



FUTURAL

Empowering the **FUT**ure through innovative Smart
Solutions for **rURAL** areas

D6.1: Existing Policy and Governance frameworks for
smart community-led innovation

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Executive Summary

The Horizon Europe FUTURAL project (*Empowering the future through innovative smart solutions for rural areas*) aims at developing and testing societal, technological and business innovations in rural areas across Europe. However, the FUTURAL Smart Solutions – and their *success* – depend on **several contextual factors**. This report focuses on one of these contextual factors and more precisely the role of **policy and governance frameworks** into enabling the appearance and implementation of smart community-led solutions in rural areas.

In this respect, this report analyses **over 100 existing policies and governance mechanisms** which can be used to support community-led innovation in rural areas both at EU level and within FUTURAL Countries. It identifies **unmet policy needs and gaps** within current EU and national policies. It also identifies a set of **policy recommendations** to strengthen community-led innovation in rural areas and their transformative capability to deliver the EU's Long-Term Vision for Rural Areas in these territories.

Section 1 provides a brief introduction to the aim of this report and the relevance of community-led innovations for addressing rural challenges.

Section 2 and 3 describe key concepts used in this report and the overall methodology used to perform the policy analysis and gather views from experts.

Section 4 identifies EU-level policies and governance mechanisms which can be used to support community-led innovation in rural areas. It also defines their potential role, and their weaknesses.

Section 5 provides a policy analysis of enabling policy and governance frameworks within the six FUTURAL Case Study countries (Austria, Belgium, Greece, Lithuania, Spain, Romania). It also provides insights into policy needs and gaps which have emerged from interviews with 39 rural experts outside the project's consortia.

Section 6 provides the highlight messages from the previous chapters and, building on these, it advances a set of policy recommendations. These policy recommendations are highly timely as the EU discusses the next Multiannual Financial Framework and future of the EU policies.

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List of abbreviations

List of Abbreviations and Acronyms	
AEIDL	European Association For Innovation in Local Development
EAFRD	European Agricultural Fund for Rural Development
EC	European Commission
EIP	European Innovation Partnership
ERCA	European Rural Community Alliance
EU	European Union
CAP	Common Agricultural Policy
CLLD	Community-Led Local Development
DG	Directorate General
ERCA	European Rural Community Alliance
ERDF	European Regional Development Fund
ESF(+)	European Social Fund (Plus)
LEADER	Liaison Entre Actions de Développement de l'Économie Rurale
MAP	Multi-Actor Platforms
MFF	Multi-Financial Framework
O	Output
OP	Operational Programme
PO	Policy Objective
PREPARE	Partnership for Rural Europe
R	Result
R&D	Research & Development
SME	Small and Medium Enterprises
SO	Specific Objective
SV	Smart Village

1. Introduction and objectives

Policies and governance structures play a crucial role in creating enabling conditions for Smart Solutions in rural areas. They are essential to enhance the emergence of such Solutions and ensure they scale up into more sophisticated rural innovative ecosystems.

This report provides an **initial mapping of existing policy and governance frameworks and their contribution to the smart development of Europe's rural areas**. This analysis has been conducted at the EU level and in the six Case Study countries (Austria, Belgium, Greece, Lithuania, Romania, Spain). This report focuses on **community-led innovations in rural territories**. Whereas community-led development was successfully developed across Europe since 1991 with the first LEADER programme, we believe that **the potential of community-led innovation is far from being fully exploited as a powerful approach to drive territorial innovation** (Ray, 2000).

Community-led innovation puts local communities at the **heart of transformative change**. This approach allows local communities to take **ownership** of the strategic development of their own territory and to craft **place-based solutions** to complex territorial challenges. It also ensures those innovations - being technological, social, organizational or economic innovations - are **meaningful** and fit the needs of its users (Jouen et al., 2010). When it comes to digital solutions, the role of community activators and promoters of the entire development process ensures that solutions are designed and built in to become **user-centric and (not only) technological-driven**.

'Citizen-led initiatives that aim to improve people's lives while respecting nature's limits are rapidly growing in Europe [...] These initiatives are not only hands-on, practical actions to achieve sustainability: they are rays of hope, inspiring families, friends - and now, hopefully, policy makers. They train our muscles for social imagination: what if... we could all live well within the limits of the planet? They can help trigger societal change towards a socio-ecological transformation.' ([ECOLISE website, Time for Collective Action](#))

In its Report on the [progress in the Long-Term Vision for Rural Areas](#), the European Commission (2024a) has identified a number of **key questions that future EU and domestic rural policies** need to address. Though not all are directly relevant for the scope of the FUTURAL Project, the recommendations will seek to address some of the more relevant questions in the below list:

1. What are the **key challenges** arising from depopulation, ongoing transitions and structural changes **for which EU interventions provide added value**?
2. What are the best ways to **address them in a targeted way** that considers the **different needs** of various rural communities?
3. How to enhance **financial support** for rural areas and communities through EU, national and regional funds, including improving synergies and complementarities between them?
4. What is needed to improve financing, quality of delivery and effectiveness through territorial tools such as **CLLD/LEADER**?
5. How to improve the **monitoring and assessment** of the resources targeted to rural areas and communities from the different EU funds and programmes?
6. What is needed to improve access to support for the final beneficiary through **simpler rules, optimised procedures and improved administrative capacities**?

7. *What can be done for wider and more efficient implementation of the **rural proofing** mechanism at EU, national and regional level?*
8. *What are the best policy tools to ensure **institutional, governance and integrated support** for rural areas at all levels?*
9. *At EU level, would turning the rural vision into a **strategy** have added value in terms of meaningful actions on the ground?*
10. *How can the EU further help Member States, regions and local communities develop **national and regional rural strategies and action plans**?*
11. *How to improve the availability of policy-relevant **rural statistics and data**, without increasing the administrative burden?*

Therefore, the specific objectives of this report are:

- To identify the **most relevant and existing policies, strategies, funding programs** supporting smart community-led innovation in rural areas at both EU and MAP-level.
- To map existing **governance structures and frameworks** contributing to the development and implementation of smart community-led innovative initiatives in rural areas at the EU and MAP-level.
- To present **policy needs gaps and recommendations** from European to local level to strengthen community-led rural innovation.
- To define **policy recommendations** addressing unmet needs, policy gaps and inconsistencies as emerged from previous findings and stakeholder interviews.

This report is produced in the framework of the EU-funded [FUTURAL project](#) (*Empowering the future through innovative smart solutions for rural areas*). In the project, the policy analysis and recommendations are co-created with FUTURAL partners and Case Study Areas, and they will support, among others, the European Green Deal, the European Digital Strategy, the European Pillar of Social Rights, and the EU's Long-term Vision for rural areas, and the next EU Multiannual Financial Framework.

2. Key concepts

Smart community-led innovation in rural areas is a composite concept, bringing several terms all together. For this reason, the paragraphs below provide a concise definition for most relevant concepts which will be used in this report.

Smart Rural Communities are territories and communities that build upon territorial strengths and assets to meet their own needs and improve their resilience and wellbeing (ENRD, 2021; Smart Rural 21). Even though the foundation of smart rural areas is closely intertwined to the Smart City theory, a distinct body of literature and working documents focused specifically on smart rural communities is currently being developed (Mishbah *et al.*, 2018; Wang *et al.*, 2022). According to literature, smart rural areas are characterised by a holistic, human-centric, no one-fits-all and multi-sectoral approach (Zavratnik *et al.*, 2018; Mukti *et al.*, 2021).

Smart Solutions or Innovations can be technologies, innovative tools, methods or approaches aimed at solving a specific challenge. To become smart, solutions are expected to rely on a set of processes which makes them more efficient and effective, and can range across social, technological, digital and organizational innovations. According to the literature, in smart rural areas, community-solutions assume a bigger space than technological innovations. They are often designed to address complex challenges, in particular demographic change, service provision, enhanced standards of life and environmental/climatic challenges (Cambra-Fierro & Pérez, 2022; European Commission & E40, 2025; Stojanova *et al.*, 2021).

Community-Led Local Development (CLLD) is a community-engagement approach aimed at involving citizens in the development of their living place. This approach targets the design and implementation of local development strategies and place-based activities that can improve the socio-economic and environmental wellbeing of a community in their given territory. Since 1991, the EU has supported CLLD (also known under the LEADER approach) initiatives through specific policy measures¹ (Courais & Brosei, 2018).

Policy Frameworks describe the set of legislative and non-legislative frameworks which orientate policy intervention in a given issue (Shanahan *et al.*, 2018). These range across binding files, such as treaties, laws, policy measures and funding programs, and strategic – yet not binding documents, such as strategies, action plans etc.

Governance Frameworks is ‘a way to solve collective action dilemmas’ (Filgueiras *et al.*, 2023). It defines how decisions are made and agreed upon by relying on rules, processes, structures and connections among them. Governments – at different scales – are a crucial component of the policy making and delivery process, but not the only one. Actors, networks and other social structures have the power to influence decision making and hence are a key pillar of governance frameworks.

