

Energia, sistemi produttivi e logistica nei contesti montani

I risultati del progetto iNEST – Spoke 1

21 novembre 2025

8:30 – 17:30

Campus NOI Techpark Bolzano
Facoltà di Ingegneria
Via Bruno Buozzi, 1, 39100 BZ

PLENARY MEETING

8:30 Inaugurazione Poster Session

Interventi dei coordinatori dei Research Topic

9:30 Apertura registrazioni

10:00 Apertura dei lavori

10:10 Saluti istituzionali

10:15 Risultati conseguiti nel Research

Topic RT2 – **Guido Orzes** (unibz)

10:40 Risultati conseguiti nel Research

Topic RT2 – **Marco Baratieri e Giovanni Pernigotto** (unibz)

11:05 Esempi di progetti

- Bando Young Researcher: iMAP – Integrated Monitoring of Alpine Pastures – **Salvatore Raniolo** (UNIPD)
- Bandi a cascata: ITACA – Lighter-than-air Mobile Telecommunications Infrastructure for the Alpine Context – **Gianluca Ristorto** (MAVtech S.r.l.)
- Bandi a cascata: SMart AUTOMATIC CABLEway – **Alberto Valente** (Plumcake S.r.l.)

12:05 Da iNEST ad iNEST2IMPACT: Proposta per il dopo PNRR – **Luca Fabbri** (General Manager del Consorzio iNEST)

Ore 12:25 Conclusioni e presentazione delle sessioni parallele – **Fabrizio Mazzetto** (Coordinatore scientifico dello Spoke 1 del progetto iNEST)

Coffe Break

Spoke Leader

14:00 – 16:30 Programma del pomeriggio su tre sessioni parallele

RT2.A RESILIENCE IN MOUNTAIN AGRIFOOD SYSTEMS

Moderata: **Enrico Sturaro**

Bandi a Cascata: Multi-platform autonomous rover with transport capability and trail-opening functionality in mountainous and forested environments (RBos) - **Luigi Longo**, CLOR srl

Bandi a cascata - Systematic and digital Production Model of Healthy Pistachio to improve the resilience of production Mountain systems (PH-ProMode) – **Anna D'Onghia**, Enbiotech srl

02.01 Mountain Grasslands: A Possible Role in Reducing Enteric Methane Emissions – **Alberto Romanzin** (UNIUD)

02.02 Integrating Economic and Natural Sustainability in the Management of Grassland-Based Ecosystems – **Matteo Gecchelin** (UNIPD)

02.03 Agroecology Indicators (tool) to Favour Agro-ecological Transition of Mountain Farms – **Enrico Sturaro** (UNIPD)

02.04 Evaluation of the Resilience of Extensive Mountain Grasslands: Soil Ecosystem Services and Plant Functional Diversity in a Climate Change Scenario – **Claudio Zaccone** (UNIVR)

02.06 Technological Safety Solutions for Alternative Cropping Systems in Mountain Extensive Agriculture – **Merve Karaka** (unibz)

02.07 Extended Stability Tests for Refining the Stability Model of Farm and Forestry Machines in Rough and Steep Terrains – **Merve Karaka** (unibz)

02.08 Assessing Rolling Resistance of Forest Machines on Steep Terrain Using CAN-BUS Data Under Real-World Operating Conditions – **Stefano Grigolato** (UNIPD)

02.09 Mapping the Carbon and Water Balance of Italian Alpine Forests – **Vincenzo Saponaro** (UNIPD)

Bando YR: Real-Time Monitoring of the Nutritional Value of Alpine Meadows and Pastures Using a Portable NIR Spectrometer – **Alberto Romanzin** (UNIUD)

RT2.B RESILIENCE IN MOUNTAIN INDUSTRY, ARTISANSHIP, DESIGN, AND TOURISM

Moderata: **Guido Orzes**

02.13 Development of a MCDM (Multi-Criteria Decision Making) Platform: The Inest-AMC Platform – **Pasqualina Sacco** (unibz)

02.05 Methods and Tools for Sustainability Assessment, Circular Economy and Multi-Dimensional Assessment – **Mehari Teshome** (unibz)

02.10 Development of Wearable Solutions for Working and Recreational Activity in the Winter Industry Domain – **Ahmed Rasheed** (unibz)

02.11 Development of Sensing Solutions for Environmental Monitoring in the Winter Industry Domain – **Ahmed Rasheed** (unibz)

