) *educational (tomorrow’s energy professionals)*.

Project 2: Increased knowledge on renewable energy and energy efficiency through training and best practice exchanges between professionals from Arad County and Norwegian partners - Arad County Project

The main objective of the project is to start and implement a training and awareness programme addressed at several levels of people involved, starting from the top decision makers, local public authorities, together with the regional representative universities, executive employees from

the same entities and general public from the local communities involved.

Project 3: -DOITSMARTER

Main objectives: To design, develop and test Energy Management and Control algorithms and tools for the optimization of a Smart Building; To install and demonstrate cost-effective and user-friendly solutions in three Demo pilots in Norway and Romania.

AGENDA for the Seminar on 26 June (D-303/Smia)

First/Morning session: Green Buildings & Renewable Energy Sources

**9 - 9.30: Welcome & Introduction to the workshop + Short presentation
(Professor Lucian Mihet)**

9.30 – 10.00: Green Buildings – Horizon Project (Prof. Anna-Lena Kjøniksen)

10.00 – 10.45: Material science & technology in green buildings-Lab visits in groups (Assoc. Prof. Susana Garcia Sanfelix)

10.45 – 11.00: Coffee break

11.00:11.40: Renewable Energy Systems: Challenges and Opportunities (Prof. Nand Kishor)

11.45-14.15: Visit and Lunch in Hvaler Island (Restaurant Big Fish-Torvet 6, 1680 Skjærhalden - <https://www.bigfishcafe.no/>)

<https://www.google.com/search?q=hvaler%20norway&tbm=isch&rlz=1C1GCEAenNO1022NO1022&hl=en&sa=X&ved=0CB4QtI8BKABqFwoTCLiH6ZSXjP8CFQA AAAAdAAAAABAH&biw=1266&bih=634&dpr=3>

Second/afternoon session: Tools for RES and Energy efficiency in Smart/Green Buildings

14.15 – 15.00: Solar and Wind Energy Systems: Tools for Initial Design (Prof. Nand Kishor)

15.00-15.30: A real-time building monitoring and control systems-based RES (Senior Scientist [Dorin Let](#))

15.30-15.45: Coffee break

15.45-16.30: Energy efficiency in smart buildings (Prof. Lucian Mihet)

End of the seminar (Have a nice evening and see you tomorrow)

AGENDA for 27 June

(Sites visit, relevant companies visit, networking)

8.45: Meeting in front of the faculty building-S12

9 – 10.30: NxTech AS (Dokka 6) – Company presentation + Industrial Projects

<https://www.nxtech.no/>

10.30-11.00: Bus

11.00 – 12.30: Høiax AS (Høiax AS, Trippeveien 5, 1618 Fredrikstad)– Water Heater Tanks + Smart energy efficiency solutions: <https://www.hoiax.no/om-hoiax/articles/smart-varmtvannsbereder-med-skylosning-hoiax-connected>

12.30-13.00: Bus

13.00 – 14.30: Lunch in Old Town/Fredrikstad

<https://www.visitnorway.no/listings/gamlebyen-i-fredrikstad/23375/>

14.30-15.00: Bus

15.00 – 18.00: Arca Nova (Borgeveien 1, 1653 Sellebakk), (Smart Building-Future Living Pilot: <https://www.arcanova.no/>; <https://www.arcanova.no/future-living>)

AGENDA for 28 June – DOITSMARTER Project (D-303/Smia)

9 – 9.15: Welcome + Short Introduction (Lucian)

9.15 – 9.45: HIOF contributions & achievements to the project / Development of simulation models, algorithms and tools-based AI, ML/RL;

(Lucian + Ibrahim/Andreas + Muhammad)

9.45 – 10.15: Technical University of Cluj-Napoca-TUCN contribution to the project: Development of a platform demonstrator

(Dr. Andrei Ceclan + Timea)

10.15 – 10.45: University Polytechnic Timisoara-UPT contribution: Simulation models for a stratified fluid storage tank and for a flat-plate solar thermal collector (Assoc. Prof. Cristian Vasar)

10.45 – 11.00: Coffee break

11.00 – 11.30: Alba Iulia Town Hall / Demo Pilot Residential Building (Dr. Vali Voinica)

11.30 – 12.00: NGO/CSD (Dr. George Jigla)

12.00 – 13.00: Light lunch (Fredrikstad canteen)

13.00 – 13.30: NxTech presentation / A smart relay plug-in communication module for Electric Water Heater (John Breiland +Kristian Sørliie +Terje Wahlstrøm)

13.30 – 14.30: Future work, next steps/reportings (TUCN + HIOF)

14.30 – 15.00: Coffee break

15.00-16.00: Diverse