Interreg Co-funded by the European Union
Alpine Space

SmartCommUnity

SmartCommUnity Project

REPORT | SMART TRANSITION ACTIVITIES AND MEETINGS IN TEST AREAS

The INTERREG Alpine Space SmartCommUnity project | APRIL 2025

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Regionalverband Südlicher Oberrhein
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Introduction

1.1 Overview of the SmartCommUnity Project

The SmartCommUnity project, officially titled "Creating a Functional Transnational Community Towards Smart Transition in the Alps," is a collaborative initiative designed to support Alpine rural areas in fully leveraging the benefits of digitalization. The project aims to foster smart transitions and create a functional transnational community within the Alps, aligning with the objectives of the EUSALP Action Group 5 Smart Alps Network. Supported by the Interreg Alpine Space Programme 2021-2027, the project operates over a dynamic 3-year period. Its structure is organized into three key working packages: EUSALP Uptake and Policy Integration (WPEU), Test Activities and Networking for SmartCommUnity (WPTAN), and Innovation Tools for SmartCommUnity (WPIT).

1.2. Context of Smart Transitions in Alpine Areas

Alpine rural areas face unique challenges and opportunities in the context of digitalization. These regions often grapple with issues such as limited infrastructure, dispersed populations, and a reliance on traditional industries. However, digitalization offers the potential to overcome these challenges by improving connectivity, enhancing access to services, and fostering innovation in sectors such as tourism, agriculture, and renewable energy. The SmartCommUnity project recognizes the need to tailor digital solutions to the specific needs and contexts of Alpine communities, ensuring that these transitions are inclusive, sustainable, and community-driven.

1.3. Role of Working Package: Test Areas and Networking (WPTAN)

The Test Activities and Networking for SmartCommUnity (WPTAN) working package is central to the SmartCommUnity project's mission. WPTAN focuses on fostering smart community-led transitions in selected Test Areas (TAs) across the Alpine region. Its primary objectives include implementing actions across the six smartness dimensions, creating national and regional networks between more advanced (lighthouse test areas – LTAs) and less advanced (follower test areas – FTAs) TAs in each country, and facilitating capacity building, community exchanges of best practices, and mobilization of community energies. Key activities within WPTAN include implementing smart transition initiatives, creating an interactive catalogue of smartness actions, developing a user-oriented community tool, facilitating the merging of national/regional networks

into AG5 Smart Alps, and organizing a final project conference to showcase project results.

1.4. Purpose and Scope of the Deliverable

This deliverable aims to report on the progress and outcomes of the WPTAN working package until Period 5 of the SmartCommUnity project. It focuses on documenting the smart transition activities implemented by project partners in their respective test areas, as well as the meetings and exchanges that have taken place between LTAs and FTAs. The deliverable highlights key themes such as local-driven smart transition, community-driven changes, and regional/international links, providing a comprehensive overview of the project's impact on the Alpine region.

Objectives of the Deliverable

This deliverable aims to:

- Present the results of smart transition activities implemented by each project partner.
- Document the lessons learned from these activities.
- Report on the meetings between LTAs and FTAs, highlighting key discussions and outcomes.
- Showcase examples of local-driven and community-driven changes.
- Outline the regional and international links fostered through the project.

Methodology

3.1 Data Collection Approach

Data for this deliverable was collected from each project partner using a standardized template designed to capture key information about their smart transition activities and meetings between LTAs and FTAs. The template included sections for describing the activity or meeting, specifying the date of implementation, listing key outcomes, documenting lessons learned, describing local-driven changes, and outlining regional and international links. Partners were instructed to provide detailed and specific information, including measurable indicators where available.

3.2. Structure of Partner Contributions

Each partner's contribution to this deliverable is organized into two main sections:

- **Section 1: Smart Transition Activities:** This section provides detailed information about the smart transition activities implemented by the partner in their respective test area. It includes a description of the activity, its objectives, target audience, date of implementation, key outcomes, lessons learned, local-driven changes, and regional/international links.
- **Section 2: Meetings Between LTAs and FTAs:** This section reports on the meetings and exchanges that have taken place between lighthouse test areas (LTAs) and follower test areas (FTAs). It includes information about the meeting title, date, participants, purpose, key discussions, outcomes, and next steps.

This structure ensures that all relevant information is captured in a consistent and comparable format, facilitating analysis and synthesis of the project's overall impact.

Reports on Smart Transition Activities by Partner

4.1. Energy and Environment Agency Lower Austria (Austria)

Activity Title: Exhibition Climate & Me

Test Area: KLAR! Regions of Lower Austria

Smartness Dimension: Smart People, Smart Environment, Smart Living

Description of Activity: The KLAR! regions in Lower Austria focus on comprehensive climate protection measures at the municipal level. Each test area, consisting of several municipalities, is managed by a regional manager with strong political connections. The primary aim is to implement climate adaptation measures, including ecological connectivity and public awareness initiatives regarding heat waves, heavy rainfall, water supply assurance, and forest climate resilience.

To support these efforts, the traveling exhibition "Climate & Me" was developed. Utilizing colorful roll-ups, the exhibition explains the climate crisis, its causes, consequences, and individual actions for climate protection and adaptation. It covers six thematic areas:

- Travel & Mobility
- Electricity & Energy

- Building & Living
- Waste & Recyclables
- Food & Drink
- Consumption & Lifestyle

The exhibition empowers visitors with actionable insights to positively impact the environment.

Date of Implementation:

- The exhibition was printed in April 2023 and is available for about one month at each location. Media promotion and stakeholder collaboration accompany each exhibition opening.

Exhibition Locations:

- 03.04. – 28.04.2023: Pedestrian Zone Amtsgasse, Hollabrunn
- 02.05. – 31.05.2023: Museum Niedersulz
- 02.06. – 30.06.2023: Museum Piz1000, Pitten
- 09.09. – 30.09.2023: Beach resort area Litschau
- 02.10. – 15.10.2023: Town Hall Korneuburg
- 16.10. – 05.11.2023: Banquet Hall Bisamberg
- 16.11. – 20.11.2023: Middle School Harmannsdorf
- 21.11. – 22.12.2023: Middle School Langenzersdorf
- 08.01. – 26.01.2024: Municipality Großrußbach
- 19.02. – 22.03.2024: Middle School Hollabrunn
- 04.04. – 30.04.2024: Local History Museum Elzach, Germany
- 12.04. – 28.05.2024: Monastery St. Anna, Nature Park Wüste
- 29.05. – 07.07.2024: Village Museum Roiten
- 11.09. – 09.10.2024: City Center Amstetten
- 10.10. – 11.10.2024: Youth and Career Information Fair, Schwechat
- 21.10. – 15.11.2024: Federal Secondary School Wieselburg
- 13.11. – 15.11.2024: 9th EUSALP Annual Forum and AG9-Meeting, Slovenia
- 16.11. – 31.01.2025: Anninger Hall, Hinterbrühl
- 03.03. – 31.03.2025: Municipality Poysdorf

Key Outcomes: The exhibition has effectively raised public awareness about climate issues, engaging diverse audiences of all ages. The roll-up design allows it to adapt flexibly to different spaces, ensuring its message reaches broad demographics. It has been displayed at numerous sites, fostering engagement and dialogue.

Lessons Learned: Key insights include:

- Flexibility in exhibition format allows for diverse locations.
- Collaborating with local stakeholders attracts varied audiences.
- Expanding availability to English could increase international reach.

Local-Driven Changes: The exhibition has heightened community awareness of climate issues, prompting discussions around sustainable practices. Local stakeholders have engaged more actively in eco-friendly initiatives, using the exhibition as a catalyst for further community engagement.

Regional and International Links: The exhibition reached multiple communities, including presentation in Elzach, Germany, and participation at the 9th EUSALP Annual Forum, introducing its message to regional and international stakeholders.