¹ [Community-led Local Development \(CLLD\) - ENRD \(European Network for Rural Development\) - European Commission](#)

3. Methodological note

This analysis was conducted by the European Association for Innovation in Local Development (AEIDL) in close collaboration with partners from the rural civil society (ERCA, PREPARE), University (UNIP) and the coordinators of 6 [FUTURAL Multi-Actor Platforms](#) (MAPs). AEIDL defined the main methodological guidance which was later used to coordinate the policy mapping at European and national levels. These consisted of **four main steps: 1) Desk Research, 2) Interviews with Stakeholders, 3) Data Analysis, 4) Consolidation and Report Writing**.

Desk research was used to collect data on the contextual situation of rural areas at EU and country level, followed by a mapping of relevant policy and governance frameworks impacting rural innovation. AEIDL was responsible for carrying out the EU-level analysis, whereas FUTURAL MAPs conducted the analysis at the regional and national level in consultation with local stakeholders.

Several resources were consulted to inform this step of the analysis, including inter alia:

- Two internal reports and one policy brief produced by AEIDL as preparatory policy work by 2024²;
- Review of EU legislative frameworks, political strategies and policy tools related to rural development and innovation, rural revitalization, digitalization, Smart Specialisation under different services of the EU Commission within the current programming period (2021-2027).
- Review of national legislative frameworks related to rural development and innovation, rural revitalization, digitalization, Smart Specialisation, in particular measures under National CAP Strategic Plans, national Cohesion Policy Operational Programmes (and some regional ones), other national/regional political strategies and measures.
- Consultation of EU Directorate General's website, documents and resources;
- Findings from previous projects on rural innovation, rural development, Smart Villages, including Smart Rural 21/27 projects;
- EU Rural Pact resources (e.g. inputs from the Policy workshops/Policy Labs).

Additionally, interviews with **39 stakeholders** were carried out with senior experts external to the projects as follows: 11 policy makers (EU, national, regional, local), 12 civil society actors, 10 representatives from research and academia, 6 Private Sector/Smart Solutions providers. Interviews included **27 respondents from the 6 FUTURAL countries** (Austria, Belgium, Greece, Lithuania, Romania, Spain) and **12 respondents** operating at supra-regional or EU level (performed by AEIDL, ERCA, PREPARE).

Analysis of findings in the desk research and interviews was carried out by AEIDL. Information collected through desk research was reviewed by AEIDL and complemented by different sources and with additional research work. Interview results and insights were used to complement information from the data analysis and report in the chapter on policy gaps, needs and recommendations.

² The reports: Sinerma, J., Lostrangio, C., Pazos-Vidal (2024) 'FUTURAL Policy Inception Report'; Pazos-Vidal, S., Lostrangio, C. (2025). 'New EU Commission Priorities for the 2024-2029 Period, 'Smart Rurality Policy Brief' ([Lostrangio, 2024](#)). The first two reports are internal documents.

4. EU level Analysis

'Rural areas are the fabric of our society and the heartbeat of our economy. They are a core part of our identity and our economic potential. We will cherish and preserve our rural areas and invest in their future'. [European Commission's President Von der Leyen, A long-term Vision for the EU's Rural Areas \(2021\)](#).

Approximately **26% of the total EU-27 population** are living in rural territory and rural areas equal to approximately **75% of the EU's total surface** (Rural Observatory, 2021). These figures are not uniform across EU Member States, ranging from countries with very relevant share of rural inhabitants (Slovakia- 48.8%, Slovenia- 45.1%, Poland- 41.9%, Lithuania- 41.8%) to countries where rural residents are quite marginal (Malta- 2.5%, the Netherlands- 10.5%, Spain 13.3%, Belgium- 14.4%) (*Ibid.*). Based on Eurostat's Degree of Urbanisation definition, a **rural area** is 'an area where more than 50% of its population lives in rural grid cells (Eurostat, 2021). Yet, some academic scholars underline that **rural areas are not homogenous** across the EU-27, as they range from peri-urban areas and rural areas closer to cities, remote rural areas, mountains, islands and so on (Stjernberg *et al.*, 2023).

Despite this diversity, rural areas in Europe face **common challenges and opportunities**. The [EU's Long-Term Vision for Rural Areas](#) (European Commission, 2022) and [Rural Europe's](#) report of the Joint Research Centre, offers a comprehensive description of dynamics and trends affecting rural areas in our continent. Several EU-funded projects also published cross-country analyses of changing dynamics and trends affecting rural areas, and their implications for territorial development. Among these, the [SHERPA project](#) gathered evidence and feedback across 41 rural territories. Another example is the [MOVING project](#), which developed [cross-country comparisons](#) of 23 mountain regions in Europe on societal, environmental and economic topics. The following chapter provides a summary of major challenges and opportunities faced by Europe's rural areas today.

The European Commission recognizes that rural areas are **active players** for Europe's **green and digital transition**, while playing a key role in achieving an important number of EU objectives (EC, 2021). Furthermore, **rural areas' contribution to strategic sectors** such as the bio and circular economy, renewable energy sources and sustainable resource management, has been widely acknowledged (EC, 2021). This role proves the essential contribution of rural territories for the 2024-2029 EU's political priorities on competitiveness and innovation, as further explained later in this report.

4.1 Rural Areas in the EU

Demographic context

There are notable differences in the types of rural territories across EU Member States. In countries such as Sweden, Finland, Latvia, Estonia and Greece, rural areas are mostly **remote rural areas**, i.e. rural areas which are far at least 45 min from a closer city of at least 50,000 inhabitants³. Whereas, in other EU countries such as Luxembourg, Czechia, Cyprus and Germany, **rural areas are mostly close to a city**, and therefore might benefit from access to urban services, employment and educational opportunities. Remote rural areas – alone- account for 40% of EU's surface and 9% of the EU's population, and they perform significantly worse

³ Glossary: Rural area - Statistics Explained - Eurostat

compared to non-remote areas in relation to road network efficiency, internet speeds, distance to services, household income, and population change (Castillo *et al.*, 2023).

Negative demographic trends have been affecting rural regions since the mid-20th century. Notably, in the 1960s, nearly 70% of rural regions were experiencing depopulation (Curtale *et al.*, 2025, ESPON, 2017) and it is expected that by 2040 half of EU regions will be demographically declining (European Commission, 2022, 2024b). Between 2015 and 2020, 90% of predominantly rural regions in the EU experienced decreasing **natural population change**⁴ and approximately 30% of EU predominantly rural regions were impacted by **negative net migration** (Rural Europe, 2021). In the last decades, rural depopulation has slowed down and is quite stabilized, yet people are getting older and generational renewal are pressing issues. For this reason, **demographic change** is likely to remain one of the main trends in rural Europe for the coming decades and should be addressed by adequate policies on **ageing, demographics and boosting attractiveness** and attracting **talents**.

Societal context

Since decades now, a large proportion of rural areas have faced acute issues of **peripheralization, marginalisation, deprivation, and deterioration of social life**. Recent studies argue that ‘traditional’ forms of community organisations and social bonding are in decline and therefore, there is a need to shed light on the social dynamics impacting rural areas and (Černič Istenič, 2023). In 2022, the **risk of poverty or social exclusion** was the highest in EU’s rural areas (22.1%) compared to other urban and peri-urban territories (Eurostat, 2023). On average, the **rural–urban income gap** has increased by approximately 19% over the past decade (Eurofund, 2023). In some rural areas, the inclusion of specific target groups such as migrants, women and LGBTQ+ communities are currently being dealt with (e.g. [MATILDE](#) project). In this regard, **social innovation** showed its capability to drive social inclusion and more broadly contributed to rural development (e.g. [SIMRA](#), [ESIRA](#)).

More recently, **energy poverty** gained more attention, being energy at the core of the modern digital economy and climate mitigation and further exacerbated by the Russian invasion. Rural areas are **more vulnerable** than cities to energy poverty due to lower income and educational levels, ageing population, less energy efficient and bigger buildings to heat (Dokupilová *et al.*, 2024). Additionally, rural areas experience the so-called rural ‘**energy efficiency gap**’, which is a slower uptake of energy efficiency measures due to higher financial barriers, awareness and access barriers, and geographical barriers (Papantonis, 2024).

Another key challenge in rural areas – which has considerable effects on residents’ quality of life – is the **access to essential and non-essential services**. Lower dense areas are characterised by more distance to access to public services, such as hospitals and schools, and lower transport network infrastructure and efficiency (Castillo *et al.*, 2023; ESPON DESIRE, 2025; European Commission, 2021; OECD, 2024). Access to services and infrastructure is arguably a factor in driving economic growth and the ability to retain or attract residents. In Letta’s report ‘[Much More than a Market](#)’, the **Right to Stay Principle** underscores the need to make such services available at the same rate of urban areas to provide a fifth freedom to the Union.

In 2021, the share of young people (15–29 years) **neither in employment nor in education and training** in rural areas was 13.7%, slightly below the one of the subpopulations living in towns and suburbs (13.9 %) but higher than for those living in cities (12.2 %) (Rural Europe, 2021).

⁴ The difference between birth and deaths.

Additionally, in 2023, the **attainment of tertiary education** was the lowest in rural areas of the EU-27 (25.5% of the rural population), and considerably below the one in cities (approximately 50% of urban population). Additionally, growing unemployment, low turnout and increasing migration population have been found to generate repercussions into **political dissatisfaction** and anti-EU vote in rural areas (De Dominicis *et al.*, 2022). Scholars argue that these trends are at the origins of the 'geography of discontent' and 'revenge of places that do not matter' (Rodriguez-Pose, 2018; Rodriguez-Pose *et al.*, 2023).

