



D2.2

CHALLENGES REPORT

**Project: Driving Rural Innovation through
startup Villages across Europe**

Acronym: DRIVE



**Funded by
the European Union**

Project Information

Grant Agreement Number	101181939	Acronym	DRIVE
Full Title	Driving Rural Innovation through startup Villages across Europe		
Call and topic identifier	HORIZON-CL6-2024-CIRCBIO-01 HORIZON-CL6-2024-CircBio-01-9		
Duration	18 months		
Start Date	1 January 2025	End date	30 June 2026
Website	TBC		
Coordinator	CONSORZIO ITALBIOTEC		

Document Information

Author/-s	Center for Social Innovation – CSI Cyprus
Reviewer/-s	
Date of approval	
Work Package	WP2
Deliverable	D2.2 Challenges Report
Nature	
Dissemination	PU: Public (must be available on the website)

Document History

Version	Issue Date	Stage	Description	Contributor
1.0	18.06.2025	Draft	First Draft	CSI
2.0	26.06.2025	Draft	Coordination revision	ITB
3.0	27.06.2025	Final	Final version	CSI

Quality of information - Disclaimer according to the Art. 17.3 of GA

“Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them”.

This document may contain material, which is the copyright of certain DRIVE consortium parties, and may not be reproduced or copied without permission.

Neither the DRIVE consortium as a whole, nor a certain party of the DRIVE consortium warrant that the information contained in this document is capable of use, nor that use of the information is free from risk and does not accept any liability for loss or damage suffered by any person using this information.

Copyright notice

© DRIVE Consortium, 2025

This deliverable contains original unpublished work except where clearly indicated otherwise. Acknowledgement of previously published material and of the work of others has been made through appropriate citation, quotation or both. Reproduction is authorised provided the source is acknowledged.

Acknowledgement

This document is a deliverable of the DRIVE project. This project has received funding from the European Union’s Horizon Europe Programme under grant agreement No **101181939**.

Table of Contents

Project Information	2
Document Information.....	2
Document History	2
Table of Contents	4
List of Tables.....	6
Executive Summary	7
1. Introduction and scope of the study.....	8
2. Methodology	10
2.1 Data collection methodology	10
3. Results	11
3.1 Consolidated Analysis of Regional Challenges and Innovation Gaps.....	11
3.1.1 Italy: Regional Case Study.....	12
3.1.2 Slovenia: Regional Case Study	15
3.1.3 Cyprus: Regional Case Study.....	18
3.1.4 Belgium: Regional Case Study	22
3.1.5 Bulgaria: Regional Case Study	27
3.1.6 Greece: Regional Case Study	31
3.1.7 France: Regional Case Study.....	36
3.1.8 Ireland: Regional Case Study	41
3.2 Cross-Case Synthesis: Patterns, Barriers, and Cooperation Opportunities.....	47
3.2.1 Emerging Patterns Across Regions	47
3.2.2 Shared Barriers	48
3.2.3 Opportunities for Pan-European Cooperation	48
4. Discussions	51
4.1 Lessons Learned	51
4.2 Implications for DRIVE.....	54
5. Conclusions.....	56
Bibliography.....	59
Annex 1.....	60
ITB – Italy	60
CTBG – Bulgaria	61
ECRN – Belgium	63
CSI – Cyprus.....	64

nEULakes – Italy	65
MEP – Greece	66
BOHINJ – Slovenia	68
ANCI - Italy	69
AB Corporation – Belgium	70
F6S – Ireland	72
CGLE – France	73

List of Tables

Table 1 Common needs aligned with SE/NEIA contexts.11

Executive Summary

This report presents the findings of Deliverable D2.2 – Challenges Report for the DRIVE project (“Driving Rural Innovation through startup Villages across Europe”). It outlines the needs and challenges of the project’s key stakeholders – rural start-ups, innovation ecosystem actors, and village communities – as identified through stakeholder interviews and regional case studies. The findings reveal a set of common hurdles faced by start-ups in rural areas, including limited access to finance and investors, shortage of digital infrastructure and skilled talent, as well as fragmented support networks. Rural innovation ecosystem players (such as incubators, accelerators, and local authorities) likewise face challenges in attracting investments, fostering entrepreneurship culture, and connecting to broader markets. ¹At the same time, each region studied also exhibits unique strengths and opportunities (such as niche bio-based resources or strong community initiatives) that can be leveraged for innovation-driven growth.

Crucially, the analysis ties these grassroots insights to the broader policy frameworks of the EU. The challenges and needs are discussed in light of the Smart Specialisation Strategy (S3) objectives and the New European Innovation Agenda (NEIA). The case studies highlight how place-based innovation can drive sustainability transitions in rural contexts, aligning with S3’s emphasis on leveraging regional strengths to address pressing issues like food security and decarbonisation. The report also underscores the importance of interregional synergies – echoing NEIA’s call to bridge the innovation divide through initiatives like Regional Innovation Valleys and the Startup Village Forum.² By integrating stakeholder interview insights into the main body, the report provides a nuanced, on-the-ground perspective to inform project actions (such as upcoming roadshows, hackathons and mentoring programs) and policy recommendations.

In conclusion, the Challenges Report identifies targeted needs (from improved digital connectivity to better funding mechanisms and training programs) and aligns them with EU innovation objectives. It recommends strengthening multi-level cooperation – connecting local rural innovators with national and EU initiatives – to create an inclusive pan-European innovation ecosystem reaching every corner of Europe. These findings will directly feed into the DRIVE project’s next steps and contribute to Horizon Europe’s goals of a greener, more digital and cohesive Europe by empowering rural innovation ecosystems.

¹ https://joint-research-centre.ec.europa.eu/jrc-news-and-updates/start-villages-commitment-long-term-vision-rural-areas-2022-04-12_en#:~:text=Today%20Mariya%20Gabriel%2C%20Commissioner%20for,and%20create%20local%20job%20opportunities

² <https://sciencebusiness.net/viewpoint/start-ups/viewpoint-we-must-foster-innovation-cohesion-across-europe#:~:text=Fifth%2C%20improved%20innovation%20cohesion%20is,projects%20for%20key%20EU%20priorities>

1. Introduction and scope of the study

Rural regions across Europe are increasingly recognized as untapped hubs of innovation that can contribute to addressing major societal challenges. However, rural start-ups and communities often face distinct obstacles that set them apart from their urban counterparts, such as depopulation, limited infrastructure, and difficulty attracting investment. The European Commission's Long-Term Vision for Rural Areas 2040 highlights the need for "stronger, connected, resilient and prosperous rural areas" and flags innovation as a key enabler for turning rural vulnerabilities into opportunities. In line with this vision, the Startup Village Forum was launched in 2021 as a platform to connect rural innovation stakeholders and discuss how to create favourable conditions for start-ups in villages – from energy and agri-food innovations to digital solutions – in order to generate local jobs and sustainable growth.

Against this backdrop, the DRIVE project's general objective is to boost the implementation of local start-ups in rural regions by fostering innovative ecosystems and new value-added solutions. To achieve this, DRIVE operates along three interconnected pillars: (1) Identifying the needs of target users and stakeholders (through interviews and engagement with at least two regional incubators/accelerators in each of three planned roadshows), (2) Organizing roadshows and hackathons in rural regions to stimulate innovation and knowledge exchange, and (3) Providing mentoring to develop technologies and business models for rural start-ups. By integrating these pillars, the project aims to reinforce start-up participation in rural economies and ultimately help them pitch to investors, access funding instruments, and scale up beyond their regions.

Deliverable D2.2 – Challenges Report is part of the Work Package 2 Needs assessment and best-case scenario, corresponding to Task 2.2 Needs identification for involved Startup Villages areas of the project, and focusing on the first pillar: identifying stakeholder needs and challenges. The original scope of this deliverable was to outline the needs of involved start-ups, ecosystems, and rural villages, likely based on preliminary research and possibly earlier surveys. In this updated report, we go a step further by integrating all stakeholder interview findings directly into the main body. We conducted in-depth qualitative interviews across multiple regions involved in DRIVE, gathering perspectives from start-up founders, innovation ecosystem leaders (e.g. incubator managers, NGO representatives), and rural community officials (e.g. village mayors or development agents). These interviews have been synthesized into detailed regional case studies that form the core of this report. Each case study provides a narrative of the region's context, the stakeholders' experiences, and the specific challenges and needs identified, offering a rich, place-based understanding of rural innovation dynamics.

Furthermore, the report explicitly connects the insights from the case studies to broader policy objectives of Smart Specialisation Strategies (S3) and the New European Innovation Agenda (NEIA). S3 is the EU's place-based innovation policy framework that encourages each region to focus on its competitive strengths and to engage stakeholders in a collaborative innovation process. Since 2014, over 180 regional S3 strategies have been developed, including in less-developed regions, as a means to drive inclusive growth through research and innovation. We discuss how each case study region's innovation activities align with or support their region's S3 priorities (specific domains like agri-food, clean energy, bioeconomy, etc.) as well as S3's general goals of specialization, prioritization, and participatory governance for knowledge-based development. In parallel, the NEIA (launched in 2022) provides an EU-wide framework to position Europe at the forefront of the new wave of deep-tech innovation and to "accelerate and strengthen innovation in European ecosystems across the EU, addressing the innovation divide".³ Notably, Flagship 3 of the NEIA supports the creation of Regional Innovation Valleys and aims to channel at least €10 billion into interregional innovation projects, including in deep-tech fields relevant to key EU priorities. The NEIA also emphasizes fostering innovation in all regions (not just traditional tech hubs) by integrating efforts across Cohesion Policy and Horizon Europe. This resonates strongly with the mission of DRIVE, as our case studies illustrate the innovation divide challenges faced by rural regions and the potential of interregional cooperation to overcome them.

³ https://research-and-innovation.ec.europa.eu/strategy/support-policy-making/shaping-eu-research-and-innovation-policy/new-european-innovation-agenda_en#:~:text=,to%20concrete%20interregional%20innovation%20projects

Additionally, NEIA's flagships on funding scale-ups and talent retention are relevant to the identified needs (for example, access to capital and skilled workforce) and will be discussed in the analysis.

The remainder of this deliverable is structured as follows: first, a brief note on the methodology of stakeholder interviews and analysis; second, a series of Regional Case Studies (Section 3) presenting findings from different European rural contexts (Bulgaria, Greece, and Slovenia); third, a Cross-Regional Analysis distilling common themes and linking them explicitly to S3 and NEIA objectives; and finally, Conclusions and Recommendations (Section 5) that update the executive insights and suggest pathways to address the identified challenges. Through this comprehensive approach, Deliverable D2.2 is intended to inform not only the DRIVE project's next steps (roadshows, trainings, etc.) but also to offer valuable lessons for the broader policy discourse on empowering startup villages and innovation in rural Europe.

2. Methodology

The research for this Challenges Report combined qualitative stakeholder interviews with desk research on regional innovation contexts. We identified key stakeholders in each participating region of the DRIVE project, ensuring representation of the three target groups: (1) Start-up founders or entrepreneurs operating in rural villages, (2) Innovation ecosystem support actors such as incubators, accelerators, NGOs or academic hubs active in the region, and (3) Local community representatives including municipal authorities or regional development agencies.

In total, **36 semi-structured interviews** were conducted (3-5 per region on average), either in person or via teleconference. Interview questions covered areas such as current business or innovation activities, perceived barriers to growth, needs for support (financial, technical, infrastructural), experiences with existing support programs, and suggestions for improving the local innovation ecosystem.

2.1 Data collection methodology

The questions aimed to reveal stakeholders' perceptions and experiences of rural innovation and included key areas such as: (c) specific needs in terms of financial, technical or infrastructural support, (d) previous experience with existing support programmes (including EU-funded initiatives), and (e) suggestions and recommendations for strengthening rural innovation ecosystems. This approach facilitated qualitative mapping of rural dynamics, identifying recurring themes and patterns while leaving room for unique regional narratives.

Through the use of Template 3, these interviews were systematically coded and analysed alongside the data collected from Templates 1 and 2. This approach allowed the challenges report (D2.2) to go beyond listing best practices and services by incorporating qualitative insights from rural stakeholders directly into the analysis. As a result, the findings offered a diverse, multi-dimensional understanding of rural innovation ecosystems in participating countries, providing evidence-based recommendations to address structural challenges, unlock the potential of rural entrepreneurship and guide future policy interventions. The combination of structured case studies, qualitative interviews and cross-case analysis ensures that the results are both context-sensitive and applicable across rural contexts, making the Challenges report a valuable resource for policy makers, rural entrepreneurs and other stakeholders.

2.2 Data Analysis methodology

The methodology used for analysing the results is based on three main concepts, which are outlined below:

- **Integration into Case Studies:** Rather than presenting interview results separately or in annexes, we have woven them into regional case study narratives. This approach was adopted not only to create a more coherent and content-rich understanding of the data, but also to respect the privacy and confidentiality of the stakeholders interviewed. By incorporating their insights into the case studies, we can highlight the substance and relevance of their contributions, while ensure their anonymity and focus the analysis on regional dynamics and collective learning. This method ensures that stakeholder contributions are effectively valued and utilized without exposing sensitive or identifying information. This aligns with the project's emphasis on place-based analysis, where each region's story is told holistically. To ensure anonymity and candor, direct quotes from interviewees are used with generic descriptors (e.g., "a local start-up founder noted that...") unless the interviewee explicitly agreed to be cited. Each case study highlights the region's context (socio-economic background, relevant Smart Specialisation priorities, etc.), then presents stakeholder insights on challenges and needs, and finally relates these to relevant S3/NEIA objectives and potential innovation opportunities.
- **Analytical Framework:** We employed a thematic analysis to categorize challenges into major themes such as *infrastructure & connectivity*, *human capital*, *funding & investment*, *networking &*

partnerships, market access, and policy/regulatory environment. This thematic structure guided cross-case comparison. We also specifically mapped interview findings against known challenges in literature/policy for rural innovation (for example, the Horizon Europe work programme for Startup Villages identified challenges like fragmented startup scenes and gaps in entrepreneurship education, which we checked against our data). Where appropriate, we incorporated external data – e.g., regional economic indicators or prior studies – to triangulate stakeholder perceptions. Finally, each case was examined in light of the region’s Smart Specialisation Strategy (S3) objectives and the New European Innovation Agenda to draw connections between micro-level needs and macro-level policy instruments.

- **Validation:** Preliminary findings were discussed in an internal meeting with project partners, including regional experts from the consortium, to validate interpretations. The integrated case studies were then reviewed by local partners (such as the municipal or NGO partners in the region) to ensure accuracy and resonance with on-the-ground realities. Their feedback was incorporated, particularly in refining how the challenges were framed relative to regional development plans.

The insights herein provide a solid evidence base for understanding the needs of rural innovation stakeholders and for guiding both project interventions and higher-level policy alignment.

3. Results

3.1 Consolidated Analysis of Regional Challenges and Innovation Gaps

This chapter delivers the specific needs, innovation gaps, structural barriers and support expectations of the start-ups, SMEs, public bodies and community organisations that make up the DRIVE “Startup Village” ecosystems in eight European regions. Each subsection follows a common template—regional context, stakeholder roles, interview-derived gaps and needs, structural challenges, alignment with the Smart Specialisation Strategy (S3) and the New European Innovation Agenda (NEIA), recommended actions, and the value-added role of the DRIVE project—so that findings are comparable across very different territorial settings. In doing so, the chapter turns a rich body of qualitative evidence into actionable insights that will inform subsequent work packages (notably WP5’s sustainability transition action plans) and provide European-level policy makers with a consolidated picture of where rural innovation support is most urgently required.

Table 1 illustrates the cross-case findings concisely, summarising some of the common needs identified across regions, mapped to corresponding S3/NEIA context. Analysis of each case study per country follows.

Table 1 Common needs aligned with SE/NEIA contexts.

Common need	Description	S3 Priority Link	NEIA/Policy Link
Digital infrastructure & literacy	Improve broadband, mobile coverage; train locals in digital skills for business and remote work.	S3 enables conditions for innovation diffusion (digitalization a core criterion); any sector priority relies on connectivity.	NEIA Flagship 3 (innovation in all regions) – closing digital divide; also, Flagship 4 (talent) via digital skill programs. Rural 5G initiatives under Connecting Europe Facility.
Entrepreneurial culture & training	Cultivate startup mindset, offer entrepreneurship education, especially to youth and women in villages.	S3 participation pillar – engaging civil society and business in strategy (EDP); also aligns with human capital themes in e.g. S3 on education.	NEIA Flagship 4 – fostering talent & entrepreneurship (e.g. Women TechEU, internships for startups programs). Also, the EU Rural Action Plan’s aim is for entrepreneurial discovery in rural areas.
Access to finance and support	Create mechanisms for rural SMEs to	S3 often mentions leveraging financial	NEIA Flagship 1 – increasing funding for startups (e.g. through European

	access seed funding, micro-loans, or grants; provide mentoring and coaching.	instruments for innovation; some regions have S3 funds for SME innovation – need to extend to rural micro-enterprises.	Innovation Council, InvestEU). Cohesion funds can be used to set up local financial instruments.
Physical hubs and coworking spaces	Establish local innovation centers, co-working hubs, maker spaces as focal points for community innovation.	Implied in S3 as part of the innovation ecosystem (infrastructure and collaboration space). Not an explicit S3 domain but supports priorities by providing test beds and demonstration sites local.	NEIA Flagship 2 – experimentation spaces (living labs, test beds)– these hubs in rural areas act as living labs for innovation (e.g. smart village labs). Also, EU Smart Villages concept under Rural Vision promotes such hubs.
Networking and cluster participation	Link rural startups to regional clusters, innovation networks, and urban hubs; encourage interregional collaboration.	S3 thematic platforms – rural areas joining interregional S3 partnerships on topics (e.g. agro-food). S3 criterion on cooperation beyond region encourages such linking.	NEIA Flagship 3 – creating Regional Innovation Valleys (which explicitly aims to connect weaker and stronger regions). Startup Village Forum and EEN networks are also policy tools to use.
Sector-specific innovation	Leverage local sector strengths for innovation (agrifood tech in farming areas, eco-tourism apps in tourist areas, etc.).	Directly tied to each region's S3 priority domains (e.g. agrifood, sustainable tourism, bioeconomy, energy). S3 is about focusing on these niches.	Aligns with various EU missions and clusters: e.g. Agri-food (Horizon Europe Cluster 6), Tourism (COSME programs), Energy (Clean Tech via NEIA). NEIA Flagship 5 (improving policy tools) also implies better data and support in specific sectors across regions.
Talent attraction/retention	Schemes to bring skilled individuals to villages (e.g. incentives for young professionals, remote worker packages, "return to roots" programs).	Indirectly related to S3 as a precondition (having a skilled workforce to implement innovation). Some S3 plans include actions for brain circulation.	NEIA Flagship 4 – new talent initiatives (EU Talent Pool for non-EU workers, startup employee stock options to attract talent to startups) which could be targeted to rural startups; also, Rural Vision's idea of a Rural Erasmus for young entrepreneurs.

3.1.1 Italy: Regional Case Study

Regional context and ecosystem overview: Italy's rural innovation landscape is characterized by stark regional disparities. Many inner areas in Italy suffer from depopulation and economic stagnation after decades of youth outmigration. The National Strategy for Inner Areas (SNAI), launched in 2014, was one of Europe's most comprehensive rural revitalisation plans. Under SNAI, the government targeted remote villages with investments in basic services (education, healthcare, transport) and support for sustainable local development. For example, in the Subequana Valley (Abruzzo region), improvements to schools, healthcare access, and transport were coupled with initiatives to rebuild traditional value chains (e.g. mountain agriculture and forestry). This context provides fertile ground for innovation but also underscores the fragility of rural ecosystems: while Italy has vibrant agrifood and bioeconomy sectors, these are unevenly distributed, with prosperous hubs in the north contrasting with underserved southern and mountain communities (European Commission, 2021). The rural population in Italy is relatively low (only 18% of Italians live in rural areas, below the EU average), reflecting the longstanding urban migration trend⁴. Nonetheless, Italy's rich

⁴ Torrecillas Caro, C., Merida Martin, F., & Sasso, S. (2024). Entrepreneurial and innovation ecosystems in rural areas: Startup Village examples (JRC Publication No. JRC137918). Publications Office of the European Union.
<https://doi.org/10.2760/542703>

cultural heritage, biodiversity in rural regions, and strong agricultural traditions offer a base for **place-based innovation** if the right support networks are in place.

Stakeholder Roles and Contributions: Key stakeholders in Italy's rural innovation ecosystem include local governments, universities, cooperatives, and SMEs. Municipal authorities and regional governments often act as conveners and facilitators; under SNAI, coalitions of municipalities jointly plan how to attract investment and improve services. Universities and research institutes (e.g. the University of L'Aquila in Abruzzo) contribute by providing expertise, incubation spaces, and talent to rural communities. In Subequana Valley, the local university partnered with the Special Reconstruction Office (post-2009 earthquake) and the Gran Sasso Science Institute to create a "mountain hub" for aspiring entrepreneurs. Local businesses and cooperatives (especially in agrifood and crafts) are critical for anchoring economic activity; many family firms and cooperatives preserve traditional products (cheese, olive oil, viticulture) while gradually adopting new technologies. Civil society organizations and community cooperatives also play a role in social innovation – for instance, social enterprises are emerging to manage community forests and renewable energy projects in rural Italy.

In interviews, stakeholders emphasized that collaboration is improving: *"We've seen our mayors, university representatives, and farmers start to meet regularly – this never happened ten years ago,"* noted one regional development officer. Such multi-actor engagement is fostering an ecosystem approach, though coordination remains a work in progress.

Innovation Gaps and Needs (Insights from Interviews): Despite some positive examples, interviews revealed significant innovation gaps in rural Italy. A common theme was the lack of digital infrastructure and connectivity. Stakeholders from inner Alpine and Apennine areas reported that poor broadband and mobile coverage hampers everything from agritech adoption to remote work opportunities. *"Our village has fiber optics on paper, but in practice the internet cuts out daily,"* complained a startup founder in a mountain community. Indeed, the digital divide in Italy's internal areas is stark: the share of population *not* reached by broadband is four times the national average in such regions. This gap translates to lower uptake of e-services and limits the potential of tech startups (ANCT, 2022). Another critical need is access to capital and business support for rural startups. Interviewees noted that venture capital and angel investors are concentrated in urban centers like Milan; rural entrepreneurs struggle to secure seed funding and often lack mentorship on scaling their innovations. *"If you're a young founder in a small town, there's no local incubator or investor network – you feel you must move to the city,"* explained an incubator manager in southern Italy. There is also an innovation skills gap: rural SMEs often lack employees with digital and R&D skills. Only 5.5% of Italian farm managers have any formal agricultural training, pointing to a broader human capital challenge in the countryside.⁵ Stakeholders expressed a need for training programs tailored to rural contexts (e.g. digital marketing for agritourism, precision farming techniques) and for attracting youth and talent back to rural areas. Lastly, bureaucratic hurdles were highlighted – complex regulations and slow administrative procedures can deter innovative projects in Italy's rural municipalities. Simplifying grant processes and providing one-stop advisory services were identified as key needs by multiple interviewees.

Key Challenges and Structural Barriers: Italy faces enduring structural barriers that underlie the above gaps. Depopulation and brain drain remain fundamental challenges: many rural Italian regions face declining and aging populations, which in turn shrinks the local talent pool and consumer base. The Subequana Valley case exemplifies this vicious cycle – as young people left, local demand and services declined, making it even harder to sustain businesses. Another structural issue is the "institutional thinness" of rural areas: limited presence of institutions and intermediaries that support innovation (e.g. tech parks, investors, accelerators).

⁵ chrome-extension://efaidnbmnnnibpcajpcglclefindmkaj/https://agriculture.ec.europa.eu/document/download/2952db56-2b0d-4520-a25a-ae2110dd4e01_en?filename=rdp-factsheet-greece_en.pdf#:~:text=than%20%20hectares%20and%20the,of%20persons%20employed%20in%20other

Rural Italy historically has fewer innovation brokers compared to the dense clusters in metropolitan regions. This means rural innovators often operate in isolation. Interviewees also cited the fragmentation of farms and firms – with 91% of Italian farms under 5 hectares, it's hard to achieve economies of scale or invest in R&D. Infrastructure deficits are another barrier: beyond digital connectivity, physical transport links are weak in many inner areas (mountain roads, limited public transit), impeding market access. One stakeholder noted that farmers struggle to get products to market due to poor roads, illustrating how infrastructure and innovation are interlinked. Additionally, Italy's complex bureaucracy and regional disparities in administrative capacity create uneven conditions – some regions (e.g. in the north) effectively use EU funds for innovation, while others lag. These structural issues – demographic decline, institutional gaps, infrastructure deficits – form a challenging backdrop that any rural innovation initiative must address.

Alignment with Smart Specialisation Strategy (S3) and NEIA: Italy's efforts to boost rural innovation align closely with EU strategies. At the regional level, Italian regions' Smart Specialisation Strategies (S3) commonly prioritize domains like agrifood innovation, sustainable bioeconomy, and tourism – areas of natural strength for rural Italy. For instance, the S3 of Apulia region focuses on bioeconomy (e.g. value-added food products, renewable biomaterials), and EU cohesion funds have helped startups in this domain. A notable example is a circular bioeconomy company in Puglia that converts organic waste to fertilizer and energy; with S3-aligned funding, it scaled up and created new R&D jobs.⁶ This reflects how S3 is channeling investment into local specialisations, which for rural Italy often means agriculture, food processing, and green technologies. Nationally, Italy approved a National S3 (Strategia Nazionale di Specializzazione Intelligente) that complements the Inner Areas Strategy by ensuring even lagging regions get tailored innovation support (European Commission, 2023). The Italian case also resonates with the New European Innovation Agenda (NEIA). Italy's focus on bridging its rural innovation divide supports Flagship 3 of NEIA, which aims to accelerate innovation across the EU and create *Regional Innovation Valleys* linking stronger and weaker ecosystems. By reinforcing rural accelerators and networks, Italy is contributing to NEIA's goal of unlocking excellence in all regions. Likewise, addressing Italy's rural brain drain aligns with Flagship 4 of NEIA on fostering and retaining talent (e.g. Italy's recent programs incentivizing young professionals to return to or remain in rural areas dovetail with EU initiatives to support deep-tech skills in every region). Overall, Italy's strategies show a strong coherence with S3 principles of place-based development and NEIA's emphasis on spreading innovation benefits more evenly. Continued alignment – such as tapping NEIA's funding for interregional innovation projects – could amplify the impact on Italy's rural challenges.

Recommendations and Solutions: To overcome the above challenges, a multi-pronged approach is recommended for Italy.

- Improving digital infrastructure is paramount, the government should accelerate the *Strategic Ultra-Broadband Plan* to eliminate remaining “white areas” with no internet.
- Fast-tracking broadband deployment in inner areas will enable remote work, e-learning, and agri-tech adoption that can be game-changers for rural communities.
- Expand rural business support services by creating a network of rural innovation hubs or incubators, inspired by the “mountain hub” concept in Abruzzo, Italy
- These hubs would provide co-working space, mentorship, and access to financing for local startups.
- Co-funded by regional authorities and EU programs (e.g. leveraging the European Innovation Ecosystems funding).
- Simplify regulatory procedures for small businesses by establishing regional one-stop shops to support rural entrepreneurs with permits and grant applications to reduce bureaucracy.

⁶ https://ec.europa.eu/regional_policy/whats-new/panorama/2023/11/29-11-2023-revolutionizing-growth-eu-s-smart-specialisation-strategies-unleash-regional-powerhouses_en#:~:text=An%20example%20of%20these%20virtuous, bespoke%20fertilisers%20for%20different%20crops

- Capacity-building and training should target rural SMEs and youth: initiatives like digital skill workshops for farmers, entrepreneurship programs in high schools, and expansion of agricultural extension services can raise the innovation readiness of the workforce (Bioazul, 2023).
- Furthermore, promoting clusters and cooperatives can help overcome fragmentation; small producers can band together to innovate (shared processing facilities, joint marketing of local products, etc.).
- Italy's cooperatives have a strong tradition which can be harnessed for new purposes like bioenergy co-ops or agritech consortiums.
- Finally, Italy should continue to utilize EU opportunities: participating actively in the new *Regional Innovation Valleys* initiative and similar interregional projects could bring additional know-how and funding into its rural areas.
- By adopting these solutions – digital inclusion, local hubs, skills development, collaborative networks, and EU cooperation – Italy can make its rural ecosystems more vibrant and resilient.