Activity Title: Workshop „Village of the Future“

Description of Activity: The "Village of the Future" workshop aims to improve life in rural areas and villages through smart climate adaptation and protection. The workshop is divided into two parts:

1. **Interactive Presentation:** Experts provide insights into the vision of a sustainable and climate-resilient village, showcasing how climate protection, digitalization, and energy transition can enhance quality of life in rural communities. Key topics addressed include mobility, energy, and the design of climate-friendly living spaces, highlighting concrete smart measures that can be implemented today.
2. **Creative Application:** Participants utilize real maps of their municipalities and a DIY set to collaboratively design their vision of the "Village of the Future." They are encouraged to add elements such as:
    - Local shops
    - Mobility hubs
    - Bike paths
    - Flower meadows
    - Climate-friendly buildings
    - Photovoltaic systems
    - E-charging stations
    - Smart digital street lighting

This hands-on activity allows participants to envision and create practical solutions for a more sustainable and livable community.
To support the workshop, six thematic sticker sheets covering smart mobility, sustainable energy, and regional development were developed, totaling over 50 stickers. A 45-page brochure was created, showcasing regional best practices and offering inspiration for local action. Customized maps in A1 format are prepared for each participating region, and all presentation materials and activities are tailored to the specific regional conditions to ensure relevance and engagement.

Date of Implementation: The "Village of the Future" workshop was initially designed as part of the SmartVillages project (April 2018 – April 2021) and has since been revised

under the SmartCommUnity project. The enhanced workshop concept has been offered again since 2023, with 30 municipalities having participated. Workshop dates include:

- 17.12.2023: Pottendorf (KLAR! Ebreichsdorf) with 10 municipalities
- 27.04.2024: Kirchberg am Wagram (KLAR! Wagram)
- 21.08.2024: Region Manhartsberg with 9 municipalities
- 22.10.2024: Bisamberg (KLAR! 10vorWien) with 10 municipalities

Key Outcomes: The workshop provides valuable insights into which climate-friendly measures have already been implemented and what additional measures could be introduced. The maps and stickers are effective tools for visualizing current status and envisioned future, fostering discussions and collaboration among participants. The created maps are useful for further planning and can be displayed publicly to maintain community engagement. The impact of the workshop is influenced by the diversity of participants, including community representatives and the general public, which allows for a wider range of perspectives in shaping the village's future.

Lessons Learned: The workshop has revealed essential insights into community engagement with climate adaptation and protection through hands-on activities. Key takeaways include:

- The importance of visual tools, like maps and stickers, in making complex concepts accessible and engaging.
- Value in involving both local representatives and the general public to ensure the solutions are relevant to community needs.
- The necessity for better outreach and promotion to encourage diverse participation, alongside incorporating regional examples of successful initiatives to inspire participants further.

Local-Driven Changes: The workshop has stimulated new ideas within test regions, encouraging communities to actively plan for climate adaptation and sustainability. Ideas are developed in collaboration with regional managers and local stakeholders, ensuring that workshop visions translate into actionable plans. Involvement of both regional managers and local stakeholders has strengthened community ties and supported long-term, locally driven changes, integrating ideas into future development plans and elevating climate resilience as a priority for regional growth.

Regional and International Links: The project is included in the EUSALP Work Plan 2023 – 2025, enhancing collaboration between Action Group 9 (Energy) and Action Group 5 (Connectivity). This partnership facilitates the capitalization and dissemination of project results, joint project proposals in cross-border initiatives, and showcases best practices, including the workshop "Village of the Future."

4.2. Innovation Technology Cluster Murska Sobota (Slovenia)

Activity Title: Green Point Living Lab for Short Food Supply Chain

Test Area: Green Point Living Lab

Smartness Dimension: Smart Economy

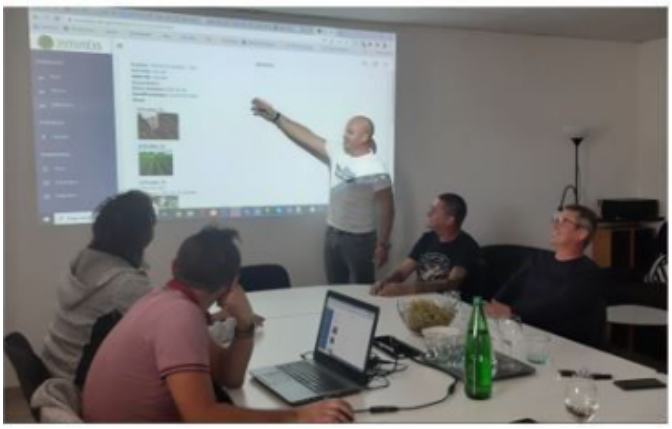
Description of Activity: The Green Point Living Lab focuses on enhancing short food supply chains through innovative and sustainable practices. Its objectives include:

- Promoting local agricultural products
- Reducing food waste
- Fostering community engagement

The target audience encompasses local farmers, students, SMEs, and consumers interested in sustainable food practices.

Date of Implementation: October 2023 – January 2025

Key Outcomes: A significant outcome of the Living Lab has been the successful launch of the "Hudo Zeleno" product line, which uses surplus fruits and vegetables to create innovative food products meeting consumer demand. The Living Lab has also participated in major trade fairs, such as FRUIT LOGISTICA in Berlin, raising awareness of sustainable practices among consumers and stakeholders. By integrating 30 farmers into the DIH AGRIFOOD Data Space (DADS), Green Point has established itself as a vital data provider in the network.



Lessons Learned: Key insights from these activities include:

- The importance of community engagement and stakeholder involvement in developing innovative agri-food solutions.

- A systematic approach to data collection on farmers' needs is essential before implementing digitization strategies.
- Collaboration among local and regional entities enhances resource sharing and builds community capacity.

Local-Driven Changes: These activities have sparked notable local-driven changes, including increased consumer awareness of sustainable food practices and higher community engagement in workshops and product testing. Furthermore, the Green Point Living Lab has formed regional and international links through partnerships with universities and collaborative projects such as dRural, BIO-Boost, and Food4CE, broadening its network and enhancing knowledge exchange with global stakeholders in the agri-food sector.

Regional and International Links: The Green Point Living Lab has established extensive regional and international connections through strategic partnerships and participation in significant events. Collaborations with universities and projects such as dRural and BIO-Boost have promoted innovative agri-food practices. Participation in Slovenia's largest International Fair of Agriculture and Food, AGRA 2023, garnered a Certificate of Appreciation for contributions to inspiring stories and informative content on the Common Agricultural Policy 2023-2027. Additionally, recognition as winners at the 8th Agrobiznis Hi-tech Conference for adopting cutting-edge technologies further underscores its impact. Engagement at the DIH AGRIFOOD Meet-up in December 2023 and participation at the prestigious FRUIT LOGISTICA fair in Berlin in February 2024 have facilitated valuable connections with global players in the agri-food sector, enhancing knowledge exchange and best practice sharing.

4.3. Autonomous Region of Valle d'Aosta (Italy)

Activity Title: Creation of Immersive VR Videos for Exhibition/Museum Areas

Test Area: Gran Paradiso

Smartness Dimension: Smart Living, Smart People

Description of Activity: This activity has the following objectives:

- Create new VR content for the Gran Paradiso area for use in various cultural sites (e.g., visitor centers, museums, castles, events) with light implementations that diversify existing content.
- Develop a new immersive installation for the Mont Avic area.
- Establish coordinated communication for both areas to promote them as “smart” entities.

Target Audience: The activity targets local residents, tourists, media, stakeholders, and 'SmartCommUnity' partners, including children, young people, adults, and the elderly who are interested in sports, outdoor activities, culture, and nature.

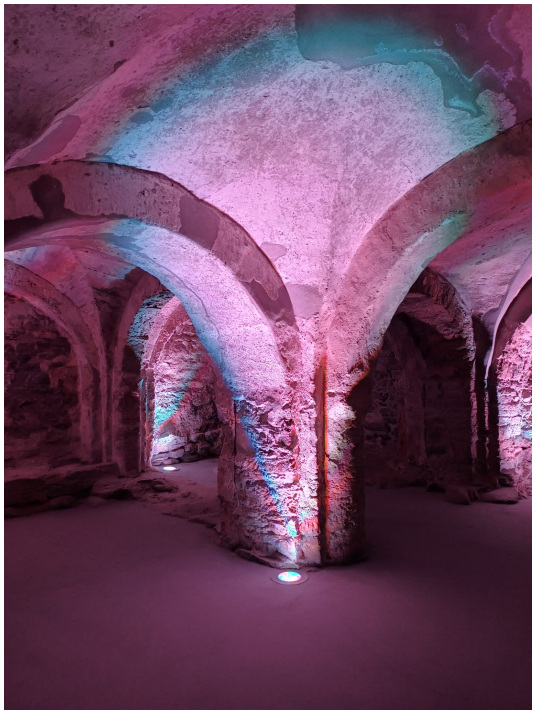
Activities in the Mont Avic Area:

- Filming Day (29 October 2024): After confirming weather conditions, a day of filming was organized. Attendees included Luisa Vuillermoz (director of Fondation Grand Paradis), who participated as a visitor, Davide D'Acunto (environmental guide), and Céline Merlet (user perspective with a GoPro 360° camera).

