

LES ORRES 8 MARCH 2022

Smart
Mountain
for
tomorrow

18th OCOVA FORUM

NOVALTITUDE

Smart Transition
for Alpine Communities



CONTEXT

1

- Climate change is highly impacting the mountain tourism models and economy
- Ski resorts are strong energy consumers and GHG emitters

2

- Highly seasonal tourism impacts all types of infrastructure: energy, water, waste, mobility...
- Most infrastructure is or need to be managed at the resort/valley level

3

Smart digital technologies (IoT, LPWAN and mobile networks, supervision platforms), can be successfully deployed in mountain tourism areas for supervising a wide range of ecological fields

4

Shared digital platforms for energy and multiple ecological fields management by local communities offer a path to better territorial ecological transition, appropriation by the population, and integration with Regional policies

ALPINE SPACE CALL

Priority 1

Climate resilient and green Alpine region

OBJECTIVE

Promoting climate change adaptation and disaster risk prevention, and resilience

OBJECTIVE

Enhancing protection and preservation of nature, biodiversity and green infrastructure

Priority 2

Climate resilient and green Alpine region

OBJECTIVE

Promoting energy efficiency and reducing greenhouse gas emissions

OBJECTIVE

Promoting the transition to a circular and resource efficient economy

Priority 3

Innovation and digitalisation supporting a green Alpine region

OBJECTIVE

Developing and enhancing research and innovation capacities and the uptake of advanced technologies

OBJECTIVE

Reaping the benefits of digitalisation for citizens, companies, research organisations and public authorities