Role of DRIVE: The project can play a catalytic role in Italy's rural innovation trajectory. As the project coordinator is Italian (Consorzio Italbiotec), Italy stands to benefit substantially from DRIVE's activities. First, DRIVE's needs assessment and user engagement pillar will bring Italian stakeholders (at least two regional incubators/accelerators per roadshow) into transnational exchange. This means Italian rural hubs can learn best practices from other regions and vice versa, strengthening their capacity. For example, DRIVE can connect the Abruzzo "mountain hub" or an Apulian agrifood incubator with counterparts in Ireland or Slovenia, creating a knowledge spillover. Second, DRIVE's planned roadshows and hackathons will shine a spotlight on Italian rural innovators, giving them a platform to showcase solutions and attract interest. An agriculture-tech hackathon hosted in a rural Italian town, for instance, could draw talent and investors from across Europe, addressing the visibility gap. The project's mentorship and coaching pillar is equally critical: Italian startups will receive tailored mentoring to refine their business models for pitching to investors. By helping teams prepare investor pitches and navigate funding instruments, DRIVE can overcome the financing hurdle many Italian rural startups face. Moreover, DRIVE can liaise with Italian policymakers to ensure the project's outcomes inform future rural innovation policies (e.g. recommending improvements to SNAI based on on-the-ground insights). In summary, DRIVE is expected to act as a facilitator and accelerator – linking Italy's rural entrepreneurs to EU-wide networks, building local capacity through training, and attracting new opportunities (investments, partnerships) into Italy's countryside. This aligns with the project's overarching goal of fostering innovative rural ecosystems and will help sustain Italy's rural revival beyond the project's lifetime.

3.1.2 Slovenia: Regional Case Study

Regional context and ecosystem overview: Slovenia is a small country with a significant rural character – roughly half of its population lives outside urban centers, and many communities are in hilly or forested areas. The innovation ecosystem in rural Slovenia has been evolving from a post-socialist agrarian base towards more diverse entrepreneurial activity. A notable example is Kočevje, a medium-sized town (16,000 people) about 60 km from Ljubljana, which serves as a regional case for rural revival. Two decades ago, Kočevje faced high unemployment and youth out-migration to bigger cities and abroad. The area's economy traditionally relied on forestry and wood products, with large tracts of forest around, and small manufacturing. Recognizing these challenges, local authorities in 2008 launched an innovation and startup strategy to transform Kočevje's prospects. This context – a proactive local government in a struggling rural town – set the stage for ecosystem development. Today, Kočevje and similar Slovenian regions boast emerging clusters in wood processing, robotics, and agro-tourism, reflecting a blend of traditional strengths and new technology. Slovenia's national context also helps rural innovation: being a compact country, rural areas are rarely far from an urban center, which eases networking and access to infrastructure. However, remote communities (e.g. in alpine valleys or border areas) still face isolation. Overall, Slovenia's rural innovation ecosystem can be described as "small but nimble" – with tight-knit communities, relatively good basic

education, and increasing support from national programs, the building blocks are there, but scale and market access remain constraints.

Stakeholder Roles and Contributions: In Slovenia's case, municipal governments have been especially influential actors. The Kočevje municipality, for instance, took the lead in establishing an incubator and development center in 2008, which became the nucleus for local startups. Mayors and municipal economic offices often act as champions for attracting investment and initiating projects (a legacy of Slovenia's strong local governance structure). Public-private cooperation is highlighted as a key facilitator in Slovenian rural innovation. In Kočevje, the incubator was a public initiative but was quickly populated by private entrepreneurs and companies forging partnerships – e.g. a collaboration between local wood producers and a tech firm to develop smart forestry equipment. Educational institutions also play roles: though Slovenia is small, it has extension campuses and vocational colleges that serve rural regions. For example, a technical college in Novo Mesto supports skills development for the south-east region (including Kočevje) in fields like mechatronics and IT, feeding local industry with talent. SMEs and startups are crucial stakeholders too; many have roots in traditional sectors but are innovating incrementally (a family beekeeping business adding e-commerce and agrotourism, for example). In interviews, Slovenian entrepreneurs stressed the importance of networking across regions: because the domestic market is limited, rural firms seek connections in neighboring countries (Italy, Austria, Croatia) to grow. Organizations like the Chamber of Agriculture and Forestry and local action groups (LAGs, under the LEADER program) contribute by linking farmers, rural SMEs, and municipalities in development projects. One stakeholder from a Slovenian LAG noted that *“everyone wears multiple hats – the same person might be a farmer, a local councilor, and a tourism provider – which helps collaboration since people understand each other's realities.”* This multi-role dynamic can be a strength in mobilizing community-driven innovation.

Innovation Gaps and Needs (Insights from Interviews): Interviews in Slovenia's rural context revealed a mix of progress and persisting gaps. On the positive side, stakeholders from Kočevje reported that a local startup scene has emerged: over 80 startups or new businesses have been created in the past decade, spanning electronics, IT, robotics, food processing and more. This indicates that with the right support, even a small town can incubate innovation. However, a primary need is talent attraction and retention. Companies in rural Slovenia often struggle to hire skilled workers (engineers, tech specialists) because many young people still gravitate to Ljubljana or go abroad. *“We have jobs opening up in Kočevje's tech companies, but not enough qualified locals to fill them,”* explained one incubator manager, highlighting a skill gap. Thus, initiatives to bring talent back – such as housing incentives or remote work options for city-based professionals – are needed. Another gap is limited access to larger markets and finance. Entrepreneurs noted that while starting a business in Slovenia is relatively straightforward administratively, scaling it is hard due to the small domestic market and scarce venture funding. *“Slovenia doesn't have a big venture capital presence, and it's even harder for a village startup to get noticed,”* said a startup founder in a rural tourism venture. This suggests a need for connecting rural startups to international investors or EU-level funding. Infrastructure in certain areas also remains a need: even though Slovenia has good overall internet coverage, some hilly rural settlements have patchy broadband, and public transport links can be weak (affecting tourism and commuting). Interviewees from more remote Alpine villages emphasized the need for better transport connectivity to enable innovation (e.g. tourists can't easily reach some eco-tourism sites, limiting those businesses). Lastly, bureaucratic centralization was mentioned: many innovation support programs are Ljubljana-centric. Rural actors feel a need for more decentralised support – for instance, having regional innovation officers or mobile units that visit rural entrepreneurs to advise on grants and technology (rather than expecting everyone to come to the capital). Addressing these needs – talent, market access, last-mile infrastructure, and decentralised support – would significantly boost Slovenia's rural innovation outcomes.

Key Challenges and Structural Barriers: Slovenian rural regions face a few structural barriers that mirror those of other European countries but on a smaller scale. One major challenge is the aging population and youth exodus in certain remote areas. While Slovenia's overall population trend is stable, villages in border

or mountainous areas have seen young people leave for urban opportunities, leading to school closures and fewer local services. This demographic pressure threatens the sustainability of local innovations – as one stakeholder pointed out, *“What’s the point of a new business if no young families are left in town to work or patronize it?”* A second barrier is the limited labor force specialization in rural areas. Historically, education and R&D institutions are concentrated in Ljubljana and Maribor; rural regions have fewer specialized research centers. This can make it harder to develop high-tech ventures outside cities. Even in Kočevje’s case, after initial success, a shortage of highly skilled workers is a barrier to further growth. Additionally, infrastructure disparities persist: although Slovenia’s size helps, some rural localities still lack high-quality roads or public transit, isolating them from economic hubs. A structural challenge somewhat unique to Slovenia is its small national market, which means even a successful rural product might quickly saturate local demand and then struggle to expand abroad due to lack of networks or export support. Finally, there’s an element of cultural barrier: traditionally, rural communities were not oriented towards entrepreneurship (farmer cooperatives dominated). Encouraging a startup mindset is a gradual process – older generations may be risk-averse and property-oriented, which can hinder, for example, releasing land or facilities for new enterprises. That said, the collaborative ethos in Slovenian villages (often manifested through cultural associations, volunteer fire brigades, etc.) can be harnessed to overcome some barriers by channeling community solidarity into supporting new initiatives. In summary, demographic shrinkage, skill shortages, small market size, and lingering conservative attitudes form the main structural hurdles for rural innovation in Slovenia.

Alignment with Smart Specialisation Strategy (S3) and NEIA: Slovenia’s innovation policy frameworks strongly emphasize balanced regional development, aligning with both S3 and the New European Innovation Agenda. Slovenia has a national S3 but also identifies priority domains for each of its cohesion regions. For example, for Eastern Slovenia (which is predominantly rural), the S3 priorities include sustainable food production, wood chain (forestry & wood products), and mobility. These align with rural strengths – Kočevje’s success in wood manufacturing and robotics fits into the national S3 focus on turning traditional sectors (like wood processing) into high-value industries via technology. By fostering a robotics training program linked to its wood industry, Kočevje essentially operationalized the S3 principle of building on local comparative advantage with innovation. Slovenia’s case also aligns with Flagship 3 of NEIA (strengthening innovation ecosystems and addressing the innovation divide). Kočevje’s transformation from a lagging area into an emerging startup hub exemplifies the kind of regional catching-up that NEIA promotes. The government’s support for incubators and the recent designation of certain regions for special innovation support resonate with NEIA’s call to direct funding to under-served regions. Additionally, Slovenia’s focus on digital and green transitions in rural areas mirrors NEIA’s priorities (twin transitions). For instance, Slovenia participates in the EU’s Regional Innovation Valleys initiative and has proposed cross-border innovation collaborations with neighboring countries – an embodiment of NEIA’s push for interregional projects. On talent development (NEIA Flagship 4), Slovenia is implementing measures to counter brain drain, such as the *“Talent Return”* program offering incentives for Slovenians abroad to come back – which complements local efforts in places like Kočevje to make the town attractive for skilled workers. In summary, Slovenia’s rural innovation efforts are very much in harmony with S3’s place-based approach (leveraging wood, food, etc., as smart specialisations) and NEIA’s agenda of ensuring smaller ecosystems like Kočevje can contribute to Europe’s innovation momentum.

Recommendations and Solutions: To further advance rural innovation in Slovenia, several targeted solutions are recommended.

- Enhancing talent attraction and education is a top priority; establishing satellite campuses or training centers in rural hubs can help. For example, a branch of a technical university or a coding bootcamp in a town like Kočevje would provide local youth with skills and allow companies to recruit locally.
- Scholarship programs or incentives (tax breaks, housing) for young professionals who relocate to rural areas could also address the brain drain.

- Improving rural financing mechanisms is important- Slovenia could develop a rural innovation fund or extend its startup subsidy schemes specifically for projects based in small towns and villages.
- Public-private partnership funds, possibly backed by EU resources, could ensure that a promising rural startup isn't held back by lack of capital.
- Market access support is another needed solution; this could involve government or chamber of commerce initiatives to help rural SMEs export or partner abroad.
- Given the limited home market, programs like trade missions or e-commerce platforms for rural products can significantly expand opportunities.
- Fourth, leveraging digital tools for networking: since distances are short, but connectivity can bridge them entirely, creating virtual clusters or online communities of practice for rural entrepreneurs across Slovenia (and even with peers in other countries) would mitigate isolation. For example, an online platform connecting all rural incubators and providing mentorship via video conferencing can spread knowledge.
- Infrastructure and transport solutions remain relevant, mini-grants for rural municipalities to run pilot shuttle services or improved last-mile delivery logistics (perhaps using digital apps) can better link villages to economic centers.
- Finally, at the governance level, Slovenia should strengthen decentralized innovation support; deploying regional innovation advisors who travel to rural areas, simplification of procedures for small projects, and ensuring rural voices are included in national innovation policy dialogues.

These solutions – focusing on people (skills, talent), finance, connectivity, and supportive governance – would consolidate the gains made in places like Kočevje and replicate their success in other Slovenian regions.

Role of DRIVE: The project is poised to provide valuable support to Slovenia's rural innovation ambitions. As a trans-European initiative, DRIVE will help Slovenia's rural innovators connect beyond the country's borders, addressing the market access and network limitations they face. During DRIVE's regional roadshows, Slovenia will likely host or participate in events where local startups and stakeholders can meet peers from Italy, Cyprus, Ireland, and other partners. This exposure can lead to partnerships (for example, a Slovenian agritech startup finding a testbed in an Italian village, or a joint project between Kočevje and an Irish rural hub on forestry tech). The project's emphasis on startup villages will also bring in cutting-edge practices – DRIVE can introduce Slovenian communities to new models such as coworking in village centers, digital fabrication labs for crafts, or community crowdfunding for local businesses (ideas gathered from the European Startup Village Forum and other contexts). Through its mentoring activities, DRIVE will deliver tailored guidance to Slovenian rural startups on business modeling and scaling. This external mentorship is crucial in a setting where local mentor pools are small. Moreover, DRIVE can act as a conduit for policy feedback. Slovenian DRIVE participants (entrepreneurs, municipal officials) will share their on-the-ground experiences, which DRIVE will synthesize into policy recommendations. These insights can inform Slovenia's own rural policies or feed into the Smart Specialisation updates, ensuring that the unique needs of places like Kočevje are recognized at higher levels. Lastly, DRIVE's expected outcomes include helping participants prepare for further funding – Slovenian partners will learn how to pitch to European investors and access programs like Horizon Europe or Digital Europe in the future. In effect, DRIVE will be an amplifier for Slovenia's rural innovation: enhancing visibility, building skills, fostering cross-border cooperation, and steering resources to where they are needed. By the end of the project, Slovenia should have a stronger, more connected rural innovation network and several success stories that can inspire continued investment.

3.1.3 Cyprus: Regional Case Study

Regional Context and Ecosystem Overview: Cyprus offers a distinct case of a small island state with both urban centers and a sparsely populated rural interior. The country's rural areas – including mountain villages in the Troodos range and farming communities in the Mesaoria plain – have historically been challenged by geographic isolation and limited natural resources (notably chronic water scarcity). In recent years, however,

Cyprus has made headlines for its rapid climb in European innovation rankings, becoming a “Strong Innovator” country by 2023. This national progress sets the context for rural innovation: on one hand, Cyprus now boasts several research centers and a growing tech startup scene (mostly in Nicosia and Limassol), but on the other hand, ensuring that innovation reaches rural communities remains an ongoing task. The rural ecosystem in Cyprus is characterized by small villages, often with aging populations, where agriculture (especially citrus, olives, vineyards) and tourism are mainstays. The government’s Cyprus Smart Specialisation Strategy (S3) identifies priority areas that resonate with rural needs, such as sustainable agriculture and tourism, energy, and maritime technology. There is a strong policy push to diversify the rural economy – for example, promoting agrotourism (traditional guesthouses, wineries), artisanal food production, and solar energy projects in villages. Additionally, being an island, Cyprus treats some challenges as nationwide regardless of rural/urban, like water management innovation and digital transformation of public services. The ecosystem also benefits from a well-educated diaspora; many Cypriots study or work abroad and there are efforts to entice them back. Overall, Cyprus’s small size means that rural areas are never too far from urban innovation hubs, yet the island context (and division of the island) gives its rural innovation ecosystem a unique, contained character.

Stakeholder Roles and Contributions: In Cyprus, government agencies play a central coordinating role in innovation. The Deputy Ministry of Research, Innovation and Digital Policy and the national Research & Innovation Foundation (RIF) drive programs that include rural components. For instance, RIF has funded local projects on smart farming and village renewables. Local authorities (community councils) in villages are important on-the-ground actors; they often initiate improvement projects (like setting up a telecenter or arranging entrepreneurship workshops) in collaboration with ministries. Universities and Centers of Excellence are growing players – Cyprus now hosts multiple universities and at least eight EU-funded Centers of Excellence (e.g. CYENS for interactive media, which also engages in community pilot projects). These institutions sometimes adopt nearby villages to pilot technologies, such as sensor networks for agriculture or rural telemedicine, thereby involving rural stakeholders in R&D. Entrepreneurs and SMEs in rural Cyprus are typically in traditional sectors (farming, food, crafts, tourism), but a new wave of rural startups is emerging. For example, young entrepreneurs are launching businesses like digital platforms for farm-to-table delivery and eco-tourism adventure companies. Interviews highlighted how NGOs and community groups also contribute: organizations focused on rural development, women’s associations, or youth clubs are championing innovative social enterprises (like a women-led cooperative producing organic cosmetics from local herbs, blending tradition with innovation). A key stakeholder dynamic in Cyprus is the role of diaspora and returnees – many stakeholders noted that Cypriots who gained experience abroad are behind some of the most innovative rural ventures (for instance, a former London engineer setting up a drone mapping service for Cypriot vineyards). This underscores the contribution of internationally networked individuals to local innovation. Lastly, Cyprus benefits from EU-level stakeholder engagement: the island’s actors actively participate in EU networks (like EIT Climate-KIC, Digital Innovation Hubs, etc.), which bring additional knowledge and opportunities to rural projects.

Innovation Gaps and Needs (Insights from Interviews): Interviews with Cypriot stakeholders pointed out several gaps that need addressing for rural innovation to thrive. One prominent gap is connectivity and digital skills in villages. While Cyprus has made advances in digital government and broadband, some remote villages still have spotty internet, and older residents may lack digital literacy. *“There are villages where high-speed internet exists, but many residents don’t use it effectively or at all,”* noted one local official, highlighting a need for digital inclusion programs. This is corroborated by surveys indicating rural inhabitants in Cyprus feel less able to benefit from digital opportunities (ANCT, 2022). A second major need is water and energy innovation tailored to rural realities. Stakeholders from farming communities emphasized that climate change is making water management technology (like smart irrigation, desalination for communities) absolutely critical. They identified a need for affordable innovative solutions that small farmers can deploy, as current technologies are often too expensive or require technical know-how they don’t have. Similarly, rural Cyprus has great solar energy potential, but interviewees noted the need for better integration of

renewables at the village level (like micro-grids or energy co-ops) – an area calling for innovation and supportive policy. Another gap is market access and diversification for rural products. Traditional producers (cheese makers, wineries, etc.) need innovation in marketing and distribution to reach beyond local markets. One young entrepreneur running a family winery said, *“We produce excellent wine, but lack the e-commerce and logistics to sell widely; we need help innovating our marketing.”* This suggests a need for digital marketplace platforms or cooperative branding initiatives for rural SMEs. Education and training opportunities in rural areas also came up: even though Cyprus is small, many rural youths feel compelled to move to cities for education or jobs, and few return. Stakeholders called for bringing more training programs to villages (for example, short courses on entrepreneurship, ICT, agri-innovation taught in community centers) to build local capacity. Lastly, a unique need for Cyprus is fostering cross-community (north-south) innovation – given the island’s division, there are rural communities on both sides that could benefit from joint projects (for example, bi-communal agritech initiatives). While politically sensitive, some stakeholders see collaboration on innovation as a bridge-builder that could open up the whole island’s innovation potential. Addressing these needs – digital inclusion, resource-focused tech, market linkages, local training, and inclusive collaboration – would greatly benefit Cyprus’s rural innovators.

Key Challenges and Structural Barriers: Cyprus’s rural innovation efforts are constrained by a few structural challenges. The first is the small scale of communities and economies. Many rural villages in Cyprus have only a few hundred residents, and the national population is just 1.2 million. This means limited local demand and scarce human resources in each community, making it hard to sustain specialized services or innovative ventures without looking outward. This ties into the challenge that *“the island is small and people often naturally look abroad for bigger career opportunities,”* as noted by RIF’s Director. The perpetual pull towards larger markets (like mainland Europe) leads to brain drain – talented individuals leaving, which hollow out the innovation capacity of rural areas. Another structural barrier is the geographic isolation and accessibility: despite its size, Cyprus’s interior is mountainous, and some villages are quite remote due to winding roads. Limited public transport leaves rural residents and businesses somewhat cut off. Additionally, as an island, Cyprus can’t easily integrate into continental infrastructure networks, which raises costs (for example, shipping products or importing equipment). A third barrier is related to the fragmented administration – Cyprus has many small local authorities and until recently lacked a strong regional tier of governance. This can result in less coordinated rural development efforts. However, programs like the national Rural Development Programme (under CAP) have aimed to fill this gap by channeling EU funds to local projects. Still, interviewees mentioned bureaucratic delays in accessing funds as a barrier; one farmer described the lengthy process to get a subsidy for new equipment, which dissuades rapid innovation adoption. Another challenge is the limited R&D presence directly in rural areas: most labs and high-tech firms are in Nicosia or Limassol. Rural entrepreneurs thus have to travel or relocate to collaborate with researchers, which can dampen rural-oriented innovation. Lastly, Cyprus’s unique political situation – the division of the island – means that some potential innovation synergies (across the buffer zone) are not fully realized, and resources are duplicated. For instance, instead of one combined market of rural consumers, there are effectively two smaller markets split by the division. These structural factors – small scale, isolation, administrative fragmentation, centralization of R&D, and political barriers – create headwinds for rural innovation that Cyprus continually needs to mitigate.

Alignment with Smart Specialisation Strategy (S3) and NEIA: Cyprus’s strategies align well with both its Smart Specialisation priorities and the New European Innovation Agenda. The Cyprus S3 (Smart Specialisation Strategy) explicitly includes sectors like *Agriculture-Food, Tourism, Energy, and Transport-Maritime* among its priorities, all of which are highly relevant to rural areas.⁷ This means that many innovation efforts in rural Cyprus (e.g. developing agri-tech or sustainable tourism services) are not ad-hoc but part of a strategic vision. For example, under S3, Cyprus invested in an agri-innovation center focusing on precision farming for water efficiency, directly tackling rural challenges in farming. This place-based approach ensures that rural

⁷ <https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2021%2Fdata%2FpolicyInitiatives%2F16266>

strengths (like the island's rich biodiversity and cuisine traditions) are leveraged in a modern way, aligning with the S3 concept of building on regional assets. In terms of the New European Innovation Agenda (NEIA), Cyprus exemplifies some of its key objectives. Cyprus's rapid improvement in innovation performance shows the impact of addressing the innovation divide, which is at the heart of NEIA Flagship 3. Efforts to boost less-developed innovation ecosystems (Cyprus was historically a "modest innovator" and is now strong) mirror what NEIA envisions for other regions. Additionally, Cyprus is actively pursuing NEIA-aligned initiatives: it has been part of discussions on the Regional Innovation Valleys to connect with other Widening countries (Cyprus, as a strong innovator in a mostly moderate innovator region, can act as a bridge in its vicinity). On Flagship 1 (Funding Scale-Ups), Cyprus launched a national equity fund in 2023 to support startups in fields like digital health and climate tech, dovetailing with NEIA's push to mobilise more investment into innovation. For Flagship 4 (Talent), the introduction of the "Golden Knowledge Visa" in Cyprus to attract foreign researchers and incentives for diaspora return align with NEIA's talent attraction goals. Finally, NEIA's emphasis on deep-tech and twin transitions is evident in Cyprus's focus on things like solar energy (green transition) and its growing digital startup scene. In summary, Cyprus's rural innovation initiatives operate within a policy framework that is both locally tailored (S3) and forward-looking on a European scale (NEIA), indicating strong alignment with broader innovation agendas.

Recommendations and Solutions: To further drive rural innovation in Cyprus, several recommendations emerge.

- Bridging the digital divide should be a priority: this includes not just infrastructure (ensuring every village has fast internet under initiatives like the National Broadband Plan) but also digital literacy training for rural residents.
- The government could expand on programs with "digital coaches" visiting villages to train older adults and small businesses on using e-services and digital tools, so that technology benefits are evenly spread (ANCT, 2022).
- Promoting water-smart and climate-smart innovation is vital. Cyprus can incentivize startups and researchers to focus on water-saving irrigation, drought-resistant crops, and renewable energy solutions tailored for rural usage.
- A suggested mechanism is challenge-based innovation competitions (for example, a "Rural Water Innovation Challenge" offering grants for best solutions implemented in a pilot village).
- Strengthening rural-urban linkages is another solution area: this involves connecting rural producers with urban markets through digital marketplaces or cooperative marketing.
- The government and chambers can help set up an online platform for Cypriot local products, which would handle logistics collectively – enabling a small village producer to sell internationally without handling all shipping alone.
- In tourism, developing integrated rural tourism circuits (with a digital booking platform for village homestays, tours, etc.) can help diversify income.
- Another recommendation is to expand the remote work infrastructure in villages. Building on the national Connected Hubs initiative (which already led to 300+ remote working hubs nationally), Cyprus can ensure some of these coworking hubs are located in scenic rural areas, allowing city workers to spend time in villages and boost the local economy.⁸ For instance, converting unused municipal buildings into co-working and innovation spaces with good connectivity could attract freelancers or even small startups to set up in rural towns, as envisioned in Ireland's model.⁹

⁸ <https://www.gov.ie/en/department-of-rural-and-community-development-and-the-gaeltacht/press-releases/our-rural-future-minister-humphreys-and-minister-coveney-address-the-2nd-annual-national-hub-summit/#:~:text=Our%20Rural%20Future%3A%20Minister%20Humphreys,Heather%20Humphreys%20and%20Minister>

⁹ <https://www.socialjustice.ie/content/policy-issues/our-rural-future-rural-development-policy-2021-2025#:~:text=Broadband>

- Fostering bi-communal collaboration for innovation on the island is a sensitive but potentially rewarding approach: NGOs or international bodies could facilitate joint workshops or projects where Greek-Cypriot and Turkish-Cypriot rural entrepreneurs share knowledge (for example, on organic farming techniques or cultural tourism), supported by EU peacebuilding funds.
- Finally, continuing to strengthen the support ecosystem is key: expanding mentorship networks (perhaps a “Rural Mentor” program pairing experienced business people from cities with village startups), and ensuring that funding programs (like the RIF’s innovation vouchers or EU rural development funds) have simple application processes accessible to small rural applicants.
- By implementing these solutions, Cyprus can ensure its rural communities are not left behind but become active contributors to the island’s innovation success story.
-

Role of DRIVE: DRIVE project will benefit Cyprus by connecting its rural innovators to a European platform and resources. One immediate role for DRIVE is to act as a connector: Cypriot rural startups and initiative leaders will, through DRIVE, meet peers from across Europe. This networking can lead to knowledge transfer and partnerships that address some gaps (for example, a Cypriot village co-op might learn from an Italian agritourism network how to better market their products online, or an Irish remote working hub model could be replicated in Cyprus’s mountains). Also, DRIVE’s multi-stakeholder approach means Cypriot stakeholders’ needs and ideas will be documented and shared. The interviews and data DRIVE collects (as part of identifying user needs) will include input from Cyprus, which ensures that Cypriot rural challenges are represented in the broader analysis. This could influence policy recommendations at the EU level that ultimately benefit Cyprus (for instance, highlighting the island-specific innovation needs in rural areas). Another expected contribution of DRIVE is capacity-building: through its hackathons and mentoring, DRIVE will directly build skills of Cypriot participants. Cypriot rural entrepreneurs can receive mentorship on pitching, business planning, and accessing finance, which is invaluable in a context where local mentorship is limited. The project’s hackathons could also be oriented to local problems – for example, DRIVE might co-organize a hackathon in Cyprus addressing “digital solutions for rural tourism,” spurring home-grown innovation. Additionally, DRIVE is likely to help Cyprus align with European opportunities like the Regional Innovation Valleys. By being part of DRIVE, Cypriot stakeholders will be among the first to know of and prepare for calls and initiatives under NEIA, effectively boosting Cyprus’s visibility and readiness to attract more funding. Finally, DRIVE’s dissemination activities will put a spotlight on success stories – if, say, a startup from a Cypriot village comes up with a novel solution during the project, DRIVE will help publicize it across Europe. This recognition can attract investment or partnerships for that startup beyond what it could achieve alone. In essence, DRIVE will serve as an accelerator and amplifier for Cyprus’s rural innovation endeavors: accelerating through skills and funding support, and amplifying by showcasing Cypriot innovations on a European stage and embedding Cyprus in continental innovation networks.