- Filming began at the Covarey visitor center, where Davide introduced the excursion context. Following this, the group hiked to the Magazzino locality (1,450 m asl) and through the hooked pine forest, observing natural peculiarities.
- The group continued to Lake Servaz, focusing on aquatic environments, and then explored alpine meadows near the Barbustel Refuge, before ending at Col du Lac Blanc (2,300 m) to capture drone footage mimicking an eagle's flight.
- After filming, the team recorded the voice-over for the video. Additional images were provided by Director Stellin, including shots of local wildlife like the woodpecker and tree frog.
- On 20 January 2025, the first draft of the video was presented to Carlo Vigna and Alessio Pastorino from the Autonomous Region of Valle d'Aosta. The project is in the finishing phase, with completion expected soon.

Activities in the Gran Paradiso Area:

- A filming project was conducted at cultural sites managed by Fondation Grand Paradis, including the Church of Saint-Léger in Aymavilles, Châtel-Argent in Villeneuve, and Introd Castle, providing a historical journey through the valley floor.
- Preliminary editing commenced in January 2025, incorporating additional footage. A second voice-over version is planned for February 2025.



Date of Implementation: September 2024 – April 2025

- Conceptualization meetings (September 2024)
- Shooting at cultural sites (September 2024)

- Shooting at natural sites (October 2024)
- Development meetings (October 2024 – January 2025)
- Video editing and voiceover (January – February 2025)
- Communication meetings (February – March 2025)
- Presentation of results and feedback collection (March – April 2025)

Key Outcomes:

- 1 video produced for the Mont Avic area
- 1 video produced for the Gran Paradiso area
- 1 joint communication platform to be implemented

Lessons Learned: Key insights include:

- The necessity for precise planning in content selection, shooting logistics, and post-production coordination.
- The inclusion of both male and female narrators enhanced the accessibility and appeal of the videos.
- Streamlining content sharing and review processes could expedite post-production.

Local-Driven Changes: The initiative has strengthened connections between local communities and cultural heritage, enhancing accessibility in the Gran Paradiso and Mont Avic areas through immersive storytelling. It has encouraged collaboration among park management and guides, fostering an interactive experience of nature and history. Additionally, there is growing interest among local stakeholders in adopting digital tools for tourism enhancement, thereby reinforcing the role of technology in preserving regional identity.

Regional and International Links: This activity fosters collaboration between Fondation Grand Paradis and regional authorities. The production of VR content and its application in museums and visitor centers serves as a model for other protected areas and cultural sites, creating potential for knowledge-sharing and partnerships with other regions and international organizations interested in similar digital transformation projects.

4.4. Anci Liguria (Italy)

Activity Title: SMART LAB (job orientation through gamification)

Test Area: Comune di Cogorno

Smartness Dimension: Smart People

Description of Activity: The SMART LAB activity aims to establish a system for orienting students towards technical professions related to environmental sustainability, leveraging digital tools and gamification. The objectives of the activity include:

- Supporting the choice of educational pathways
- Preventing early school leaving
- Developing transversal skills
- Increasing knowledge of the labor market
- Creating a “tailor-made” educational pathway

The project entails co-creating immersive environments through virtual and augmented reality, along with recreational-educational experiences designed to engage and support third-year secondary school students in choosing appropriate school and career paths.

Beneficiaries:

- Direct Beneficiaries: Second-year secondary school students who will explore technical professions related to the environment through innovative technologies, from orientation gaming to augmented reality recreations of work environments.
- Indirect Beneficiaries: Families of the students and community citizens, who will see an increased focus on environmental sustainability for future generations.

Date of Implementation: November 2023 – May 2025

Key Outcomes: The workshop aims to create an inclusive and accessible space characterized by dynamic environments that facilitate cooperation and socialization. Key features include:

- Cooperative learning zone

- Coding zone
- Immersive environment zone
- Simulations and augmented reality experiences related to technical professions
- A web app accessible on common devices (PCs and tablets) with a customizable questionnaire developed in collaboration with the University of Genoa. This web app allows tutors to access a dashboard for analyzing individual student results, while students can complete the questionnaire without logging in. Answers will be summarized for analysis by responsible tutors.
- Two videos highlighting the relationship between elements of energy sustainability (sun, water, wood) and related professions, showcasing the training needed to achieve those professional objectives.

Lessons Learned: Currently, there are no lessons learned since the implementation is still ongoing in April and May 2025, with 60 pupils expected to test the instrument across three different schools. Post-implementation, evaluations will focus on both qualitative and quantitative aspects, particularly:

- Enhancement of environmental awareness
- Self-awareness through innovative orientation
- Peer education impact on students

Local-Driven Changes: The activities conducted in the test area mark the beginning of an experimental phase utilizing innovative approaches. This initiative represents a significant step forward and serves as a foundation for future developments. By integrating innovative digital solutions, the project aims to narrow the technology gap in rural areas, fostering connectivity, efficiency, and sustainable growth. Ultimately, it contributes to broader digital transitions that empower local communities to evolve into smart regions.

Regional and International Links: A connection has been established with the National Inland Area Strategy, with Val Fontanabuona identified as a new inland area coinciding with the FTA. The proposed orientation activities emerged as a key need from grassroots discussions for the Strategy.

4.5. Standortagentur Tirol SAT (Austria)

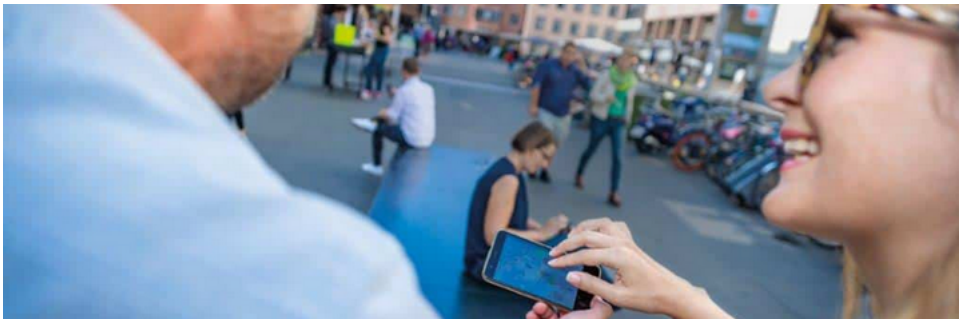
Activity Title: Deployment of LoRaWAN Sensors and Development of a Requirement Catalog for a Future Municipal Service Platform

Test Area: Lienzer Talboden

Smartness Dimension: Smart Governance, Smart Environment

Description of Activity: Within the SmartCommUnity project, LoRaWAN sensors were installed across 15 municipalities in the Lienzer Talboden test region. These sensors facilitate real-time environmental and infrastructure monitoring, with data securely integrated into datahub.tirol and the municipal server of Amlach. Additionally, the project supports the development of a comprehensive requirement catalog for a future municipal service platform in collaboration with empatic. Although the implementation of this platform is not part of the SmartCommUnity project, workshops systematically collected functional requirements, interoperability needs, and governance structures to ensure the feasibility and scalability of such a system.

Workshops employed Design Thinking and Value-Based Engineering (VBE) methodologies, ensuring that digital services align with municipal needs and broader societal values. Documentation adheres to ISO 25000/25001 standards to guarantee system quality and data security.



Date of Implementation:

- LoRaWAN sensor deployment: Ongoing since 2024.
- Workshops for requirement catalog development: November 2024 – March 2025.

Key Outcomes:

- LoRaWAN sensor network deployed across 15 municipalities, enabling real-time environmental and infrastructure monitoring.

- Secure data integration into datahub.tirol and the municipal server of Amlach, ensuring structured data flow management.
- Conceptual framework and functional requirement catalog for a future smart municipal platform developed with empatic.
- Standardization of API structures and data interoperability protocols, ensuring integration across municipal IT systems.