Priority 4

Cooperatively managed and developed Alpine region

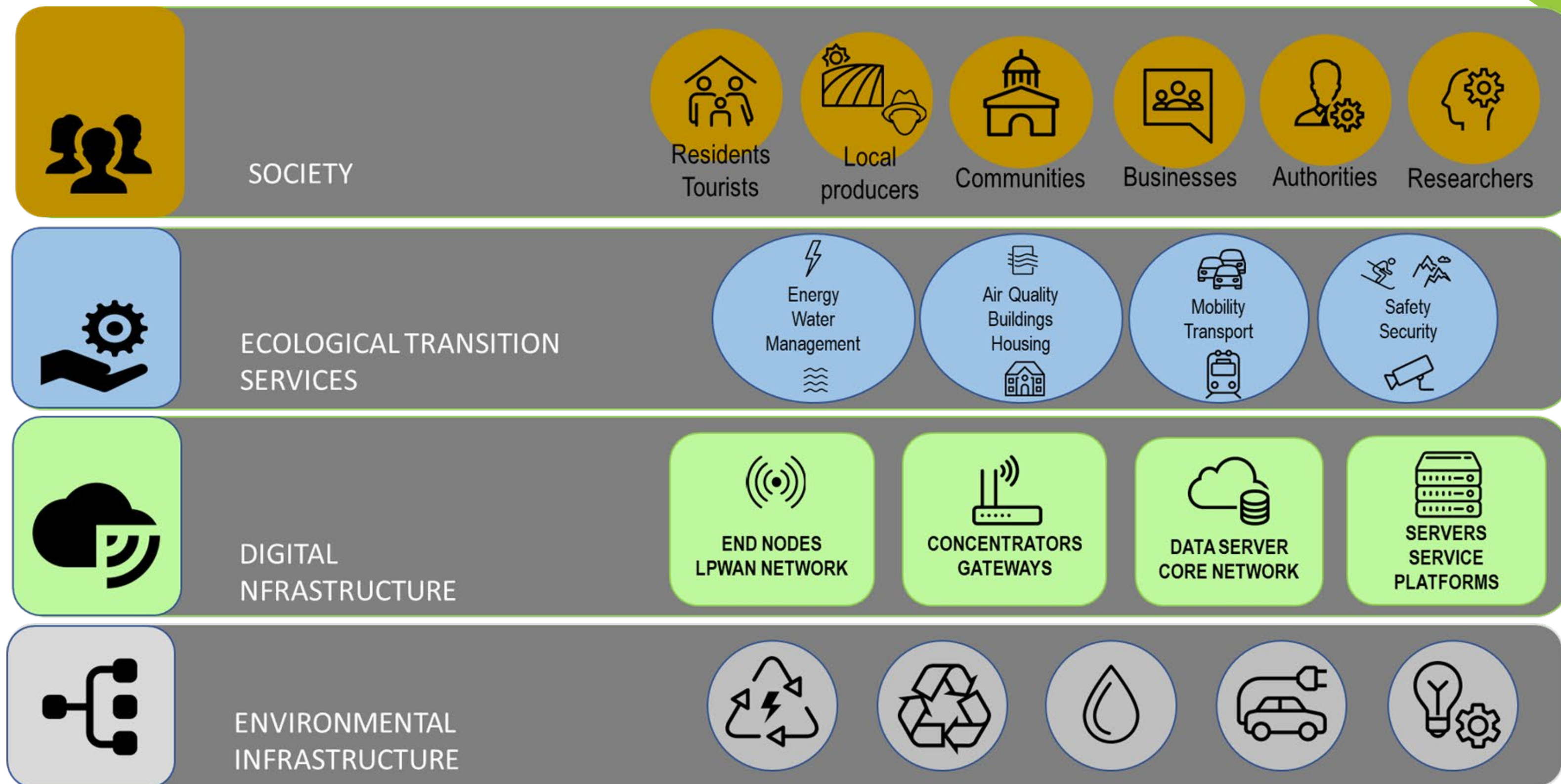
ACTION

Enhance institutional capacity of public authorities and stakeholders to implement macro-regional strategies and sea-basin strategies, as well as other territorial strategies.

OBJECTIVES

1. Assess the potential of smart technologies to facilitate the ecological transition in local communities in mountain tourism areas
2. Develop and implement in pilot territories (living labs) cross-sector digital service platforms, connecting energy and other fields of interest in a holistic digital transformation approach in order to develop mountain transition communities
3. Set up solutions for data transfer between local communities and regional authorities for a better integration of ecological transition territorial policies
4. Liaise with EUSALP / Alpine Space initiatives and contribute to the emergence of innovative solutions for the tourism transition and their replication at the Alpine Space level
5. Promote an active role for citizens as prosumers and active participants of the ecological transition