Technological context

In 2022, broadband coverage reached **45% of rural households**, which is significantly lower compared to other EU territories (European Commission, 2024). In 2024, the EU-27 average speed for fixed broadband was 147 Mb/s compared to 206 Mb/s in urban areas (Rural Observatory). Similarly, most recent data from the Rural Observatory and the [2024 State of the Digital Decade Package confirm](#) a well-known **digital divide** between rural and urban areas.

As argued by [Van Dijk](#) and further investigated in the [ESPON DIGIREG project](#), the **digital divide is a multi-layered phenomenon** going from a limited access to broadband (first-level divide), to differences in the level of digital skills, modes and purposes of using digital technologies (second-level divide) and wider socio-economic effects of using digital technologies (third-level). The risk of increased **marginalisation** of rural communities due to digitalisation of society is underscored by (Cowie *et al.*, 2020).

Digital transition, including rural areas, was a top priority under the 2019-2024 Von der Leyen's Commission. Digitalisation is perceived as a strategic enabler to **unlock new opportunities** in rural areas and bring tangible benefits. A few examples are improving resource management and optimisation, leading to the emergence of newer jobs, boosting economic diversification, and attracting new residents. The positive outcomes of rural digitalisation have been explored by several EU-funded projects (e.g. SHERPA, CODECS, DESIRA, BEATLES). With the EU's Long-Term Vision for Rural areas, EU institutions managed to mobilise **EUR 23.5 billion investments** in grants and updated State aid rules are improving digital connectivity in areas where markets fail to deliver (European Commission, 2024).

In addition to providing support to digital infrastructure, a lot of ongoing policy efforts are put into strengthening **digital services** and **digital skills**. Strongly related to one another, digital services (e.g. e-Government, tele-health, online education) allow to enlarge the accessibility to services which cannot anymore be provided in rural areas due to decreasing population. To ensure that these services are concretely being exploited by rural residents, an adequate level of skills should be ensured. However, according to the [Digital Economy and Society Index](#), 47.50% of the rural population has basic digital skills (compared to 62.55% of the urban population), and only 20.34% of rural residents have above basic digital skills (33.76% in cities) (DESI, 2023). [Measures](#) to increase digital skills in rural areas are being discussed.

Economic context

After the end of World War II and the Golden Age of economic growth, the rural economy has gone through an important transformation. The **traditionally prominent agricultural** sector decreased across several EU countries, especially in uplands and more remote areas (Collantes, 2009). Whereas contribution from agriculture, forestry and fishing to gross value added in predominantly rural regions is higher than in urban regions, other sectors have today a bigger role in shaping rural economies (European Parliament, 2025b). In 2021, market services accounted

for nearly 40% of the gross value added of predominantly rural regions, followed by industry at 28% (Rural Europe, 2021)⁵. In rural areas, **GDP per inhabitant** is around 70% of GDP per capita in the EU (European Commission, 2024).

In terms of **job opportunities**, market services are the top employment sector in rural regions (approx. 30% of all employment options), followed by public non-market services and the industrial sector (Rural Europe, 2021). In 2021, agriculture accounted for only 11% of all **employment opportunities** in rural regions, followed by the secondary and tertiary sectors (*Ibid*). Interestingly, the unemployment rate was slightly lower in rural areas (approx. 5%) compared to cities (nearly 7%) in 2023 (Rural Observatory). Green jobs are 20% of all rural jobs (Montemayor 2025). Negative demographic trends and the shrinking of rural regions are often linked to a growing mismatch between **supply and demands of services**. Provision of essential services in rural areas experiences deteriorating trends across Europe and shows that the public sector should undertake a stronger role in remote and rural areas (ESPON DESIRE).

However, rural areas hold an untapped potential for strategic economic sectors in the EU. Innovation in rural territories has also paved the way for relevant successes in traditional and less traditional sectors (e.g. high-tech sectors, such as transport, energy, and robotics). In some EU countries, rural regions hold more than **75% of the total share of start-ups** (Sasso, 2024), however, rural areas have 25% less young startup entrepreneurs than urban areas (Montemayor 2025). **Proximity and social economy** are particularly strong in rural areas and brings social, economic and environmental values in these areas (lackstock *et al.*, 2022; [SERIGO](#) project). Other niche sectors such as **silver economy** are also being discussed as potential trends to restore economic dynamism in rural areas⁶.

Environmental context

Rural areas contribute widely to the natural capital of the EU. They host the vast bulk of EU's biodiversity, natural resources and a **large part of the Natura 2000 network** (EEA, 2020). Rural areas also host significant renewable energy sources, including geothermal heating, sun and wind power. According to latest estimates, **72% of renewable energy** production takes place in rural areas and this potential is largely underexploited (Perpiña Castillo *et al.*, 2024; European Parliament, 2025b).

Rural areas provide crucial **ecosystem services** for the entire EU territory, including water purification and delivery, food provision, and cultural and recreational activities for residents and non-resident populations (Lostrangio *et al.*, 2021; Maes *et al.*, 2020). Some EU Member States have piloted multiple schemes for the payment of ecosystem services in forestlands or other rural settings⁷. As in the rest of Europe, rural areas in the EU are not excluded from the impacts of climate change and increased human pressure. These forces often have strong impacts on **soil and water quality, biodiversity trends and natural disasters**. Nature-based solutions and other initiatives for Climate adaptation in rural areas are increasingly covered by numerous EU projects (e.g. [MOVING](#), [MountResilience](#), [PHUSICOS](#)).

⁵ [Urban-rural Europe - economy - Statistics Explained](#)

⁶ [SILVER SMEs | Interreg Europe](#)

⁷ [Factsheet_Polluters_pay_Payments-for-ecosystem-services_V1.pdf](#)

4.2 EU Policy frameworks

Policies can create **preconditions and an enabling environment** to stimulate and sustain community-led innovation. They can provide a coherent vision across policy areas and provide the resources, action plans and support to turn policies into reality. Policy frameworks can also hinder the development of rural innovative solutions. In this section, we mapped most relevant **EU-level policy measures, strategies and programmes** (*legislative and non-legislative*) impacting, in positive or negative terms, **rural innovation**.

To this scope, we investigated **policy frameworks across four main blocks**: i) digital innovation policies, ii) social innovation policies, iii) community-led development, iv) rural development. Overall, we identified **41 policies impacting rural innovation at EU level** (Table 1), as follows: Legislation & regulatory frameworks (4), Strategies, plans and guidelines (12), Funding instruments (15), Information and Knowledge Platforms (7), Other (3). Only policy frameworks active in the current 2021-2027 period were considered.

For each identified policy framework, we highlighted: the Steering Body/Organisation (and Directorate Generals for the EU Commission), Typology of the mapped intervention, Relevance to one of the four building blocks studied by FUTURAL (Digital Innovation, Social Innovation, Community-led Local Development, Rural Development); Type of support provided (Political & Legal, Economic and Financial, Technical & Capacity Building). The most relevant ones are summarized in the following pages.

Table 1 EU Policy Instruments, Measures and Programmes relevant to smart community-led innovation in rural areas

	Steering	Typology	Relevant to ⁸				Support Type ⁹		
			DP	SP	CLLD	RD	PL	ECO	TCB
CAP 2023-2027	DG AGRI	Legislation & Regulatory Frameworks	X	X	X	X	X	X	X
CAP Strategic Plans 2023-2027		Legislation & Regulatory Frameworks	X	X	X	X	X	X	X
EU Long-Term Vision for Rural Areas*		Strategies, Plans, Guidelines	X	X	X	X	X	X	X
Vision for Food and Agriculture		Strategies, Plans, Guidelines	X		X	X	X	X	X
Common Provision Regulation 2021-2027	DG REGIO	Legislation & Regulatory Frameworks	X	X	X	X	X	X	X
ERDF/CF 2021-2027		Legislation & Regulatory Frameworks	X	X	X	X	X	X	X
Interreg projects		Funding Instruments	X	X	X	X	X	X	X
Communities for Climate		Other	?	X	X			X	X
New European Bauhaus	DG REGIO with other DGs	Funding Instruments	X	X	X	X		X	X

⁸ DI (Digital Innovation Policies), SI (Social Innovation Policies), CLLD (Community-led Local Development), RD (Rural Development).

⁹ Support Type: Political & Legal (PL), ECO (Economic and Financial), TCB (Technical & Capacity Building).

