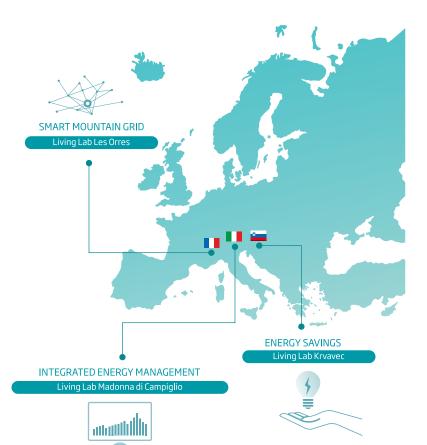
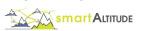
LIVING LABS

A network of 3 ski resorts experimenting innovative solutions for a low-carbon, high-impact and resilient future







Contact coordinator

Yann Bidault MUNICIPALITY OF LES ORRES yann@ybsolution.com

Contact FBK

Diego Viesi viesi@fbk.eu

Contact Trentino Sviluppo Gianni Baldessari

gianni.baldessari@trentinosviluppo.it

PARTNER

Municipality of Les Orres

26

ANMSM

MARKES DES STATIONS DE MONTAGNE

krvavec

Slovenia

ANMSM

France











Austria







Italy





Trentino Sviluppo





Center in Energy and Municipal Researches Switzerland



Steinbeis 2i GmbH

This project is co-financed by the European Regional Development Fund through the Interreg Alpine Space program





LIVING LAB MADONNA DI CAMPIGLIO Integrated Energy Management







The Smart Altitude project aims at developing and implementing new solutions and policies to improve the use of energy in Alpine ski resorts

Smart Altitude results are:



WebGIS: for visualizing renewable energy potential and energy performance



Living labs: for testing clean energy innovation in mountain tourism territories





new strategies

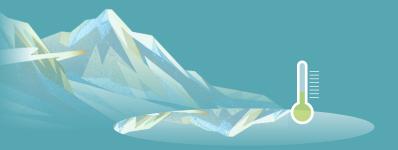


Replication: for transferring knowledge and solutions over the Alpine Space





OUR MISSION ZERO EMISSION



MONITORING LAGO MONTAGNOLI

WHAT IS IT?

• A set of **hi-tech sensors** installed in the artificial lake that feeds the snow production system.

WHAT DOES IT DO?

• **Data gathering** on water temperature at different depths, water surface and weather conditions.

WHY?

 Optimize the artificial snow production process through energy and water savings and heat recovery.



TESTING AN INTEGRATED ENERGY MANAGEMENT SYSTEM



MONITORS







FORESEES

www.ski.it/en/zeroemission2026

Electric grid

Energy consumption from the medium voltage grid

Snow production

Water, compressed air and energy consumption

Lake monitoring

Water temperatures and water surface

Snow grooming

Operational data, Meteorological diesel consumption conditions and and snow-depth weather forecasts

Ski lifts

Energy usage, n° of entrances, photovoltaic integration

Skiers data

Analysis of skier days



INTEGRATED ENERGY MANAGEMENT SYSTEM FOR THE SKI RESORT MADONNA DI CAMPIGLIO

WHAT IS IT?

• A digital platform for the mountain environment and ski infrastructures.

WHAT DOES IT DO?

• **It monitors** plants' operations and the consumption of energy and water.

Generate report, send notifications, make forecasts.

WHY?

• To have an integrated decision support system for eco-sustainable choices.