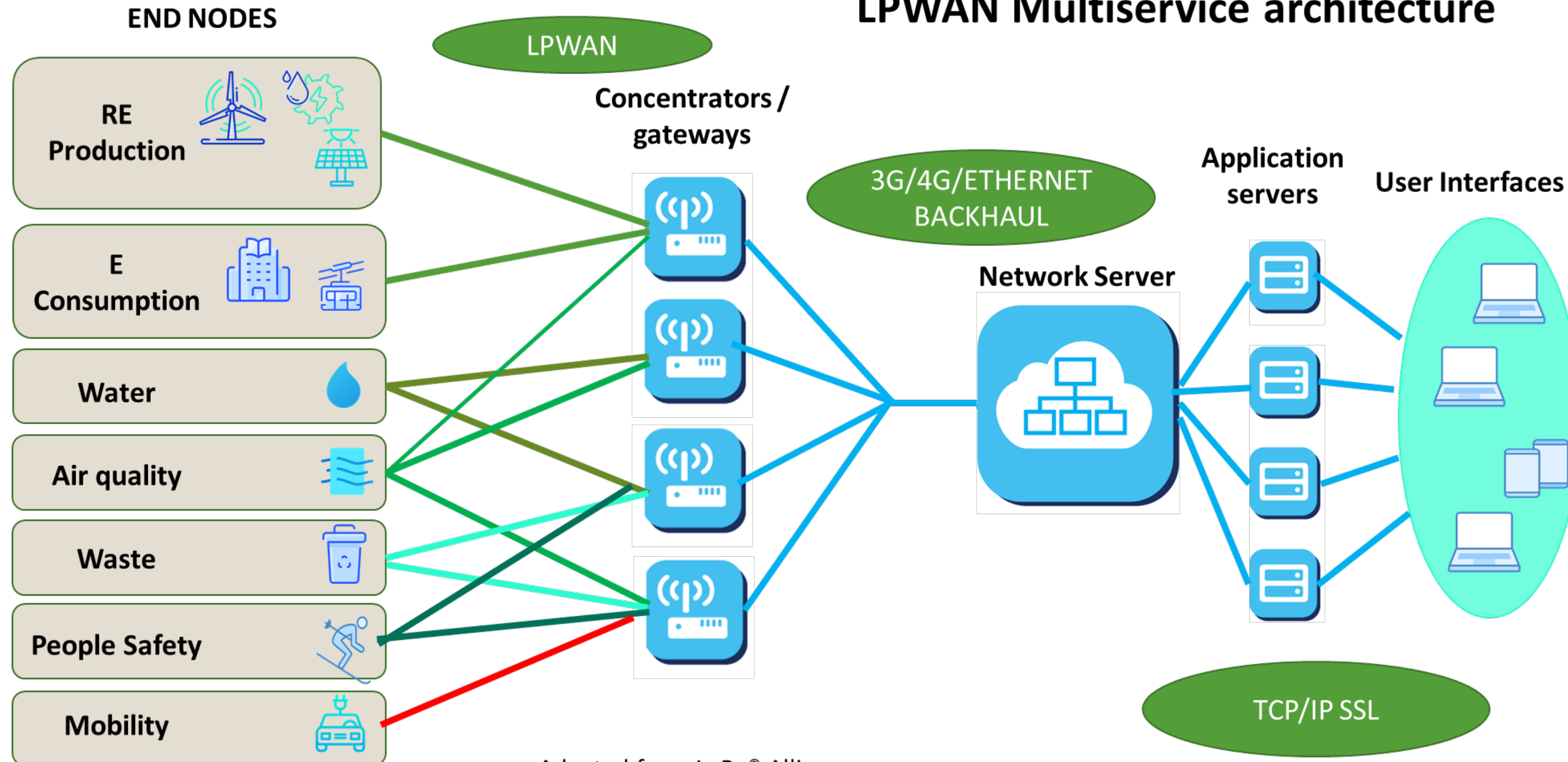
SMART TRANSITION



Adapted from Digital Villages Germany – Working document / European Network for Rural Development

SMART ARCHITECTURE

LPWAN Multiservice architecture



Adapted from LoRa® Alliance

PROJECT AXES

Evaluating
Modelling

1. Studying the characteristics of the territories for energy production and consumption in relation to the tourism sector and analysing the specific reference standards (where existing) for the governance of energy communities (eg. historical energy and ecological transition consortia)
2. Assessing the potential of smart technologies to facilitate the ecological transition in local communities in mountain tourism areas
3. Analysing links of the energy sector with other relevant sectors in resort/valley environment, tourist presence, mobility, operational needs, territorial needs, with the aim of developing cross-sector digital service platforms
4. Designing a toolbox (process + models + roadmap)

Testing

Applying in 5 pilot areas the main components of the project: improving energy audit system developed in Smart Altitude to include multiple stakeholders of local communities and additional supervision relevant fields (public lighting, housing, public building heating, air quality control, mobility, water and waste management, depending on each pilot specificities and priorities)

Enrolling
Replicating

1. Pursuing and expanding the Replication process engaged in Smart Altitude and building upon the AlpGov 2 mass replication process
2. Liaising with other EUSALP and Alpine Space initiatives and projects to facilitate the emergence of common approaches of the replication process
3. Building up recommendations to facilitate the implementation of Ecological transition in tourism intensive mountain territories

A STRONG PARTNERSHIP

No	COUNTRY	PILOT TERRITORY	ACRONYM	CATEGORY	ASSIGNT	STATUS
1	FR	Les Orres Municipality	Les Orres	Municipality	LP	Public
2	FR	Community of municipalities of Serre-Ponçon	CCSP	Community of municipalities	PP	Public
3	FR	Syndicate of Energy of the Hautes-Alpes	SyME05	Inter-municipal Syndicate	PP	Public
4	IT	University of Milano -- UNIMONT	UMIL	Higher education & Research	PP	Public
5	IT	Fondazione Bruno Kessler	FBK	Higher education & Research	PP	Public
6	IT	Lombardy Region	Lombardy	Regional authority	PP	Public
7	AU	Austrian Academy of Science / IGF	ÖAW/IGF	Higher education & Research	PP	Public
8	AU	Austrian Institute of Technology	AIT	Higher education & Research	PP	Public
9	AU	Ecoplus Alpin GmbH	ECOPLUS	Consultancy & Innovation agency	PP	Private
10	CH	Centre for Energy & Municipal Research	CREM	Higher education & Research	PP	Public
11	SI	RRA-Podravje Maribor	RRAPM	Development Agency	PP	Public
12	DE	Bad Hindelang/BAUM	Bad Hindelang	Municipality	PP	Public

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MERCI POUR VOTRE ATTENTION
THANK YOU FOR YOUR ATTENTION