EU New Industrial Strategy 2020	DG GROW	Strategies, Plans, Guidelines	X					X			
SME Strategy for a sustainable and digital Europe		Strategies, Plans, Guidelines	X				X	X	X	X	
European Declaration on Digital Rights and Principles	DG ICT	Other	X				X	X			
Digital Decade Programme		Strategies, Plans, Guidelines	X				X	X			
Horizon Europe	DG RTD	Funding Instruments	X	X	X		X	X	X	X	
New EU innovation agenda		Strategies, Plans, Guidelines	X	X			X	X	X	X	
Strategic Technologies for Europe Platform	DG BUDG	Funding Instruments	X				?		X		
Social Climate Plans	DG CLIMA	Funding Instruments		X	X		?		X		
Climate Adaptation Strategy		Strategies, Plans, Guidelines	X		?		?	X			X
Erasmus+	DG EAC	Funding Instruments	X	X	X		X		X	X	
Creative Europe		Funding Instruments	X	X	X		X		X		
European Solidarity Corps		Funding Instruments		X	X		X		X		
Resilience and Recovery Facility & Next Generation EU	DG ECFIN, with DG REGIO	Funding Instruments	X	?				X	X	X	
InvestEU	DG ECFIN, EIB	Funding Instruments	X	X			X		X	X	
EU Skills Agenda	DG EMPL	Strategies, Plans, Guidelines	X		X						X
Harnessing talent in Europe's regions		Strategies, Plans, Guidelines	X				X				X
Social Economy Action Plan		Strategies, Plans, Guidelines	X	X	X		X	X	X	X	
Employment and Social Innovation Programme (EaSI)		Funding Instruments		X	X		X		X	X	
LIFE Programme	DG ENV	Funding Instruments		?	X		X	X	X	X	
Biodiversity Strategy 2030		Strategies, Plans, Guidelines	?	?	X		X	X			
European Maritime, Fisheries and Aquaculture Fund (former EMFF)	DG MARE	Funding Instruments	X		X		X		X	X	
Handbook of Territorial and Local Development Strategies	JRC	Other			X		X				X
EU Startup Village		Other	X	X	?		X	X			
EU Competitiveness Compass	EU Commission	Strategies, Plans, Guidelines	X				?	X			

Regenerative Community Fund	ECOLISE	Funding Instruments	?	X	X	X	X
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Source: Own elaboration.

Box 1. Insights from the analysis of policy frameworks

How do mapped policies relate to rural innovation?

Most of the mapped policies target digital innovation and rural development. This is not a surprise given the former EU priorities on the digital transition. To a slightly lesser extent, policy supports community-led development and social innovation.

Rural areas remain in the scope of the majority of the mapped policy frameworks with a few exceptions (e.g. Next Generation EU, EU New Industrial Strategy, EU Skills Agenda). These exceptions should not be overlooked. Contrariwise, they demonstrate that it is possible to finance innovative actions in rural areas throughout other sectoral programmes (e.g. within digital and economic policies or industrial policies).

Nearly 75% of mapped policies targeted at least one building block and rural areas (between social innovation, digital innovation, community-led development, rural development) and 40% of them targeted all blocks. This is particularly important as rural areas are often called to solve multi-sectoral and complex challenges for which **policy mix** could be particularly beneficial.

How do mapped policies support rural innovation?

Technical and capacity building is the first type of support provided by the policy frameworks mapped above (70%), followed by **Economic and financial support** (58%)¹⁰. An example of capacity building support is assistance and funding to prepare LEADER and Smart Villages Strategies. Economic and financial support is provided both through shared management funds (e.g. LEADER, CLLD) and direct management funds (e.g. Horizon Europe, LIFE).

Nearly 50% of the mapped policy frameworks foresee **political and legal support**, meaning that community-led innovation is enshrined into legislative documents/basis and therefore have a legal relevance, and sometimes, binding implications.

The mandatory **minimum allocation** to the LEADER programme into the current CAP policy (5% of national EAFRD funds) is an example of how legislative support can act as a guarantee for political action. Rural stakeholder networks fear that without such minimum allocation some Member States will decommit from this form of bottom-up local development¹¹, and therefore, legal obligations are the most secure pathway to ensure this is maintained as a binding rule across all EU countries. This obligatory earmarking is not granted to CLLD under the Cohesion Policy's general provisions (as for rural areas, where 8% minimum earmarking was introduced for urban areas).

What is the EU budget financing community-led innovation in rural areas?

The European Commission calculates that together with LEADER, around **8% of the current 2023-2027 CAP allocations contribute to rural areas beyond farming** (EC, 2023a, 2024). When it comes to the **2021-2027 EU Cohesion Policy**, approximately **16% of the planned**

¹⁰ Examples: equip communities with the abilities to design, implement and Smart Solutions or Smart Strategies (capacity building);

¹¹ Microsoft Word - Updated ELARD position on the future of LEADER CLLD_approved_GA_20190410

allocation are directly and explicitly allocated to rural areas¹², whereas more than 80% of the remaining shared management funds are not territorially targeted ([Ibid.](#); Kah *et al.*, 2020). However, as emerged recently from a Rural Pact policy lab¹³, the monitoring of funding reaching rural areas is still insufficiently granular and inconsistent across Member States (Rural Pact Support Office, 2024). The EU Commission does not dispose of clearcut data on how much of the EU budget reaches rural areas, especially beyond the DG AGRI Pillar II on rural development, and mostly rely on estimates.

When it comes to **budget reaching community-led innovation in rural areas**, the current CAP legal framework provides that **at least 5% of the Member States' financial envelopes** shall be earmarked to support community-led innovation in rural areas via the LEADER programme (i.e. approx. € 4.77 billion).

In the 2021-2027 Cohesion Policy, the [EU Commission](#) reports that 12 Member States planned investments of **€ 1.6 billion under community led local development strategies**, mainly in the rural context. Nearly **€ 750 million** have been planned to support **bottom-up community-led local development strategies via the ERDF and ESF+**, with an almost equally split between urban and rural areas (EC, 2023b). (*Ibid.*)

Though conceived as an one-off programme to help address the economic and societal shock of COVID-19, the **Recovery and Resilience Facility (RRF)**, part of Next Generation EU (NGEU), has for the period 2021-2026 double the size of Cohesion and CAP put together, and though it is based on National Recovery and Resilience Plans (NRRPs) that have been criticised for being centralised (European Committee of the Regions, 2024) their investments are often similar to that of Cohesion and Rural Development programmes. It is estimated that at least 10.2% of RRF expenditure (some €50 billion), has been primarily targeted to Territorial Cohesion (Sapala, 2024).

Most relevant Regulatory Frameworks: Cohesion Policy and CAP

The most relevant legislative and regulatory frameworks for rural development and rural innovation are the Common Agricultural Policy (CAP) and the Cohesion Policy. All together, they equal 2/3 of the EU budget (2021-2027 period), distributed almost equally (1/3 each).

The CAP is the main EU's policy targeting specifically the agricultural, forestry and fishing sectors, and rural development (beyond farming). The EU's CAP consists of two main pillars, whose mechanisms and functioning are laid down in the EU's regulations, where specific interventions are depending on national CAP Strategic Plans since 2023. **Pillar I** focusses on direct payments, and it represents the biggest financial allocation (more than 70% of all CAP budget in the 2023-2027 period), where **Pillar II** focuses on rural development¹⁴. In this current period, **Knowledge, innovation and digitalization of agriculture** is a cross-cutting objective of the current CAP and two **CAP policy objectives** targets innovation in particular through increased competitiveness (SO2), business development in rural areas (SO8). Other policy objectives are also relevant as targeting more specifically climate and biodiversity, or supply chain innovation.

¹² This percentage raises to 24% when included funds directly and explicitly allocated also to mountain areas and islands ([Ibid.](#)).

¹³ Rural Pact Policy Lab 'Enhancing policy coordination for vibrant rural areas: Learning from experience to build a sustainable rural future'. 28/11/2024.

¹⁴ CAP funds - European Commission

Within the current CAP, two well-established measures are key to supporting rural innovation. The first is the system of national **Agricultural Knowledge and Innovation Systems** (AKIS) which aims at co-creating innovative solutions with farmers and rural communities through the setup of the **EIP-AGRI Operational Groups**. The second one is the **LEADER programme** within Pillar II. Since 1991, LEADER has supported private-public partnership (the '*Local Action Groups*') to set up and implement community-led innovation through specific funding. In the current CAP, Member States had to allocate at least 5% of their National CAP contributed to the LEADER programme ([Regulation \(EU\) 2021/2115, Art 92](#)). Based on the latest figures, Member States planned to support a total of 2,678 Local Action Groups¹⁵ with 5 bln EUR (7.7% of EAFRD), covering approximately 65% of the rural population in the EU-27¹⁶. The focus on innovation is strictly dependent on choice of the local partnership and their local development strategy. Furthermore, CAP Pillar I can be used by Member States to finance innovation in agriculture (e.g. digital farming technology or farm modernization)¹⁷.

The **Cohesion Policy** is the primary policy for territorial development, and it promotes equal standards of living across the EU. This policy *should* provide special attention to ensure rural and remote areas are not left behind (and adequate resources), as stated within Article 174 and 175 of the Treaty on the Functioning of the European Union. The [general provisions](#) governing this policy states that Operational Programmes shall provide '*indication of the specific territories targeted, including the planned use of integrated territorial investment, **community-led local development** or other territorial tools*' ([Common Provision Regulation 2021/1060, Art. 22](#)). Furthermore, Chapter II (Art 28-34, *Ibid.*) reinstates the importance of territorial development and community-led development, and calls Managing Authorities to support community-led development across all Cohesion Policy funds (ERDF, the ESF+, JTF, EMFAF) in an integrated manner. The political priorities of the Cohesion Policy 2021-2027 are highly relevant for rural innovation. In particular, the Policy Objectives: **smarter Europe** (PO1), **more connected Europe** (PO3), **Europe closer to its citizens** (PO5). National and regional Managing Authorities can also design interventions to support community-led innovation under the other two Policy Objectives on greener and more social Europe.