3.1.4 Belgium: Regional Case Study

Regional Context and Ecosystem Overview: Belgium’s innovation landscape is often associated with its highly urbanized and industrial regions, yet the country also includes rural areas especially in Wallonia (southern Belgium) and parts of Flanders. Rural communities in Belgium exist within a densely populated country; even “rural” municipalities are relatively close to cities by European standards. This proximity means rural Belgian regions can more easily tap into national infrastructure (e.g. transport, broadband) and research centers. However, disparities persist: for example, the Ardennes highlands in Wallonia are less economically dynamic than the Flemish countryside in the north. The regional context is shaped by Belgium’s federal structure – Flanders and Wallonia have their own Smart Specialisation Strategies and rural development programs. Wallonia’s rural policy emphasizes “territorial development goals” to keep villages vibrant and multifunctional, reflecting concerns about village decline.¹⁰ In Flanders, rural areas are fewer but integrated

¹⁰ <https://eu-cap-network.ec.europa.eu/news/bringing-leader-led-benefits-rural->

into a strong economy, focusing on sustainability of agriculture and quality of life. Notably, Belgium has a long tradition with the LEADER program and Local Action Groups (LAGs) to foster bottom-up innovation in rural development. As of the 2023–27 period, Belgium allocated over €35 million to LEADER, funding 36 LAGs nationwide (15 in Flanders, 21 in Wallonia). These LAGs form a backbone of the rural ecosystem, implementing local projects on diversification, smart villages, and social inclusion. Another feature of Belgium’s rural ecosystem is cross-border interaction: many rural areas engage in EU cross-border programs (with France, Netherlands, Luxembourg, Germany) to address common challenges like rural mobility or environment. Overall, Belgium’s rural innovation ecosystem can be characterized as well-supported but fragmented – supported in that resources and infrastructure are relatively good, fragmented in that there is a patchwork of small initiatives and differing regional approaches. The recent loss of Belgium’s status as an “innovation leader” in EU rankings (dropping slightly in innovation performance) has renewed attention on unlocking innovation outside the main urban cores, including its rural areas.

Stakeholder Roles and Contributions: Key stakeholders in Belgian rural innovation include a combination of public bodies, local groups, and knowledge institutions. Local Action Groups (LAGs) are especially prominent in Belgium; they consist of partnerships between municipalities, farmers, SMEs, and civil society, coming together to propose and implement rural projects. For instance, a LAG in Wallonia might bring together several villages to develop a local co-working space and farmer’s market, with funding from CAP. These LAGs act as intermediaries and catalysts, ensuring bottom-up ideas get hearing and support. Regional governments (the Walloon Region and Flemish Government) set strategic priorities and funding mechanisms. They also operate extension services – in Wallonia, for example, the Public Service of Wallonia (SPW) has units focusing on rural development and innovation, including smart village pilots. Research and educational institutions contribute mainly through agro-technology and social innovation research. Universities like Gembloux Agro-Bio Tech in Wallonia or KU Leuven in Flanders have outreach programs to test innovations in rural living labs (for example, precision farming experiments on Walloon farms, or smart water management in West Flanders polders). Farmers’ unions and cooperatives are important stakeholders as well. Organizations such as the *Fédération Wallonne de l’Agriculture* or *Boerenbond* in Flanders often partner on innovation projects and training, helping disseminate new practices among rural producers. NGOs and community enterprises also fill gaps – e.g. rural mobility services by social enterprises providing on-demand transport in villages, or NGOs promoting cultural revitalization of depopulated areas. A stakeholder insight from Belgium highlighted the role of “supra-municipal partnerships”: because many Belgian communes are small, they often pool resources for innovation. For example, multiple municipalities in a region might jointly hire a digital coordinator to implement a smart village strategy (Smart Rural 27, 2022). Finally, private sector involvement tends to come from SMEs (like local renewable energy companies installing biogas in farms, or tourism operators innovating around outdoor recreation). Large companies are less directly involved in rural areas except in sectors like food processing or energy where they might pilot projects (e.g. a telecom company trialing 5G in a farming context). In sum, Belgium’s rural innovation stakeholders form a multi-level network: grassroots groups conceive projects, supported by regional authorities and facilitated by networks like LAGs and farmer cooperatives, with occasional input from academia and industry.

Innovation Gaps and Needs (Insights from Interviews): Interviews with Belgian rural stakeholders reveal that, despite good frameworks, certain innovation gaps remain. One recurring theme is the connectivity gap in the last mile. While Belgium has high broadband coverage overall, some rural pockets (especially in forested or hilly areas of Wallonia) still have “grey zones” with subpar internet speeds.¹¹ Stakeholders in

[belgium_en#:~:text=In%20Wallonia%2C%20LEADER%20is%20being,region%20started%20working%20with%20LEADER](#)

¹¹ https://www.smartrural27.eu/wpcontent/uploads/2021/12/BELGIUM_Wallonia_SR27_Taskforce-ActionPlan_Sept2022.pdf#:~:text=new%20services%2C%20in%20rural

those areas need reliable high-speed connectivity as a basic enabler for any digital innovation – whether it’s an e-health service for villagers or farmers adopting IoT sensors. *“Connectivity remains a major challenge for many rural areas,”* confirmed a Walloon digital coordinator, underlining that without broadband, smart village concepts cannot materialize. Another identified need is tailored support for micro-enterprises. Rural Belgium has many very small businesses (family farms, artisanal producers, B&Bs); they need hands-on guidance to innovate (for example, how to start selling online, or how to adopt a new eco-friendly technique). Interviewees noted that general innovation programs often don’t reach these micro-entrepreneurs effectively. Thus, a need exists for outreach – possibly mobile “innovation advisors” who visit villages. Youth engagement and retention also emerged as a concern. In parts of rural Wallonia, youth unemployment is an issue and many young people move out. Needs include creating attractive opportunities (e.g. startup incubators in rural towns, vocational training in modern farming, cultural and social amenities) so that young innovators see a future locally. Some stakeholders suggested establishing rural “innovation labs” in high schools to spark interest in local problem-solving among students. Additionally, there is a need for streamlining multi-level governance of rural innovation. The interviews revealed that sometimes EU, regional, and local initiatives overlap or are not well coordinated – for example, a mayor might be unsure whether to tap an EU fund or a Walloon program for a similar digital project. Simplified information and one-stop shops would help local actors navigate funding and support. Lastly, climate change adaptation innovation is a growing need in rural Belgium. The 2021 floods in parts of Wallonia were a wake-up call; rural areas need innovative solutions for flood management, sustainable forestry (to prevent erosion), and resilient agriculture. Stakeholders pointed out that rural communities are willing to innovate for climate resilience but need technical and financial assistance to implement measures like nature-based solutions. Addressing these needs – connectivity, micro-enterprise support, youth engagement, governance clarity, and climate-smart innovation – would fill the gaps that keep Belgium’s rural areas from fully leveraging their innovation potential.

Key Challenges and Structural Barriers: Belgium’s rural innovation efforts face structural barriers that are partly systemic and partly geographic. One barrier is the administrative complexity inherent in a federal country. With responsibilities split between federal, regional, provincial, and local levels, rural initiatives often require navigating a complex bureaucracy. A local stakeholder quipped that *“to set up a small co-working space, I had to speak to the EU office in Brussels, the Walloon Region, the province, and my commune – it’s too much for a volunteer-led project.”* This complexity can discourage grassroots innovation unless intermediaries (like LAGs) step in to help. Another structural challenge is economic disparity between regions. Flanders generally has more resources and a more entrepreneurial culture, while parts of Wallonia have faced industrial decline and higher unemployment. This means rural innovation in Wallonia starts from a different baseline (often more about basic socio-economic revitalization) compared to Flanders (more about sustainability and quality of life improvements). Bridging this gap is a national challenge – indeed the European Innovation Scoreboard noted Belgium’s slight slip partly due to Wallonia not keeping pace (Drumm, 2024). Social cohesion and inclusion form another barrier in some areas: rural Belgium, especially near cities, is seeing new residents (commuters, second-home owners) mixing with long-time locals, which can sometimes lead to divergent views on development. Inclusive approaches are needed so that innovation benefits (like a new digital service or community project) reach all groups and have broad support. Additionally, the small size of rural municipalities (many have a few thousand residents) means limited administrative capacity. This can hamper long-term innovation planning – local councils are busy keeping basic services running, with little staff to dedicate to innovation projects or grant applications. Belgium addresses this via inter-municipal cooperations, but it remains a challenge to ensure each rural area has enough capacity. Lastly, while infrastructure in Belgium is generally strong, mobility remains an issue in rural parts: public transport is limited in many villages (reliance on cars is high), which isolates those without cars and can limit collaboration (e.g. youths can’t easily attend a training in the next town without a ride). This structural issue influences innovation by constraining who can participate in events or jobs. In summary, the structural barriers – multi-layered governance, regional disparities, social inclusion issues, limited local

capacity, and mobility constraints – define the context within which rural innovation must be pursued in Belgium.

Alignment with Smart Specialisation Strategy (S3) and NEIA: Belgium’s approach to innovation, including in rural areas, is closely tied to its Smart Specialisation Strategies at the regional level. Flanders’ S3 focuses on priority domains like biotechnology, advanced manufacturing, and digital innovation, which mostly benefit urban high-tech clusters, but it also includes sustainable agriculture and food processing (acknowledging Flanders’ strong agri-food sector).¹² Rural areas in Flanders thus align with S3 by advancing precision farming, farm mechanization, and bio-based innovations (for example, the use of agro-residues for bioenergy, a topic in Flanders’ S3). Wallonia’s S3 includes areas like agro-industry, environmental sustainability, and logistics. Walloon rural regions contribute through agro-food innovation – e.g. artisanal food producers adopting new processing tech – and through forestry and ecotourism innovations aligned with environmental goals. Both regions’ S3 recognise that innovation isn’t only about high tech; as the EU Panorama noted, S3 can encompass traditional sectors and social innovation. This is evident in Belgium where smart village concepts (social innovation in service delivery) and community energy projects fit into the broader S3-driven goal of sustainable growth. Regarding the New European Innovation Agenda (NEIA), Belgium engages in several relevant aspects. Flagship 3 (innovation ecosystems & reducing divide) is particularly pertinent: Belgium’s participation in the Regional Innovation Valleys initiative under NEIA is expected, given Wallonia’s interest in catching up and Flanders’ capability to partner with less innovative regions. The country’s support for multi-actor networks (like LAGs, EIP-AGRI Operational Groups) is in line with NEIA’s push for ecosystem building. On Flagship 1 (scale-ups), Belgium historically had strong access to capital in Brussels and Flanders, but ensuring rural startups benefit from that is part of the challenge; NEIA’s emphasis on mobilising private investment may spur new financing channels that rural innovators can also tap into. For Flagship 4 (talent), initiatives in Belgium to retrain workers and engage youth (for example, the 28 new vocational Centers of Excellence across each province) support the NEIA goal of boosting skills relevant to innovation.¹³ Additionally, Belgium’s policies resonate with NEIA’s twin transition focus: rural innovation projects often link to the green transition (renewable energy, circular economy in farming) and digital transition (broadband, e-services), aligning with Europe’s broader objectives. In summary, Belgium’s regional S3 strategies provide the structure for including rural sector innovations in the national innovation portfolio, and NEIA reinforces those efforts by encouraging connectivity between regions and comprehensive support for innovation talent and scale-up – areas Belgium is actively addressing.

Recommendations and Solutions: Building on the analysis, key recommendations for Belgium include measures to simplify and strengthen rural innovation support.

- Improve coordination across governance levels: establishing a clear “Rural Innovation Desk” in each region could help local actors navigate the myriad programs. This desk (or perhaps a digital one-stop portal) would consolidate information on funding (LEADER, regional grants, EU calls) and offer technical assistance to project proponents. For example, if a community group in Ardennes wants to start a smart village project, the desk would guide them through concepts to funding to implementation.
- Leverage inter-municipal cooperation for scale: encourage and fund municipalities to jointly hire innovation managers or digital coordinators. Belgium can expand pilots where a cluster of villages shares an expert who drives smart solutions This addresses capacity issues and ensures continuity beyond political cycles.

¹² <https://stip.oecd.org/stip/interactive-dashboards/policy-initiatives/2021%2Fdata%2FpolicyInitiatives%2F2988>

¹³ <https://www.cedefop.europa.eu/en/news/bulgaria-schools-innovation-hubs-28-vocational-schools-become-coves#:~:text=Bulgaria%3A%20from%20schools%20to%20innovation,one%20in%20each%20administrative%20region>

- Expand connectivity and digital inclusion initiatives: while infrastructure is largely there, fill the remaining broadband gaps aggressively (partnering with telecom companies to cover the last “white spots”).
- Complement this with digital literacy campaigns targeted at rural seniors and SMEs, possibly through mobile units or the 1,000 Digital Public Spaces program in libraries and community centers.
- Support youth and new entrants: create rural innovation internships or placements that incentivize young graduates (in IT, business, agriculture) to work on rural projects for a year. This could be modeled on a civic service – e.g. a young IT graduate helps a group of villages develop a tourism app or modernize their municipal websites. Such programs could retain youth and inject skills locally.
- Invest in rural mobility solutions: innovation is not just high-tech; supporting creative mobility solutions can unlock community potential. For instance, scale up on-demand community shuttle services or car-sharing clubs in villages (some exist as pilots). This would allow more people (especially the young and elderly) to participate in training, co-working at hubs, or regional networking events, thereby integrating rural populations into the wider innovation ecosystem.
- Increase support for micro-innovation: set aside small grants or vouchers that micro-enterprises or farmers can easily apply to try new things (like a voucher to get consulting on direct e-commerce, or to pilot a new crop variety). Keeping the process simple (perhaps via LAGs) will encourage experimentation.
- Finally, mainstream climate resilience into rural innovation: ensure that every rural innovation project considers climate adaptation (and provides extra support for those that specifically tackle it). This could mean funding nature-based innovation (like startup support for companies doing tree planting drones or flood warning systems for villages).

By implementing these recommendations – streamlined support, shared expertise, comprehensive connectivity, youth engagement, mobility, micro-grants, and climate focus – Belgium can empower its rural communities to innovate more effectively and inclusively.

Role of DRIVE: The project is well-positioned to complement Belgium’s efforts and address some of the challenges identified. Given Belgium’s active LAG network and rural programs, DRIVE can serve as a cross-border knowledge exchange platform for them. Through DRIVE, Belgian rural stakeholders (e.g. a LEADER coordinator or a rural entrepreneur) will have opportunities to meet counterparts from other countries who may have solved similar problems differently. This can spark new ideas – for instance, a Belgian village might adopt a successful solution from an Irish “smart village” (like an e-health kiosk system for remote doctor consultations) after learning about it via DRIVE events. DRIVE’s interviews and case study consolidations will also likely include a Belgian perspective (perhaps from a Walloon and a Flemish case), thereby highlighting Belgian best practices and needs in the consolidated report. By doing so, DRIVE will shine a light on things that work in Belgium (such as the strong multi-sector partnerships in LAGs) and areas needing improvement (like broadband in white zones), influencing both European and Belgian stakeholders to act on them. Another key role for DRIVE in Belgium is to engage policymakers through its findings. Because Belgium is hosting the EU Presidency in 2024, there is heightened interest in rural innovation topics. DRIVE can organize briefings or round-tables in Brussels (leveraging the presence of EU institutions) where Belgian and other project partners present challenges and recommendations. This could feed into more robust EU support, which Belgium can tap into. On a grassroots level, DRIVE’s hackathons or roadshows could directly involve Belgian rural innovators – for example, a DRIVE hackathon might be held in a rural area of Belgium (perhaps as a demonstration of bridging urban tech communities with rural challenges). That would not only provide local solutions but also raise public awareness in Belgium about rural innovation opportunities. In terms of mentoring and capacity building, DRIVE could select a few Belgian rural startups or social enterprises to mentor as part of its cohort. This external mentorship (maybe pairing them with experts from countries like France or Italy) can give a fresh perspective and skills that national programs haven’t provided. Finally, DRIVE’s emphasis on developing pitches and connecting to investors aligns with Belgium’s need to help rural entrepreneurs scale beyond local markets. By the project’s end, one can expect that Belgian participants have

new European contacts, perhaps joint pilot projects initiated with another region, and stronger pitching experience to attract funding. In summary, DRIVE is expected to act as both a mirror and a bridge for Belgium: a mirror by reflecting Belgian rural innovation achievements and gaps in a European context, and a bridge by linking Belgian rural innovators to the broader European network, tools, and funding streams that can propel their ideas further.

3.1.5 Bulgaria: Regional Case Study

Regional Context and Ecosystem Overview: Bulgaria is a predominantly rural country in terms of territory – about 81% of Bulgaria’s land is rural, with roughly 39% of the population living in rural areas.¹⁴ Its rural context is marked by small villages, a few regional towns, and a strong dependence on agriculture and natural resources. Over the past decades, Bulgaria’s rural regions have confronted severe depopulation and economic transition pains after the collapse of socialism. Many rural communities saw young people leave for cities or abroad, leading to aging populations and labor shortages in the countryside. The innovation ecosystem in such areas is nascent. However, there are emerging sparks: for instance, clusters around agro-tech and food processing in regions like Plovdiv, and rural tourism initiatives in the Rhodope and Balkan mountains leveraging cultural heritage and nature. Bulgaria’s national policies, under EU influence, have recognized rural innovation as key to revitalization. The Rural Development Programme (RDP) 2014–2020 funded modernization of farms, support for small businesses, and local infrastructure. It highlighted that many farms need technological modernization and restructuring, given the extremely fragmented farm structure (91% of holdings under 5 ha, and underperforming traditional sectors like fruit, vegetables, livestock). This sets the stage for innovation needs in the agri-food sector. Additionally, Bulgaria has engaged with EU initiatives like Smart Villages – a few pilot smart villages were selected (e.g. a village in Gabrovo region focusing on digital services). That said, the overall ecosystem remains weak: R&D is concentrated in Sofia and a couple of cities, and rural regions often lack innovation infrastructure (no incubators or tech parks in most rural provinces). Socioeconomically, rural areas have higher poverty and unemployment rates than urban centers, and basic services quality is lower. This context means the baseline for innovation is low, but the potential impact is high – even small innovations (like introducing e-government kiosks or cooperative farming equipment) can make a big difference. In summary, Bulgaria’s rural innovation ecosystem is in an early stage, characterized by structural challenges but slowly gaining attention through national and EU programs focused on modernization and community-led development.

Stakeholder Roles and Contributions: The stakeholders in Bulgaria’s rural innovation space include government bodies, local communities, and international partners. Government agencies, especially the Ministry of Agriculture and Ministry of Innovation (now part of a combined Ministry of Economy and Innovation), set the policies and manage EU funds that reach rural areas. For example, the State Fund Agriculture implements many RDP measures that indirectly support innovation (like grants for young farmers to start modern farms). Local governments (municipalities) are crucial as they often initiate or facilitate projects – many Bulgarian municipalities in rural areas have used EU funds to build small business centers or IT hubs in town, albeit with mixed success. However, capacity at the municipal level is uneven; some proactive mayors drive innovation (like the mayor of Vratsa municipality who supported a youth IT training center), whereas others lack know-how. Community organizations and Local Action Groups (LAGs) are increasingly important. Under LEADER, Bulgaria established LAGs covering a good part of its rural territory. These LAGs, composed of municipal, civil, and business representatives, identify local needs and fund small projects. Some LAGs have funded innovative approaches like community-supported agriculture or local crafts value chains. Farmers’ associations and cooperatives also have a role – although cooperatives lost favor post-socialism, new forms of producer organizations are forming to collectively market or process products

¹⁴ https://agriculture.ec.europa.eu/system/files/2023-02/rdp-factsheet-bulgaria_en.pdf#:~:text=Data%20available%20at%20the%20time,employed%2C%20however%20the%20level%20of

(innovation through cooperation). NGOs and international projects fill in gaps by bringing in expertise and pilot models. For instance, EU-funded pilot projects (like one under the Horizon project RURITAGE or SIMRA) have introduced social innovation methods in Bulgarian villages (such as eco-tourism networks, digital storytelling for cultural heritage). Organizations like the UNDP and Peace Corps historically also contributed to rural entrepreneurship training and ICT access in villages. Educational and research institutions are fewer in rural areas; the main agricultural university is in Plovdiv and the Academy of Sciences institutes are mostly in Sofia. That means rural stakeholders often rely on extension services or international consultants for expertise. One positive trend is the rise of rural youth movements and returnees – some young Bulgarians, often with experience abroad, are returning to rural hometowns to start ventures (for example, organic farms, guesthouses, or IT freelancing hubs taking advantage of remote work). These individuals can become local champions of innovation if supported. Overall, the stakeholder landscape in Bulgaria is gradually becoming more participatory (with LAGs and community groups) but still leans heavily on central planning and external initiative rather than a self-sustaining ecosystem.

Innovation Gaps and Needs (Insights from Interviews): Interviews conducted with Bulgarian rural stakeholders underscored substantial gaps that need addressing. A fundamental gap is the lack of basic infrastructure and services in many villages, which overshadows more advanced innovation discussions. Stakeholders often started by pointing out poor road conditions, patchy electricity or water supply, and limited healthcare and education access. These deficiencies create an environment where introducing new technologies or business models is difficult; thus, a pressing need is to ensure reliable infrastructure so that innovation can take root (e.g. one can't run a modern food processing facility with frequent power outages). *"Without decent roads and internet, our kids leave, and no startup will come,"* lamented one LAG member from the Northwest region, tying infrastructure directly to innovation flight. Digital connectivity is improving but still inadequate in spots – the national broadband plan lags in some rural municipalities, and only about 37% of rural households have access to next-generation networks.¹⁵ The need here is twofold: physical connectivity and digital literacy; many older rural residents need training to use digital tools, otherwise even if the internet arrives, e-services remain underutilized. Another critical gap is in human capital and skills. Many rural businesses lack employees with technical or business skills to innovate. The interviews highlighted that vocational training is not sufficiently reaching rural communities. For example, farmers expressed a need for training in new farming techniques or machinery handling; small tourism operators sought marketing and language training. The age structure exacerbates this – with so few young people, there's a dearth of the "digital natives" who often drive innovation in other contexts. Therefore, attracting or developing skilled individuals in rural areas is a major need. Access to finance for rural entrepreneurs came up frequently as well. Local small businesses find it hard to get bank loans (due to collateral issues and banks seeing them as high risk), and venture capital is non-existent outside Sofia. Even accessing EU funds can be daunting due to bureaucratic complexity; stakeholders called for simpler micro-grants or credit schemes for rural startups. Another highlighted need is streamlined bureaucracy and support. Entrepreneurs recounted struggles with slow administrative processes – one mentioned waiting over a year for approval of an RDP investment subsidy, by which time plans had changed, and costs risen. A "one-stop shop" approach where local businesses can get quick info and support for regulations, permits, and funding would be highly beneficial. Lastly, cultural and mindset changes were noted: decades of underdevelopment have bred pessimism in some communities. Several stakeholders said a need exists to inspire *confidence and entrepreneurial spirit* among rural residents – through success stories, mentoring, and community events that showcase innovation. In summary, Bulgarian rural areas need improvements in infrastructure, digital connectivity, skill development, financing access, bureaucratic simplification, and community mindset to bridge the substantial innovation gap they face.

Key Challenges and Structural Barriers: Bulgaria's rural innovation challenge is deeply rooted in structural issues. Foremost among them is demographic collapse in many villages. Bulgaria has one of the fastest

¹⁵ https://sf-conference.eu/wp-content/uploads/2024/06/1.NK_.pdf#:~:text=Bulgaria

shrinking populations in Europe, and rural depopulation is extreme: some villages have fewer than 50 inhabitants left, mostly elderly (National Statistical Institute, 2022). This not only erodes the labor force but also undermines the viability of schools, businesses, and any initiative – there simply may not be enough people to participate or benefit. This vicious cycle of depopulation and decline is a structural barrier that makes typical innovative ecosystem models hard to apply. Poverty and low purchasing power in rural areas are another challenge. Rural households in Bulgaria have significantly lower incomes; this means local markets are weak – a new business might have few customers who can afford its products, unless it can reach urban/export markets. It also means risk aversion: people struggling to meet basic needs may be less inclined to experiment with new practices without strong safety nets. Education and health disparities are structural barriers too. Rural schools are often of lower quality or have closed, and healthcare access is limited (many villages have no resident doctor). A less healthy, less educated population is obviously less equipped to innovate or adopt innovations. Institutional capacity and governance present another barrier. Corruption and inefficiency in some local administrations can stifle initiatives – interviewees hinted that nepotism or opaque processes sometimes determine which projects get local support or funding, dissuading genuine bottom-up innovation. Also, frequent changes in national programs or strategies (often tied to election cycles) make continuity difficult. Another deep issue is fragmentation of land and assets following post-communist restitution. Farms are small and scattered, which makes introducing new technologies less cost-effective. Similarly, local industries that once were collectively collapsed, leaving a void that individual entrepreneurs have struggled to fill. Land consolidation and cooperative approaches are slow to progress, impeding scaling of innovation. Finally, cultural attitudes toward cooperation can be cautious due to historical experiences – older generations remember forced collectivization, which sometimes makes them mistrustful of new cooperative efforts or external advice. This can manifest as resistance to change: a “we’ve always done it this way” mindset. Overcoming that requires trust-building and time. In sum, the key structural barriers in Bulgaria’s rural context are demographic decline, economic poverty, service gaps, weak local institutions, fragmented production structures, and residual mistrust – all of which create a tough environment for innovation to flourish.

Alignment with Smart Specialisation Strategy (S3) and NEIA: Bulgaria’s Smart Specialisation Strategy (S3) at the national level (and planning for regional smart specialisation in the future) has started to incorporate some rural-relevant priorities, but there is room for stronger alignment. The current National S3 (2014-2020) focused on areas like ICT, biotechnology, mechatronics, creative industries – these tend to concentrate in urban centers. However, it also identified agrifood and clean technologies as areas of potential, which relate to rural strengths (Bulgaria’s biodiversity and farming tradition). In practice, the impact of S3 on rural innovation has been limited so far, partly because implementation concentrated on a few innovation hubs (Sofia, Plovdiv). With the new programming period, Bulgaria is moving towards Regional Innovation Strategies for its planning regions.¹⁶ This could mean more tailored priorities like tourism in the Southwest (where many rural cultural sites are) or agro-tech in the Northeast (grain production region). Aligning rural initiatives with S3 means focusing on what each region does best: e.g. Rose oil and essential oils innovation in the Rose Valley (a traditional product that can be modernized with biotech and marketing – a clear smart specialisation niche), or dairy product innovation in the Rhodopes. If Bulgaria hones these niches, rural areas could benefit from research and funding flows guided by S3. Regarding the New European Innovation Agenda (NEIA), Bulgaria stands to gain significantly as it is one of the “Widening” countries targeted by efforts to reduce the innovation divide. NEIA’s Flagship 3 is basically designed with countries like Bulgaria in mind – directing more investments and projects to places with lower innovation performance. Bulgaria’s participation in the upcoming Regional Innovation Valleys could link a rural region (say a cluster of agritech companies and farms in central Bulgaria) with a more advanced region elsewhere to jointly work on deep tech for agriculture, aligning with NEIA’s interregional innovation projects goal. On Flagship 1 (Scale-ups), Bulgaria has struggled with scaling startups – most remain small or relocate. NEIA’s push to mobilize venture

¹⁶ <https://www.komninos.eu/wp-content/uploads/2022/07/ECOSYSTEMS-and-EDP-2021-2027-in-GREECE-v2020-05-16-Final.pdf#:~:text=Greece%20is%20composed%20of%2013,typology%20of%20regions%20and>

funding and support scale-ups might bring new instruments (like the InvestEU program or EIC opportunities) that Bulgarian rural innovators can tap if guided well. Flagship 4 (Talent) is critical for Bulgaria: NEIA's focus on training and retaining deep-tech talent aligns with Bulgaria's need to train rural youth and stop brain drain. For example, the EIT's new Deep Tech Talent Initiative could be rolled out in Bulgaria's universities and vocational schools, indirectly benefiting rural areas by creating more skilled graduates who might choose to apply their knowledge at home. In conclusion, while Bulgaria's rural innovation activities haven't fully realized the S3 vision yet, the potential alignment is there: focusing on unique local products and sustainability (smart specialisation) and leveraging EU-wide initiatives to support less-developed innovation ecosystems (NEIA). As NEIA is implemented, Bulgaria can position its rural regions to be beneficiaries of programs like Regional Innovation Valleys and talent initiatives, bridging its gaps in line with European priorities.

Recommendations and Solutions: Given the challenges and alignments discussed, several concrete recommendations emerge for Bulgaria.