Lessons Learned: Key insights from the project include:

- **Data sovereignty is critical:** Municipalities must retain control over their data assets, ensuring compliance with GDPR and regional data protection standards.
- **Interoperability is essential:** Standardized data formats (MQTT, JSON, CSV) and open APIs facilitate seamless integration and cross-regional collaboration.
- **Incremental system development allows for scalability:** A modular approach ensures the gradual introduction of digital services without overwhelming municipal resources.
- **Value-Based Engineering (VBE) improves acceptance:** Aligning technological advancements with social, economic, and environmental values ensures sustainable adoption and long-term usability.

Local-Driven Changes: Municipalities have gained first-hand experience in handling sensor-based data collection and smart city infrastructure, with training and knowledge transfer for municipal IT teams preparing them for future digital service expansion.

Regional and International Links:

- Strengthened regional collaboration through datahub.tirol, serving as a centralized data exchange hub.
- Exchange of best practices with regional and international partners (e.g., Achensee tourism) regarding data governance, interoperability, and smart municipal services.

4.6. Association for the networked development of territories and services (France)

Activity Title: Support for the Development of a Mobility Center

Test Area: Communauté des Communes des Baronnies en Drôme Provençale (LTA)

Smartness dimension: Smart mobility, Smart Governance, Smart Economy, Smart Living

Description of the activity: The goal of the Mobility Center is to establish a hub that consolidates all information about mobility facilities in the area and provides public access. Our role has been to support stakeholders in mobilizing partners to prototype the service and its functionalities. Additionally, a feasibility study for a car-sharing service covering part of the area complements the Mobility Center. Currently, we are working on a "Mobility Tour" (summer 2025) with local authorities to gather missing data for the Mobility Center, including unreferenced data like WhatsApp car-sharing groups.

Date of Implementation: September 2023 – Summer 2025

Key Outcomes:

- 5 workshops to design the prototype of a Mobility Center
- 1 feasibility study on the development of a car-sharing service
- 1 Mobility Tour (upcoming)

Activity Title: Organisation of Breakfasts for SMEs on the Housing Issue

Test Area: Communauté des Communes des Baronnies en Drôme Provençale (LTA)

Smartness dimension: Smart mobility, Smart Governance, Smart Economy, Smart Living.

Description of Activity: The test area aims to enhance the attractiveness of the region and address recruitment challenges due to a lack of available housing. We developed a format for informational breakfasts aimed at businesses and SMEs, sharing information on different types of aid and available measures while discussing best practices. Two meetings have been organized, with three more scheduled for April.

Date of Implementation: April 2024 – April 2025

Key Outcomes:

- 15 businesses reached
- 3 breakfasts planned in April

Activity Title: Support in the Development of an Interactive Guide to Collect Data on Local Health Services

Test Area: Communauté des Communes des Baronnies en Drôme Provençale (LTA)

Smartness dimension: Smart mobility, Smart Governance, Smart Economy, Smart Living

Description of Activity: The LTA seeks to create an interactive guide for local residents, listing available health services to better inform them. ADRETS is assisting the pilot area in designing the tool, its technical specifications, and ensuring accessibility.

Date of Implementation: January 2025 – Summer 2025

Key Outcomes: A guide compiling information on health services (upcoming).

Lessons Learned: We observed that compared to the initial ambition of having a functional Mobility Center by the end of the project, decision-making within the public authority has slowed progress, and the hub may not be operational by 2025. Our support has proven beneficial in networking stakeholders in this broad area, assisting with projects and meetings, and providing methodologies for developing new services.

Local-Driven Changes: The most significant change has been in networking and cooperation among public institutions and stakeholders in the fields of housing and mobility. Another major change is the increased inclusion of citizens in developing new services and improving public information.

Regional and International Links:

- Opportunities for exchange with the FTA through a study visit organized in September 2024.

- Participation in a network of territories engaged in transitions to share best practices.
- Membership in the Smartalps network, with plans to host a study visit in March 2025.

Activity Title: Develop Awareness of Residents and Second Home Residents on the Housing Issue

Test Area: Communauté des communes de Guillestrois et du Quyears (FTA)

Smartness dimension: smart governance, smart economy, smart living

Description of Activity: One of the FTA's major challenges is addressing the high number of unoccupied second residences and the difficulty in finding accommodation to attract new residents. ADRETS coordinated efforts among stakeholders and housing organizations to engage landlords and organize touring workshops aimed at motivating them to rent out their homes, sharing best practices and innovative housing solutions (e.g., tiny houses, intermediary renting). This also includes preparing for a “Housing Forum” this summer, gathering professionals in the housing sector, stakeholders from the FTA, and local residents.

Date of Implementation: May 2023 – Summer 2025

Key Outcomes:

- 3 workshops to gather professionals and design touring workshops
- 4 workshops with local residents (1 scheduled for April)
- 1 “Housing Forum” (Summer 2025)

Activity Title: Develop a Network of Professionals Working with People in Very Vulnerable Situations

Test Area: Communauté des communes de Guillestrois et du Quyears (FTA)

Smartness dimension: smart governance, smart economy, smart living

Description of Activity: This initiative addresses the challenge of providing support and care for the most vulnerable individuals in the area, including homeless people, those struggling with addictions, and young dropouts. The activity involves creating a network of partners and a digital networking tool to facilitate exchanges among professionals who are not accustomed to collaborative, non-sector-based working habits.

Date of Implementation: October 2023 - April 2025

Key Outcomes:

- Five workshops conducted to develop the network of professionals.
- One interactive tool to enhance exchanges in the test area (ongoing).

Lessons Learned: Similar to the experiences shared by the LTA, we found that our support has been valuable for networking among participants who are not used to collaborating. Despite the smaller size of this test area compared to the LTA, our assistance primarily revolves around project management methodologies.

Local-Driven Changes: The most significant changes include improved networking and collaboration between public institutions and stakeholders in housing and care. Additionally, there has been increased engagement of citizens in developing new services and enhancing public information.

Regional and International Links: Our FTA benefits from opportunities to exchange knowledge and experiences with the LTA through a study visit organized for September 2024. It is also part of a network of territories focused on sharing best practices during their transitions. Furthermore, the FTA is a member of the Smartalps network and will participate in the network's study visit in March 2025.

4.7. Regionalverband Südlicher Oberrhein (Germany)

Activity Title: Digital Forest Nature Trail for Children

Test Area: Winden im Elztal

Smartness Dimension: Smart People

Description of Activity: The goal is to implement a digital forest nature trail that educates children (and adults) about the surrounding nature. To enhance the experience, QR codes are integrated into the design of the signs, allowing for audio and video information. During the conception phase, various stakeholders are involved, including:

- Target Audience: To understand their interests in learning about the forest.
- Teachers: To ensure the information presented is child-friendly.
- Local Ranger: To provide knowledge about the forest.
- Local Businesswoman: Who runs an educational garden nearby, with exceptional knowledge of local nature and community connections.
- Municipality: To assist with trail setup and connections to forest owners.

Meetings with stakeholders are conducted during the conception phase to gather materials and ideas, forming a rough outline of the next project steps. In the development phase, the signs are designed with stakeholder feedback, making adjustments as necessary before printing and installation.

Date of Implementation: January – June 2025

Key Outcomes: Education of children regarding nature and the integration of digital tools.

Lessons Learned: Involve all important stakeholders from the beginning. Engage with the target audience, involve individuals responsible for trail maintenance, and consult with the ranger about interesting locations in the forest.

Local-Driven Changes: Children learn about the nature in their area and how to use digital tools to access information.

Regional and International Links:

- The trail serves all children in the region, and the municipality of Winden im Elztal collaborates with local stakeholders for future maintenance.
- There are plans to feature the trail on the local tourism website to increase awareness among residents and tourists.

Activity Title: Citizen-App

Description of Activity: The Citizen-App aims to connect citizens, local associations, and the municipality. Various functions are planned to display events and important information. Initially, meetings organized by the app provider will introduce the app to the municipality and all associations, explaining its functions and usage. Once the app is set up, it will be promoted throughout the city, culminating in an evening event to introduce it to all citizens and allow for Q&A and feedback.

Date of Implementation: January – May 2025

Key Outcomes: A Citizen-App with an integrated portal for associations to gather, plan, and promote their events.

Lessons Learned:

- Involve all stakeholders.
- Clearly specify expectations at the outset to evaluate project feasibility.
- Effective advertising is essential to raise awareness and encourage citizen engagement with the new offer.

