

WINTER SEMINAR OF THE CENTRE OF EXCELLENCE IN ENERGY EFFICIENCY

8-9.01.2026, TERVIS SPA HOTEL, SEEDRI 6, PÄRNU

AGENDA

THURSDAY, 8.01.2026

10:00-10:30 MEET-UP AND WELCOME COFFEE

10:30-11:00 OPENING SESSION (2x15 min)

- **ENER CER: From Idea to Implementation.** Jarek KURNITSKI (*TalTech, EE*)
- **Estonian National Renovation Plan.** Lauri SUU (*Ministry of Climate, EE*)

11:00-12:00 ZERO EMISSION BUILDINGS (5x12 min, incl. Q&A)

- **Operational Energy Performance Normalization.** Helena KUIVJÕGI (*TalTech, EE*)
- **Heat Pump Performance Data Dashboard.** Karl Villem VÕSA (*TalTech, EE*)
- **Climate Change and Underfloor Cooling.** Kättriin ONEMAR (*TalTech, EE*)
- **Homeowner Renovation Notification Procedure with Simplified Administrative Burden.** Alois PÕDRA (*TalTech, EE*)
- **NZEB Test Facility Renovation to ZEB.** Martin KIIL (*TalTech, EE*)

12:00-13:00 ENERGY EFFICIENT, RESILIENT AND SMART ELECTRIFICATION TECHNOLOGIES (5x12 min)

- **Zero-Emission Buildings and Challenges of All-Electric Lifestyle.** Andrei BLINOV (*TalTech, EE*)
- **Residential Prosumer DC Microgrids.** Indrek ROASTO (*TalTech, EE*)
- **New Opportunities and Challenges in Residential PV Generation.** Andrii CHUB (*TalTech, EE*)
- **Dimensioning of Residential Battery Energy Storages.** Tofopefun NIFISE OLAYIWOLA (*TalTech, EE*)
- **Addressing Urban Infrastructure Challenges via Opportunity V2G Charging.** Hans ANNISTE (*TalTech, EE*)

13:00-14:00 LUNCH

14:00-15:00 DATA DRIVEN CONTROL AND MODELLING (5x12 min)

- **Control in the Era of AI.** Juri BELIKOV (*TalTech, EE*)
- **Advancing Explainable Artificial Intelligence for Trustworthy Machine Learning Applications.** Kimia SOROUGH (*TalTech, EE*)
- **Human-Centric Buildings: The role of eXplainable AI in Cognitive Environments.** Vejeey Pradeep SURESH ACHARI (*TalTech, EE*)
- **Adaptive Demand-Based Control of Heat Pumps Using Supervised Machine Learning.** Ivan SUKHANOV (*TalTech/R8, EE*)
- **Data Preprocessing for Analysis of Buildings Energy Performance.** Kristina VASSILJEVA (*TalTech, EE*)

15:00-16:00 SOCIAL AND REGIONAL IMPACTS (5x12 min)

- **What Supports and What Hinders Collective Decision-Making in Sustainability Transition? The Case of Retrofitting Decisions in Apartment Associations.** Peeter VIHMA (*TalTech, EE*)
- **Everything Started with Drinking Cider': Collective Renovation Capability in Estonian Apartment Associations.** Kaire HOLTS (*TalTech, EE*)
- **Motivations and Rationality of Apartment Associations in Choosing Deep Energy Renovations without Financial Grants.** Lauri LIHTMAA (*TalTech, EE*)
- **Register-Based Study of Housing Renovations: First Insights.** Anneli KÄHRIK (*UT, EE*)
- **Insights from Housing Renovation from Digitalization Work Group.** Kadi-Riin VENDEL (*TalTech, EE*)

16:00-17:00 OPEN DISCUSSION AND NETWORKING

17:00-18:00 DINNER

18:00-21:00 SOCIAL EVENT

FRIDAY, 9.01.2026

8:00-9:00 BREAKFAST

9:00-10:00 INTRODUCTION OF ENER CER PLANS FOR 2026 (research directions, keynote speeches, organization of conferences/events, etc.)

- **Zero Emission Buildings.** Jarek KURNITSKI (*TalTech, EE*)
- **Energy Efficient, Resilient and Smart Electrification Technologies.** Dmitri VINNIKOV (*TalTech, EE*)
- **Data Driven Control and Modelling.** Juri BELIKOV, Eduard PETLENKOV (*TalTech, EE*)
- **Social and Regional Impacts.** Tiit TAMMARU (*UT, EE*)

10:00-11:15 DEMONSTRATION AND INDUSTRY OUTREACH

- **SecondSpark: Giving Second Life to EV Batteries.** Alexander RINK (*TalTech, EE*)
- **Urban DC Street Lighting Nanogrids.** Andrei BLINOV (*TalTech, EE*)
- **TalTech Residential DC Innovation Hub - The First DC Living Lab in Northern Europe.** Dmitri VINNIKOV (*TalTech, EE*)
- **Patenting and IP: Basics & Beyond.** Andrii CHUB (*TalTech, EE*)

11:15-11:45 BREAK AND HOTEL CHECK-OUT

11:45-13:00 DISCUSSION ON ENER JOINT ACTIVITIES IN 2026. Moderator: Jarek KURNITSKI (*TalTech, EE*)

- **Joint Research Papers**
- **Joint Supervision of PhD Theses**
- **Joint Project Applications**
- **Closing Remarks. Planning of Next Central Events.**

13:00-14:00 FAREWELL LUNCH

Chair: Dmitri Vinnikov
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