Since 2014, the Cohesion Policy also gives the possibility to finance bottom-up local development through **CLLD** (similarly instrument to LEADER) via the European Social Fund Plus (ESF+) and the European Regional Development Fund (ERDF), and, where Member State programming permits, Local Action Groups may prepare and deliver integrated strategies using multiple funds ([Regulation \(EU\) 2021/1060, Art 31-32-33-34](#)). **Smart Specialisation Strategies** are another potential means to integrate rural innovation into a broader regional strategy for innovation and business development. Managing Authorities shall deliver such strategies to benefit from the Cohesion Policy funds since 2014. However, apparently very few of them targeted rural innovation within the scope of their strategies (Torre *et al.*, 2020).

A novelty entered into force in 2021 in both CAP and Cohesion Policy, it is the possibility for EU Member States to plan dedicated measures targeting **Smart Villages** in rural areas. Smart Villages are '*Communities in rural areas that develop smart solutions to deal with challenges in their own local context*' ([Smart Rural 21's Guidebook](#), 2023: 2). Smart Villages can be supported both as part of the LEADER/CLLD programme as well as within other policy measures. This instrument experienced relatively quick expansion and interest from both institutional actors and rural organisations since it initially appeared in mid 2010s (Lostrangio, 2024).

¹⁵ This is a considerable rise from the initial number (217) in 1991.

¹⁶ [LEADER facts and figures: New LAGs for 2023-2027 | EU CAP Network](#)

¹⁷ https://agriculture.ec.europa.eu/cap-my-country/cap-strategic-plans_en

The 2023-2027 CAP Regulation allows Member States to plan Smart Villages mainly through **investments** and **cooperation** interventions, including under **LEADER** ([Regulation \(EU\) 2021/2115](#), Article 73 and 77). Furthermore, Result Indicator 40 expressively measures ‘**Smart transition of the rural economy: Number of supported smart-village strategies**’. The type of possible support goes from financing any activities related to the preparation and/or implementation of smart Village strategies (within or outside LEADER) and/or support investments (e.g. digital infrastructure, basic services etc.) related to Smart Village Strategies (*Ibid.*). As shown in this [report](#), different countries made use of this possibility to support Smart Villages. Interventions planned go from supporting the preparation of Smart Village strategies to financing smart mobility, local services, digital education, sustainable energy initiatives, reactivating vacant sites and restimulating the local economy (EC, 2023). Based on the latest figures, **18 EU Member States used LEADER to support Smart Villages in their CAP Strategic Plans, and 5 EU countries designed dedicated Smart Villages interventions** (Makrandreou, 2025). In total, **2,624 Smart villages – projects and strategies- are foreseen by 2029 under Result Indicator 40** (*Ibid.*).

Smart Villages in the CSPs (2025)

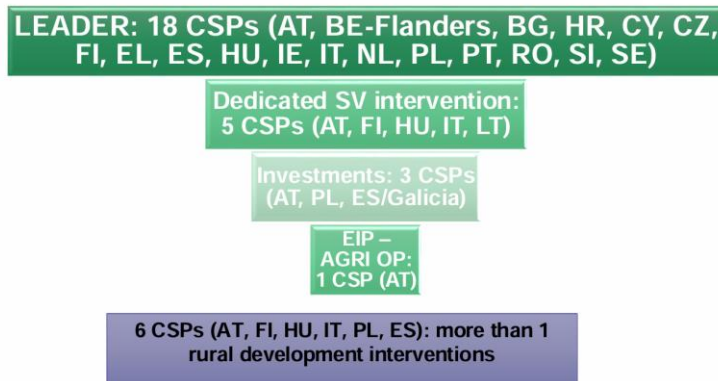
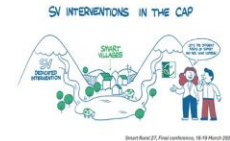


Figure 1 Smart Villages in the CAP Strategic Plans (2021-2027 Period). Source: Makrandreou, M. EU Commission - DG AGRI. [3rd meeting of the Subgroup on LEADER and Territorial Dimension](#). 5-6 March 2025.

The 2021-2027 Cohesion Policy (and particularly [ERDF and CF Regulation](#)) also encourages EU Member States to develop Smart Villages projects. These projects should develop new opportunities in rural, mountainous and remote areas, including inter alia **decentralized services and energy solutions**, digital technologies and innovations for the benefit of local communities. Unfortunately, no result or impact indicators linked to it were set up in the Regulations, and so far there are no studies that quantify the uptake of this possibility by Managing Authorities.

The EU's Long-Term Vision for Rural Areas and other Strategies

The **Long-Term Vision for Rural Areas** is the ‘number one’ strategy for rural areas. Launched in 2021 under the joint initiative of DG AGRI and DG REGIO, it outlines the strategy to make rural areas more vibrant. The Vision is based on four pillars (stronger, more connected, more resilient,

more prosperous rural areas). The **Rural Action Plan** describes the list of actions the European Commission engaged to deliver to strengthen rural innovation. The most relevant are:

- Action “**Enhanced networking for LEADER/CLLD and Smart Villages**”
- Flagship action “**Research and innovation for rural communities**” (e.g. via FUTURAL, RURACTIVE, SMARTERA, ESIRA projects)
- **Start-up Village Forum**: Focus on start-ups and entrepreneurs as innovation engines – to strengthen innovation eco-system

The Long-Term Vision also provides a framework for cooperation across multiple actors to exchange, network and support the implementation of the vision at different levels (the so-called ‘**Rural Pact**’). The **Rural Pact Revitalization Platform** offers a digital space for the **Rural Pact Community Groups** to interact on several topics, including Smart Villages, Mountains, Digital Innovation etc.

Additionally, other strategies target innovation in rural areas. Inter alia, we can mention the ‘[Harnessing talent in Europe's regions](#)’ (targeting talents), Or the [SME Strategy for a sustainable and digital Europe](#), or the [Social Economy Action Plan](#). All these strategies foresee specific measures to support rural areas including capacity building for SMEs on digitalization, reinforce networking of rural businesses via the European Enterprise Network and industrial clusters, provide financial and technical support to pilots in regions experiencing demographic transition.

The new European Commission (2024-2029) also launched several strategic documents for the future of the Union’s policies on innovation. In March 2025, the **Vision for Food and Agriculture** sets out a strategic pathway to lead the transition of Europe’s agrifood and rural development policies. This Vision renews its commitment to strengthen the Rural Action Plan and Rural Pact. It is committed to presenting an **EU digital strategy for agriculture** and reinforcing the **circular bioeconomy** in rural areas. The Vision promises to provide adequate resources to operationalize **rural proofing** and **territorial impact assessments** (ENRD, 2022). Finally, it also engages to boost participatory local development tools, like LEADER/community-led local development and Smart villages, which proved their efficiency. However, it is regretful to notice how the newest [EU’s Competitiveness Compass](#), which dictates Europe’s vision on innovation and competitiveness for the 2025-2029 period, is unclearly addressing how our continent wants to address the innovation gap between rural and non-rural settings¹⁸.

Funding programmes for community-led innovation

At the EU level, there are different programmes which could be used by communities to finance innovative actions (Table 1). Among these, [Horizon Europe](#) targets rural innovation especially in Cluster 6 (‘Food, Bioeconomy, Natural Resources, Agriculture and Environment’), but also in other Clusters (e.g. Culture, Creativity and Inclusive Society; Health). While this programme is very interesting and requires no added contribution from winning applicants, the competition and efforts required for the application make it quite hard to access for communities.

Box 2. Cascade-Funding to Invest in community-led actions

¹⁸ Lostrangio. [European Innovation Policies: The Challenges and FUTURAL’s Contribution](#). FUTURAL Blog. 20/02/2025.

In Horizon projects, rural communities are most often funded via Living Labs. However, there have been some calls targeted specifically to communities. An example is the recent call from the Horizon Missions 'Restore our Water and Oceans': [Community-led actions to restore our ocean, seas and waters](#) (2024). This call foresaw providing at least 5 cascading grants of EUR 200 000 (EUR 2 million per grant) to community-led pilot actions that are implementing innovative solutions which contribute to the restoration of fresh and seawater ecosystems. This example provides a baseline for how community-led actions could be even more strengthened in the next EU Horizon programme.

Other relevant funding can be accessed via the [Erasmus+](#), [LIFE](#) and [Interreg](#) programmes. Unlike the Horizon programme, these funds require a co-financing amount from applicants from not-for-profit actors, hence possibly becoming less accessible to communities. It is interesting to observe how the evolution of some programmes, notably Erasmus+ and Interreg, sometimes moved towards smaller-scale projects in the 2021-2027 period (e.g. [Interreg Alpine Space's small-scale projects](#), [Erasmus+ small-scale partnerships](#)). This shift not only make fundings more appealing and accessible to smaller communities, but also easier to deal with in the implementation phase (if funded). Smart innovation in rural areas has also been the focus of some Interreg programmes, most notably the Interreg Alpine Space (e.g. [SmartCommunity](#)).