Local-Driven Changes:

- Connecting citizens.
- Promoting local associations and their events.
- Facilitating direct communication from the municipality.

Regional and International Links: The app is available for use by everyone, keeping them informed about events in Elzach.

4.8. Region Luzern West (Switzerland)

Activity Title: Revitalization of Village Centres and Smart Mobility Solutions

Test Area: Region Luzern West

Smartness Dimension: Smart Mobility and Smart Governance

Description of Activity: The SmartCommUnity project aims to assist rural areas in the Alps in fully leveraging the benefits of digitalization and to create a functioning transnational community within the Alpine Smart Villages Network, Smart Alps. Interactive digital tools will enhance transnational matchmaking and role modeling, allowing new regions to follow the lead of more advanced areas. Participating territories will collaboratively develop strategies to create more sustainable, resilient, and attractive rural environments. In the Region Luzern West, the focus is on mobility aspects of the tourism sector and the revitalization of village centers and their businesses.

Date of Implementation:

- September 13, 2023: Smart Mobility Workshop on Napfberg
- January 23, 2024: Smart Governance Workshop (Revitalization of Village Centres) in Ufhusen
- February 28, 2024: Smart Governance Workshop (Revitalization of Village Centres) in Schüpfheim
- May 1, 2024: Start of a sub-project within Smart Mobility: Smart Interactive Bus Stop (Webcam, Wi-Fi, Infoterminal for guests) in Luther Bad
- May 1, 2024: Start of a sub-project within Smart Governance: Free Wi-Fi in village centers of Escholzmatt and Marbach
- June 18, 2024: Smart Governance Workshop (Generation-Parks) in Ufhusen
- June 24, 2024: Smart Mobility Workshop in Menzberg
- June 2024: Start of the Smart Governance project: Village Development in Ettiswil
- Planned - April 2025: Start of the Smart Governance project: Digital Voucher System (for tourism and commerce) in Entlebuch

- Planned - June 2025: Smart Governance Workshop (Municipal Energy Network) in Escholzmatt

Key Outcomes:

- Strengthened network among key actors in the region.
- Initiation of a project in Ettiswil for village center development, with expected investments of 20 million Swiss Francs from the municipality.
- Launch of a smart interactive bus station project in Luthern.
- Implementation of free Wi-Fi in the village centers of Escholzmatt and Marbach.
- Additional projects are in the pipeline.

Lessons Learned: Key insights include:

- Significant time and resources are required to generate lasting, growing, and sustainable effects in rural areas.
- A dedicated network of individuals is crucial for success.
- Presenting good examples from our region and beyond promotes best practices.

Local-Driven Changes: The municipalities of Schötz and Egolzwil are also in the process of starting a village center revitalization initiative. Additionally, the municipality of Nebikon is developing a project concerning a Generation Park.

Regional and International Links:

- Workshops conducted between the work group mobility and TRAFIKO (SME).
- Collaboration workshops between municipality leaders and the organization Die Sphäre.

Reports on Meetings Between LTAs and FTAs by Partner

5.1. Energy and Environment Agency Lower Austria (Austria)

Meeting Title: KLAR! Netzwerktreffen 2023

Date of Meeting: 17.04.2023 & 11.09.2023

Location: St. Pölten

Participants: LTA and FTA representatives

Purpose: To network regional managers and facilitate the exchange of current challenges and successes in LTAs and FTAs, inviting all regional managers and guest experts.

Key Discussions: At the KLAR! networking meetings in 2023, key discussions focused on the following topics:

- Traveling exhibition "Climate & Me"
- Funding for climate change adaptation measures
- Climate-friendly site development and industrial area renewal

Outcomes of the Meeting: Test regions require further support for a smart transition, primarily in securing funding. Initiatives like the "Climate & Me" exhibition were presented to raise regional awareness.

Next Steps: Identify best practices among regions and develop specific examples for the upcoming 2024 meetings.

Meeting Title: KLAR! Netzwerktreffen 2024

Date of Meeting: 10.06.2024 & 02.12.2024

Location: Tulln & St. Pölten

Participants: LTA and FTA representatives

Purpose: Continue the discussions from 2023.

Key Discussions:

- Climate-Fit Community Forests
- Climate-Fit Landscape and Spatial Planning
- Collecting Best Practice Examples

Outcomes of the Meeting: Effective exchanges led to connections that will foster the long-term development of Lower Austria. Interviews were conducted for the SmartCommUnity project, shared via newsletters.

Next Steps: Focus on agricultural topics in 2025, with meetings planned at the Chamber of Agriculture of Lower Austria in May 2025.

5.2. Innovation Technology Cluster Murska Sobota (Slovenia)

Meeting Title: Initial Meeting on Farmers' Associations Analysis

Date of Meeting: October 2023

Participants: FTA representatives

Purpose: Conduct analysis of farmers' associations in the Podravje region.

Key Discussions and Outcomes: Identified stakeholders using the DIH AGRIFOOD platform and prepared for a detailed analysis.

Meeting title: Decision Meeting on Workshop Scope and Timing.

Date of meeting: December 2023

Participants: FTA representatives

Purpose: Decide on the timing and scope of the workshop.

Key Discussions and Outcomes: Determined it was too early for the workshop; continued focus on studying Alternative Food Networks.

Meeting title: Online Workshop on Short Supply Chains

Date of meeting: May 14, 2024

Participants: Various stakeholders from Podravje region.

Purpose: Discuss logistics challenges and opportunities in short food supply chains.

Key Discussions and Outcomes: Highlighted local food supply resilience and logistic challenges.

Meeting title: Representative Visit and Exchange Meeting.

Date of meeting: May 17, 2024

Participants: LTA and FTA representatives

Purpose: Exchange good practices and identify key development areas.

Key Discussions and Outcomes: Discussed blockchain traceability systems and organized common events.

Meeting title: Vision and Ambition Alignment Meeting

Date of meeting: January 2025

Participants: Representatives from Podravje region, Green Point, Circular Economy Expert

Purpose: Align strategies to develop circular bioeconomy practices in local food systems.

Key Discussions and Outcomes: Agreed on collaborative strategies for stakeholder engagement, focusing on surplus food and the CirEco platform.

Next Steps: Map community-led innovations and niche business opportunities.

5.3. Autonomous Region of Valle d'Aosta (Italy)

Meeting Title: Meeting to explore project ideas involving Natural and National Parks

Date of Meeting: 15 January 2024

Participants: LTA and FTA representatives

Purpose: Explore project ideas involving natural resource protection and participatory science, including:

- Active involvement in natural resource protection
- Smart logistics using drones for high-altitude supplies

Key Discussions: Managing tourist flows to reduce overcrowding and environmental impact.

- Strategies: redirect visits from crowded areas (e.g., Champorcher) to less frequented locations (e.g., Champdepraz).
- Proposed a new information system to promote awareness of different areas.

Outcomes: Initiatives aim to sustainably manage tourist flows and improve accessibility while reducing environmental impact.

Next Steps: Discuss ideas with the Regional Stakeholder Group.

Meeting Title: 2nd Regional Stakeholder Group meeting

Date of Meeting: 15 February 2024

Participants: LTA and FTA representatives, local and regional government representatives, university representatives

Purpose: Discuss and select capitalization and innovation ideas for the project.

Key Discussions:

- Presentation and prioritization of eight identified project ideas.
- Selected ideas for implementation based on impact, feasibility, and financeability.

Outcomes of the Meeting: Capitalization and innovation ideas selected, including:

- Digital initiatives for participatory databases and visitor experience monitoring.

- Creation of immersive videos for exhibition areas.

Next Steps: Implement one capitalization idea and one innovation idea.

Meeting Title: Meeting to further discuss project ideas involving Natural and National parks

Date of Meeting: 15 May 2024

Participants: LTA and FTA representatives

Purpose: Discuss project ideas for visitor experience improvement and environmental monitoring.

Key Discussions:
- Importance of citizen science and data collection for visitor flows.
- Enhancements needed for sensor technology in monitoring.
- Real-time visitor flow management solutions and predictive models development.

Outcomes of the Meeting: Emphasis on strengthening real-time sensor networks for better visitor experience.

Next steps: Schedule a follow-up meeting for action plans and resource allocations.

Meeting Title: Technical-organisational meeting on VR capitalisation project

Date of Meeting: 23 September 2024

Participants: LTA and FTA representatives, guides, video producers

Purpose: Define technical methods for producing a VR video exploring Mont Avic Natural Park.