02.12 Development of Biodegradable and Biocompatible Substrates and Electrodes for Optoelectronic Devices for Mountain Environments – **Franco Cacialli** (unibz)

02.14 Feral Wool – Designing With a Vibrant Matter in Times of Uncertainty – **Secil Ugur Yavuz** (unibz)

02.16 Creation of An Interactive Map with Tourism Information of the Verona's Mountains – **Jessica Deagostini** (UNIVR)

02.17 Analysing the Resilience and Competitiveness of Manufacturing Companies Located In Mountain Regions – **Guido Orzes** (unibz)

Affiliates

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Bando YR: L'uso dei GIS a supporto del rilancio economico delle aree marginali montane – **Jessica De Agostini** (UNIVR)

Bando YR: How Mountain Companies Respond to Disruptions: The Role of Supply Chain Structure – **Margherita Molinaro** (unibz)

Bando YR: WOLB / Woll-E-Lab – Exploring Alternative Possibilities of Local Wool Production through Design, Technology, and Crafts with a More-than-human Approach – **Secil Ugur Yavuz** (unibz)

Bando YR: Ciocca – eco fRriendly Innovation: agave Silk-basEd sUBstrates for next generation Photovoltaic cells and printable electronics (RISE-UP) – **Manuela Ciocca** (unibz)

RT3 – DECENTRALISATION OF MOUNTAIN STRUCTURES AND INFRASTRUCTURES: ENERGY AND LOGISTIC STRATEGIES

Modera: Giovanni Pernigotto

Bandi a Cascata: Drone for Autonomous and Sustainable Transport in Mountainous Areas, **Gaetano Caputo** e **Giovanni Grasso**, G.G.G. spa

Bandi a cascata: Power Resource Optimization with Green Energy Systems, and AI-Based Sustainable Solutions – **Matteo Gerola** (Energenius Srl)

Bandi a Cascata: Impacts study of Innovative Technological Solutions Supporting Decentralization Strategies in the Ecosystem of the Alps (IDEA) – **Giovanni Giannotta** (Piano Green srl)

3A.01 System Modeling of Energy Supply and Demand In Alpine Contexts – **Steffi Misconel** (Eurac Research)

3A.02 – Use of renewable energy sources, sustainable hydropower plants design - **Maurizio Righetti** e **Pranav Dhawan** (unibz)

3A.03 – Bioenergy as a source of complementary dispatchable renewable power in mountain areas - **Stefano Piazza** (unibz)

3A.04 Energy Performance and Renovation of Existing Building Stock in Mountain Areas – **Giovanni Pernigotto** (unibz)

3A.05 Best Practice in Traditional Buildings' Retrofit and Knowledge Gap on Hygrothermal Aspects – **Alexandra Troi** (Eurac Research)

3B.01 Strategies for the Decarbonization of the Logistic Sector in Mountainous Areas – **Wolfram Sparber** (Eurac Research)

3B.02 Development of New Mountain Logistics Strategies and Preliminary Evaluations – **Andrea Roberti** (UNIVR)

3B.03 Exploring Mountain Transport and Logistics Systems Through Literature Review & Patent Analysis and Developing Case Studies of Multi-Criteria Decision-Making – **Mehari Teshome** (unibz)

Bando YR: Study of the Geographical Distribution of Livestock Waste and the Location of Potential Future Biogas Plants in South Tyrol – **Samuele Zilio** (Eurac Research)

Bando YR: Study of the Types of Industry and their Respective Energy Consumption in the Province of South Tyrol and Identification of Decarbonization Possibilities and Integration into Overall Energy Models – **Steffi Misconel** (Eurac Research)

Bando YR: Review of Regional Policies at the European Level in the Field of Decarbonization of Heating Systems in Existing Buildings to Identify Best Practices and Leading regions in this Field – **Edoardo Carangelo** (Eurac Research)

Bando YR: Review of Regional Policies at the European Level in the Field of Energy Renovation of Existing Buildings to Identify Best Practices and Leading Regions in this Field – **Dario Bottino Leone** (Eurac Research)

Bando YR: Decarbonisation and Optimisation of Local Off-Grid Mountain Huts Energy System through Green Hydrogen Technology (DOLOMIGH2T) – **Jacopo Alberizzi** (unibz)

Spoke Leader



Affiliates