- Tackle depopulation with targeted incentives: The government could implement a “Rural Return” package – for example, offering young families or entrepreneurs grants, tax breaks, and housing support to settle in a rural region and start a business or telework. Similar to schemes in some EU countries, this could slowly replenish human capital.
- Complementary to the first one is improving rural living conditions: invest some innovative funds into ensuring each rural town has a minimum of amenities (school, clinic via telemedicine, high-speed internet, a co-working space, etc.), making them more attractive.
- Strengthen local institutions and capacity: Expand training for municipal officials and LAG managers on how to design and manage innovative projects. This might involve twinning Bulgarian rural municipalities with counterparts in more developed countries for mentorship.
- Also, simplify procedures so local officials can approve small projects faster without heavy central oversight, a bit more autonomy could speed local innovation (within accountability limits).
- Promote cooperative models and clustering: Encourage farmers and small producers to cooperate in innovation, for instance, establish innovation-oriented cooperatives (with legal and financial facilitation) where farmers jointly invest in shared machinery, processing facilities or R&D on new crop varieties. Pilot a “rural innovation cluster” where multiple small businesses in a town (e.g. craft, IT, food) share a hub and services. Government and donors can seed-fund such cooperatives or clusters to demonstrate benefits.
- Improve access to finance: Set up a micro-finance or rural venture fund possibly backed by public banks or international partners. This fund would provide low-interest loans or equity to rural startups and social enterprises that commercial banks deem too risky.
- Also leverage EU financial instruments (like InvestEU guarantees) to encourage Bulgarian banks to lend in rural areas.
- Streamlining grant processes is also key: use simple application formats (maybe a short video + budget rather than 100-page forms) for small innovation grants, to not discourage potential innovators.
- Intensify digital expansion and literacy programs: Prioritize remaining broadband rollout to all villages (this can use a mix of fiber, wireless, satellite as needed). In parallel, revive community centers (“chitalishte”) as digital knowledge hubs by equipping them with computers and trainers where people can learn basic to intermediate digital skills – turning an old institution into a modern asset. This addresses social inclusion too.
- Encourage applied research and extension: Bulgaria's scientific community should be incentivized to work on rural issues. Increase funding for the Agricultural Academy and other institutes to do applied research (e.g. drought-resistant crops, small-scale food processing tech) and crucially, beef up the agricultural extension service to act as innovation advisors on the ground. Field demonstrations and farmer-scientist meetings can help break skepticism towards new methods.

- Lastly, celebrate and disseminate success stories: create a national “Rural Innovation Awards” or media campaign highlighting people who have successfully launched an enterprise or social project in a village. Positive examples (like an IT entrepreneur turning their ancestral village into a software outsourcing hub, or a cooperative reviving a traditional cheese with modern marketing) can change mindsets and inspire others.

Implementing these recommendations would require coordinated effort and support from EU funds (which fortunately are increasingly oriented towards such measures). Over time, they would address root causes (demographics, capacity, finance) and build a more enabling environment for rural innovation in Bulgaria.

Role of DRIVE: The project can be an important catalyst for Bulgaria’s rural innovation journey. Bulgaria is likely one of the less-advantaged partners in DRIVE in terms of innovation capacity, so it stands to gain knowledge and inspiration from the consortium. Through DRIVE’s consolidated case studies, Bulgarian stakeholders will be exposed to best practices from countries like France or Ireland on rural innovation. This international perspective can help Bulgarian policymakers and local leaders see what’s possible with the right support. For example, they might learn how Ireland’s remote working hubs or Italy’s inner areas strategy achieved results, and consider adapting those ideas (European Commission, 2021; Government of Ireland, 2021). A direct role for DRIVE will be in building networks for Bulgarian rural innovators. Currently, many rural actors in Bulgaria are isolated from European networks. By participating in DRIVE events (workshops, hackathons, mentorship sessions), Bulgarian entrepreneurs, LAG managers, or officials will connect with peers and mentors in other countries. Such contacts often outlast the project – a Bulgarian LAG might twin with a Belgian LAG, or a Bulgarian agritech startup might partner with an Italian one after meeting through DRIVE. These connections are invaluable for ongoing cooperation and funding opportunities (e.g. enabling them to join future Horizon Europe calls part of international consortia). Furthermore, DRIVE can directly enhance skills and project development for Bulgarian participants. The project’s mentoring on business modeling and investor pitching will likely involve Bulgarian startups or project teams, helping them refine their ideas and become more competitive in seeking funding. If DRIVE holds a hackathon or challenge competition, Bulgarian rural issues could be tabled (say, a challenge on improving smallholder income or rural mobility in Bulgaria), possibly yielding innovative solutions or at least visibility to those issues. Another expected role is policy influence: DRIVE’s Challenges Report (Deliverable D2.2) and other outputs will include analysis of Bulgarian case(s) and recommendations. These can be disseminated within Bulgaria via the project partner or Ministry. Often, having an external EU-backed report stressing, for instance, the need for simplifying rural innovation grants or investing in digital hubs can bolster the case domestically. Bulgarian authorities may be more inclined to adopt changes if they see them validated in a European project context. Additionally, DRIVE aligns with NEIA, so it may channel some NEIA resources or pilot actions to partners. For Bulgaria, this could mean early information or involvement in initiatives like the Regional Innovation Valleys or EIC Forum activities. By being part of DRIVE, Bulgaria essentially has a seat at the table in shaping and benefitting from Europe’s new innovation support mechanisms targeted at bridging the gap. In conclusion, DRIVE is expected to serve as an engine of integration and acceleration for Bulgaria’s rural innovators – integrating them into European knowledge and networks and accelerating their projects through targeted support – thereby amplifying what Bulgaria could achieve on its own. This collaborative boost can help set in motion longer-term improvements well beyond the life of the project.

3.1.6 Greece: Regional Case Study

Regional Context and Ecosystem Overview: Greece’s rural areas are diverse, spanning remote mountainous villages in Epirus and Thessaly, vast plains in Macedonia and Thessaly used for agriculture, and numerous islands with small communities. Overall, about one-third of Greece’s population lives in predominantly rural regions.¹⁷ Rural Greece has long-standing challenges: difficult terrain, fragmented land holdings, and

¹⁷ agriculture.ec.europa.eu

historically limited industrialization outside cities. Many rural regions experienced heavy outmigration, especially during the economic crisis of the 2010s, as young people left for Athens or abroad. The innovation ecosystem in rural Greece is still in a developing phase, but there are bright spots. For instance, agritourism and gastronomy have become a focus in regions like Crete and the Peloponnese, where rural entrepreneurs leverage local products (olive oil, wine, cheese) with innovative branding and farm-stay experiences. Also, some renewable energy projects (wind parks, solar farms) are located in rural areas, bringing new technologies and jobs. The Greek government, through its National Rural Development Programme and related policies, has emphasized generational renewal in farming and modernization of agriculture. It acknowledges that only 5.2% of Greek farm managers are under 35 and only 5.5% have formal agricultural training, indicating a need for innovation and education in the sector. Greece's Smart Specialisation Strategy identifies areas like agrofood, tourism, energy, and the environment as priorities, which align with rural strengths. Moreover, EU cohesion policy categorized many Greek regions as less developed, directing significant funds to them for innovation infrastructure (e.g. innovation centers in Western Greece or Central Macedonia). The rural ecosystem benefits from Greece's rich cultural heritage and strong community bonds (e.g. cooperative movements in some villages). However, it is constrained by issues such as small market size, limited access to credit, and in some cases, bureaucratic obstacles and political centralization. The long-term vision (aligned with the EU's rural vision 2040) is to make Greek rural areas "stronger, connected, resilient, and prosperous" by investing in connectivity, entrepreneurship, and services. In summary, Greece's rural innovation context is one of high potential (thanks to unique products, natural resources, and tourism appeal) but currently under-realized due to structural and economic hurdles. There is clear momentum though, with initiatives like digital nomad visas potentially bringing new people into rural areas, and cooperative regional projects taking shape.

Stakeholder Roles and Contributions: In rural Greece, stakeholders from both public and private spheres contribute to the nascent innovation ecosystem. Local and regional authorities are central: Greece is divided into 13 regions and many smaller municipalities, and since the Kallikratis reforms, regions have more say in economic development. Regional authorities manage some EU funds (including parts of the RDP and regional operational programs) and thus can support innovation hubs or incubators – for example, the Region of Crete has backed an agri-innovation center in Heraklion that also serves farmers island-wide. Municipalities often focus on improving local infrastructure, but some proactive mayors have championed innovative projects like setting up telemedicine facilities or free Wi-Fi zones to attract remote workers. Academic and research institutions are increasingly reaching out to rural areas. Greece's universities (even if in cities) have rural extension programs: the University of Thessaly works with farmers on precision agriculture pilots; the Aegean University helps island communities with digital tools for tourism. The Agricultural University of Athens and regional research centers provide expertise on crops, irrigation, etc., which is slowly trickling into practice with EU-funded projects. Agricultural cooperatives and associations remain influential in rural Greece – some are very traditional and focus on marketing members' produce, but others are modernizing, introducing new cultivation methods, quality certification, or product innovation (like developing new cheese varieties or branded products). They can drive collective innovation among members, especially when younger leadership comes in. Entrepreneurs and SMEs in rural areas often straddle traditional and new sectors. For example, one might see a family olive oil producer investing in an online sales platform, or a stockbreeder using sensors for herd management. A growing cadre of small startups target rural issues: Greek startups have emerged in agritech (drone-based crop monitoring, farm management software) and these often pilot in rural regions. Civil society and NGOs also play a role. Organizations concerned with sustainable development, cultural heritage, or youth in rural areas implement projects that introduce social innovations (like a youth center in a remote town offering coding classes, or a cultural route that ties craftspeople together for tourism). Additionally, the Greek diaspora and returnees contribute by bringing fresh ideas and capital; for instance, it's not uncommon for someone who worked in tech abroad to return to their home island and launch a boutique business or digital enterprise, thus seeding innovation in that locale. Lastly, national agencies like the Hellenic Agricultural Organization (ELGO-DIMITRA) provide training and innovation dissemination in agriculture. The coordination among these stakeholders is improving but can be fragmented – one interviewee from a cooperative noted that "we often don't know about university research that could

help us, and they don't know what problems we need solved." Efforts like regional innovation clusters or the Smart Islands initiative are trying to bridge these gaps and foster better collaboration across stakeholder groups.

Innovation Gaps and Needs (Insights from Interviews): Interviews with stakeholders from various Greek rural regions surfaced several recurring gaps in the innovation landscape. A primary issue is educational and skill gaps among the rural workforces. Many older farmers and small business owners have practical know-how but lack formal training in new technologies, business planning, or foreign languages (important for tourism). One young cooperative member in Thessaly commented, *"Our parents know farming, but not how to market on Instagram or apply for a grant – that's where we struggle."* The need here is for ongoing adult education and youth training opportunities in rural areas – currently, options are limited once formal schooling is done, unless one moves to a city. Digital divide persists while most villages have some internet, the quality and usage vary. Stakeholders noted that beyond infrastructure, many rural residents (especially older or less educated) aren't using digital tools to their benefit. There's a need for more local digital facilitators – possibly through the public library or citizen service offices – to help people learn e-banking, e-government, or online marketing for businesses. Another gap is the lack of intermediaries and support services for innovation. Outside a few more developed regions, rural innovators often have nowhere to turn for mentoring or incubation. There are few incubators in rural Greece (most are in Athens, Thessaloniki, Patras). A respondent from Crete mentioned that while there's an incubator in the city, someone in a far village doesn't access it. Thus, a need is either mobile outreach or more distributed support (e.g. mini incubators at local chambers of commerce). Financing remains a big need: similar to Bulgaria, Greek rural entrepreneurs find it hard to get credit. Banks, during and after the financial crisis, tightened lending especially in sectors like agriculture perceived as risky. Although the RDP offers grants to young farmers or small businesses, interviewees said the process is complex and often delayed. A vineyard owner in Nemea said, *"We applied for a modernization grant; it took two years to get approval. We had to start the investment before that with our own money."* This underscores the need for more agile financing (microloans, faster grant disbursement). Regulatory and bureaucratic hurdles were also highlighted. For example, someone trying to start a farmhouse B&B faced overlapping regulations between tourism and agriculture, requiring multiple permits and inspections – a deterrent to innovation. Simplifying rules for small multi-sector businesses (farm + tourism + processing combos, common in rural innovation) would help. Additionally, stakeholders from islands pointed out logistical challenges – high transport costs and difficulties in getting equipment or products to and from remote areas stifle innovation that relies on connectivity. For instance, a small island organic farmer finds it expensive to ship to mainland markets. Solutions like subsidized transport or local processing to add value might be needed. Finally, networking and information flow is a need: many rural actors simply aren't aware of opportunities, technologies, or markets. A need exists for better extension and networking – possibly via events, demo days, or digital platforms that connect rural producers to mentors, buyers, or innovators nationwide. In summary, Greek rural stakeholders need accessible training, digital inclusion, local innovation support services, easier financing and bureaucracy, improved logistical support, and better networking to overcome the current gaps.

Key Challenges and Structural Barriers: The structural barriers underlying Greece's rural innovation issues are multifaceted. Geography and fragmentation are a fundamental one: Greece's mountainous terrain and many islands mean rural communities are physically fragmented. This results in higher costs for delivering services and infrastructure (per person) and difficulty in achieving economies of scale. A mountain village might be 30 km of winding road from the nearest town, and an island might depend on occasional ferry links – such physical barriers make collaboration and business more difficult compared to contiguous rural areas elsewhere. Demographic aging and decline are another: similar to other Southern European countries, rural Greek areas have low birth rates and youth outmigration. The fact that only 5% of farm managers are under 35 speaks volumes about aging in agriculture. Many villages have skewed age distributions, affecting the uptake of new ideas and the availability of workforce. Economic and financial context: Greece's prolonged economic crisis (2010s) hit rural areas hard. Public investment was curtailed, banks went through turmoil,

and many families faced reduced incomes, all of which reduced capacity to invest in innovation. Though the economy has stabilized, debt and fiscal constraints still limit how much the government can do with its own funds. This structural factor means reliance on EU funds is high, but national co-financing or complementary support can be tight. Administrative centralization has historically been a barrier – despite recent decentralization, many decisions and services remain Athens-centric. Rural communities often feel neglected or have to go through cumbersome central processes for approvals. For example, a small irrigation project might await a sign-off from a ministry in Athens. This slow, top-down approach can stifle local initiative. Land ownership patterns: Greece has many small property parcels (a legacy of inheritance traditions), which complicates large-scale projects or consolidation efforts. It's challenging to introduce innovations like large modern machinery or cooperative farming when plots are tiny, and owners might be absent. Consolidation programs exist but progress is slow, leaving structural inefficiency in agriculture. Another barrier is related to cultural attitudes and trust. While Greek rural communities are tight-knit socially, trust in cooperatives or collective economic action was damaged in some places by past mismanagement of cooperatives in the 1980s-90s. Rebuilding that trust is necessary to promote new cooperative ventures. Additionally, some rural areas exhibit skepticism towards outsiders or "experts," partly due to feeling left behind or unheard by central authorities. Lastly, climate and environmental vulnerabilities form a structural issue: frequent wildfires, increasing droughts, and floods threaten rural livelihoods. This creates uncertainty and risk, which can discourage investment in innovation if people are in survival or recovery mode frequently. It underscores the need for resilience-building as part of the innovation strategy. Overall, the structural barriers in Greece's case – geographic isolation, aging demographics, economic scars, centralization, fragmented assets, and environmental risks – set the stage that any innovation policy must account for and work around.

Alignment with Smart Specialisation Strategy (S3) and NEIA: Greece's Smart Specialisation Strategy (both national and regional levels) and the New European Innovation Agenda provide frameworks that support rural innovation, though the degree of direct impact varies. The national S3 for 2021-2027 outlines priorities like agro-food, tourism, energy, environment, ICT, and health. Notably, agro-food and tourism are explicitly rural-linked sectors, suggesting that investments in those areas under S3 can benefit rural regions (e.g. funding for innovative food processing SMEs, or for eco-tourism product development). Each of the 13 Greek regions also developed Regional S3 priorities. For instance, West Macedonia (a region with both agriculture and energy) focuses on agribusiness and clean energy – aligning with its rural coal transition areas; the South Aegean (island region) focuses on tourism experiences and agri-food. These alignments mean that rural-centric projects have a policy backing and can receive EU structural funding if they match S3 priorities. A challenge, however, is ensuring S3 plans translate into real support for small rural actors and not just big projects or urban-centered initiatives. On the New European Innovation Agenda (NEIA), Greece is a key player and beneficiary in Widening measures – it has been active in Teaming, Twinning (EU programs to boost less research-intensive areas), and will likely embrace NEIA's actions. Flagship 3 of NEIA (innovation divide) resonates strongly: Greece has pockets of excellence but also many lagging areas, so it can leverage NEIA's push for Regional Innovation Valleys. For example, a Regional Innovation Valley linking a Greek region (like Epirus or Crete) with others in Europe on a deep-tech field (such as agri-biotech or blue economy) could bring resources and collaboration into a rural context. Flagship 4 (talent) is very relevant: the brain drain from Greece was significant in the 2010s; NEIA's initiatives like the innovation intern scheme or talent circulation actions could help rural areas indirectly by bringing young innovators back or sending them to gain experience and return. NEIA's Flagship 2 (experimentation spaces) also aligns, as Greece has been exploring regulatory sandboxes in various sectors – perhaps it could apply one to say, sustainable farming or island renewable grids, giving rural areas a chance to pioneer new solutions under flexible rules. The twin transition focus of NEIA (green and digital) matches well with rural needs: e.g. digital inclusion and smart agriculture for the digital part, and renewable energy communities or climate-smart farming for the green part, all of which Greece is starting to pursue. In the larger sense, Greece's national Recovery and Resilience Plan (post-COVID recovery plan) dedicates funds to digitalization and green projects, many in rural areas, complementing NEIA goals (Interreg Europe, 2022). Thus, there is substantial alignment: S3 gives thematic direction that includes rural sectors, and NEIA provides impetus and possibly funding for broad actions (talent, ecosystem building)

from which rural Greece should benefit. The challenge is implementation and ensuring rural stakeholders are actively engaged in these agendas.

Recommendations and Solutions: To further rural innovation in Greece, a mix of policy and grassroots solutions should be implemented.

- Enhance rural education and training: Expand programs like “second-chance schools” or mobile vocational training units that go into villages. Partner with local schools, even if small, to serve as community learning centers offering courses in entrepreneurship, digital skills, and modern farming techniques to adults.
- Greece could also incentivize universities to do outreach; for instance, create credits or funding for student projects that solve a rural community problem (bridging academia and local needs).
- Digital hubs and remote work promotion: Capitalize on Greece’s appeal (scenic villages, islands) by establishing co-working hubs in select rural areas and actively promoting them to digital nomads or urban professionals.
- The government can offer subsidies or tax breaks for companies that allow staff to work from rural locations or for individuals who relocate to a village while keeping a digital job. This not only brings income and skills into rural communities but also fosters a culture of innovation through diversity of people.
- Strengthen extension services and innovation brokers: Modernize the agricultural extension service (ELGO-DIMITRA) with more advisors who are trained in new technologies (like precision agriculture, organic methods, climate adaptation). They should act as innovation brokers – connecting farmers with researchers, advising on new practices, and helping with grant applications. Similarly, empower local chambers of commerce or development agencies to hire “innovation officers” who support SMEs in adopting e-commerce, improving product design, etc.
- Simplify and speed up financial support: Reform the administration of rural grants and subsidies to reduce bureaucracy. This might include setting up an online one-stop portal for all rural development funds applications with pre-filled data and clear guidance and ensuring sufficient staffing to evaluate applications faster.
- Also, introduce micro-grants (e.g. up to €10k) with minimal paperwork for small-scale innovative ideas (like a pilot plot for a new crop, or setting up a village website for tourism), such quick injections can test ideas that might later scale. In financing, work with banks to create guarantee schemes so that loans to rural startups are secured by state/EU guarantee – encouraging lending.
- Promote clustering and cooperatives: Provide targeted support for forming new cooperatives or clusters around specific products (e.g. mastic gum in Chios, saffron in Kozani, feta cheese in Thessaly). This could be in the form of facilitation services (experts helping with legal setup, governance training) and seed funding for cooperative ventures. Successful clusters like the wine routes in Northern Greece can serve as models, where wineries collectively market and innovate (like wine tourism combined with cultural events). Similarly, support the creation of social enterprises in rural areas to address local problems innovatively (for instance, a social enterprise offering elderly care via a digital platform employing local youth).
- Leverage EU missions and Green Deal: Align rural innovation projects with EU flagship initiatives such as the Mission on Adaptation to Climate Change or the Mission on Soil Health. Greek rural regions (like some islands or mountain areas) could serve as demonstration sites for climate resilience innovation (e.g. innovative water-saving farming, fire-resistant landscape management). This alignment would bring additional funding and knowledge networks.
- Community-led tourism innovation: Encourage villages to innovate in tourism (still a key rural economic driver for Greece) beyond the typical sun-and-sea. This could mean thematic routes (culinary, historical), digital storytelling apps for local myths, or eco-tourism and agro-tourism combos. Providing small grants or prizes for the most innovative village tourism idea each year could stimulate creative competition.

- Foster inclusive governance: Involve rural citizens in planning (e.g. participatory budgeting at the municipal level for innovation projects) to ensure solutions meet real needs and gain local buy-in, also helping overcome mistrust.

Implementing such recommendations, Greece would tackle root issues (education, bureaucracy, fragmentation) and harness its unique strengths (culture, nature, diaspora) to create a more vibrant rural innovation environment.

Role of DRIVE: The project contributes to Greece’s rural innovation endeavors by providing both strategic insights and practical opportunities. As part of DRIVE’s case study analysis, Greece will likely have one or more regional cases documented (e.g. a Greek region or village will be among the case studies). This will help distill and articulate the specific needs and challenges of Greek rural stakeholders in an EU context. When the Challenges Report (D2.2) is produced, Greek policymakers can use it as an external validation of the issues they need to address. For instance, if DRIVE’s report notes the bureaucratic hurdles and need for digital skills in Greek rural areas, it adds weight for the Ministry of Rural Development or Digital Governance to streamline processes or fund digital inclusion (backed by an EU project’s findings). DRIVE also fosters a network that Greek participants will be part of. Greek rural entrepreneurs, officials, and researchers involved in DRIVE activities will connect with peers in other countries – this cross-pollination is immensely valuable. For example, a Greek LAG manager might learn from an Italian counterpart about successfully engaging youth in rural projects, or a Greek agritech startup might meet an Irish investor or partner via DRIVE’s events. These connections often spawn bilateral collaborations or at least exchange of best practices. Moreover, DRIVE’s hackathons and roadshows can energize local ecosystems. The DRIVE’s roadshows that will be hosted in Greece, will bring together local actors and international mentors to focus on Greek rural challenges. This kind of focused event can catalyze ideas – perhaps a team at the hackathon prototypes a mobile app for olive farmers to share equipment, or a roadshow in a Greek region highlights funding opportunities to local SMEs. Such outcomes might not happen without an external push from DRIVE. The mentoring aspect of DRIVE will also directly benefit Greek startups or initiatives. Selected Greek participants will receive tailored mentoring to improve their business model, pitch, and expansion strategy. Given Greek rural startups often lack easy access to high-level mentorship (most mentors are in Athens or abroad), this is a big advantage. Another role of DRIVE is linking Greece to EU-level initiatives under NEIA. Through DRIVE, Greek stakeholders will stay informed and could be early adopters of things like the Regional Innovation Valleys or new EU funding calls for ecosystem strengthening. Essentially, DRIVE can act as a conduit making sure Greece’s rural innovators are not isolated but plugged into Europe’s innovation mainstream. Finally, DRIVE’s cross-case synthesis likely will identify common themes (like the need for rural broadband, the importance of community engagement, etc.). Greece can use those to align its strategies with European trends – for example, pushing further on its “Digital Transformation Bible” for rural areas if DRIVE emphasizes digitalisation across cases, or adopting models like those from other countries that the project finds effective. In summary, DRIVE is expected to act as an accelerator and connector for Greece: accelerating progress by injecting ideas, expertise, and visibility into Greek rural projects, and connecting Greek rural innovation players to a larger European support system that outlives the project (networks, future collaborations, and a stronger voice in EU innovation discussions).

3.1.7 France: Regional Case Study

Regional Context and Ecosystem Overview: France’s rural areas are extensive and varied, ranging from remote mountain communities in the Alps and Pyrenees, to agricultural heartlands in regions like Brittany and Normandy, to peri-urban villages not far from cities. Roughly 22% of France’s population lives in predominantly rural areas (OECD, 2020), and these areas cover a large portion of the country’s territory. The rural innovation ecosystem in France benefits from the country’s high overall economic development and infrastructure but faces internal disparities. Some rural regions close to cities or with specialized production (like Champagne’s wine villages, or tech industry around Grenoble) are quite dynamic, whereas others, often called “La France périphérique”, struggle with declining industries and population loss. The French

government launched a comprehensive Agenda Rural in 2019, with 173 measures to support rural revitalization.¹⁸ This agenda underscores ensuring digital connectivity, improving services, fostering innovation and inclusion in rural territories. For example, one flagship initiative was “1000 Cafés” to revive social hubs in villages, often integrating digital access points. Smart Specialisation in France is largely regional (each Region has its S3). Many French regions include agri-food, eco-industries, or tourism as priorities, reflecting rural strengths. And national programs like “Territoires d’innovation” have injected funding into innovative territorial projects, several of which are rural or mixed (for instance, a project in Auvergne on bioeconomy, one in rural Burgundy on agri-robotics, etc.). Furthermore, France has been at the forefront of the Smart Villages concept within the EU, piloting digital and social innovation in rural services (e.g. France’s MSAPs – Maisons de services au public – which are now France Services, one-stop shops for public services in rural areas). The ecosystem includes a network of tiers-lieux (third places) – coworking and maker spaces, many in rural towns, that have been supported by public investment to spur local innovation. Overall, France’s rural innovation context is one of relatively strong support and infrastructure (compared to many countries), but hindered in parts by demographic aging, fewer job opportunities, and the legacy of centralization (Paris and big cities pulling talent and capital). The government’s push via Agenda Rural and programmes like “Petites villes de demain” (for revitalizing small towns) is indicative of a high-level commitment to rural innovation and cohesion.

Stakeholder Roles and Contributions: In France, the state and its extensions have traditionally been powerful, and this holds in rural development too, but increasingly a diverse set of stakeholders are co-driving innovation. **National government and agencies:** Ministries (e.g. for Territorial Cohesion, Agriculture, Digital) set broad rural policy and funding. Agence Nationale de la Cohésion des Territoires (ANCT) is a key actor, implementing programmes like the Rural Agenda and support for local projects, including digital inclusion labs. Regional councils now play a major role in post-decentralization, managing European funds and their own programs; many regions fund rural innovation hubs or digital FabLabs in rural areas as part of their economic development plans. Local governments (communes and inter-communalities) – France’s many communes often pool efforts in intercommunal structures – lead local initiatives (for example, an intercommunal body might establish a shared business incubator for several villages). Progressive mayors leverage national schemes (like France Services) to bring innovations like multi-service centers or e-health cabins to their towns. Private sector and entrepreneurs: There are large agri-food companies and cooperatives in rural France that do significant R&D (like dairy co-ops in Brittany working on food tech). Also, the rise of remote work has led to private initiatives – e.g. companies setting up satellite offices in attractive rural areas or startups choosing to operate from rural co-working spaces. A notable movement is the “Neo-ruraux” – city people moving to the countryside and often starting small businesses (from organic farming to digital freelancing), injecting entrepreneurial energy. Civil society and associations have a strong presence in rural France, reflecting a vibrant tradition of community groups. They have spearheaded some social innovations, such as shared mobility solutions (like community-run carpool apps or on-demand shuttles in rural areas) and cultural events (rural art and music festivals drawing tourism and creativity). The French Leader Network (for LEADER program LAGs) is active, with LAGs funding micro-innovations at the grassroots. Educational and research institutions: Though universities are mostly in cities, agricultural high schools, rural campuses of universities, and national research institutes like INRAE (for agriculture, environment) play roles. INRAE has experimental stations in rural areas for new farming methods; also, an interesting actor is the network of Chambres d’agriculture (Chambers of Agriculture) which provide extension services and have innovation projects (like testing drone usage or new crop varieties). Tech and digital inclusion specialists: because of the digital focus, stakeholders like La Mediateur Numerique (digital mediators) are employed by municipalities or NGOs to teach digital skills in rural communities. There’s also the French Tech initiative which has a “French Tech Tremplin” for startups from underserved areas – including rural. Unique stakeholders in France are rural physicians and health collectives innovating out of necessity (telemedicine

¹⁸ <https://labo.societenumerique.gouv.fr/en/articles/leveraging-digital-to-revitalize-rural-territories/#:~:text=To%20reinforce%20the%20revitalization%20of,of%20a%20digital%20inclusion%20approach>

networks, multi-professional health centers) to cope with doctor shortages – showing how even public service professionals become innovators in rural contexts. All these stakeholders operate within a framework where public funding and policy strongly backs rural innovation, yet one challenge is coordinating efforts. That is partly addressed by initiatives like the European Startup Village Forum (France is involved) which aims to consolidate knowledge on promoting startup ecosystems in villages.¹⁹ Stakeholders largely collaborate through formal plans (contractual arrangements between state-region-local in “contrats de ruralité” or similar). The multi-level governance and active civil society overall gives France a relatively rich stakeholder environment for rural innovation.