More recently the [New European Bauhaus](#) and the [CERV programmes](#) also provide sources of financing streams. Compared to other programmes, the size of their financial portfolio is smaller and the application less burdensome. This makes it more accessible for smaller communities, which do not rely on solid administrative and financial units. Small programmes such as the [European Solidarity Corps](#) could also be used for informal or youth organisations to finance volunteering in rural areas over short-to-long periods (2-12 months). In our analysis, we could also map some third-party support, such as the [ECOLISE Regenerative Communities Fund](#) aimed at funding 600 community-led initiatives up to 2030. Yet, an important role is certainly covered by cross-regional or European philanthropic organisations which are not being mapped in this study.

Other relevant instruments

Other relevant instruments also support rural innovation. Among these, the [Startup Village Forum](#) is a relatively recent (and still not sufficiently known) initiative aimed at mapping and promoting innovation and entrepreneurial ecosystems in rural areas. Additionally, the EU Commission also finances innovation through ad-hoc pilot projects, such as the [Communities for Climate](#) project. A plethora of other projects on rural innovation are financed through [Cascade funding calls \(Financial Support to Third Countries\)](#), though they have not been mapped in our Table.

4.3 EU Governance frameworks

The design, delivery and evaluation of policies and policy instruments strongly depend on the underlying **structures, processes and rules**. The governance landscape is fundamental to accompany the design, implementation and evaluation of innovation policies in rural areas. The most relevant ones at EU level are provided below.

EU Treaties and principles on rural and community-led innovation

The Founding Treaties of the EU are **explicitly supportive of the socio-economic development of rural areas** and **implicitly supportive of the notion of community-led**

innovation. The **European legislative framework guarantees specific attention to rural areas.** This mainly occurs through the so-called notion of **territorial cohesion**, introduced in 2007 with Lisbon Treaty reform. According to this principle, European functioning and policies should ensure that citizens across all regions (and territories, being them urban, rural or peri-urban), enjoy similar quality of life and services. This principle states the EU shall pay additional attention to rural and other specific territories¹⁹ and provide the means to achieve that ([Art. 174-175 TFEU](#)). In 2022, the 'Do Not Harm to Cohesion Policy' principle was reintroduced by the 8th Cohesion Report (European Commission, 2022) to reinstate that no EU policy should harm regional development policy²⁰.

The [EU Better Regulation](#) provides a set of horizontal guidelines to ensure that new EU laws and policies do not negatively affect territories, including rural areas. The [EU Better Regulation Tool on Territorial Impact Assessment](#) resumes the guidelines, methods and tools (including via **Rural Proofing**) to carry out an ex-ante assessment of the territorial impacts of EU's policies. Furthermore, principles enshrined in the EU Treaties are the most valuable ally towards unpredictable and changing political deviations. Notably, the principles of proportionality and subsidiarity ([Art. 4-5 of the Treaty on European Union](#))²¹ recognize and provide a framework to ensure coordination among different levels of governance, from local to European. They set up the basis for **multi-level governance**. Authorities and actors should cooperate at their best to maximize the impacts of policies, giving priority to the level of governance which is closer to citizens ([Art. 10\(3\), TEU](#)). Coordination across governance levels for the delivery of policies, in particular shared management policies, is based on the **Partnership principle**²².

To these fundamental principles, European institutions acknowledged the added value of a **place-based approach** (Barca, 2009). The place-based approach argues that policies should be tailored to local needs and specificities, and territorial innovation strategies should be grounded on regional strengths and competitive advantage. Place-based development is not just a principle but has been applied in specific policies. For instance, since 2014, setting up a place-based development strategy for regional innovation (i.e. **Smart Specialisation Strategies**) has become a pre-condition to access Cohesion Policy funds.

EU (or not EU) competences for community-led innovation

Another key premise to keep in mind is that policy competences are exercised at different levels (European, national, regional) according to the policy area. **The EU does not have full competence in all matters relevant to community-led innovation in rural areas** (see Table 2). Contrariwise, the **EU shares competences** with its Member States in many areas relevant to rural innovation (e.g. single market, economic, social and territorial cohesion, agriculture and environment). The best-known policies where shared management applies are the Cohesion Policy and CAP. These are also the main policies to potentially support smart and community-led innovation in rural areas (in both financial terms and policy priorities).

¹⁹ Rural areas, areas affected by industrial transition, sparsely populated areas, islands, cross-border, mountain regions.

²⁰ [https://www.europarl.europa.eu/RegData/etudes/ATAG/2023/747892/EPRS_ATA\(2023\)747892_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/ATAG/2023/747892/EPRS_ATA(2023)747892_EN.pdf)

²¹ According to the **principle of proportionality**, 'content and form of Union action shall not exceed what is necessary to achieve the objectives of the Treaties' (Art. 5, Ibid.). The **principle of subsidiarity** says that 'in areas which do not fall within its exclusive competence, the Union shall act only if and in so far as the objectives of the proposed action cannot be sufficiently achieved by the Member States, either at central level or at regional and local level, but can rather, by reason of the scale or effects of the proposed action, be better achieved at Union level' (Art. 5, Ibid.).

²² [Inforegio - Partnership principle underpins cohesion funding and synergies with other policies](#)

Table 2 Areas of EU action

EU exclusive competences	Shared competences (EU & MSs)	MSs legislate, EU support	EU special competences
<ul style="list-style-type: none"> • Custom union • Competition rules • Monetary policy • Trade • Marine plants and animals 	<ul style="list-style-type: none"> • Single market • Employment and social affairs • Economic, social, territorial cohesion • Agriculture • Fisheries • Environment • Consumer protection • Transport • Trans-European networks • Energy • Justice and fundamental rights • Migration and home affairs • Public health (only for aspects in Art. 168 of the TFEU) • Research and space • Development cooperation, humanitarian aid 	<ul style="list-style-type: none"> • Public health • Industry • Culture • Tourism • Education, training, youth, sport • Civil protection • Administrative cooperation 	<ul style="list-style-type: none"> • Coordination of economic and employment policies • Definition/implementation of the Common Foreign and Security Policy • ‘Flexibility clause’, which under strict conditions enables the EU to take action outside its normal areas of responsibility

Source: Adapted from [EU website](#) & Garben & Govaere (2017).

Under shared management policies, the **EU is responsible** for establishing overall policy objectives and architecture, whereas **national or regional Managing Authorities** oversee fine-tuning and adapting this to their own context. This ensures that these policies are place-based and appropriate to respond to territorial needs. It also means that the EU will have to deal with a plethora of mechanisms and understanding to plan and implement policies, requiring some time further attention from EU level policy makers for a coherent approach. The most relevant action areas for the FUTURAL project and rural innovation ecosystems at large are highlighted in Table 2 above.

Multi-level Governance is implicit in the EU governance and in some EU policies in particular those having a territorial dimension, though it has a wide range of notions (Stephenson, 2013), it presupposes **cooperation** between the EU and regional/national authorities is vital for the delivery of these policies (Pazos-Vidal, 2019). In some cases, other intermediaries play a relevant role in the delivery of policies. For instance, Figure below illustrates the dynamics and flows behind the financing of Smart Villages, from overarching policies (e.g. CAP, Cohesion Policy, others) down to local communities.

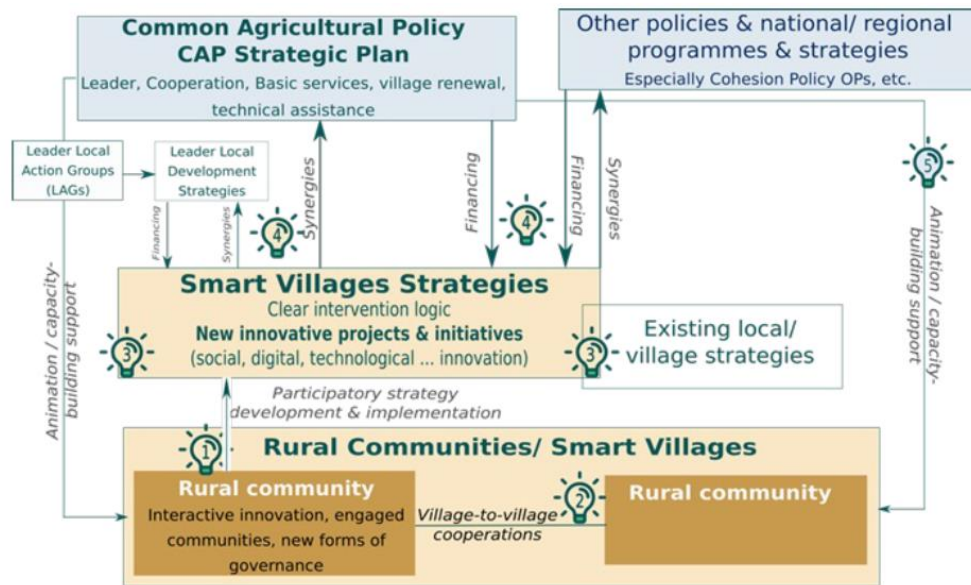


Figure 2 Smart villages funding. Source: Smart rural 27 project.