Key Discussions:
- Concept of the VR video to guide users through park trails.
- Use existing footage and new material in an interactive format.

Outcomes of the Meeting: Proposed itinerary for VR video content and timetable for preparation and filming.

Next Steps: Create a detailed storyboard for production.

Meeting Title: Meeting with the director of the Mont Avic Natural Park

Date of Meeting: February-March 2025

Participants: LTA and FTA representatives

Purpose: Share the outcome of the smart transition activity regarding the VR video.

Outcomes of the Meeting: Delivering the VR headset and collecting feedback.

Next Steps: Create a joint platform for project dissemination and user feedback collection.

5.4. Anci Liguria (Italy)

Meeting Title: Presentation SmartCommUnity Project

Date of Meeting: 24 November 2023

Participants: Local government representatives

Purpose: Present the SmartCommUnity project objectives and opportunities.

Key Discussions: Project details led to interest in participation from attendees.

Outcomes of the Meeting: Defined a common pilot project between LTA and FTA.

Next Steps: Identify main stakeholder groups.

Meeting Title: 1st LTA meeting

Date of Meeting: 15 December 2023

Participants: Local government representatives, Villaggio del Ragazzo of Cogorno – local Expert.

Purpose: Discuss activities for LTA as a driving force for FTA.

Key Discussions: Proposed possible activities in the Water Portal area with local expert involvement.

Outcomes of the Meeting: Collaboration definition with the Villaggio del Ragazzo.

Next Steps: Formalize collaboration procedures.

Meeting Title: Meeting with FTA and LTA

Date of Meeting: 23 January 2024

Participants: LTA and FTA representatives, local government representatives

Purpose: Sharing common objectives and possible activities to be implemented in the LTA in cooperation with the FTA.

Key Discussions: Anci Liguria shared the objectives of the SmartCommUnity project and engaged in an initial discussion on the actions and needs of the territory.

Outcomes of the Meeting: First collection of ideas about a Smart project for the area.

Next Steps: Verify feasibility of the idea and identify the most suitable option for the area.

Meeting Title: Meeting with Local Expert of Villaggio del Ragazzo – Training Center

Date of Meeting: 05 February 2024 (online)

Participants: Local government representatives, Villaggio del Ragazzo of Cogorno – local Expert.

Purpose: Define initial proposals for actions to be implemented in the water portal building.

Key Discussions: Goals defined included:

1. Involving secondary school students in a green lab to organize future orientation activities (utilizing gamification software).
2. Engaging companies to raise awareness of environmentally related career options attractive to youth.

Outcomes of the Meeting: Draft proposal

Next Steps: Draft proposal developed.

Meeting Title: Meeting with School Directors

Date of Meeting: 16 February 2024 (online)

Participants: Local government representatives, school representatives, local experts

Purpose: Share the draft proposal of activities and involve schools as the target audience of the pilot project.

Key Discussions: Discussion and feedback on the draft proposal.

Outcomes of the Meeting: Proposal developed with contributions from attendees.

Next Steps: Share the proposal with the respective institutions involved.

Meeting Title: Stakeholder Group Meeting

Date of Meeting: 16 April 2024

Participants: Local government representatives, school representatives, local experts

Purpose: Share activities planned for the water portal dedicated to students from FTA and LTA schools.

Key Discussions: Guided conversation held on topics including:

- Environmental management and required skills.
- Professional profiles needed in sustainable energy.
- Skills required for slow and environmentally-friendly tourism.
- Agriculture's role in land management today and required skills.
- Professional opportunities in forestry and its supply chain.
- Good practices for digital orientation.

Outcomes of the Meeting: Main content for the video was identified.

Next Steps: Proceed from idea development to implementation.

Meeting Title: Pilot project

Date of Meeting: 02 July 2024

Participants: Local government representatives, local experts

Purpose: Define the pilot project content and instruments.

Key Discussions: Structure of the pilot project including questionnaire and videos.

Outcomes of the Meeting: Pilot structure prepared for presentation.

Next Steps: Share the project with stakeholders and main actors.

Meeting Title: Participation to the inauguration of the WATER PORTAL

Date of Meeting: 27 November 2024

Participants: LTA and FTA representatives, local government representatives, citizens, and local stakeholders

Purpose: Present the pilot project “SMART LAB,” co-financed by SmartCommunity.

Key Discussions: Showcase the Water Portal structure and outline future building usage, along with the SMART LAB project details.

Outcomes of the Meeting: Successful dissemination of the SMART LAB project.

Next Steps: Finalize SMART LAB instruments and activity timetable with schools.

Meeting Title: Open day of Smart Lab

Date of Meeting: 06 March 2025

Participants: Local government representatives, school representatives, local experts

Purpose: Showcase the completed tools: web app, questionnaire, immersive, and augmented reality videos.

Key Discussions: Demonstrate the tools and outline next steps with the schools. Expected results: engagement of 3 schools and 60 students.

Outcomes of the Meeting: Completion of web app and videos.

Next Steps: Establish a timeline for laboratory sessions with LTA and FTA schools.

5.5. Standortagentur Tirol SAT (Austria)

Meeting Title: Steering Group Meeting datahub.tirol

Date of Meeting: 07 January 2025

Participants: LTA and FTA representatives

Purpose: Present and discuss the Use Case in the Lienzer Talboden test region within the datahub.tirol ecosystem.

Key Discussions:

- Importance of data sovereignty and management as infrastructure.
- Benefits of regional data spaces for improved municipality management.

Outcomes of the Meeting: Ongoing discussions for long-term financing of municipal data management platforms.

Next Steps: Refine interoperability frameworks and monitor funding opportunities.

5.6. Association for the networked development of territories and services (France)

Meeting title: Presentation meeting

Date of meeting : 2 May 2023

Participants: LTA and FTA representatives

Purpose: To allow the two TAs to meet and start discussing their issues.

Key discussions:

- Individual presentations
- Presentation of the test areas
- Challenges and activities supported through the project.

Outcomes of the meeting: Initiated a dynamic exchange between the TAs.

Meeting title: Study visit

Dates of meeting: 24-27 September 2024

Participants: LTA and FTA representatives

Purpose: Visit a third “smart village” to inspire the TAs and enrich ongoing activities.

Key discussions:

- Presentation of the test areas
- Updates on activities supported through the project
- Best practices
- New ideas or activities to implement in SmartCommUnity or alongside

Outcomes of the meeting: The week-long format strengthened links, deepened discussions, and highlighted several important best practices.

Meeting title: Presentation of the training program “SmartGovernance”

Date of meeting: 4 November 2024

Participants: LTA and FTA representatives

Purpose: Present the training program developed for the TAs to increase knowledge on Smart Governance.

Key discussions: Discussion on the training program's presentation, feedback, and dissemination updates on ongoing activities.

Meeting title: Study visit

Date of meeting: 20 March 2025

Participants: LTA and FTA representatives

Purpose: Present public policies and good practices of the LTA to other participants from the SmartAlps network.

5.7. Regionalverband Südlicher Oberrhein (Germany)

Meeting Title: Projects for a Smart Transition

Date of Meeting: 08 September 2023

Participants: LTA and FTA representatives

Purpose: Evaluate future workshop results and discuss implementation projects.

Key Discussions:

- Perception of workshops among municipalities.
- Evaluation and prioritization of implementation project ideas.
- Potential collaboration among municipalities for projects.

Outcomes of the Meeting: Agreement on implementation projects for education seminars.

Next Steps: Search for service providers and plan future events.

5.8. Region Luzern West (Switzerland)

Meeting Title: Workshop Smart Mobility around the Napf

Date of Meeting: 13 September 2023

Participants: LTA and FTA representatives

Purpose: Generate new ideas concerning smart mobility.

Outcomes of the Meeting: Led to the project “smart interactive bus stop in Luthern”.

Next Steps: High demand for another meeting.

Synthesis of Key Findings

6.1. Common Themes and Successes

Through the analysis of diverse test areas and associated activities, several overarching themes and successful strategies have come to light, reflecting the shared goals of the project stakeholders:

- **Community Engagement is Crucial:** A consistent thread throughout the initiatives was the recognition of the importance of engaging local communities in both the design and implementation phases of smart transition projects. Partners highlighted that this engagement is not merely beneficial but essential for success. Methods varied widely, including workshops, surveys, participatory design processes, and stakeholder meetings, each tailored to fit the specific community context. The Green Point Living Lab's success with the "Hudo Zeleno" product line serves as an exemplary case, showcasing how community input is not just valued but can actively drive innovation in product development and service delivery.