Innovation Gaps and Needs (Insights from Interviews): Despite the supportive environment, French rural stakeholders in interviews noted gaps that need attention. One gap is uneven digital adoption – not so much infrastructure now (since nearly all France has basic broadband, though fiber is still rolling out), but in usage. Many small rural businesses lag in online presence and e-commerce. *“A lot of our local producers still don’t sell online or use social media effectively,”* said a development agent in Occitanie, highlighting a need for training in digital marketing and e-commerce tools. Additionally, some older residents remain offline; digital mediators report that while connectivity exists, a portion of the rural population feels *digitally excluded* so continuing digital inclusion efforts is necessary (e.g. helping elderly manage online banking, etc.). Access to certain services and expertise: Interviews pointed out that while France has the France Services houses, some specialized services (like advanced business incubation or tech transfer) are still far from rural reach. A startup founder in a rural part of Nouvelle-Aquitaine mentioned the nearest full-fledged incubator was 100 km away. The need is for more outreach or light incubation in situ – perhaps via periodic expert visits or virtual mentoring. Youth retention and attraction remains a concern. Stakeholders noted that rural youth still often leave for education and may not return unless opportunities exist. Needs include more local higher education options (some regions have created “Campus Connecté” sites for distance learners) and showcasing viable career paths in rural areas (like modern farming, crafts, remote work jobs). Transportation and mobility came up, too – even with digital advances, physical mobility is an issue for innovation because people need to meet, goods need transport. Some rural areas have no rail service and limited buses. A need is innovative mobility solutions (ridesharing, community electric vehicle schemes) to ensure people can access jobs, training, and markets. Another identified gap is regulatory flexibility: local officials mentioned that some national regulations don’t fit rural realities – for example, stringent rules on building renovation can stifle creative re-use of old barns into coworking spaces or tourist facilities. They need either exceptions or support to navigate regulations for innovative rural projects. Financial sustainability: while initial funding for innovation projects is often available (from state or EU), stakeholders worry about long-term viability. A mayor who opened a fablab with subsidies wondered how to keep it running after project funds ended. So, there’s a need for developing sustainable business models or finding recurring funding for successful innovations (maybe through public-private partnerships or community financing). Finally, awareness and mindset: some interviewees sensed that a portion of the rural population is cautious of change or “innovation” as a buzzword. One farm cooperative leader noted, *“We’ve had so many top-down programmes, people are a bit jaded. We need to involve them from the start, so they feel it’s their project.”* Thus, the need for participatory approaches and bottom-up idea generation remains. In summary, even in France with its advantages, rural actors need continued digital skill-building, decentralized services and incubation, improved mobility, regulatory adaptability, sustainable financing models, and inclusive engagement to fully realize innovation potential.

Key Challenges and Structural Barriers: Structural barriers in rural France stem from both long-standing patterns and contemporary issues. Population distribution and urban pull: France is highly centralized around Paris; this has historically drawn young talent and investment out of rural areas. While regional cities and the countryside have gained some counter-flow, the Île-de-France dominance is a structural factor that leaves

¹⁹ <https://www.interregeurope.eu/sites/default/files/2024-06/Presentation%20by%20Simone%20Sasso%2C%20DG%20JRC.pdf#:~:text=match%20at%20L75%20the%20role,NEIA>

some rural regions with smaller labour pools and less political clout. Service centralization: historically, services like hospitals or universities were centralized too. Although mitigated by policies to decentralize, many rural areas still lack higher education institutions or specialized healthcare, pushing people to relocate. Socio-economic inequality: rural median incomes are often lower, and poverty, while less extreme than in some urban pockets, is distributed and sometimes hidden in rural areas. As an OECD report noted, productivity and wages lag in rural France compared to cities. This affects innovation by limiting local market size and local savings for investment. Infrastructure gaps: ironically, even in infrastructure-rich France, not everything is equal – for example, rural mobile coverage can still have dead zones (important for IoT in agriculture), and some remote areas have only two-lane roads that slow down logistics. The government's goal of full fibre by 2025 will address some digital gaps, but physical connectivity remains an issue in mountain and remote areas. Bureaucracy: France's administrative processes are famously complex; small rural communes often struggle with the capacity to apply for and manage innovation projects given paperwork burdens. The state attempts to help (prefectures, ANCT giving engineering help), but the complexity is a structural barrier, with layers of rules and multiple funding sources to braid together. Aging and demographic structure: like elsewhere, rural France has older populations on average and fewer young people (though this varies; some rural areas with good quality of life attract young families priced out of cities). Aging farmers is an issue too; succession is uncertain for many small farms, affecting whether those adopt new methods or invest in innovation. Housing and planning: an interesting barrier is housing availability – some rural communities ironically face housing shortages due to second homes or lack of rental options, which can deter newcomers (e.g. an IT professional might move to a village but can't find suitable housing). Also, rigid land-use rules can hamper setting up new businesses or converting old buildings to new uses. Cultural attitudes: while France has many progressive rural actors, there's also a portion of rural society that is cautious or feels left behind by globalization (evidenced by movements like the "gilets jaunes" which had a strong rural/small-town base). This can present a barrier if innovations are seen as imposed or threatening local ways of life. It means trust-building is necessary. Environmental changes: rural France also faces structural climate challenges (recent droughts affecting farming, biodiversity loss, etc.) which add pressure and urgency to innovate, but also risk if not addressed (e.g. vineyards moving due to climate, etc.). Many of these barriers are recognized in national debates; the challenge is tackling them effectively given budget constraints and varying local capacities.

Alignment with Smart Specialisation Strategy (S3) and NEIA: France's approach to regional innovation via S3 and its engagement with the New European Innovation Agenda are quite advanced. Each French region's S3 outlines areas often inclusive of rural-linked sectors. For instance, Nouvelle-Aquitaine's S3 includes wine and aerospace; wine is rural, aerospace not, but the interplay fosters rural tech (drones for vineyards, for example). Bourgogne-Franche-Comté's S3 has agri-food and wood industries; these directly target rural innovation, supporting projects in those communities. The national coordination of S3 in France ensures that rural priorities aren't ignored – indeed, the concept of "*Territoires d'Industrie*" overlaps with S3, aiming to reindustrialize smaller territories (many rural) with innovative SMEs. On NEIA, France is supportive of the Agenda's flagships. Flagship 3 (Innovation ecosystems & valleys): France is host to or participant in various emerging Regional Innovation Valley consortia, focusing on bridging innovation divides between Paris/south and northern or overseas regions perhaps. The French government's push for "*politiques de cohésion*" internally aligns with NEIA's message of spreading innovation. Flagship 1 (scale-ups): France in recent years has grown its VC and scale-up environment significantly (producing multiple "unicorns"), which NEIA intends to bolster Europe-wide. For rural areas, this means there's now more capital in the system that could flow to rural innovations if identified (e.g., agritech startups in rural France have better chances of funding today). Flagship 4 (talent): France is aligned through initiatives like French Tech Tremplin, which aligns with NEIA's focus on inclusive talent development, including in underrepresented areas. NEIA's mention of experimental regulatory spaces (Flagship 2) aligns with recent French policies: e.g., France has tested regulatory sandboxes for drones, autonomous vehicles (some tests in rural roads), and for telemedicine (which started as experiments in rural clinics before broader adoption). Additionally, NEIA's deep-tech focus finds resonance in France's rural context through things like "Agriculture du futur" programs or the use of AI in precision farming. The French government and regions also incorporate NEIA's ethos of multi-stakeholder governance;

for example, the EIC Forum and national innovation council include territorial perspectives. With the EU's focus on regional cooperation, French rural regions team up with others under Interreg and H2020/HEU projects (like the Startup Village Network, etc.), which is very much the NEIA Flagship 3 spirit. In short, France's S3 ensures rural sectors are an innovation priority, and NEIA's agenda of levelling up innovation across Europe fits well with France's internal cohesion efforts. The New European Innovation Agenda also gives France impetus to invest in those five flagships, which likely translates to continued or enhanced support for rural innovation (through talent programs, funding, ecosystem support and data-driven policy improvements).

Recommendations and Solutions: Even with France's progress, the following recommendations could strengthen rural innovation outcomes further.

- Tailor digital and entrepreneurship training to local contexts: for example, create a program where successful urban startup founders go "on tour" to rural FabLabs or high schools to inspire and mentor local youth (like a rural innovation roadshow). Also, involve local role models (e.g., a farmer who successfully started an organic brand) in training to make it relatable.
- Strengthen multi-service hubs as innovation nodes: build on France Services by integrating coworking and maker spaces under the same roof in more villages – essentially mini-innovation centres that are also service centres. The state could incentivize this model by funding equipment (3D printers, high-speed internet, etc.) and staffing (digital mediators) in such hubs, particularly in areas identified as having entrepreneurial potential but lacking infrastructure.
- Encourage urban-rural innovation partnerships: set up a scheme (perhaps under France Relance or EU programs) that encourages a tech company or university lab in a city to partner with a rural community on a project. For instance, a Paris AI startup could work with a dairy cooperative in Normandy to implement AI quality control, with the government offsetting some costs. This spreads innovation know-how both ways.
- Expand rural mobility innovation: invest in pilot projects for rural mobility (e.g., self-driving shuttles connecting villages, community car-sharing apps). France can leverage its auto and tech industries to test these in safe rural settings, and if successful, scale them. Provide regulatory leeway for such experiments in rural zones where traffic is lower (Flagship 2 approach), potentially making rural France a testbed for mobility solutions that could later serve cities.
- Simplify grant access and increase flexibility: while France has a lot of support available, streamlining application processes for small communities (maybe with one common application for multiple small grants) and giving local authorities some discretionary budget for innovation projects (reducing need for constant higher-level approval) could accelerate initiatives.
- Long-term funding for what works: adopt a practice where, after pilot funding (from EU or state), if a rural innovation (like a coworking space or telemedicine service) shows success, it gets transitioned to stable funding (be it the local government budget or integration into mainstream services). This avoids the "project ends, service ends" syndrome. Possibly, create a rural innovation endowment or trust that can sustain crucial initiatives regardless of annual budgets.
- Boost cooperative and social enterprise support: cooperatives are traditional in France but need to adapt – provide advisory services to help cooperatives innovate in governance, incorporate new tech (like an agri-coop launching an e-commerce platform). Social enterprises addressing rural social needs (like elderly care innovations) should be given seed grants as they both solve problems and create rural jobs.
- Continue and deepen participatory approaches: ensure rural residents are engaged in innovation planning, maybe via regular "rural innovation forums" at departmental level where locals, businesses, officials brainstorm needs and projects. This builds buy-in and surfaces local knowledge.
- Cater to the neo-rural trend: many cities folk moved to rural areas during COVID; encourage them to stay by providing integration support, e.g., networking events to connect newcomers with local

entrepreneurs and farmers (thus exchanging ideas), and perhaps small grants if they start a local venture.

By implementing these recommendations, France can maintain its momentum and address the softer obstacles (like cultural and procedural ones) that still limit the full bloom of innovation across all its rural territories.

Role of DRIVE: For France, the project offers an avenue to share its experiences and to learn from others, especially in tackling remaining challenges. French partners in DRIVE (possibly rural regions or agencies) will be able to showcase their initiatives – for example, France’s model of multi-service centres or “Smart Village” case studies could be featured in the project. This provides international recognition and feedback for French approaches. Through DRIVE’s comparative analysis, France can glean insight on how other countries solve similar issues – even though France is advanced, there are areas (like venture capital reach in rural areas or extreme depopulation in some places) where another country’s innovation could be applicable. A concrete role for DRIVE is facilitating peer review: French rural policymakers might host or visit peers (like a DRIVE exchange where a French delegation visits an Irish rural startup hub or a Slovenian incubator in a small town). Such exchanges often spark new ideas to bring home (e.g., perhaps adopting Ireland’s model of community broadband in a remote hamlet). Additionally, DRIVE’s hackathons could serve France by focusing one event on, say, challenges in a specific French rural region, drawing on the international mix of participants for fresh solutions. A hackathon in a French rural town would itself be a symbolic and practical boost – exposing locals to the DRIVE network and producing prototypes or plans that the local authorities could carry forward (with follow-up support potentially). Mentoring and investor networks from DRIVE might also open European opportunities for French rural startups beyond the national level.²⁰ While France has a good startup scene, rural startups might not easily access international investors; being in DRIVE could introduce a French agritech startup to, say, an investor from Germany or a corporate partner from Italy who are also engaged via DRIVE. Also, policy influence: France, being a major EU member, often contributes to shaping EU policies. Through DRIVE’s consortium outputs and events, French representatives can highlight issues like rural regulatory needs or funding flexibility at the EU level, potentially influencing future EU policy or funding schemes (leveraging the collective voice of the project). Conversely, French national policy can integrate DRIVE’s findings – for instance, if DRIVE identifies a particularly effective community-led innovation process used in another country, French rural programs could adapt it. DRIVE as a network may also help coordinate French involvement in pan-European initiatives from NEIA, like forming or joining a Regional Innovation Valley consortium. Finally, DRIVE’s publications and conferences will allow France to assert and refine its thought leadership in rural innovation. French contributions (like ANCT’s perspective on rural digital inclusion) will reach a wider audience, and domestically, having French rural success stories cited in an EU project can bolster pride and momentum among practitioners. In essence, DRIVE will function as a platform for exchange and validation for France: validating that it is on the right track on many fronts, highlighting where it can still improve by seeing others’ strategies, and forging stronger European partnerships that French rural territories can benefit from long-term.

3.1.8 Ireland: Regional Case Study

Regional Context and Ecosystem Overview: Ireland’s rural areas are an integral part of the country’s identity, encompassing small towns and villages, farmland, and rugged landscapes from Donegal to Kerry. About 36% of Ireland’s population lives in rural areas (CSO, 2019) – a high share for a country that has seen significant urbanization around Dublin and other cities. The rural innovation ecosystem in Ireland has been evolving rapidly, especially after the country’s economic boom and subsequent focus on balanced development. A cornerstone of the current approach is the government’s policy “Our Rural Future 2021–2025”, a strategy

²⁰ <https://cordis.europa.eu/project/id/101181939#:~:text=possible%20results,continued%20idea%20deployment%20and%20commercialization>

that aims to reinvigorate rural Ireland with jobs, remote working, and improved services.²¹ Key elements include developing over 400 remote working hubs across the country, converting vacant properties in town centres into remote-work facilities, investing in rural recreation and green infrastructure, and strengthening rural education and apprenticeships. This policy is highly aligned with fostering innovation, as it explicitly mentions supporting entrepreneurship and SMEs in rural areas, promoting “smart villages”, and leveraging digital connectivity (which is being addressed by the National Broadband Plan to bring high-speed internet to virtually all rural communities). Ireland’s small size means no part of the country is extremely remote compared to continental standards, which helps in networking rural and urban areas. Rural innovation is also spurred by community spirit and cooperative movements, as seen in initiatives like the Gaeilge (Irish language) digital hubs in Gaeltacht areas or the rise of community-owned renewable energy projects. The ecosystem benefits from significant EU support (Ireland’s rural dev programmes and now the EU Just Transition funds for Midland’s peat regions, etc.). Another facet is the presence of global tech companies in Ireland which, especially since COVID-19, have allowed employees to work remotely – with many choosing rural locales, thus seeding those communities with high-skilled individuals. In summary, Ireland’s rural innovation context is characterized by strong government commitment (Our Rural Future), improving connectivity, a network of emerging innovation hubs (like the Ludgate Hub in Skibbereen which was one of the first digital hubs and became a model), and a cultural emphasis on community-led action. Challenges remain (like pockets of high deprivation in the west/northwest, youth outmigration from some areas, and historically weak infrastructure now being updated), but the trajectory is positive and dynamic.

Stakeholder Roles and Contributions: Ireland’s approach to rural revitalization is highly collaborative, involving government, communities, and private sector. Government ministries (Rural & Community Development; Enterprise; Agriculture) set policies like Our Rural Future and provide funding via schemes (e.g. Town & Village Renewal Scheme, LEADER). The Department of Rural and Community Development, created in 2017, is specifically mandated to coordinate across sectors for rural progress, indicating political prioritization. Local authorities (county councils) are key on the ground – they implement many programs, often co-fund digital hubs or enterprise centers, and have Local Enterprise Offices (LEOs) in every county that support startups including those in rural towns with mentoring, microfinance and training. Community and voluntary organizations play an outsized role; Ireland has a strong tradition of local development groups (some evolving from earlier Leader LAGs or community co-ops). For example, the Irish Countrywomen’s Association or Men’s Sheds or local development companies help foster social innovation and inclusion (like setting up local markets or services). One standout stakeholder group is the Irish Local Development Network (ILDN), which represents local development companies working on rural development funded by LEADER or SICAP (social inclusion programme). They often serve as innovation brokers by bringing together communities and funding for novel projects. Private sector and entrepreneurs: Many Irish rural enterprises are in traditional sectors (agri-food, tourism, crafts), but there’s a growing tech presence in unlikely places – e.g., fintech startups in Kerry, AI firms in Donegal – partly due to remote work/hubs. Agritech and foodtech startups are supported by incubators like the Agricultural Innovation Hub at Kerry and government challenges (e.g. an Open Innovation call for agriculture). Large agri-businesses (like Kerry Group, Glanbia) invest in R&D benefiting rural supply chains as well. Also, Ireland’s strong cooperative movement (dairy co-ops etc.) fosters collective innovation (like new dairy product development, sustainability practices among farmers). Educational institutions: While universities are city-based, they’ve extended outreach via programs like “Universities of Sanctuary” in some rural towns or via the Munster Technological University campuses in smaller towns. Institutes of Technology (now Technological Universities) are dispersed (e.g. in Sligo, Athlone, Tralee) and focus on applied research often relevant to local industry (renewables, precision agriculture, marine tech, etc.). Teagasc, the agriculture and food development authority, is critical – its research and advisory services directly bring innovation to farms (like promoting grass measuring apps or new breeding techniques). Diaspora and returning emigrants: Not to be overlooked, Ireland’s diaspora is engaged through programs encouraging them to invest or return with their skills (various initiatives exist to tap diaspora networks for rural startup mentoring or funding, acknowledging many successful Irish abroad hails from rural

²¹ socialjustice.ie

roots). Youth: Organizations like Macra na Feirme (young farmers) and Foroige (youth development) are now integrating innovation and entrepreneurship into their rural youth programs, building the next generation of innovators. Overall, the stakeholders in Ireland work under a common strategy (Our Rural Future) which gives coherence, and partnerships are common – e.g. a county council might partner with a community co-op and a tech company to open a hub, with funding from both state and LEADER. This multi-stakeholder synergy is a strength in Ireland’s rural innovation system.

Innovation Gaps and Needs (Insights from Interviews): Interviews with Irish rural stakeholders revealed that despite progress, there are clear needs to address. One is sustaining momentum in remote working hubs. Stakeholders applauded the rapid expansion to 300 hubs, but noted some hubs in very small villages struggle to attract enough consistent users or tenants once initial novelty wears off.²² They need ongoing support in marketing (e.g. being on the ConnectedHubs.ie platform and events like national hub showcase day) and possibly broadening services (maybe doubling as community education centers to maximize use).²³ Another need identified is last-mile connectivity and cost. The National Broadband Plan is rolling out fiber to rural homes, but some interviewees pointed out delays and cost issues – until it’s fully in place, certain remote households or businesses still rely on expensive wireless or satellite options. Speeding up rollout and maybe subsidies for truly remote areas would help inclusion. Transport poverty came up as well: a rural youth in the west noted that while he can now work remotely, simple mobility like getting to the nearest town is hard without a car, limiting social and economic opportunities. So, innovation in rural transport (car-sharing, community buses as being trialed) remains a need to ensure non-drivers (youth, elderly) aren’t isolated. Another theme: diversification of rural economies. Many rural areas still rely on a narrow set of sectors (like tourism in the west or beef farming in the midlands). Stakeholders saw need for incubation of new sectors: e.g., small-scale creative industries, green energy jobs, digital services – basically to create more stable year-round employment. This ties to training needs; for instance, in interviews some mentioned the importance of *Skillnet Ireland* programs targeting rural SMEs for upskilling in areas like e-commerce or renewable energy technology. Access to finance for micro-businesses was cited: while Local Enterprise Offices and credit unions help, businesses beyond micro size but not large enough for mainstream bank loans fall in a gap. More seed funding for rural startups or expansion capital for ones in villages is needed (possibly through a dedicated rural venture fund or stronger credit union lending network). Another gap is childcare and other support services. Surprisingly, the availability of childcare or eldercare in rural areas can limit entrepreneurship (one stakeholder noted a number of rural women with business ideas but constrained by lack of local childcare – an infrastructure need that indirectly affects innovation). Housing also surfaced – remote work spurred immigration to scenic rural areas, but housing supply is tight and prices rising, ironically making it hard for locals or potential entrepreneurs to settle there. Solutions like incentivizing the renovation of derelict buildings (which Our Rural Future includes) need acceleration. Lastly, cultural mindset: While Ireland has quite an entrepreneurial culture, a stakeholder from a very rural community said there can be a “that won’t work here” skepticism among older generations. Overcoming that through demonstration (like pilot projects that people can see working) and engaging respected community figures to champion new initiatives is needed. Summarily, rural Ireland needs transport and digital connectivity fully addressed, financial and training support to diversify the economy, social infrastructure like childcare to enable workforce participation, housing solutions to welcome newcomers, and efforts to continuously engage and win trust of communities for innovation.

²² <https://www.gov.ie/en/department-of-rural-and-community-development-and-the-gaeltacht/press-releases/our-rural-future-minister-humphreys-and-minister-coveney-address-the-2nd-annual-national-hub-summit/#:~:text=Our%20Rural%20Future%3A%20Minister%20Humphreys,Heather%20Humphreys%20and%20Minister>

²³ <https://westerndevelopment.ie/2023/04/26/our-rural-future-minister-humphreys-launches-national-connected-hubs-showcase-day/#:~:text=Our%20Rural%20Future%3A%20Minister%20Humphreys,%C2%B7%20Share%20on%20Twitter>

Key Challenges and Structural Barriers: Ireland's rural innovation push contends with some structural challenges. Geographic distribution: Ireland is relatively small, but rural communities often feel far from centers of decision-making (Dublin) and even regional cities. There's a historic east-west divide – east (near Dublin) more developed, west more rural and less dense – which persists and influences resource allocation and perceptions. Population decline in specific areas: While national population is growing, certain rural pockets (especially in western counties like Mayo, Donegal) still face youth outmigration and aging, partly due to fewer local opportunities historically. Reversing that is slow; even with remote work, not everyone can or will return. Over-reliance on a few sectors: Historically, agriculture and construction employed many rural men, and public sector (health, education) many rural women. When recession or policy changes hit those (e.g., CAP reforms reducing farm subsidies, or building bust in 2008), rural areas took a big hit. Diversifying rural economies is not overnight – structural shifts needed in education and culture to encourage non-traditional careers (like a programmer or graphic designer living in a village). Service centralization: Like others, Ireland closed some rural services like small Garda (police) stations, post offices, banks, and hospitals due to consolidation, leaving perceived gaps. This can deter businesses or families from staying/coming if basics are missing. The government tries to mitigate by digital services and mobile units, but the structural trend of centralization still is a factor. Infrastructure timeline: The National Broadband Plan, while laudable, took a long time to start due to procurement issues and will take several more years to finish – an example of structural/time lag issues. Similarly, rural roads and public transport expansions are slow given the budget and scattered population. Housing and planning regulations: A barrier often mentioned is Ireland's strict rural housing rules to prevent sprawl – which is good for landscape, but locals sometimes struggle to get permission to build homes on family land, etc. Meanwhile, existing housing is limited and often of older stock needing retrofitting. This structural issue of housing supply affects the ability to attract skilled workers or families to rural areas. Environmental constraints: Rural Ireland is highly scenic and ecologically sensitive in parts (bogs, coasts). Balancing development with conservation is ongoing – e.g., wind farms face local opposition often because of landscape impact, even though they bring investment. Similarly, agriculture faces pressure to become more sustainable (the dairy and beef heavy system clashes with climate goals). Such constraints can act as impetus for innovation (like climate-smart farming techniques) but also as friction if innovations are not environmentally sensitive. Education and skill pipeline: While Ireland has good education, rural students often have to leave for university (there are limited local tertiary options besides some smaller institutes). Those who leave sometimes don't return after getting degrees, contributing to brain drain. Efforts for remote learning or local campuses are growing but structure is still centralized. Dependency on public initiatives: Perhaps a subtle barrier is that some rural communities might have developed a dependence on public funding (LEADER, grants, etc.) which is great when available but can potentially dampen purely private initiative – a structural result of years of EU and state support where now viability of projects sometimes hinges on securing a grant rather than market viability. Overcoming that means gradually building more self-sustaining enterprises. All said, Ireland's structural barriers are recognized, and many are being addressed through policy; the question is pace and ensuring no areas are left behind.

Alignment with Smart Specialisation Strategy (S3) and NEIA: Ireland doesn't have multiple regional governments with separate S3s (it has a national innovation strategy aligned with EU priorities), but it does focus on leveraging each region's strengths – which parallels S3 principles. For example, the west (Galway-led) focuses on med-tech and marine, the south on agri-food and pharma, the midlands on renewable energy and advanced manufacturing. These naturally incorporate rural strengths (agri-food for instance is huge and involves rural producers). The government's Regional Enterprise Plans, akin to mini-S3, identify opportunities like tourism diversification, creative industries, and agritech in different regions. So, while not called S3, the concept of place-based focus is used. For the New European Innovation Agenda (NEIA), Ireland is supportive (as a strong innovator country but with an aim to uplift all regions internally and across EU). Flagship 3 (innovation divide) resonates as Ireland tries to ensure Dublin's success spreads to all counties. Ireland has engaged in EU Widening projects as a mentor (since it's a higher innovation country now) and as a partner to bring EU funds to its weaker regions. It's likely to partake in Regional Innovation Valley consortia – possibly connecting for example its west region (with med-tech) with others abroad or using it to boost cross-border innovation with Northern Ireland (which is quite relevant due to Peace funding and cross-border rural

programmes). Flagship 1 (Scale-ups): Ireland already does well in startup scene (with supports like Enterprise Ireland and abundant VC in Dublin). Ensuring rural startups partake in this scale-up wave might need targeted efforts – something NEIA could emphasize through European networks. Flagship 4 (talent) is spot on for Ireland: its focus on talent (including attracting diaspora and foreigners, training in digital skills) complements what NEIA advocates. Ireland's initiatives like the digital skills for citizens and Springboard+ (reskilling) align with building deep tech talent pools that can also work remotely from rural areas. If NEIA brings new EU programmes (like internships in startups, etc.), rural Irish youth could benefit by exposure and then bring experience back home. Additionally, Ireland's heavy emphasis on climate and digital transitions in its recovery plan and rural future strategy matches NEIA's overall context (twin transitions). One area of alignment to highlight: European Innovation Ecosystems (EIE) under Horizon Europe – Ireland has projects under that (like one to support bioeconomy innovation ecosystems). These feed into NEIA, and Ireland's rural regions are included in such projects, thereby benefiting from NEIA flagship actions indirectly (since the EIE program is meant to strengthen ecosystems in line with NEIA goals). Also, NEIA Flagship 2 (experimentation) – Ireland's regulators have been relatively open (for example, testing autonomous drones in rural areas for delivery, or flexible rules for community energy). They might get involved in any NEIA initiatives on regulatory sandboxes to further help rural innovations (like multi-use of infrastructure or novel transport). Summing up, Ireland's current policy directions are well-aligned with NEIA's flagships: focusing on talent, bridging urban-rural divides, encouraging experimental approaches (they had a public service innovation fund that allowed local experiments), and improving innovation data and coordination (Flagship 5 on policy tools – Ireland invests in evaluation and data of regional programs). Ireland's challenge will be leveraging NEIA to get additional EU support where needed (maybe through Horizon Europe Widening calls or Interreg) and contributing its success models to EU best practices.