In policy areas where **Member States legislate** (e.g. education, health, industry), the EU can only offer support (when necessary), e.g. sharing good practices, facilitating cross-country coordination and networking. Some of these policies are relevant to enhancing rural innovation ecosystems, for instance by investing in rural skills to join the digital transition or boosting telemedicine in rural areas. Therefore, to advocate for policy change, actions should be more directed towards national and regional authorities than at EU level. FUTURAL policy work will consider the pertinent level of governance to which its recommendations should be addressed

EU Policy Making on rural matters

Policy making is a joint responsibility of the three EU co-legislators (the EU Commission, EU Parliament and Council). However, the European Commission is the EU body responsible for initiating policy making through policy proposals, strategies etc. At the national level, we would call this as the 'government' or the executive body of a nation.

At the level of the EU Commission, the Directorate Generals on Agricultural and Rural Development (DG AGRI) and on Regional and Urban Policy (DG REGIO) are the primary drivers on rural and territorial development policies. DG AGRI is responsible for agricultural innovation but also rural development beyond agriculture (e.g. CAP Pillar II), DG REGIO deals with rural development with the broader scope of reducing inequalities (social, economic, territorial). (European Commission, 2008)

Nevertheless, it is worth highlighting that other DGs dealing with sectoral policies have policies and initiatives having a territorial dimension, such as mobility, connectivity, innovation and competitiveness. The contribution of these other DGs to rural development is less easily documented with clear figures, and less known to rural actors. For instance, DG GROW is widely responsible for Europe's economic growth, DG CONNECT with digitalisation, DG EEA with skills, education and training, DG MOVE with rural mobility etc. Whereas the **EU's Long-Term Strategy for Rural Areas** provides a framework for cross-DGs cooperation on rural development, this is not engaging all relevant DGs dealing with innovation (e.g. GR GROW, GR EISMEA). In some DGs, there is a new positive trend towards developing units that deal more specifically with

rural needs, such as on rural mobility under DG MOVE, or DG ENER with the Covenant of Mayors, inter alia. Outside Cohesion and Agriculture, there are over a dozen EU programmes with a local development dimension (Committee of the Regions, 2023).

The architecture of the EU Commission DGs and their competences is not written in stone. For instance, the **restructuring** of the [2024-2029 EU Commission](#) redesigned the actions of certain DGs with respect to relevant areas of rural innovation. For instance, the Vice-Presidency on Democracy and Demography (also in charge of the Harness Talents initiative) disappeared and now moved under DG MENA. Also, Commissioners on Housing and Intergenerational Fairness were set up for the first time in history. Following the evolution of the EU's executive body allows us to get in touch with the most appropriate units in charge of planning and implementing relevant policies.

EU Mechanisms to gather citizens and communities' feedback

Some EU bodies are responsible for defending and representing the voice of citizens, communities and sector associations. Among these, the **European Parliament** is the elected body of people's representatives which is elected democratically by EU citizens once every 5 years. The European Parliament has legislative, supervisory, and budgetary responsibilities. In addition to being responsible to co-legislate with the European Commission, it examines citizens' inquiries²³.

The **EU Committee of the Regions** and the **EU Social and Economic Committee** represent the voice of Europe's authorities and social and economic actors, respectively. They provide recommendations on the design and implementation of policies, in consultation with their stakeholders by way of structures such as - in the case of Committee of the Regions - the RegHub Network and the Subsidiarity Assessment Network as well as stakeholder dialogues prior to drafting Opinions (Altun et al., 2022). They do not have legislative power; however, their Opinions and recommendations are valuable for the democratic process of the EU. The European Commission also establishes and draws up [expert groups](#) to assist the legislative process. Such expert groups can take different forms, names and composition, and they cover different topics. For instance, **Civil Dialogue Groups** is a DG AGRI expert group gathering several networks of stakeholders on development and implementation of the EU's agrifood policy.

Furthermore, the EU has other methods, initiatives and forums to collect **direct feedback** from its citizens. The **right to petition** is a direct way in participatory democracy and was introduced by the Maastricht Treaty in 1992. The [European Citizens Initiative](#) allows anyone in the EU to call the European Commission to propose new laws upon the collection of 1 million signatures from EU citizens.

In 2015, the European Commission launched the [Have your Say portal](#). This platform showcases initiatives or legislative procedures for which citizens and organizations are called to provide their feedback, as defined by the EU Better Regulation. Consultations must be kept open for at least 12 weeks, and after this, outputs of the feedback are used to fine-tuned policies or initiatives. In 2024, the European Commission also launched a series of **Youth Policy Dialogue meetings** to collect the views of younger generations on Europe's policies and future.

²³ [European Parliament – roles and powers | European Union](#)

Unfortunately, some scholars argue that the EU tools for consultation are currently little known by individual and civil society, or they are insufficiently factored in for more sensitive topics, hence resulting in top-down exercises (Alemanno, 2020).

Governance-frameworks for community-led innovation

Given the above-listed premises, **we attempted to identify rules, processes and structures which could contribute to raising the traction of community-led innovation into policy making.** Such processes must be understood complementarity to the principles and mechanisms mentioned in the previous pages.

Overall, we mapped **54 EU-level governance frameworks** (Table 3), which include Compliance rules and processes (3), Cooperation Frameworks and Strategies (7), Working Groups (14), Networks (13), Specialised Agencies and Bodies (2), Initiatives (3), Information & Knowledge Platforms (9), Other (3). The most relevant of these frameworks are presented in the following section.

Table 3 EU-level governance frameworks impacting community-led innovation in rural areas

Compliance Rules & Processes	
<ul style="list-style-type: none"> • Better Regulation (Interinstitutional Agreement, Guidelines & Toolbox) • Have your Say platform 	
Cooperation frameworks & Strategies	
<ul style="list-style-type: none"> • EU Semester • EU Territorial Agenda • EU Macro-regional Strategies • EU Digital Infrastructure Consortium (EDIC) • EP Intergroup on Seas, Rivers, Islands and Coastal Areas • EU partnerships in the EU's Research & Innovation Frameworks • EP Intergroup on Social Economy and Services of General Interest • EP Intergroup RUMRA & Smart Villages (ended in 2024) 	
Networks	Working Groups
<ul style="list-style-type: none"> • EU Digital Innovation Hub Network • Network of Broadband Competence Offices • EU CAP Network / former ENRD • EIT Knowledge and Innovation Communities • Network of Territorial Cohesion Contact Points • European Rural Parliament • Stakeholder networks (e.g. ELARD, ECOLISE, ERRIN, ERCA, PREPARE, Smart villages network) • EU funded projects & service contracts on smart innovation, smart rural areas • EU Cluster Collaboration Platform (incl. Euroclusters) • Smart Villages Network 	<ul style="list-style-type: none"> • Harnessing Talents Working Groups • European Community of Practice on Partnership (EcoPP) • Expert Groups (e.g. on Interregional Innovation Investments, Innovation Fund, Economic and Societal Impact of Research and innovation) • Expert Group on Territorial Matters (e.g. Regional, Urban and Rural Development Statistics, Territorial Cohesion and Urban Matters; New European Bauhaus Facility) • Experts Groups related to Digital (Digital Decade) • Experts Groups related to social economy and social enterprises • European Board on Agriculture and Food • Working Group on Digital Education • Social Dialogue Committees, Civil Dialogue Groups
Specialized Agencies & Bodies	Initiatives
<ul style="list-style-type: none"> • ESPON • European Innovation Partnership on Smart Cities and Communities (ended) 	<ul style="list-style-type: none"> • Partnership for Regional Innovation/ Continued as 'EU Preparatory Action on Innovation for place-based Transformation' • Living-in.EU/ Support Service for Smart Communities • European Social Economy Regions Initiative
Information & Knowledge Platforms	Other

<ul style="list-style-type: none"> • EU CAP Network Good Practices Database • Rural Pact Good Practices Database • Kohesio, Cohesion Open Data Platform • Rural Toolkit • Handbook of Territorial and Local Development Strategies • Farm Sustainability Data Network • Smart Villages Portal, EU Smart Villages Observatory 	<ul style="list-style-type: none"> • S3 Community of Practice • Youth Policy Dialogues • Rural Pact (incl. its Community Group on Smart Villages)
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Source: Own elaboration.

Box 3. Insights from the analysis of governance frameworks

How do mapped governance mechanisms relate to rural innovation?

Approximately 85% of mapped governance frameworks influence policy making related to rural development. This means that this list is a very good starting point for organisations which wish to get more engaged on EU policy making related to rural matters. While this is not definitive, it provides a potential quick start tool to familiarise with relevant bodies and structures acting at different moments of the policy cycle.

How do mapped governance mechanisms support rural innovation?

More than half of these frameworks support the sharing of information, data and existing practices. Knowledge is perceived as one of the critical points to build the capacities of communities and inspire their action. **Approximately 50% of mapped frameworks are aimed at supporting the EU legislative process through advocacy or stakeholder engagement.** To a lesser (yet still important) extent, these frameworks are used for consulting stakeholders, encouraging networking and peer-to-peer learning, and piloting innovative solutions and practices.

Whose voices are heard in the mapped governance mechanisms?

About a third of these governance mechanisms has a mixed composition (29%), meaning that they rely on a composition of different target groups. To a lesser extent, there are groups involving only the main type of actors, such as national authorities (16%), and EU institutional actors and multi-level public authorities (13% each) (Figure 3). The least represented are groups involving only or predominantly local authorities, research & academia, civil society & NGOs, or other actors.