- **Digital Tools Enhance Accessibility and Awareness:** The integration of digital tools, such as web applications, virtual reality videos, and sensor networks, has proven instrumental in enhancing the accessibility of information. These tools significantly raise awareness about key issues while facilitating community involvement. For example, by incorporating interactive elements into educational resources, participants have reported greater engagement and retention of information.

- **Collaboration Fosters Innovation:** The collaborative approach, particularly the partnerships forged between Lighthouse Test Areas (LTAs) and Follower Test Areas (FTAs), alongside local businesses, research institutions, and government agencies, has been crucial in fostering innovation. The value of shared knowledge and resources is exemplified in the collaborative efforts of the Green Point Living Lab, which engaged with universities and projects like dRural and BIO-Boost, creating a robust network that promotes innovative practices across regions.

- **Data-Driven Decision Making:** The establishment of sensor networks and the systematic collection of data regarding visitor flows, environmental conditions, and community needs have enabled efficient, data-driven decision making. This approach ensures that resources are allocated effectively, optimizing service delivery while addressing the most pressing local challenges.

- **Focus on Local Needs and Context:** Successful initiatives were characterized by their adaptability to the specific needs and contexts of local communities. This tailored approach involved not only understanding unique challenges but also identifying local opportunities that could be leveraged to enhance the impact of project activities.

- **Promoting Sustainable Practices:** A strong emphasis on sustainability, especially within the agrifood sector, was evident across numerous test areas. Initiatives aimed at promoting sustainable agricultural practices and education about environmental responsibility have helped to promote long-term ecological health and community resilience.

6.2. Challenges and Lessons Learned

Despite the successes achieved throughout the project, partners encountered several notable challenges and gleaned valuable lessons that could inform future endeavors. These challenges provided insights into operational processes and highlighted areas for improvement:

- **Decision-Making Processes Can Be Slow:** Throughout the project, several partners expressed concern about the sluggish decision-making processes within public authorities. This common experience underscores the often bureaucratic nature of public administration, where approvals and policy decisions can take considerable time. Such delays can lead to setbacks in project timelines, ultimately impacting the efficacy and immediate benefits of initiatives designed for community improvement. The slower pace can hinder the agility needed to respond to emerging challenges and adapt strategies effectively. To address this, it is crucial to establish clearer communication channels, streamline decision-making protocols, and create a sense of urgency around the implementation of projects.

- **Data Sovereignty is Critical:** Another essential learning point is the significance of data sovereignty for municipalities. It became evident that local authorities must maintain control over their data assets to ensure compliance with the General Data Protection Regulation (GDPR) and regional data protection standards. This control is paramount not only for legal compliance but also for fostering public trust and encouraging community engagement with digital initiatives. Ensuring data sovereignty means that municipalities can dictate how data is collected, used, and shared, which is critical in an era where data flows freely across platforms and borders. To navigate this challenge, municipalities should invest in robust data governance frameworks that empower them to safeguard community data while still leveraging it for decision-making and service delivery.

- **Interoperability is Essential:** As various digital solutions were implemented, the need for interoperability became increasingly apparent. Partners recognized that utilizing standardized data formats and open Application Programming Interfaces (APIs) is necessary for seamless integration and collaboration across regions. Interoperability allows different systems and platforms to communicate effectively, share insights, and integrate functions, which is vital in achieving a cohesive smart city ecosystem. The lack of interoperability can lead to data silos, where valuable information is trapped within particular systems and inaccessible to others. Moving forward, stakeholders should prioritize the development of common data standards and facilitate partnerships that foster collaborative technological environments.

- **Precise Planning is Needed:** The complexity of projects, especially those involving advanced technologies such as virtual reality (VR), underscored the importance of meticulous planning. Stakeholders realized that precise planning is essential not only for content selection and logistics but also for post-production coordination. Poor planning can lead to disorganization, missed deadlines, and ultimately, a lower quality of outcomes. A well-structured project management approach that clearly delineates timelines, roles, and deliverables can help ensure that all phases of production run smoothly. Implementing project management tools and techniques can enhance efficiencies and enable teams to adapt quickly to any challenges that arise.

- **Involve All Stakeholders Early:** Involving all relevant stakeholders at the project's inception emerged as a critical factor in its success. Engaging stakeholders such as community members, local businesses, governmental organizations, and non-profit entities early in the project helps build a strong foundation for collaboration and trust. This early involvement ensures that diverse perspectives are considered, allowing for projects that are more attuned to local needs and conditions. Furthermore, early engagement often leads to higher levels of commitment and ownership among stakeholders, which can significantly enhance the likelihood of sustainable success.

- **Systematic Data Gathering is Essential:** Lastly, partners recognized the need for a systematic approach to gathering data, especially in sectors like agriculture that are ripe for digitization. Collecting comprehensive and accurate data on farmers' needs before implementing digitization strategies proves essential for developing solutions that are responsive and effective. This proactive approach allows for the crafting of tools and services that directly address gaps and opportunities within the sector. As a result, stakeholders can create interventions that not only meet current demands but are also adaptable to future changes in the landscape.

Overall, these lessons learned from the challenges faced during the project underscore the necessity of flexibility, collaboration, and a commitment to continual improvement. By reflecting on these experiences, project partners can better prepare for future initiatives, leading to more impactful and sustainable outcomes within their communities.

6.3. Impact on Local Communities

The activities associated with the project have had a profoundly positive impact on local communities through various avenues, enriching both individual lives and the broader social fabric.

- **Increased Awareness:** The project initiatives, including the "Climate & Me" exhibition, the digital forest nature trail, and the activities of the Green Point Living Lab, have dramatically raised awareness about crucial issues such as climate change and environmental sustainability. Community members have become more informed about their local heritage and the significance of preserving it, as well as the importance of adopting sustainable food practices. This increase in awareness is not merely academic; it translates into more active participation in local environmental initiatives, increased advocacy for sustainable practices, and a greater willingness to engage in community dialogues about ecological preservation. The scaffolding of knowledge serves as a foundational building block, empowering residents to make informed decisions that will benefit their environment and community in the long term.

- **Enhanced Connectivity:** The strategic deployment of LoRaWAN sensors alongside the development of citizen-oriented applications and the utilization of blockchain technology have significantly enhanced connectivity within communities. These technologies facilitate the real-time flow of information, allowing community members to communicate more effectively and access critical resources. For instance, sensor networks provide valuable data regarding environmental conditions, traffic patterns, and public safety, which can be utilized to inform community planning and responsiveness. Furthermore, citizen apps foster a sense of ownership and connection among residents, enabling them to share information, report issues, and engage directly with local governance. As a result, enhanced connectivity not only improves individual access to information but also cultivates a more cohesive and collaborative community dynamic.

- **Improved Services:** The establishment of mobility centers and the creation of interactive guides have played a crucial role in enhancing access to essential services such as transportation and healthcare. These developments address

significant barriers that residents, particularly those in rural or underserved areas, often encounter. By streamlining transportation options and making healthcare resources more accessible, the project has improved the overall quality of life for residents. The mobility centers serve as hubs where individuals can obtain information, access services, and connect with transportation options more effectively. This improvement not only benefits individuals but also contributes to the resilience of the community as a whole, increasing its capacity to support its members during times of need.

- **Community Empowerment:** Participatory design processes, stakeholder meetings, and community-led innovations have significantly empowered residents, providing them with the tools and opportunities necessary to shape their own future. By involving community members in decision-making processes, the project has fostered a sense of agency and ownership among local populations. This empowerment leads to initiatives that are better aligned with the community's unique needs and aspirations, further enhancing the effectiveness of smart solutions. As residents actively contribute to the development of these initiatives, they build stronger bonds within the community, resulting in increased civic engagement and cooperation.

- **Economic Development:** Projects such as the SMART LAB initiative and the Green Point Living Lab have been pivotal in promoting economic development within the region. By fostering innovation and entrepreneurship, particularly in sectors such as tourism and agri-food, these initiatives create new opportunities for job creation and economic revitalization. Support for local entrepreneurs, combined with access to new technologies and business models, enables the community to adapt to changing market conditions and consumer preferences. This boost in economic activity not only benefits individual businesses but also enhances the overall vitality of the local economy, establishing a more sustainable and prosperous community.