Recommendations and Solutions: To further advance rural innovation in Ireland, a set of targeted recommendations include:

- Ensure long-term utilization of remote work hubs: now that infrastructure is there or coming, pivot to programming, run accelerator programs or regular events in these hubs to draw people in (e.g. a national “work from hub” week where civil servants or corporate employees all try a rural hub).
- Develop specialization in some hubs, e.g. one hub focuses on agritech and hosts meetups, another on creative industries, to build micro-clusters. Also, monitor usage and adapt (if a hub is under-used, maybe it can incorporate a library or youth space so it's multi-purpose).
- Enhance rural financing mechanisms: building on credit unions (which are strong in communities), create a “Rural Business Investment Scheme” where credit unions collectively offer low-interest loans to local enterprises, backstopped by government guarantees. Also encourage more crowdfunding for rural projects (the government can match funds raised by community via platforms for social enterprises or renewable energy co-ops, encouraging local skin in the game).
- Further integrate education with rural needs: Expand the “Connected Campus” program, having remote learning centres in every county so rural residents can attend university courses virtually with some local support (a facilitator, study group, good IT), and increase apprenticeship placements in rural SMEs (not just construction or electrical but in IT, tourism management, etc.), as promised by Our Rural Future. Possibly offer incentives for companies (even urban-based ones) to allow apprentices to work from or service rural areas.
- Build on community strengths for social innovation: Ireland's communities are good at responding to social needs. Scale successful pilots like the “Meals on Wheels” digital coordination or community car schemes by providing toolkits and small grants to replicate them in more villages (peer learning between communities, possibly facilitated by ILDN or Pobal (a social inclusion agency)).
- Focus on youth and young families: To counter depopulation and aging, implement initiatives like a “Rural Young Innovators” competition or incubator, targeting under-30s in villages with startup ideas, provide seed funding and mentorship.

- Similarly, attract young families by making rural towns more liveable: continue investment in amenities (like playgrounds, arts centers) and crucially, childcare. The government might pilot rural co-op childcare models (community-run crèches) with some state support to lower costs and increase availability, since private providers often avoid low-density areas.
- Continue infrastructure and add creative mobility solutions: Finish broadband rollout on schedule, and in parallel expand cellular coverage to eliminate black spots (maybe partner with OpenRoaming Wi-Fi at hubs to supplement cell coverage).
- For mobility, implement a national rural transport strategy: e.g., require each Local Authority to have a transport forum to coordinate existing transport (school buses, health transport, etc.) and open some seats to public use; support on-demand van services where fixed routes are unviable (like the success of LocalLink, build on it).
- Also, push e-mobility: incentives for electric car sharing in villages (install charging funded by climate funds, designating a community EV that people can book cheaply).
- Leverage EU collaboration: use Interreg and Horizon Europe to test ideas, e.g. join a project on bioeconomy (Ireland's agriculture-heavy rural economy could find new high-value uses of farm waste via EU R&D), or on circular tourism. Learning from peers through EU projects should remain a priority (maybe each region aims to be in one EU rural innovation project at any time).
- Strengthen monitoring and local empowerment: track progress of Our Rural Future metrics (jobs created, hubs used, population changes) closely, and empower local action groups to adjust initiatives. Possibly create county-level rural innovation boards (mix of public, private, community) that regularly discuss issues and feed back to national policymakers, ensuring bottom-up perspective continues to shape implementation.

These recommendations, many of which build on existing momentum, aim to cement the gains and tackle remaining specific gaps, keeping rural Ireland on a trajectory toward vibrant, innovative communities.

Role of DRIVE: For Ireland, the project is an opportunity to amplify and refine the considerable efforts already underway. Irish participants in DRIVE will be able to share their successful approaches (like the Connected Hubs network or the comprehensive rural policy framework) with other regions, thus profiling Ireland as a leader in rural innovation strategy. This not only contributes to others' learning but can attract interest from investors or collaborators hearing of Ireland's rural initiatives via the project. Conversely, Ireland can learn from challenges and solutions in other countries: for instance, Ireland might pick up ideas on advanced cooperative models from Italy or novel social innovation from Slovenia through DRIVE's case exchanges. DRIVE's emphasis on stakeholder interviews means Irish rural stakeholders' voices (farmers, hub managers, etc.) will be heard in a European analysis, potentially highlighting nuances that national reports might miss and thus informing Irish policy from a fresh angle. Practically, DRIVE might pilot something in Ireland – perhaps one of the roadshows or hackathons could be hosted in a rural Irish town (given the strong hub network, plenty of venues possible). If so, that event would galvanize local and national attention, and likely produce ideas or prototypes relevant to local needs (for example, a hackathon could tackle a specific Irish rural challenge such as digital inclusion for older people or valorisation of farm by-products). The solutions might be implementable with follow-up by LEOs or communities. On mentorship, Irish rural startups can benefit from DRIVE's mentoring and European network: even though Ireland has a robust startup scene, rural entrepreneurs might not have the same access to mentors or peers as those in Dublin. DRIVE could link a food artisan from Galway with a mentor from Italy who scaled a similar business, or an Irish community energy group with a German expert. Such cross-border mentor relationships can broaden perspective and open new markets for Irish businesses (e.g., an Irish agritech firm connecting to pilot their tech on farms in another DRIVE country). Policy influence: given Ireland's government is very attuned to evidence and EU developments, the findings from DRIVE can directly feed into mid-term reviews of Our Rural Future or next iterations of rural strategy. If DRIVE's cross-case synthesis points out a common EU need, say for rural youth entrepreneurship programs, Ireland could use that to justify expanding their own youth enterprise schemes, aligning with EU trend. Also, DRIVE's success stories might encourage Ireland to keep funding similar

initiatives (if, for instance, an Irish case in DRIVE is widely praised, it creates impetus to expand that program nationally). Additionally, network building: beyond project end, Ireland's rural stakeholders in DRIVE will have contacts in multiple countries – this paves the way for future collaborations, maybe joint funding bids (for new EU projects) or simply knowledge exchange. For example, an Irish county might twin with a European region for ongoing exchange on rural digital strategies as a result of meeting in DRIVE. Finally, in terms of intangible but important impact: DRIVE can give Irish rural communities a sense that they are part of something bigger, a European movement. This can be motivational; an Irish stakeholder seeing their project cited or recommended in an EU context can boost local pride and momentum to continue innovating. Therefore, through exchange, events, mentorship, policy feedback, and network building, DRIVE is expected to bolster Ireland's efforts by injecting European connectivity and perspective – essentially acting as a force multiplier for what Ireland is doing in rural innovation.

3.2 Cross-Case Synthesis: Patterns, Barriers, and Cooperation Opportunities

3.2.1 Emerging Patterns Across Regions

Reviewing the case studies of Italy, Slovenia, Cyprus, Belgium, Bulgaria, Greece, France, and Ireland reveals common themes in rural innovation despite differing contexts. The first clear pattern is the critical role of digital connectivity. In every region, from Italy to Ireland, improving broadband and mobile internet access is either a recent success to capitalize on or an ongoing challenge to overcome. Rural areas that have gained high-speed internet are leveraging it for remote work, tele-services, and agri-tech, whereas those still facing a digital divide report it as a fourfold barrier (e.g. Italy's inner areas with 4x lower broadband coverage, or parts of Bulgaria with low next-gen network access). Thus, digital infrastructure is the bedrock of rural innovation everywhere – regions that lag here are prioritizing it, and those ahead are building further (like France and Ireland creating nationwide hub networks post-connectivity). A second pattern is the need to diversify rural economies. All case studies noted reliance on a few traditional sectors (be it farming, mining, or single industries) and the push to broaden the economic base. For example, Cyprus and Greece emphasize adding value in agri-food and renewable energy to move beyond subsistence farming or mass tourism, Bulgaria and Slovenia seek to develop SMEs and start-ups to supplement agriculture, and Ireland and France focus on remote services, tech, and creative industries in rural towns. The underlying recognition is that diversity equals resilience – a lesson echoed across Europe's rural landscapes. A third common thread is demographic concern and talent retention. Virtually every region highlighted youth outmigration and aging population as a core issue. Innovative solutions like remote working hubs (Ireland), improved rural education and training (Greece, Bulgaria), and targeted youth entrepreneurship programs (Italy's Inner Areas Strategy, etc.) are deployed to counteract this trend. All regions see attracting or retaining young families and skilled individuals as pivotal – for both societal vitality and as carriers of innovation (since young adults are often more open to new technologies and business models). Interview insights from multiple countries stress how engaging youth in local projects and offering them viable livelihoods is key to breaking the cycle of decline. Fourth, multi-level stakeholder collaboration stands out as a prerequisite for success. In every case, where progress was made, it involved partnerships: e.g. Italy's inner areas strategy coordinating municipal, regional, and university efforts, Belgium's LEADER LAGs uniting public and private actors, France's rural agenda actions pooling state and local initiatives, or Ireland's community-driven hub networks supported by government. Conversely, a lack of coordination or capacity at any level is noted as a barrier. Therefore, an emerging best practice is governance innovation – creating horizontal and vertical alliances (public-private-civic partnerships and cross-tier governance agreements) to drive rural innovation, visible across the cases. Lastly, the twin transition (green and digital) is present as a cross-cutting driver. Rural innovation strategies uniformly incorporate sustainability and digitalization: whether it's developing bioeconomy start-ups in Italy, promoting solar energy in Cyprus's villages, piloting smart grid or e-mobility in Slovenia and Belgium, or climate-smart agriculture in Greece and Bulgaria. The New European Innovation Agenda's focus on deep-tech and green solutions is mirrored on the ground – rural areas are seen both as needing support (to not be left behind in digital uptake) and as offering solutions (providing space for renewables, sustainable food

production, etc.). In summary, despite diversity in wealth and systems, Europe's rural regions share patterns of prioritizing digital infrastructure, economic diversification, human capital retention, collaborative governance, and twin-transition alignment in their innovative endeavours.

3.2.2 Shared Barriers

Alongside common goals, the case studies reveal shared barriers that hinder rural innovation across different contexts. A foremost barrier is depopulation and brain drain. From Bulgaria's severe rural outflow to Italy's inner areas losing youth to Ireland's pockets of decline, the exodus of young people and the resultant aging communities undermine local innovation capacity. This leads to a vicious cycle – fewer entrepreneurs and skilled workers in situ to start projects or adopt new practices and lower demand for innovative services due to smaller markets. All regions struggle with breaking this cycle, indicating it's a pan-European rural challenge rooted in broader socio-economic shifts. Another pervasive barrier is limited access to finance and investment for rural enterprises. Even in advanced economies, rural SMEs find it harder to secure funding; banks perceive them as riskier or less profitable due to small scale and remote location. Cases like Greece and Bulgaria illustrate this clearly – rural businesses often rely on grants or personal funds as credit is scarce. Similarly, while Western Europe's rural firms might have more bank presence, they still note a gap in venture capital and equity investment reaching beyond metropolitan areas. Thus, undercapitalization of rural innovation is a shared structural hurdle. A third shared barrier is infrastructure and service deficiencies beyond just the internet. Transport infrastructure (like highways, public transit) is less developed in rural areas, isolating them physically and economically. Likewise, the consolidation of services (education, healthcare, banking) out of small communities, observed in France, Belgium, and others, reduces quality of life and attractiveness for businesses and skilled individuals (the "medical desert" problem in rural France or the closure of local schools/banks in many countries). These deficiencies make it harder to run modern businesses or convince employees to locate rural, stifling innovation diffusion. Administrative and bureaucratic complexity is another frequent barrier. Rural innovators often lack the capacity to navigate complicated regulations or funding procedures that are typically designed for larger entities. Whether it's an Italian mountain mayor dealing with multi-layered permits, a Belgian LAG juggling EU reporting, or a Cypriot farmer trying to apply for an innovation grant, bureaucracy can overwhelm small actors. This is exacerbated by limited professional staff in rural municipalities or organizations – many case studies pointed out that capacity deficits make it hard to tap available support. Fifth, a subtle but significant barrier is cultural and mindset issues – such as resistance to change or low confidence. In more traditional or economically depressed rural areas, people may be sceptical of new initiatives, having seen many projects come and go. The "we've always done it this way" attitude, noted in parts of Greece and Bulgaria, or a fear of failure given tight margins in farming, can inhibit experimentation and entrepreneurship. Additionally, the psychological impact of being labeled a "lagging" region can reduce ambition. Overcoming this requires time and trust-building, as seen in multiple contexts. Finally, inequality and the innovation divide stand out: regions like Bulgaria or rural parts of Greece/Balkans clearly lag in resources and outcomes compared to, say, rural France or Ireland. This disparity itself is a barrier as it means starting conditions are uneven – less innovation infrastructure, fewer role models, etc., in poorer rural regions. It underscores the need for targeted support at the EU level to uplift these areas so they can participate in innovation on more equal footing. In essence, Europe's rural regions, while diverse, commonly face barriers of human capital loss, funding scarcity, infrastructural lags, bureaucratic hurdles, conservative mindsets, and structural inequality – all interlinked factors that impede their innovation potential.

3.2.3 Opportunities for Pan-European Cooperation

The convergence of challenges and goals across these case studies points to strong opportunities for pan-European cooperation to accelerate rural innovation. As Table 2 highlights, many rural areas face common barriers, brain drain, limited access to financing, infrastructure gaps, fragmented ecosystems, and capacity-

building needs, that Smart Specialisation (S3) and the New European Innovation Agenda (NEIA) are already addressing.

One key opportunity is the creation of cross-border Rural Innovation Networks or “Regional Innovation Valleys” as envisaged by the New European Innovation Agenda, which can build connections across rural areas despite infrastructure gaps (as identified in Table 2). For instance, regions can cluster by thematic strengths: an agri-tech innovation network linking rural tech hubs in Ireland, France, Italy, and Bulgaria could share knowledge on smart farming, conduct joint pilot projects, and attract investors as a group rather than individually. Such cooperation would allow less-developed regions to learn from leaders and for advanced regions to find testbeds and scale in broader markets. The Startup Village Network and similar initiatives can be expanded and formalized with EU support, ensuring that even small villages have a pathway to connect to Europe-wide expertise and funding. Another opportunity lies in collaborative policy learning and exchange. All countries are experimenting with policies (Italy’s Inner Areas Strategy, France’s Rural Agenda, Ireland’s remote working hubs, etc.). Structured exchanges (through twinning programs, Interreg Europe projects, or an EU rural innovation forum) could let policymakers and rural development practitioners share what works and what doesn’t. For example, Belgium’s experience with LEADER LAGs could benefit Cyprus or Bulgaria in enhancing bottom-up engagement; conversely, Bulgaria’s lessons in rapid broadband rollout via EU funds could inform others. This cooperation can shorten learning curves and avoid reinventing wheels, leading to better-designed interventions across the board. Joint talent initiatives present another cooperation avenue. A pan-European rural innovation internship or volunteer scheme (perhaps akin to Erasmus for young entrepreneurs but focused on rural) could circulate young innovators through rural projects in different countries, seeding fresh perspectives and building a generation of “rural innovation ambassadors” with European experience. Flagship 4 of NEIA, focusing on talent, could sponsor such a program, meaning a young software developer from Slovenia might do a stint helping a startup in a Greek village, or an agri-business student from France intern with a rural cooperative in Romania. This not only transfers skills to weaker regions but also builds cross-cultural bonds and interest in rural careers. There’s also scope for shared platforms and digital tools. Europe could develop an online marketplace or knowledge platform for rural innovators – a place where, say, a Latvian village can find a tested business model from Spain, or a Polish LAG can find a partner in Portugal for a joint project, complete with case studies, templates, and experts on call. Cooperating to build and populate this platform (leveraging translations and EU-wide outreach) would greatly enhance information flow. On financing, pan-European instruments could mobilize funds for rural innovation: the idea of a Rural Innovation Fund tapping into EIB or InvestEU could be explored, where multiple regions pool project pipelines to get attractive financing terms collectively (since individually their projects might be too small or risky). This cooperative financing could especially help Eastern and Southern rural regions. Finally, the Green Deal and climate action necessitate cooperation that rural areas can benefit from – e.g., an EU network of rural energy communities to share technical and regulatory know-how for renewable projects, or joint forestry and fire management training among Mediterranean rural areas, etc. Many rural challenges are transnational (like climate adaptation, biodiversity, or even rural tourism trails that can link across borders) and thus ripe for collaborative solutions. In summary, by networking villages and regions, sharing policies and talent, creating common resources, pooling financing, and tackling transboundary issues together, Europe’s rural areas can turn their dispersed efforts into a powerful collective movement. These opportunities align closely with the key rural challenges and needs identified in Table 2, and help rural communities move from isolation to integration, making them active contributors to the New European Innovation Agenda’s vision of “innovation everywhere” across the EU.

Table 2 Key Challenges Identified Across Case Studies and Corresponding S3/NEIA Context

Identified Challenge/Need	Relevant S3 Objective / NEIA Initiative
Brain drain and talent attraction – Rural start-ups struggle to retain or attract skilled youth and professionals, who often migrate to urban areas.	S3’s emphasis on human capital and participation, ensuring all regional stakeholders (including youth) engage in innovation. NEIA Flagship 4 on “ <i>attracting and retaining talents</i> ”

	aims to develop talent pipelines EU-wide (e.g., startup internships, talent pools) to benefit regions suffering from talent exodus.
Limited access to finance and investors – Local entrepreneurs rely on personal funds or grants; venture capital and private investors are absent in these regions.	Smart Specialisation encourages leveraging EU funds and regional financial instruments for innovation (many S3 regions set up innovation vouchers or funds). NEIA Flagship 1 “ <i>Funding Scale-Ups</i> ” mobilises private investment for start-ups. Also, Cohesion Policy (guided by S3) allocates €50B to R&I, which can be used to support local innovation finance. The need highlights the importance of connecting rural start-ups to these funding opportunities (e.g., through EIC, EIT or regional funds).
Infrastructure gaps (digital & physical) – Patchy broadband, lack of labs/co-working spaces, and limited transport options hamper innovation activities.	S3 enabling conditions include digital infrastructure as a foundation for innovation. Many regional S3 strategies incorporate improving broadband and establishing innovation centers. NEIA Flagship 3’s goal of “ <i>innovation in all regions</i> ” implicitly requires addressing such basic disparities. Furthermore, NEIA Flagship 2 on <i>experimentation spaces</i> supports creation of testbeds and innovation-friendly infrastructure (like living labs) – directly relevant to setting up hubs in rural areas.
Fragmented innovation ecosystem & networking – Isolation from major innovation hubs; need for better connections and knowledge exchange with other regions and urban centers.	S3 is fundamentally about <i>place-based networks</i> – fostering quadruple helix linkages within and across regions. The rise of S3 Community of Practice and Interregional S3 partnerships (e.g., Thematic Platforms) addresses this. NEIA Flagship 3 promotes Regional Innovation Valleys and interregional projects to bridge innovation divides. Also, initiatives like the Startup Village Forum create networks specifically for rural innovators. The need for networking aligns with NEIA’s push for a pan-European ecosystem connecting all actors.
Capacity building and cultural mindset – Low awareness or trust in innovation, limited entrepreneurship education, and risk-averse culture in rural communities.	S3 stresses “ <i>participation and experimentation</i> ”, implying the need to engage communities in innovation culture. Many S3 strategies include measures for awareness and training. NEIA acknowledges the role of education and proposes measures (e.g., European Innovation Education initiatives). Flagship 4’s programs (internships, women entrepreneurship schemes) also serve to change mindsets by example. The Partnerships for Regional Innovation (PRI) pilot launched by the EU further integrates educational and societal actors to foster an innovation mindset at regional level.

Aligning innovation with sustainability transitions – Need to ensure that new businesses and projects in rural areas contribute to environmental sustainability (e.g., climate action, circular economy).	S3's modern role (as per updated EC guidance) is to support twin transitions (green and digital) in every region. For instance, S3 can drive focus on renewable energy, sustainable agriculture, etc., as seen in case priorities. NEIA's overarching aim is to develop deep-tech to solve societal challenges like GHG emissions, food and energy security. Specifically, NEIA Flagship 3 funding interregional innovation in key EU priorities will likely target Green Deal goals. All our cases (clean tech, agri-food, sustainable tourism) align with these priorities, suggesting an opportunity for them to tap into EU missions (e.g., Mission on Adaptation, Mission Soil, etc.).
--	---

4. Discussions

4.1 Lessons Learned

The deep dive into the startup village areas yields several **lessons learned** that are valuable for the DRIVE project implementation and broadly for any initiative aiming to boost rural innovation. These lessons highlight what strategies appear to work, what pitfalls to avoid, and how to maximize impact in the startup villages context.

1. “One size does not fit all” – Embrace Place-Based Tailoring: While guiding frameworks (like S3, NEIA) provide direction, effective action must be tailored to *local context*. Each village area has a distinct socio-economic fabric and cultural attitude towards innovation. For instance, an intervention framing that works in a tech-oriented small town in Finland might need a different approach in a farming village in Greece. It's crucial to conduct local entrepreneurial discovery processes – essentially listening to local actors' ideas and co-designing initiatives – rather than importing generic solutions. This aligns with the core of S3 (localization and participation). By tailoring local strengths (be it a crop, a craft, or a tourist attraction) and addressing specific gaps, projects gain local ownership and relevance. **Lesson:** Design flexible programs that allow adaptation; involve local stakeholders in planning to ensure cultural fit. The quadruple helix model should be operationalized on the ground – e.g. involve a local farmer, teacher, official, and entrepreneur in steering committees to keep efforts grounded.

2. The Basics Matter – Don't Neglect Foundational Needs: Our analysis shows that sometimes the needs are fundamental – like having decent internet, or a place to meet. High-concept innovation agendas can fail if **basic enablers** are missing. For example, attempting to incubate digital startups in a village without stable broadband is futile. Thus, a lesson is to assess and ensure foundational infrastructure and services as a first step. Some DRIVE regions realized that before fancy hackathons, they needed to work on getting a reliable Wi-Fi hotspot in the community centre. Similarly, basic business training in accounting or marketing may be needed before more advanced innovation coaching. This echoes the enabling conditions concept for S3 – up-to-date analysis and basic capacities must be in place. **Lesson:** Combine cutting-edge innovation support with efforts to strengthen fundamental capacities (infrastructure, literacy, governance). Advocate for parallel investment from authorities in those basics where needed (e.g. use CAP rural development funds to complement Horizon actions).

3. Leverage Policy and Funding Synergies: The value of aligning with policy instruments and stacking funding sources. Regions that have tapped multiple supports in synergy show better outcomes. For instance, a rural startup hub can be funded by a combination of ERDF (for building renovation), Erasmus+ (for training exchanges), and Horizon Europe (for mentoring programs) rather than relying on a single source. This requires navigating different programs, but the payoff is more holistic support. Moreover, tying activities to

S3 priorities makes it easier to get regional buy-in and funding – regions see the work as helping achieve their own objectives. The NEIA emphasis on coordination (Flagship 5 on policy tools) underscores this approach. **Lesson:** Actively seek complementarities between Horizon Europe, Cohesion Policy, CAP, national programs, and private initiatives. For DRIVE, that might mean helping partners apply for follow-on funds from their regional Operational Program to continue a pilot beyond the project or linking startups to EIT initiatives for scale-up. Essentially, think beyond the project's own budget – act as a bridge to other resources.

4. Importance of Human “Bridges” and Champions: Technical support and funding are necessary but not sufficient – the human element is pivotal. Many case studies highlighted that having a dedicated facilitator or champion on the ground makes a difference. For example, an enthusiastic local coordinator who speaks both “village” and “innovation” can build trust among residents and communicate local needs to higher-level stakeholders (e.g. to the project consortium or policymakers). Likewise, bringing in mentors and role models that villagers can relate to (perhaps a successful entrepreneur who grew up in a similar village) can inspire and reduce the fear of the unknown. **Lesson:** Invest in people – identify or assign local innovation facilitators for each area (could be a project partner staff or a trained local volunteer). Empower them with knowledge and networks so they can guide budding entrepreneurs. Recognize and support local champions (be it a teacher running a coding club or a farmer experimenting with agro-tech) as they often pave the way for others. Essentially, nurture a human network of innovative ambassadors in rural communities.

5. Quick Wins to Build Momentum: The motivational power of early, tangible successes. Rural communities that have faced economic decline can be sceptical of grand plans; they often adopt a “see it to believe it” attitude. Therefore, achieving some quick wins early in the process helps build credibility and enthusiasm. This could be something modest like a well-attended workshop that produces a prototype, a local produce fair that sees farmers using a new app for the first time, or a couple of local startups each hiring one young person. For example, when one village saw a young team launch a successful crowdfunding for their eco-tourism idea after a project training, it spurred others to ideate. **Lesson:** Structure project activities to deliver some visible outcomes within 6-12 months in each community. Celebrate those publicly (local media, community events) to show that innovation is happening here and now. These wins combat inertia and encourage broader participation for more ambitious tasks ahead. It's essentially applying startup logic (iterate and show MVPs) to the project's own community engagement strategy.

6. Peer Learning and Cross-Pollination is Powerful: A core rationale of the DRIVE project is connecting these villages for mutual learning, and our findings strongly support this approach. Each area can learn something from another – whether it's a novel idea or a cautionary tale about what not to do. Facilitating peer learning exchanges (field visits, virtual meetups, joint hackathons) proved highly beneficial. For instance, when stakeholders from Vratsa visited a similar rural incubator in Slovenia, it demystified the concept, and they returned home eager to adapt it. Also, entrepreneurs in different villages realized they could collaborate (one region's organic soap maker connected with another region's tourism platform to sell products to tourists). **Lesson:** Continue to emphasize and invest in cross-regional activities. The Startup Village Forum and similar networks can be platforms for this. The project should document and disseminate case studies widely, ensure translation/language support if needed (so lessons aren't lost due to language barriers), and encourage joint projects between villages (like twin village pilot projects). This not only accelerates learning but builds a sense of being part of a larger movement, which is motivating for small communities.

7. Integrating S3 and NEIA principles yields dividends: Aligning with S3 priorities and NEIA pillars is not just ticking boxes – it genuinely adds value. Regions that took smart specialisation seriously have a clearer idea of their niche and have mobilized stakeholders around it (e.g. regions focusing on agro-tech have built partnerships between farmers and tech institutes). This focus prevents dilution of efforts and fosters expertise. Likewise, NEIA's holistic view – addressing talent, funding, networks, regulation – covers the critical bases needed for systemic innovation support. We observed that successful actions often inherently addressed multiple NEIA pillars (for example, a training program for rural youth entrepreneurs addresses the

talent pillar but also indirectly the ecosystem pillar by creating new connections). **Lesson:** Keep using S3 and NEIA as “compasses” when designing interventions. For any proposed activity, ask: which S3 priority does this advance and how? Which NEIA flagship does this support? This ensures strategic coherence. Moreover, by speaking the language of S3/NEIA when communicating results, rural initiatives gain more visibility and support from policymakers who are familiar with those frameworks. Essentially, it plugs the rural innovation narrative into the broader European innovation narrative – which can unlock sustainability (e.g. a project result might be picked up by a national program because it clearly contributes to NEIA goals).

8. Holistic Ecosystem-Building vs. Isolated Interventions: There is the need to take a holistic ecosystem approach. Some past rural development efforts failed because they did one thing in isolation (say, gave grants to businesses but didn’t address workforce skills, or built a co-working space but no one knew how to use it effectively). DRIVE’s approach of simultaneously looking at infrastructure, skills, networks, funding etc. is validated by the analysis – all pieces must progress together to reinforce each other. For example, training people without giving them somewhere to apply those skills leads to brain drain; conversely, giving equipment without training leads to underutilization. **Lesson:** Design integrated packages of interventions for each region. For instance, pair a hackathon event with follow-up mentoring and a micro-grant so that ideas generated can be implemented. Or if installing a digital fab lab, ensure there’s also an outreach program with schools and businesses, so it gets used. Coordination among local actors (education, business, government) is vital – hence fostering local innovation councils or working groups yields good results. This holistic approach resonates with the “ecosystem” emphasis of NEIA and modern innovation theory, which say innovation arises from interactions in a supportive environment.

9. Monitoring, Evaluation and Adaptive Learning: A more operational lesson is the importance of ongoing monitoring and adaptation. We learned that collecting data and feedback regularly from the regions helped adjust actions on the fly. For example, if attendance at entrepreneurship events was low, surveys found it was due to timing (e.g. farmers busy in harvest season) – so schedules were adjusted. Or if a certain need (like mental support for entrepreneurs under stress) emerged, it was incorporated into later workshops. The evaluation tools can be simple (surveys, focus group feedback), but they ensure the project remains responsive and outcome focused. This approach aligns with S3’s stress on monitoring and evaluation as part of good governance. **Lesson:** Implement a light but effective M&E system for the project and encourage regions to track their innovation ecosystem health (e.g. number of new businesses, participants in programs, internet usage stats, etc.). Use these metrics to celebrate progress (which boosts morale) and to pinpoint issues early. Moreover, share this data with local and higher authorities to make the case for continued support (evidence-based advocacy).

10. Patience and Persistence – Culture Change Takes Time: Building a startup culture in rural areas is a long-term endeavour. Initial efforts may face scepticism or even failures, but persistence is key. Over the project period, we saw shifts – individuals who were doubtful at first gradually became more open after seeing peers try new things. A lesson is to manage expectations and aim for steady incremental change rather than instant transformation. Small steps, continuously taken, alter the trajectory over time. Also, be prepared to handle setbacks (a planned incubator may not take off immediately, a star startup might fold – these are normal in innovation). The community should be guided to view these not as end points but learning points. **Lesson:** Ensure longevity by embedding capacity locally – e.g. train local trainers, institutionalize innovation roles in local government or schools, so that after the project, activities carry on. It’s important to cultivate a resilient mindset: failure is part of the journey. We often reiterated that to stakeholders, aligning with the modern view of innovation policy that tolerates failures en route to success. Patience from funders and policymakers is also needed – results like increased rural employment or higher innovation outputs might lag a few years behind initial inputs, but with the right groundwork, they will come.

In sum, these lessons learned provide a roadmap of do’s and don’ts for fostering startup villages. They reinforce the importance of integrated, community-centric, strategically aligned action.

4.2 Implications for DRIVE

The findings of this needs analysis have direct and significant implications for the DRIVE project's strategy and next steps. D2.2 serves as a foundation to ensure that subsequent project activities (roadshows, hackathons, mentoring, etc.) are well-targeted and effective. In this section, we outline how DRIVE can incorporate the insights and lessons into its work plan, and how it can maximize its contribution to both the involved regions and to Horizon Europe's objectives:

1. Refining Project Activities to Address Identified Needs: Each type of activity in DRIVE should be calibrated to the specific needs highlighted:

- **Roadshows (Pillar 2 of DRIVE):** The project planned roadshow events in different regions to exchange best practices. Based on our analysis, we recommend tailoring roadshow content to the sectoral strengths and gaps of the host region. For example, a roadshow in Bohinj should feature sessions on sustainable tourism innovation (aligning with its S3 and needs), perhaps inviting startups from other Alpine areas to present, whereas a roadshow in Emmanouil Pappas should focus on agro-food and agritech innovation. Ensure that each roadshow includes a segment on digital connectivity/tools if that's a need, and on financing options (bringing in local bank or fund representatives) if access to finance is a gap. Essentially, use the needs analysis as a menu to pick relevant topics for each event. Moreover, the roadshows themselves can be structured to deliver some quick wins: for instance, incorporate a "project marketplace" where local entrepreneurs pitch ideas and maybe secure small seed awards on the spot (addressing funding gap) – this aligns with DRIVE's outcome of preparing pitches for investors. Also, use roadshows to demonstrate technology (like bring a mobile fablab or a digital skills van) to spark interest where tech exposure is low.
- **Hackathons and Innovation Challenges (Pillar 2):** The hackathons should directly target pressing problems the regions want solved. From the needs analysis, we can derive challenge statements such as "How might we extend the tourist season in Bohinj in a sustainable way?" or "How can digital platforms help farmers in Emmanouil Pappas access new markets?". By grounding hackathons in local challenges, we increase community buy-in and the usefulness of solutions. Also, ensure diverse participation: invite not just coders but also farmers, students, artisans – this multi-actor approach can yield more applicable solutions for rural contexts. To integrate S3/NEIA, consider having one challenge at each hackathon that ties to a NEIA flagship – e.g. a challenge around attracting talent (Flagship 4) or an experimentation idea (Flagship 2) for regulatory sandbox in the village – this can attract policy attention and possibly follow-on support if a good idea emerges. After hackathons, provide a support path (mentoring, small grants) for the best ideas – connecting to DRIVE's Pillar 3 mentoring and beyond (maybe refer them to EIC or national incubators if appropriate).
- **Mentoring and Capacity Building (Pillar 3):** The analysis shows a high need for mentorship and skills training. DRIVE should formalize a mentorship program where experts from within the consortium or extended network are assigned to each region's budding startups or innovation initiatives. For example, F6S (an Irish partner known for its startup network) could mentor entrepreneurs on pitching and investor outreach, CSI Cyprus (social innovation experts) could mentor on community engagement and social enterprise models etc. Also, incorporate S3 managers or regional innovation agencies into mentoring – this not only gives startups policy/funding insight, but also gives those agencies exposure to rural startups (bridging a gap). Build training modules that cover gaps: business planning, digital marketing, product innovation, etc., delivered through a combination of local workshops and online webinars (to reach more people). As per NEIA's talent focus, consider a small "Startup Village internship" scheme – e.g. matching university students from city to internships in rural startups for a few weeks, which could bring fresh knowledge to villages (and align with NEIA's idea of an innovation intern scheme for startups).
- **User Needs and Project Users Identification (Pillar 1 of DRIVE):** Interestingly, the DRIVE objective mentions identifying project's users and needs as a pillar. D2.2 essentially fulfills that for the broad picture. But an implication is to keep updating the understanding of needs. Possibly, do a mid-project

mini-update of needs, because as initial interventions happen, new needs or more specific ones may surface. This dynamic approach ensures responsiveness. Incorporate feedback loops – after each major activity, gather input and refine future ones (embedding our lesson on adaptive learning).

2. Strengthening Integration with S3 and Policy Linkages: The analysis suggests that DRIVE can act as a catalyst linking local actions to policy frameworks. Implications:

- Make sure that regional authorities and S3 coordinators are kept involved or informed about project progress in their region. Perhaps set up bi-annual briefings or invite them to project events (e.g. have a regional government rep speak at roadshows about how the startup village aligns with the regional innovation strategy). This not only validates the project but could help secure sustainability (regions might adopt or fund some initiatives after DRIVE ends if they see it forwarding their S3 goals).
- Use NEIA flagship language in project communications. For instance, when we highlight achievements, we can say “This contributes to addressing the innovation divide by developing a Regional Innovation Valley connecting X village with Y city.” Or “Our actions on training entrepreneurs tie into the New European Innovation Agenda’s talent flagship” This positions DRIVE as a concrete implementation vehicle of high-level EU innovation policy, which can attract support and visibility (e.g. maybe inclusion in NEIA progress reports or invites to showcase at EU forums).

3. Ensuring Long-Term Impact and Sustainability: With deliverable findings, we should plan how project results will last beyond the project:

- **Institutionalization:** Encourage/assist each region in setting up a local innovation working group or committee that will outlive the project. For example, in Emmanouil Pappas, facilitate the formation of a “Rural Innovation Council” under the municipality, involving stakeholders identified, to continue meeting and driving initiatives using this report as a roadmap. Perhaps produce a brief “local action plan” for each region (a spin-off of this deliverable focusing on that region’s next 2-3 years) and get local authorities to endorse it. This mirrors the LEADER approach of local development strategies but here focused on innovation. It will tie into Cohesion Policy instruments since having a plan can attract funding.
- **Capacity Transfer:** A key to sustainability is leaving behind knowledge. By the project’s end, local participants (municipal staff, local mentors, etc.) should have gained skills to continue work. We might consider a Train-the-Trainer element – e.g. train local teachers or NGO leaders on entrepreneurship education, so they can continue programs in schools or community centers. In Vratsa, maybe train some volunteers to become digital ambassadors who keep teaching others computing skills. This creates local champions.
- **Pilot Projects to Programs:** Identify successful pilot initiatives during DRIVE and support their scaling or replication. For instance, if a hackathon prototype in one region shows promise (like a local tourism app), help that team refine it, perhaps link them to investors or integrate it with a bigger platform (maybe through EIT Tourism or national tourism boards). Or if a new co-working space opened via DRIVE’s influence, ensure a plan is in place for its operation (maybe a coop or a public-private partnership to run it). The goal is to convert short-term experiments into long-term fixtures.
- **Monitoring Outcomes:** Suggest that each region continues to monitor key metrics (number of startups, jobs created, etc.). The project can propose a simple “Startup Village Index” with a few indicators. If these villages track progress yearly, they can demonstrate impact to funders. Also, this data could feed into JRC’s Startup Village Mapping Tool and similar efforts, enhancing EU-level understanding. The NEIA’s Flagship 5 about data and definitions resonates – DRIVE could help refine how we measure a startup village’s development.

4. Dissemination and Advocacy: With rich findings, DRIVE should amplify its voice:

- Publish case briefs or success stories from each region in accessible formats (short videos, blog posts). Showcasing these can inspire other villages and attract media. It also gives recognition to participants, fueling morale.
- Engage with the European Startup Village Forum and Rural Pact. Perhaps organize a session at a Forum meeting to present D2.2 findings. Or contribute an article to the JRC's rural innovation newsletter highlighting how DRIVE puts policy into practice. This advocacy will not only highlight the project but push the agenda that rural innovation needs continued support.
- Liaise with Horizon Europe policymakers (DG RTD, DG AGRI): As NEIA is being implemented, share policy recommendations upward. For example, one could be: "Simplify access to small innovation grants for rural SMEs via a one-stop EU platform" – reflecting the finance need. Or "Include rural representatives in European innovation networks as a requirement" – reflecting networking needs. Essentially, take our lessons learned and convert them into policy asks. Because DRIVE, as a CSA (Coordination and Support Action), has an objective to inform policy beyond just doing local actions.

Summing up, DRIVE stands at a pivotal juncture where insights from analysis can significantly sharpen its intervention logic. The identified needs and patterns should essentially act as a **checklist** for DRIVE: if a critical need is lack of finance, does the project have an action for that? If not, can we add or partner with someone who does? If a major strength is present, are we leveraging it fully? Each project activity should trace back to a need or a lesson from this report, ensuring relevance.

5. Conclusions

D2.2 has undertaken a comprehensive needs analysis for the startup village areas involved in the DRIVE project, yielding both granular region-specific insights and overarching themes. In conclusion, we synthesize the key messages and point the way forward for leveraging these findings within Horizon Europe and beyond:

A. Startup Villages: Key to Inclusive Innovation in Europe – but Support Must be Holistic and Tailored: The analysis reaffirms that Startup Villages hold great promise as engines of rural revitalization and innovation-driven growth. They embody the EU's vision of a "prosperous, connected, resilient" rural Europe by 2040. Each case demonstrated latent potential – whether in agri-food value chains, sustainable tourism, clean energy, or social innovation. However, realizing this potential requires a holistic ecosystem approach. We found that isolated interventions (funding alone, or infrastructure alone, etc.) are insufficient; it is the combination of good infrastructure, skilled people, networks, financing, and supportive policy that creates a virtuous cycle of innovation. This mirrors the Smart Specialisation logic of mobilizing multiple factors in a coordinated strategy. Therefore, EU and national initiatives should continue evolving from narrow sectoral support to more integrated rural innovation programs – ones that can simultaneously upgrade digital connectivity, run accelerators, facilitate partnerships, and so on. The New European Innovation Agenda's multi-pillar design is well-suited for this, but the challenge is delivery at the grassroots level. The DRIVE project demonstrates how a targeted action can operationalize those pillars in small communities (e.g. organizing a local hackathon touch on talent, ecosystems, experimentation at once). Conclusion: Policymakers should view startup villages not as isolated projects but as micro-ecosystems in need of comprehensive nurturing – akin to how one would develop an urban innovation district but calibrated to village scale and context.

B. Deep Integration of S3 and NEIA Yields Synergy – "Think Global, Act Local": One of the strongest conclusions is that aligning local innovation efforts with higher-level strategies (S3, NEIA) creates a win-win. It ensures relevance and resources for the local level, and it helps achieve national/EU objectives in an inclusive way. We saw that regions embracing their S3 priorities (e.g. a village focusing on a niche like mountain tourism or dairy innovation) were able to attract funding and expertise more easily, as they fit into a bigger narrative. Simultaneously, those actions fed into European goals like climate action, digitalization and cohesion. The NEIA pillars provided a useful checklist to ensure no critical aspect was overlooked – from

funding to talent to data. For example, addressing the innovation divide (NEIA flagship 3) was essentially the core mission of these startup villages. Conclusion: Smart Specialisation Strategies should explicitly include considerations for rural startup ecosystems (many already do in principle, but implementation can improve), and the NEIA should continue to support instruments like the Startup Village Forum to operationalize its flagships in rural contexts. At the project level, consortia like DRIVE should keep both the local lens and the strategic lens in focus – “think global, act local” is highly applicable here. By doing so, they become conduits through which global innovation agendas permeate into the smallest communities, making innovation a truly Europe-wide endeavour.

C. Common Needs Point to Common Solutions – Scope for European-Level Initiatives: Despite local particularities, we identified common needs across almost all regions: digital connectivity, entrepreneurial skills, access to capital, hubs for collaboration, better marketing/linkages, etc. This indicates that many rural regions could benefit from similar support mechanisms. It makes a strong case for European-level initiatives to address these in a scalable way. For instance, the need for digital skills training in villages could be met by expanding programs like “Digital Europe” training centres into rural areas or even creating a “Rural Innovator Corps” program that deploys innovation facilitators to villages (analogous to agricultural extension services, but for innovation). The widespread financing gap could be partly filled by a dedicated EU rural innovation fund or guarantee facility, building on models like Invest EU but targeting smaller, riskier rural ventures. Also, given the importance of mentorship and network, the EU could bolster inter-region mentorship by funding more exchanges or twinning between advanced and less-advanced regions (this aligns with Regional Innovation Valleys concept). Conclusion: The EU should consider mainstreaming the Startup Village concept – perhaps via a permanent initiative or funding line in the next Multiannual Financial Framework – to systematically provide rural innovation ecosystems with digital infrastructure, training, micro-finance, and network support. This would act on the common needs identified, taking pilot experiences like DRIVE to scale.

E. Measurement and Demonstration of Impact is Critical: As these initiatives move forward, a final conclusion is the need to measure and demonstrate impact. Rural innovation can sometimes be intangible or slow to show outcomes; thus, stakeholders (especially funders and local communities) need to see evidence of progress to keep faith. This report itself is part of that evidence-building – it establishes a baseline of needs and capacities. Future evaluations can refer back to it to assess improvements (e.g., did broadband coverage increase? Did new startups form in identified sectors? Has youth out-migration slowed?). Embracing both quantitative and qualitative indicators (success stories, community satisfaction) will provide a full picture. Conclusion: The DRIVE project and its stakeholders should commit to ongoing evaluation, and the EU should invest in tracking the broader Startup Villages initiative (perhaps via the Startup Village Mapping Tool and an annual report as part of the Rural Observatory). Showing results – such as “X startup villages created Y jobs and Z% increase in SME innovation activity” – will help secure continued political and financial support. Moreover, transparent results help refine strategies: if some approaches don’t yield expected results, they can be adjusted, exemplifying the NEIA’s call for improving policy tools through data.

In closing, the needs analysis for Task 2.2 paints a picture of hope and challenge: hope in the form of motivated communities, unique assets, and promising pilot efforts; challenge in overcoming structural barriers and ensuring lasting change. The alignment with the Smart Specialisation Strategy and New European Innovation Agenda provides a strong scaffolding to address these challenges systematically. The DRIVE project, armed with the knowledge from this analysis, is well-positioned to make a tangible difference in its target regions, and to feed valuable insights into the European policy pipeline. If the lessons here are heeded, we anticipate that these startup villages – and many others inspired by them – will move steadily from the periphery to the forefront of innovation, proving that creativity and entrepreneurship are truly “*Europe’s rural strength*” and not just the preserve of its cities. The task now is to implement with vigor, monitor with diligence, and always keep the people of these villages at the heart of the innovation journey. With that, D2.2 concludes by reiterating a key principle evident throughout: *the future of Europe’s innovation*

is as much about revitalizing villages as it is about energizing cities – and by working together across all levels, we can ensure no village is left behind in the new wave of innovation.

Bibliography

Agence Nationale de la Cohésion des Territoires (ANCT). (2022). *Leveraging digital technology to revitalize rural areas*. [Online Article]. Paris: ANCT.

Bioazul. (2023, September 20). *RURACTIVE: Sustainable transition of rural areas in Europe*. [News Article]

Drumm, S. (2024, July 17). *Spotlight on Cyprus: The small island rising up the innovation rankings*. Science|Business.

European Commission. (2015). *Factsheet on 2014-2020 Rural Development Programme for Bulgaria*. Brussels: EC Agriculture and Rural Development.

European Commission. (2021). *A long-term Vision for the EU's Rural Areas – Towards stronger, connected, resilient and prosperous rural areas by 2040*. Brussels: EC. (Referenced in text as LTVRA).

European Commission. (2022). *New European Innovation Agenda*. Brussels: Directorate-General for Research and Innovation.

European Commission. (2023). *Revolutionizing growth: EU's smart specialisation strategies unleash regional powerhouses*. Panorama Magazine, (Winter 2023), 44-47.

European Commission. (2024a). *Factsheet on 2014-2022 Rural Development Programme for Greece*. Brussels: EC Agriculture and Rural Development.

European Commission. (2024b). *Joint Research Centre (Torrecillas Cara, C. et al.) – Entrepreneurial and innovation ecosystems in rural areas: Startup Village examples*. Luxembourg: Publications Office of the EU.

Government of Ireland. (2021). *Our Rural Future: Rural Development Policy 2021-2025*. Dublin: Dept. of Rural and Community Development.

Irish Government – Department of Rural and Community Development. (2021). *Our Rural Future Highlights*. Dublin.

Annex 1

ITB – Italy

Stakeholders name:
IT1, IT2, IT3
Stakeholder job position & organization:
Director of Park of Orobie Valtellinesi, President of GAL Risorsa Lomellina (Local Action Group – Rural and territorial development body for the Lomellina area), ACINQUE
Stakeholders type:
Business Support Organization, Public entity, medium-big enterprise
Stakeholders' region represented:
Lombardy (Italy)
Stakeholders' role in ecosystem:
Facilitator of rural innovation and promoter of local development projects (connector between farmers, SMEs, institutions, and the research sector), Parks management, Energy Provider
Perceived innovation gaps: What gaps do you see in the local ecosystem?
What emerged is that: first, there is a limited valorization of agricultural by-products, such as rice straw and other residual biomass, which are still mostly seen as waste. Second, a weak connection exists between agriculture, technological innovation, and green industry sectors, hindering the adoption of sustainable solutions. Lastly, low awareness among policymakers and the public about the local environmental impacts and benefits of bioenergy plants was noted, affecting social acceptance and policy support.
Needs assessment: What are your primary needs?
The stakeholder highlighted several priority needs to support innovation and sustainability in the bioeconomy sector. A key area is the valorization of rice straw and biomass through local supply chains, enabling the production of bio-based products such as bioenergy, bioplastics, and sustainable construction materials. There is also a strong demand for access to replicable know-how and best practices from other European regions to support the adoption of effective models. Additional needs include certification schemes for forestry companies to enhance value in the bioenergy supply chain, regulation of land-use competition, and the development of decision support systems for forestry operators. Finally, the availability of biomass and biomethane was noted as a fundamental prerequisite for scaling up bioenergy initiatives.
Challenges: What are some specific obstacles that hinder growth or innovation?
Several challenges were identified that hinder the development of sustainable innovation. One major issue is technological: there is a need for advanced, locally adaptable processing solutions that take into account both raw material availability and territorial value generation. Equally important is the design of an inclusive business model that actively involves farmers as equal partners, not just as raw material suppliers. Ensuring their participation in value creation is key to reducing price volatility and achieving long-term sustainability. Environmental challenges were also noted, such as the need to extract forest biomass without compromising ecological value. Lastly, a critical barrier is the economic and financial viability of investments needed to implement bioenergy systems at scale.
Proposed solutions: Please provide us with some recommendations to address the aforementioned identified challenges.

To address the identified challenges, several solutions were proposed. These include the launch of local pilot projects to explore innovative uses of rice straw, and the creation of public-private partnerships to develop shared infrastructure and services.

Training and awareness programs targeting farmers and SMEs were also suggested to support knowledge transfer and engagement.

On the environmental side, interviewees recommended the implementation of a sustainable certification system for biomass collection, grounded in ecological criteria and supported by digital decision-making tools. Finally, to ensure scalability and attract investment, it is crucial to develop a clear business model that offers reference parameters for investors of all sizes, while also ensuring the generation of economic and financial value

Support expectations: What kind of support would you expect from DRIVE or similar initiatives?

Stakeholder expressed the need for targeted support measures to advance bioeconomy initiatives. A key expectation is matchmaking with stakeholders who bring together financial capacity, technological know-how, and a socially responsible investment approach.

They also emphasized the importance of identifying opportunities and best practices to sustainably valorize local resources. Additionally, the creation of an enabling ecosystem that promotes constructive dialogue with regulators was highlighted as essential to ensure policy alignment and long-term project viability.

CTBG – Bulgaria

Stakeholders name:

1. BG1
2. BG2
3. BG3

Stakeholder job position & organization:

1. Executive Director/Regional Agency for Entrepreneurship and Innovations;
2. Centre of Competence "Clean & Circle" (CoC Clean&Circle), Expert "Transfer of Knowledge and Technology";
3. Head of European Digital Innovation Hub in Construction

Stakeholders type:

1. Non-governmental organization/business support organization;
2. Research infrastructure and scientific organisation;
3. European Digital Innovation Hub

Stakeholders' region represented:

1. Varna city – North-East region of Bulgaria;
2. South-West region of Bulgaria;
3. National coverage in Bulgaria

Stakeholders' role in ecosystem:

1. RAPIV was established in 2002 aiming to stimulate regional economy through the development of entrepreneurship and innovations. Its members include 27 representatives of 4 types of organizations: central and local government, academic and scientific institutions, NGOs and businesses as well as physical persons.
2. The Centre of Competence "Clean & Circle" plays a strategic role in bridging research excellence with innovation deployment in the fields of water, energy, and solid waste management. Another major role is facilitating knowledge transfer, managing the interface between scientific teams and industry, and enabling the development of commercially viable clean technologies. Through our accelerator and technology transfer infrastructure, we guide scientific outcomes toward real market applications.

3. Our role is to facilitate the digital transformation of the construction sector by connecting SMEs, public authorities, and large enterprises with cutting-edge digital solutions, expertise, and funding opportunities. We act as a one-stop shop for innovation support services, including training, test-before-invest facilities, and access to finance.

Perceived innovation gaps: What gaps do you see in the local ecosystem?

The local ecosystem shows strong R&D potential but is held back by several critical gaps. Funding for start-ups and SMEs is limited, and R&D spending as a share of GDP is low, making it difficult for innovations to progress beyond early development stages (TRL 3+). Talent retention is another issue, as many skilled professionals leave the region, creating a shortage of specialized human resources.

There's also weak integration between research and business sectors. Researchers often lack experience in IP protection, market validation, and business modeling, which hinders commercialization. Public-private collaboration is poor, limiting the development of supportive infrastructure and innovation policies.

The region lacks dedicated innovation events, reducing opportunities for networking and knowledge exchange. Additionally, SMEs show low digital maturity, and collaboration between tech providers and industry is insufficient, preventing the full rollout of digital solutions.

Needs assessment: What are your primary needs?

The ecosystem's primary needs center on building stronger connections among key stakeholders—academia, industry, government, and civil society—to foster collaboration and drive innovation. Better access to finance is crucial, particularly through improved regional funding mechanisms that support R&D, startups, and scale-ups. Attracting and retaining specialized talent is another priority, along with enhancing education and training to equip the local workforce with relevant skills.

To maximize impact, targeted support is needed for validating mid-TRL technologies (TRL 3+), including tailored mentorship, advanced entrepreneurship training, and structured access to investor and industry networks.

Strengthening the innovation capacity of SMEs requires improved access to technical expertise and digital transformation services. Additionally, there is a clear need for better alignment with national and EU innovation initiatives, increased awareness of available funding programs, and the development of scalable, replicable models to support digital transformation across sectors. Shared IP and revenue distribution frameworks among partners are also necessary to support collaborative innovation.

Challenges: What are some specific obstacles that hinder growth or innovation?

The local innovation ecosystem faces a range of challenges that hinder growth and the effective translation of ideas into market-ready solutions. A key obstacle is the underdeveloped collaboration between academia and industry, which limits the commercialization of research. This is compounded by limited motivation and trust among researchers to engage in innovation processes, share data, or pursue commercialization, partly due to a fragmented legal and institutional framework for technology transfer.

Access to funding remains a major barrier, particularly for smaller organizations and early-stage projects. The region also struggles with brain drain, losing skilled professionals to more competitive markets, while the local workforce often lacks expertise in emerging technologies and digital tools such as BIM, AI, and IoT.

Innovation efforts are further slowed by bureaucratic inefficiencies, policy misalignment, and fragmented support services, making it difficult for stakeholders to navigate the ecosystem. Most research teams lack the skills to manage IP, attract investment, or sustain spin-offs, and the absence of early business validation creates a bottleneck in moving technologies to market. Altogether, these issues reflect low innovation and digital readiness across sectors, limiting the region's ability to fully embrace and benefit from technological advancement.

Proposed solutions: Please provide us with some recommendations to address the aforementioned identified challenges.

To overcome the region's innovation challenges, several strategic actions are recommended. First, there is a need to promote existing support services more effectively and introduce dedicated programmes that address specific gaps in the innovation pipeline. Encouraging collaborative R&D projects between academia and industry can also strengthen partnerships and enhance technology transfer.

Internally, the formalisation of procedures for technology transfer and IP management within the Centre and

its partners is essential to streamline commercialization efforts. Structured, interdisciplinary entrepreneurship education, aligned with EU Roadmap priorities, will better equip research teams to engage in innovation activities.

Additional measures include support for pilot testing, industry matchmaking, and targeted funding instruments to advance technologies beyond the mid-TRL stage. Finally, introducing incentives for researchers—such as career advancement opportunities and financial rewards—can motivate greater involvement in market-facing initiatives and improve overall engagement with the innovation ecosystem.

Support expectations: What kind of support would you expect from DRIVE or similar initiatives?

Support from DRIVE or similar initiatives is expected to focus on enhancing ecosystem connectivity, improving access to funding for startups, SMEs, and R&D activities, and strengthening collaboration between industry and academia. Additionally, support in attracting and retaining talent and promoting policy dialogue between public and private sectors is considered essential.

There is also a need for assistance in integrating clean technology and knowledge transfer into rural innovation ecosystems. This includes access to funding for mid-TRL development, collaboration opportunities with rural stakeholders, and platforms to pilot solutions in Startup Villages. Tailored mentorship, intellectual property support, and industry matchmaking would help adapt technologies to local needs and foster sustainable regional growth.

Further support is expected in scaling digitalization initiatives across Europe. This could include matchmaking with technology providers and solution integrators, access to shared services and tools for SMEs, and opportunities to participate in cross-border pilot projects and joint funding applications, enabling greater impact and transnational cooperation.

Additional notes: Any other relevant information or comments you wish to add.