6.4. Regional and International Links

The SmartCommUnity project has significantly enhanced regional and international links through a multifaceted approach that fosters collaboration, knowledge sharing, and innovative solutions across borders. The following avenues highlight the ways in which these connections have been established and strengthened:

- **Collaboration within the Alpine Space Programme:** The SmartCommUnity project has served as a catalyst for collaboration among partners from various countries within the Alpine Space Programme. This initiative aims to create a unified approach to address common challenges faced by alpine regions, such as climate change, population decline, and economic sustainability. By bringing

together municipalities, businesses, and research institutions, the project has created a platform for exchanging ideas and resources. This cooperative spirit allows for the pooling of resources, expertise, and funding opportunities, enabling partners to undertake larger and more impactful projects than they could manage individually. The collaborative framework fosters a sense of community among participating entities, encouraging them to work together toward shared objectives while respecting and promoting the unique characteristics of their individual regions.

- **Participation in the EUSALP Action Group 5 Smart Alps Network:** The project actively contributes to EUSALP Action Group 5, which focuses on promoting smart transitions within the Alps. By engaging with this strategic network, SmartCommUnity aligns its objectives with broader regional goals, facilitating the development of smart, sustainable solutions that benefit all participating territories. The collaboration encourages cross-border partnerships that leverage the strengths of various regions, thus enhancing their collective capability to address pressing issues such as sustainable mobility, energy efficiency, and digital transformation. By working collaboratively within this framework, stakeholders can foster innovation and ensure that the solutions developed are both scalable and replicable in different contexts throughout the Alpine region.

- **Knowledge Exchange with Other Regions:** A cornerstone of the SmartCommUnity initiative is the emphasis on knowledge exchange among project partners and with other regions engaged in similar digital transformations. Through workshops, conferences, and collaborative platforms, partners have been able to share best practices, success stories, and lessons learned from their own experiences. This exchange of information leads to the identification of gaps and opportunities within each region, allowing stakeholders to adapt and implement innovative practices that have been successfully utilized elsewhere. Such interactions not only enhance the capabilities of individual partners but also create a rich tapestry of shared knowledge that contributes to the overall growth and resilience of the entire region.

- **Transnational Study Visits:** The organization of transnational study visits has proven invaluable for fostering learning and collaboration among partners. These visits allow stakeholders to explore and observe successful initiatives in other regions firsthand, providing insights that can be applied in their contexts. By enabling partners to learn from each other's experiences, these study visits facilitate the identification of potential areas for collaboration that might not have been apparent in a purely virtual setting. The face-to-face interactions foster relationships built on trust and mutual understanding, which are crucial for successful cross-border cooperation in complex projects.

- **Partnerships with Universities and International Projects:** A key achievement of the SmartCommUnity project has been the establishment of robust partnerships with universities and international initiatives. For instance, the Green Point Living Lab has formed collaborations with prestigious institutions, contributing to research and development focused on sustainable agri-food practices. These partnerships not only bolster the research capabilities of local areas but also connect them to global conversations surrounding food security, sustainability, and climate change. Collaborative projects like dRural and BIO-Boost further extend this network, allowing for the exchange of innovative solutions and research findings that can be applied at local levels. The rich exchange of knowledge from academic institutions ensures that communities benefit from the latest research and technologies in their efforts to implement smart solutions effectively.

Through these various mechanisms, the SmartCommUnity project has not only enhanced regional networks but has also positioned participating areas as active contributors to international dialogues on sustainability and innovation. The relationships forged and knowledge shared have created a foundational support system that will enable the Alpine regions to navigate future challenges collaboratively while promoting smart and sustainable development.

Conclusion

7.1. Summary of Achievements

The **SmartCommUnity project**, particularly via the initiatives undertaken in the **WPTAN work package**, has seen remarkable advancements in promoting smart transitions throughout the Alpine region. Throughout its duration, the project has successfully implemented a varied array of smart transition initiatives that not only address current challenges but also set the stage for sustainable development in the future.

Key achievements include the successful integration of digital technologies across various community sectors, enhancing the capacities of Lighthouse Test Areas (LTAs) and Follower Test Areas (FTAs) to leverage the benefits of digitalization effectively. This has resulted in a tangible improvement in service delivery and community engagement. For instance, targeted initiatives in tourism and agri-food have not only increased operational efficiencies but have also promoted sustainable practices that align with regional environmental goals.

Moreover, the emphasis on collaboration has been pivotal in the project's success. By fostering relationships between different stakeholders—including local governments, businesses, and research institutions—the initiative has cultivated a strong network of support that encourages the exchange of knowledge and resources. This synergy has amplified the impact of the project, helping communities navigate the complexities of smart transitions and embrace innovative solutions.

The initiative has also focused on empowering local communities, with numerous workshops and training sessions designed to enhance participants' understanding of smart technologies and practices. The proactive engagement of community members has led to stronger local ownership of projects and a greater commitment to sustainable development, which is expected to yield long-lasting benefits.

7.2. Reflection on the Importance of Collaboration

Collaboration has emerged as a cornerstone driver of success for the **SmartCommUnity project**. The partnership between LTAs and FTAs has not only facilitated the effective transfer of knowledge and best practices but has also fostered an environment where collaborative problem-solving can thrive. This cooperation among various actors allows for a holistic approach to addressing challenges faced by different regions.

By bringing together local businesses, research institutions, government agencies, and international project partners, the project has harnessed a diverse pool of expertise and

resources. This cross-pollination of ideas has stimulated innovation, enabling regions to adapt best practices that have proven successful elsewhere while customizing them to fit local needs and challenges. Furthermore, collaborative efforts have resulted in shared resources, reducing duplication of efforts and maximizing the potential impact of initiatives.

The emphasis on creating a culture of collaboration has also reinforced relationships among community members, increasing trust and engagement in the decision-making process. This strengthened network not only empowers stakeholders to contribute actively to their communities but also facilitates ongoing dialogue about future initiatives, ensuring that the transition toward smart practices is inclusive and beneficial to all.

7.3. Future Recommendations and Next Steps

To sustain and expand upon the outcomes achieved thus far in the **SmartCommUnity project**, the following recommendations and next steps are proposed:

- **Continue to Prioritize Community Engagement:** Engaging local communities in the design and implementation of future smart transition initiatives is essential. Future projects should ensure that the voices of community members are heard and integrated into planning processes. This can be achieved through regular consultations, surveys, and participatory workshops that focus on identifying local needs and aspirations.

- **Promote Data Sovereignty and Interoperability:** It is vital to develop clear guidelines and standards for data management to ensure that municipalities retain control over their data assets. This autonomy will help safeguard privacy and compliance with regulations like GDPR. Furthermore, promoting interoperability among different digital solutions will facilitate information sharing and system integration across various platforms, enhancing overall efficiency.

- **Invest in Capacity Building:** Offering training and resources to local communities and stakeholders can significantly improve their capabilities in digital literacy, data analysis, and project management. By equipping residents with the necessary skills, communities will be better positioned to embrace digital tools and drive their initiatives forward.

- **Seek Funding for Scaling Up Successful Initiatives:** Identifying and documenting successful initiatives and their impacts is crucial for attracting funding to scale these projects and replicate their successes in other regions. This may involve applying for grants from governmental and non-governmental

organizations focused on sustainability, innovation, and community development.

- **Foster Regional and International Collaboration:** Continuing to engage with the EUSALP Action Group 5 Smart Alps Network, as well as other transnational initiatives, will be vital for sustaining the momentum generated by the SmartCommUnity project. Sharing knowledge and best practices with diverse stakeholders will help to refine strategies and foster new collaborative endeavors.

- **Support Sustainable Practices in the Agri-Food Sector:** Promoting the adoption of innovative and sustainable practices within the agri-food sector will enhance food security, reduce waste, and support local farmers. This could include initiatives aimed at increasing local food production, strengthening supply chains, and introducing advanced agricultural techniques that improve sustainability.

By diligently implementing these recommendations and pursuing the outlined next steps, the SmartCommUnity project can continue to positively impact the Alpine region. The project's efforts will contribute to the development of a smarter, more connected, and more sustainable future, ensuring that communities are equipped to thrive in an ever-evolving landscape.