There is a significant opportunity to position Bulgaria as a regional leader in sustainable and digital construction. With coordinated support and targeted investment in human capital, innovation infrastructure, and regulation, we can accelerate the transformation of the sector and contribute to the goals of the green and digital transitions in Europe.

ECRN – Belgium

Stakeholders name:

BE1, BE2

Stakeholder job position & organization:

Venture Lead at BlueCity, Policy officer at the province of Groningen

Stakeholders type:

Circular economy hub, Regional Government

Stakeholders' region represented:

Netherlands (South Holland, Groningen)

Stakeholders' role in ecosystem:

Both BlueCity and the province are actively contributing to the transition from a linear to a circular economy. BlueCity does so by fostering entrepreneurship and innovation, serving as a hub for circular and blue economy pioneers. Meanwhile, the province supports this transition by providing subsidies, lobbying for supportive legislation, and strengthening networks between public and private stakeholders. Together, they help create an ecosystem where circular initiatives can thrive and scale.

Perceived innovation gaps: What gaps do you see in the local ecosystem?

Several barriers hinder the development of circular and biobased start-ups. Financial challenges are a major issue, particularly the lack of private investment and the difficulty in securing funding for capital-intensive projects like first-of-a-kind (FOAK) factories. Although subsidies exist, they are often insufficient, as private equity remains essential for scaling. In addition, regulatory uncertainty and inconsistent long-term policymaking limit the ability of firms to plan and grow. Practical obstacles such as high operational costs and a shortage of space for new industrial facilities further complicate the transition, even when innovative businesses are ready to replace outdated industries.
Needs assessment: What are your primary needs?
Both responses emphasize the need for stronger systemic support to help circular and green start-ups scale. This includes not only funding to run support programs and provide technical expertise, but also improved access to knowledge, networks, and practical know-how. In parallel, there is a call for consistent, long-term legislation that actively supports the green transition and creates a stable environment for sustainable innovation to grow.
Challenges: What are some specific obstacles that hinder growth or innovation?
Key innovation gaps include a shortage of risk-tolerant investors and a lack of consistent, predictable government policy. These factors create uncertainty and make it difficult for circular and sustainable innovations to secure funding and scale effectively.
Proposed solutions: Please provide us with some recommendations to address the aforementioned identified challenges.
Both responses highlight the importance of long-term, stable support structures for scaling circular innovations. This includes access to practical knowledge, mentorship, and expert networks to guide the development of first-of-a-kind (FOAK) factories, as well as consistent legislation—particularly around recycled and biobased materials—that provides the certainty firms need to make long-term investments. In-kind or financial contributions to structured programs can further strengthen these efforts.
Support expectations: What kind of support would you expect from DRIVE or similar initiatives?
Support for biobased and circular start-ups should be both strategic and regionally tailored. Start-ups need clear access to funding instruments, professional networks, and practical support to realize demo or full-scale factories. At the same time, it's important to recognize that regional needs vary, and initiatives like DRIVE should adapt their approach to the local context—especially at the municipal level—to be most effective.

CSI – Cyprus

Stakeholders name:
• CY1 • CY2 • CY3
Stakeholder job position & organization:
• Biology, beekeeper and director, G.S Ecophys Limited Bee and nature center • Director, MOLA Culture Factory • Project Manager, Kot-Kot Initiative
Stakeholders type:
Small Enterprise, NGO, and Community Initiative
Stakeholders' region represented:
Vavla village (Larnaka), Lefkara village (Larnaka district), and Akaki village (Nicosia), Cyprus

Stakeholders' role in ecosystem:
All three stakeholders play an active role in rural innovation, sustainability and community engagement. They act as service providers, educators and environmental advocates. Their initiatives focus on experiential learning, circular economy, inclusion and environmental impact, often involving community members, schools and volunteers in practical activities aimed at both local development and ecological awareness.
Perceived innovation gaps: What gaps do you see in the local ecosystem?
The main innovation gaps identified include insufficient digital infrastructure and limited internet connectivity, which makes it difficult to engage the wider public or implement technology-driven solutions. There is also a lack of institutional support and awareness among municipalities, low trust in public waste management systems and a general need for more effective and visible communication strategies. Stakeholders also noted a generational and motivational gap in youth participation and challenges in maintaining interest and participation in rural activities.
Needs assessment: What are your primary needs?
In all interviews, funding emerged as the most critical need, whether it is for infrastructure, educational tools or operational sustainability. Other needs include training in digital skills, communications and marketing, access to better transport and visitor infrastructure, and stronger academic and government partnerships to support research, implementation and sustainability of their models. There is also a common need for platforms that facilitate networking, knowledge sharing and inter-regional cooperation.
Challenges: What are some specific obstacles that hinder growth or innovation?
Common barriers include bureaucratic obstacles, restrictive zoning laws and lack of incentives for rural entrepreneurship. Stakeholders highlighted issues such as difficulty accessing their sites due to transportation or parking, lack of visibility for tourists and limited support from municipalities. Social challenges such as an ageing population, lack of volunteers and limited youth participation also limit the long-term impact. In addition, the difficulty of converting community interest into sustained support or financial support was a recurring theme.
Proposed solutions: Please provide us with some recommendations to address the aforementioned identified challenges.
Recommendations include simplifying bureaucratic procedures for rural businesses, increasing funding opportunities linked to sustainability and training, and investing in upgrading infrastructure such as internet access and transport. Training programs in digital literacy, marketing and business operations should be offered to support capacity building. Stakeholders also suggest creating formal internship or trainee schemes, strengthening stronger community networks and promoting successful rural models through awareness-raising campaigns that combine education with practical involvement.
Support expectations: What kind of support would you expect from DRIVE or similar initiatives?
Stakeholders expect DRIVE to provide access to funding, training and guidance on digital tools, communication strategies and sustainable operations. They hope for stronger networking opportunities between regions and sectors to share best practices and build supportive alliances. Support is also expected for awareness raising, policy advocacy and practical tools for community engagement and visitor outreach. More broadly, stakeholders want initiatives such as DRIVE to recognize and reinforce grassroots efforts, turning recognition into tangible growth and follow-up.
Additional notes: Any other relevant information or comments you wish to add.
All three stakeholders are deeply committed to sustainability, education and community-based innovation. They express a common desire to foster a culture of collaboration, inclusion and environmental stewardship in rural Cyprus. Their work reflects a strong alignment with the EU's rural development and green transition objectives, yet their ability to scale up is limited by financial, logistical and institutional barriers that need strategic and long-term support.

Stakeholders name:
IT1, IT2, IT3
Stakeholder job position & organization:
Technical Director – CAUTO Cooperative, Founder and CEO – Ecopans S.r.l., Project Coordinator – Green Academy
Stakeholders type:
NGO, SME, citizen group
Stakeholders' region represented:
Lombardy Region, Province of Brescia, Lake Garda (Italy)
Stakeholders' role in ecosystem:
Service providers and innovators in circular economy, composting technologies, and environmental training & inclusion
Perceived innovation gaps: What gaps do you see in the local ecosystem?
As a whole, the interviewees observed a lack of access to digital tools for effective community engagement, a lack of awareness (mainly in public authorities like Municipalities) about sustainability opportunities given by circular and bioeconomy sectors, and lastly a discrepancy between what is taught in training programs and the reality of job positions in these sectors.
Needs assessment: What are your primary needs?
The most frequent needs that emerged were opportunities for public-private partnerships, innovation-friendly policy support, stronger ties with academic and employment networks, and better-structured digital and educational resources for younger generations.
Challenges: What are some specific obstacles that hinder growth or innovation?
Bureaucracy and limited youth engagement, but also employer commitment, in rural areas.
Proposed solutions: Please provide us with some recommendations to address the aforementioned identified challenges.
Interviewees would like to have more innovation labs and mentorship programs. Moreover, they would also like to enhance connections with public administrations through awareness campaigns for municipalities. Lastly, one of their wishes for the future is to find more projects and ways to attract younger people.
Support expectations: What kind of support would you expect from DRIVE or similar initiatives?
Mentioned expectations regarded mainly pilot project funding, sharing of know-how and best practices on international level (e.g., matchmaking platforms), and support in accessing regional and European programs for funding.
Additional notes: Any other relevant information or comments you wish to add.
Generally speaking, stakeholders expressed a very strong interest in cross-border cooperation within the DRIVE network.

MEP – Greece

Stakeholders name:
GR1, GR2, GR3, GR4, GR5

Stakeholder job position & organization:
● GR1 - LEADER+ Coordinator, Director, ANESER ● GR2 - Agronomist in charge of training programs (catered to farmers) at Serres Department of «ELGO DIMITRA» (Greek agricultural organization - Under Greek Ministry of Agricultural Development). ● GR3 - Chairman of Serres Chamber of Commerce ● GR4 - President, Department of Computer, Informatics and Telecommunications Engineering, International Hellenic University (Serres Campus). ● GR5 - Assistant Professor, Department of Agriculture, International Hellenic University (IHU)
Stakeholders type:
Regional Development Agency governed by public law, Branch of Ministerial organization, Local Government / Business Chamber, Higher Education Institution (HEI) / Academic and Research Organization
Stakeholders' region represented:
Regional Unit of Serres, Central Macedonia, Greece
Stakeholders' role in ecosystem:
Aneser's role in the ecosystem is: Technical support provider, management of EU funding programs (LEADER). «ELGO DIMITRA» in general is responsible for: Research & Innovation, Knowledge Transfer, Quality Assurance of agricultural products (including bio products) Business Chamber acts as a key intermediary for local businesses and start-ups by providing entrepreneurial support, facilitating networking opportunities, advocating for local economic development, and promoting innovation. GR4 as President of the Department of Computer, Informatics and Telecommunications Engineering, oversees the provision of high-quality academic education and cutting-edge research. IHU institution acts as a catalyst for innovation by fostering collaborations with industry, supporting entrepreneurial initiatives, and driving regional technological development. GR5 is an academic researcher and educator in agricultural economics, rural development, and advisory systems at IHU institution. Certified agricultural advisor. Former head of the local OPEKEPE unit. Active contributor to EU and national agricultural projects and policy implementation in the Serres region.
Perceived innovation gaps: What gaps do you see in the local ecosystem?
The stakeholder interviews reveal several of the most significant gaps in Serres' (Regional unit) local innovation system. One of the most evident is the lack of a shared conception of what innovation, particularly in agriculture and rural development, is about. This ambiguity is compounded by weak linkages between academia, industry, and farmers, leading to underutilized research and slow adoption of new technologies. Additionally, there is a notable absence of digital and smart solutions (e.g., IoT, AI, renewable energy) in agriculture and small businesses, and unsafe agricultural practices such as unsafe disposal of pesticides. The absence of structured advisory services and equipment-sharing cooperatives also contributes to inefficiencies in agriculture.
Needs assessment: What are your primary needs?
To address the aforementioned innovation gaps, stakeholders have prioritized capacity development programs, improved training, and more networking opportunities. SMEs and farmers need practical, hands-on training rather than theory-based courses, while start-ups and researchers need more available financing and mentoring. There is a strong demand for innovation centers that can serve as focal points for knowledge exchange, demonstration, and collaboration as well. Some of the other leading demands include high-speed internet capabilities, less bureaucratic procedures, and incentives for retaining young talent within rural areas.
Challenges: What are some specific obstacles that hinder growth or innovation?

Bureaucratic inertia slows project roll-out, while an ageing farming population and resistance to change limit the adoption of new methods. Low technical literacy, brain drain of talent, and dispersed collaboration among key stakeholders also beset the region. Further, financial constraints—most visibly limited venture capital and R&D investment—limit start-up growth and research commercialization.

Proposed solutions: Please provide us with some recommendations to address the aforementioned identified challenges.

Solutions offered are aimed at structural and systemic improvement. Stakeholders recommend the establishment of regional innovation centers to consolidate resources, facilitate public-private partnerships, and pilot smart farming and green energy projects. Training programs must be remodeled with a focus on practical skills, and policies should be implemented to stimulate youth entry into agriculture. Stakeholders also call for simplified administrative procedures to hasten funding approval and project rollout.

Support expectations: What kind of support would you expect from DRIVE or similar initiatives?

Stakeholders expect projects like DRIVE to provide technical assistance, access to finance, and knowledge-sharing mechanisms. More specifically, they need assistance with innovation hub design, workshops, and access to EU-wide networks. Mentorship programs that connect farmers, businesses, and researchers are also in high demand.

Additional notes: Any other relevant information or comments you wish to add.

The potential for growth driven by innovation in the region is high, but this will necessitate greater collaboration, investment in infrastructure, and policy reform. By addressing these challenges, the area can transform into a more competitive and sustainable rural economy.

BOHINJ – Slovenia

Stakeholders name:

SI1, SI2, SI3

Stakeholder job position & organization:

President, Bohinj Women Rural Association; Director, Danica Bohinj d.o.o.; Coordinator of the “From Bohinj” brand, Tourism Bohinj

Stakeholders type:

NGO; SME; Destination Management Organisation (DMO)

Stakeholders’ region represented:

Julian Alps Biosphere Reserve – UNESCO MAB

Stakeholders’ role in ecosystem:

Stakeholders are embedded in local food, tourism, and community development. The Rural Women’s Association promotes traditional knowledge, social innovation and food culture. Gostišče Danica operates as a sustainability-certified hospitality provider with strong ties to local suppliers. Tourism Bohinj plays a central role in circular tourism, linking local producers with hospitality actors, branding, logistics, and community education.

Perceived innovation gaps: What gaps do you see in the local ecosystem?

All three stakeholders reported legal and organisational barriers that limit circularity at small scale. These include lack of adapted legal frameworks for NGOs producing food or crafts, regulatory bottlenecks for local sourcing in hospitality, and missing infrastructure for logistics and storage. There is also a notable lack of digital

literacy, low guest awareness about sustainability, and limited coordination mechanisms to enable circular innovation across sectors.
Needs assessment: What are your primary needs?
Stakeholders identified needs for technical support (e.g. in composting, supply logistics, guest engagement tools), tailored training (especially for seasonal staff and older members), legal guidance for applying circular models, and improved collaboration tools. NGOs need education in digital tools and more accessible knowledge-sharing, while tourism actors need structured platforms to co-develop new circular services.
Challenges: What are some specific obstacles that hinder growth or innovation?
Key obstacles include fragmented supply chains, shortage of qualified staff, high seasonality, and inconsistent guest behaviour regarding sustainability. NGOs face ageing membership and a lack of formal support for their sustainability practices. The complexity of managing returns, logistics, and packaging in initiatives like Bohinj Breakfast poses additional administrative burdens.
Proposed solutions: Please provide us with some recommendations to address the aforementioned identified challenges.
Key obstacles include fragmented supply chains, shortage of qualified staff, high seasonality, and inconsistent guest behaviour regarding sustainability. NGOs face ageing membership and a lack of formal support for their sustainability practices. The complexity of managing returns, logistics, and packaging in initiatives like Bohinj Breakfast poses additional administrative burdens.
Support expectations: What kind of support would you expect from DRIVE or similar initiatives?
Stakeholders expect DRIVE and similar initiatives to offer mentoring, visibility for good practices, legal and technical support, and platforms for circular product innovation. Emphasis was also placed on building long-term partnerships, digital promotion tools, and replicable models suited to small-scale, rural actors.
Additional notes: Any other relevant information or comments you wish to add.
All three Slovenian stakeholders actively contribute to circular and community-based sustainability, often without formalised strategies. Their practices show strong potential for scaling and inspire peer learning across rural Europe. Circularity in this region is closely tied to identity, landscape stewardship, and community cohesion.

ANCI - Italy

Stakeholders name:
IT1, IT2, IT3
Stakeholder job position & organization:
Municipal councilors and IT Consultant
Stakeholders type:
Local Governments and Joint-stock company
Stakeholders' region represented:

Lombardia
Stakeholders' role in ecosystem:
Policymaker, member of the European Department of Anci Lombardia and service provider
Perceived innovation gaps: What gaps do you see in the local ecosystem?
One of the primary gaps highlighted is the tendency for stagnation in the public sector. Local government organizations often struggle with outdated practices, further compounded by a high average age within local administrations, which makes it harder to attract younger, tech-savvy talent. It was also pointed out the lack of specific skills required for local governments to engage effectively in European tenders, limiting their ability to tap into European Union (EU) funding and projects. A significant gap lies in network infrastructure, critical for enabling growth.
Needs assessment: What are your primary needs?
The stakeholders have emphasized a need for networking opportunities and capacity-building initiatives in order to overcome these innovation gaps. It was specifically highlighted the need for capacity building around EU project design and a strong need for training. Additionally, every stakeholder noted the need for financial resources, as the lack of funding is a critical barrier in local governments.
Challenges: What are some specific obstacles that hinder growth or innovation?
The stakeholders identified several key challenges that hinder innovation in the local ecosystem. One of the most significant challenges is the aging workforce in local governments. The lack of attractiveness for younger talent means that new, innovative ideas are not being brought in. It was also highlighted the challenge of a disconnect from European structures and a lack of "European culture" within local governments. Additionally, it was emphasized the limited budget available for infrastructure development.
Proposed solutions: Please provide us with some recommendations to address the aforementioned identified challenges.
The proposed solutions center on collaboration, training, and infrastructure development. Involving private entities more actively in local government projects could bring in new ideas, speed up innovation, and help local governments adopt more modern practices. It was also recommended organizing local networking events to foster direct engagement with European representatives and the creation of training programs to improve the knowledge and skills of local administrators. Furthermore, she suggested introducing curriculum changes in high schools to cultivate a deeper understanding of European culture and opportunities in younger generations.
Support expectations: What kind of support would you expect from DRIVE or similar initiatives?
The stakeholders expressed several key support expectations from initiatives like DRIVE. All three emphasized the need for financial support to enable capacity building, training, and the upgrading of infrastructure. It was specifically requested support in illustrating the broader European funding landscape and showcasing successful models that could inspire local governments and businesses to innovate. Highlighted was the importance of practical guidance.
Additional notes: Any other relevant information or comments you wish to add.
In addition to the points above, it was emphasized the need for direct exposure to the workings of European bodies, organizing site visits or meet-and-greet events with European stakeholders. Finally, the overall sentiment is that more collaborative, flexible approaches are needed to address the current challenges and create a thriving, innovative ecosystem in the region.

AB Corporation – Belgium

Stakeholders name:

• BE1 • BE2 • BE3
Stakeholder job position & organization:
• Co-founder & Coordinator, La Coopérative du Chant des Cailles • Co-founder & former Business-Plan Coordinator, BEES coop • Founder & Director, Ferme Nos Pilifs
Stakeholders type:
Urban social-economy organisations: 1. Citizen-led urban farming cooperative 2. Zero-waste cooperative supermarket 3. Inclusive social-enterprise farm employing people with disabilities
Stakeholders' region represented:
All three operate in the Brussels-Capital Region (Watermael-Boitsfort, Schaerbeek and Neder-Over-Heembeek) and connect urban consumers with peri-urban/rural producers.
Stakeholders' role in ecosystem:
All three are united by a commitment to agro-ecological production, community education and cooperative retail models that both shorten supply chains and cut waste. La Coopérative du Chant des Cailles offers hands-on learning activities on its city plots, BEES coop provides an ethical purchasing channel for bulk goods, and Ferme Nos Pilifs integrates farming with processing and vocational support for people with disabilities. In doing so, they create replicable “startup village” frameworks that weave together production, distribution and social cohesion.
Perceived innovation gaps: What gaps do you see in the local ecosystem?
They worry about the long-term security of urban agricultural land, the lack of affordable logistics for bulk food distribution and the absence of robust digital tools for subscription or CSA (Community Supported Agriculture) models. Financing remains piecemeal and difficult to scale for citizen-led farms and social supermarkets, while assistive agritech and adaptive machinery for workers with disabilities are hard to access. Moreover, they lack comparable data on waste-reduction impact and circular-economy performance across product markets.
Needs assessment: What are your primary needs?
Their needs reflect these gaps: seed funding and working-capital lines to smooth cash flow; specialised training in cooperative governance, digital supply-chain management and accessible vocational modules; stronger peer-to-peer ties between urban cooperatives and rural producers; and R&D partnerships with technology providers, universities and tourism actors. At the same time, they struggle with precarious land leases, the price pressure of mainstream retailers, volunteer and member fatigue due to seasonal cash-flow volatility, and the social biases and productivity trade-offs inherent in inclusive employment.
Challenges: What are some specific obstacles that hinder growth or innovation?
These social enterprises often find themselves wrestling with a host of structural challenges. Their urban farms operate on short-term leases and depend heavily on public subsidies, making long-term planning and investment in infrastructure difficult. At the same time, they must compete on price with large-scale retailers that benefit from economies of scale, squeezing already thin margins. Internally, these organisations rely on volunteers and small memberships whose energy and financial contributions ebb and flow with the seasons, creating cash-flow volatility that undermines stability. Finally, in striving to offer inclusive employment to people with disabilities, they confront both lingering social biases and the real-world trade-offs between tailored support and productivity targets, forcing them to constantly balance mission with operational efficiency.
Proposed solutions: Please provide us with some recommendations to address the aforementioned identified challenges.

To address these challenges, they propose negotiating multi-decade land-use agreements, diversifying revenue through branded products and agrotourism, and creating a Belgian cooperative purchasing hub with shared digital planning and CSA platforms. An inclusive agritech innovation lab and a “Volunteer Academy” would help sustain engagement and drive adaptive solutions.

Support expectations: What kind of support would you expect from DRIVE or similar initiatives?

They expect initiatives like DRIVE to mediate land contracts, support joint procurement clusters, offer grant-writing clinics and micro-grants for digital tools, and provide an impact-measurement toolkit. Matchmaking with tech and research partners, international exchange visits and advocacy for cooperative-friendly fiscal incentives would round out the support they need to scale and replicate their “smart village” model in other European municipalities.

Additional notes: Any other relevant information or comments you wish to add.

Together, the participatory urban farm, zero-waste cooperative supermarket and inclusive social farm form replicable “startup-village” blueprints that weave production, distribution and social cohesion into an urban context—offering practical inspiration for other European municipalities pursuing smart-village strategies

F6S – Ireland

Stakeholders name:

IE1, IE2, IE3, IE4

Stakeholder job position & organization:

CEOs & directors

Stakeholders type:

The stakeholders represent a diverse set of organizational types, including actors in DeepTech, Biotech, and Agriculture. They are also involved in seaweed cultivation and micro-processing systems, as well as independent energy research. Additionally, the group includes representatives from non-governmental organizations (NGOs), start-ups, and small and medium-sized enterprises (SMEs).

Stakeholders’ region represented:

The stakeholders represent various regions across Europe, including Italy, Ireland, the Piemonte region in Italy, and Bulgaria.

Stakeholders’ role in ecosystem:

Each stakeholder plays a distinct role within their local innovation ecosystems. These roles include supporting startup creation, building sustainable supply chains—such as those for seaweed-based products—acting as ecosystem builders, and developing innovative services and products.

Perceived innovation gaps: What gaps do you see in the local ecosystem?

Stakeholders identified several gaps in their local ecosystems. These include a limited availability and usage of financial resources, especially for early-stage ventures. There is also poor valorization of seaweed compounds through cascade processes, and a lack of affordable, continuous energy supply for innovators. A significant gap in venture capital investments was reported, particularly in less mature ecosystems. In Bulgaria, additional barriers include slow access to funding and insufficient collaboration among key actors.

Needs assessment: What are your primary needs?

The primary needs expressed by stakeholders revolve around improving access to financing and investment opportunities. There is a demand for more funding and collaboration frameworks, particularly those that support industrial partnerships for scaling operations. Stakeholders also highlighted the importance of flexible, risk-tolerant funding mechanisms, stronger mentorship networks, and more streamlined regulatory support to

speed up the path to commercialization.
Challenges: What are some specific obstacles that hinder growth or innovation?
Stakeholders face a variety of obstacles that hinder innovation and growth. These include difficulties in connecting with potential investors, a shortage of skilled human resources, and limited access to finance. Bureaucratic procedures often slow down innovation processes, while a lack of effective technology transfer from academic institutions further restricts progress. In smaller markets, limited domestic demand poses challenges for scaling. Ecosystems were also described as fragmented, with high barriers to piloting and adopting new technologies.
Proposed solutions: Please provide us with some recommendations to address the aforementioned identified challenges.
To address these challenges, stakeholders proposed several recommendations. These include coaching startups to become investment-ready through structured support, such as the establishment of data rooms. They also suggested facilitating collaboration with downstream users and offering both grants and access to state-backed debt financing. Ensuring equal opportunities for innovators to pilot technologies was emphasized, along with the creation of new early-stage funding mechanisms designed to bypass bureaucratic hurdles.
Support expectations: What kind of support would you expect from DRIVE or similar initiatives?
Stakeholders expect DRIVE and similar initiatives to provide tailored innovation assessments and support plans. They hope for facilitated introductions to relevant partners and collaborators, as well as structured roadmaps that identify public and private funding opportunities, particularly for rural and coastal communities. Additionally, stakeholders seek the development of more inclusive, better-connected ecosystems in underdeveloped regions and the promotion of inspiring success stories to encourage early-stage entrepreneurship.
Additional notes: Any other relevant information or comments you wish to add.
One stakeholder emphasized that initiatives supporting rural coastal economic development should focus on creating shared value models. These models would empower local communities and individuals to participate actively in emerging sectors such as the seaweed economy.

CGLE – France

Stakeholders name:
FR1, FR2, FR3, FR4
Stakeholder job position & organization:
<i>CEOs & directors, Chamber of Commerce and Industry of Savoy, French Tech Alpes – Program Pass Talents Energies, French Tech Alpes – Program Tremplin Prépa, Grand Lac - Territorial Climate-Air-Energy Plan (PCAET)</i>
Stakeholders type:
Public Institutions, Startup Network, Energy Research Lab, Start-up, SME
Stakeholders' region represented:
From France, French Alps more specifically even if startup comes from everywhere.
Stakeholders' role in ecosystem:
Most of them work on startup creation and training, ecosystem building and animation and also services and products development

Perceived innovation gaps: What gaps do you see in the local ecosystem?
Small industrial businesses in rural areas often lack the resources and tools to initiate a decarbonization process. Lack of targeted programs to support young entrepreneurs in the energy and ecological transition sectors, particularly in rural areas. Many talented individuals in rural areas, particularly in "Rural revitalization zones" (ZRR), are disconnected from traditional support systems and lack access to resources to develop their innovative projects. Lack of coordination between local initiatives, lack of suitable tools for small businesses wishing to engage in a sustainable development approach, and the need for a common vision for the territory.
Needs assessment: What are your primary needs?
Support for economic actors, particularly start-ups, in the implementation of sustainable practices; development of tools to measure environmental impact; and networking to share best practices. Structured guidance to secure, shape, and accelerate project development, and easier access to networks of experts and funders. Structured guidance to secure, shape, and accelerate project development, and easier access to networks of experts and funders.
Challenges: What are some specific obstacles that hinder growth or innovation?
Raising awareness of climate issues among economic actors, mobilizing the resources necessary for the implementation of PCAET actions, and adapting public policies to local specificities. Identifying and engaging potential entrepreneurs in rural territories, overcoming socio-economic and cultural barriers, and adapting support mechanisms to local contexts. Difficulty in identifying and engaging young impact-driven entrepreneurs and in providing them with the tools and resources to develop startups in rural settings.
Proposed solutions: Please provide us with some recommendations to address the aforementioned identified challenges.
Two immersive bootcamps to structure ideas and test project viability, collective and personalized mentoring by sector experts, networking with industrial and institutional partners to facilitate funding and collaborations. A 6-month support program including practical workshops, mentoring, and financial aid, Collaboration with certified incubators like Savoie Technolac to ensure local, hands-on support. Leverage the French Tech network to provide access to key resources and opportunities. Implementation of a support program for companies wishing to engage in a regenerative tourism approach. Creation of a network of local actors to promote synergies and the sharing of experiences. Development of tools for diagnosing and monitoring environmental actions.
Support expectations: What kind of support would you expect from DRIVE or similar initiatives?
Support for the development and dissemination of support tools, funding of pilot projects related to regenerative tourism, and sharing feedback within the DRIVE network. Help to scale the program to other rural areas, funding pilot projects, and experience-sharing across the DRIVE network. Assistance in scaling the program to other rural regions, funding pilot projects, and sharing best practices within the DRIVE network.