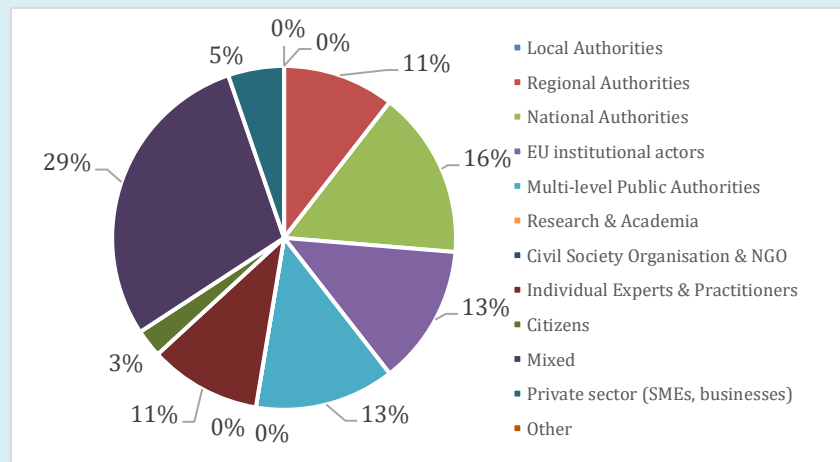


Figure 3 Most predominant actor groups involved the identified governance frameworks. Source: Own Elaboration.

Compliance rules and processes

The **EU Better Regulation Agenda** was introduced to make EU laws simpler, better and based on evidence. This regulation calls the European Commission to assess any expected significant

socio-economic and environmental impacts for any new laws. Particularly relevant are the need to ensure '**comprehensive approach**' (ensuring that impacts on rural areas are assessed and are not negative) and '**participatory principle**' (any relevant stakeholders which is likely to be affected by new laws should be involved in the discussions) in policy making. Additionally, EU institutions committed to carry out **impact assessments** on the cost of non-Europe whenever possible as well as on the 'impact on competitiveness and the administrative burdens of the different options, having particular regard to SMEs ("Think Small First"), digital aspects and territorial impact' ([Recital 12, Inter-institutional Agreement of the Better Regulation](#)). In 2021, the EU Better Regulation **Guidelines and Toolbox** were launched to implement as a result of this initiative, together with the Have your Say platform.

Cooperation Frameworks and Strategies

The [EU semester](#) is certainly the most relevant governance framework across EU Member States. Introduced in the aftermath of the 2008 crisis, follows a yearly rhythm and it is the process of socio-economic policy coordination across EU countries. Other cross-country frameworks for cooperation are the [Territorial Agenda 2030](#) – a framework to guide the EU's Territorial Cohesion across different levels of governance - and the [European Digital Infrastructure Consortium](#), an instrument made available to Member States under the Digital Decade Policy Programme 2030 to speed up and simplify the setup and implementation of multi-country projects.

This category also maps out frameworks for the cooperation between authorities and civil society, such as the EU's **macro-regional strategies**, thematically relevant **European Parliament Intergroups** or **EU Partnerships on Research & Innovation** (including the Knowledge and Innovation Communities on digital industry; climate, energy and mobility; agri-food and environment). These frameworks have the added value of setting up strategies and joint advocacy actions between policy makers and actors/professionals working on the ground.

Smart rural communities have been at the centre of the debate of many of them. For instance, all macro-regional strategies somehow planned **Smart Villages smart communities** in action plans (Kokkonen *et al.*, 2024). Another example is the **EU Parliament Intergroup on Rural, Mountainous and Remote Areas & Smart Villages**, supporting the debate on smart rural communities in EU policies. Though this Intergroup disappeared in 2024, today other Intergroups can be mobilised to address discussions related to rural innovation (e.g. Social Economy and Services of General Interest; Seas, Rivers, Islands and Coastal Areas).

Working Groups

Within this category, we mapped relevant working groups and expert groups dealing with rural development, digital innovation or social and territorial innovation. Among the ones identified in the table, it is worth mentioning the new **EU Board on Agriculture and Food**. Launched in 2025, it is an EU-stakeholders cooperation platform to define the new directions of the EU agrifood policies. The table also includes several working and expert groups informing different DGs (e.g. REGIO, AGRI, RTD, CONNECT, EAC, CLIMA). The composition of these groups depend on the scope of the thematic group, sometimes including national authorities and in other cases civil society organisations, private experts or more mixed audiences. The list of members and the dates of the meetings are publicly available²⁴. Furthermore, these groups have a limited duration, and new ones are issued based on perceived policy needs and priorities.

²⁴ <https://ec.europa.eu/transparency/expert-groups-register>

Networks

We can distinguish between **EU-funded or EU-initiated networks or stakeholders-run networks**. As for the first option, a few examples are the [EU Rural Pact](#) and the [EU CAP Network](#) (and their respective thematic working groups), the [Digital Innovation Hub Network](#), or the [EU Cluster Collaboration Platform](#). Some networks are used by the EU to bring together competent national authorities such as [Network of Broadband Competence Offices](#) or the [Network of Territorial Cohesion Contact Points](#). Additionally, through the EU Research and Innovation Framework, the EU Commission also financed networks of academic and non-academic partners to work on smart communities and digitalisation (e.g. [FUTURAL](#), [RURACTIVE](#), [SMARTERA](#), [Smart Rural 21/27 projects](#)), social innovation (e.g. [ESIRA](#)) or innovation in agriculture (e.g. [CODECS](#), [GRASSCEILING](#), [BEATLES](#)) etc. All of these projects provide policy analyses and recommendations for the work of the EU institutions.

As per **stakeholders' networks**, the most relevant ones supporting with evidence and advocacy the topic of smart rurality are [ELARD](#) (network of Local Action Groups), [ECOLISE](#) (network of villages and community-led initiatives), [ERRIN](#) (network on innovation agencies and actors), [ERCA](#) (European Rural Community Alliance), [PREPARE](#) (Partnership for Rural Europe) and the [Smart Villages Network](#). This is not an exhaustive list as other rural or innovation networks cover this topic according to the political moment and priorities.

Specialised Agencies and Bodies

ESPON is an EU funded programme that bridges research with policies. It delivers territorial analyses, data and maps to support EU development policies – and particularly Cohesion Policy - with evidence. Its findings are also used to inform public authorities and help them in benchmarking their region or city, identify new challenges and potentials and shape successful development policies for the future. A few relevant projects delivered by ESPON on this topic are *Smart Connectivity* (on how to digital transformation to tackle territorial challenges, particularly in less connected areas), *Governance of New Geographies* (understanding emerging functional areas and their potential for integrated development), *EU Territories in Global Interactions* (understand how Open Strategies Autonomy occur across territories and interlink with the green and digital transition), *Perspective for all people and places* (territorial dimension of social and economic development).

Initiatives

Initiatives are used to test and proof innovative concepts. An example is the Partnership for Regional Innovation (now '[EU Preparatory Action on Innovation for place-based Transformation](#)'). Developed jointly by the EU Commission and the EU Committee of the Region, this initiative aims at connecting local and regional innovation strategies at EU level. To do that, it finances pilot areas in different EU regions. Another example is [Living-in.EU](#). This EU initiative is targeted to local and regional leaders who believe that technology can help them make their town, city, or region a better place to live. It enables collaboration among cities and regions to make sure that you do not work in isolation, that smart city strategies can be shared, and solutions re-used.

Information & Knowledge Platforms

Several information and knowledge platforms are used to share innovative projects already being implemented at local level through the EU or other fundings (e.g. [EU CAP Network Database](#), [Rural Pact Good Practices Database](#), [Kohesio](#) or [Smart Villages portal](#)). These platforms offer inspirational examples for communities, as well as practice solutions to problems they might encounter in their area. Other tools such as the [Handbook of Territorial and Local Development Strategies](#) or the [Rural Toolkit](#) feature respective ways to boost territorial innovation and co-creation, and EU funding which could be used to do that. Additionally, the [Cohesion Open Data Platform](#) and the [Farm Sustainability Data Network](#) gathers data on the use of funds under the Cohesion Policy and CAP respectively. Though these knowledge platforms might be less relevant for communities themselves, they are quite relevant to analyse how these EU policies allocate funds across policy priorities and areas. The [EU Rural Observatory](#) also provides data on rural trends at different levels of detail.

Other governance mechanisms

Ad-hoc community of practices exists along different policy areas. Among these, the [S3 Community of Practice](#) brings together regional authorities in charge of the Smart Specialization Strategy. Furthermore, the **EU Rural Pact and its thematic Community of Practices** are also an opportunity to network with like-minded organizations and inform EU and national-level policy makers. The EU Rural Pact has a specific **community on Smart Villages**, but other communities are also relevant, such as on mountains, social economy, gender innovation etc. Under this platform, Community of Practices can be initiated by any rural actor or organization to tackle a specific challenge. Last but not least, other frameworks for consultation are initiated on some occasions. For instance, the new Youth Policy Dialogues were born out of the need to define the future directions of EU's policies and budget.

Box 4. How Do Mapped Governance Mechanisms interact with the Policy cycle?

Governance mechanisms allow actors to interact and shape the decision-making process. They are used by interest groups to express their views on policy matters before, during or after policies are made. The decision making and implementation is often referred to as the '**policy cycle**'. A **simplified version of the policy cycle** describes it as an iterative process going from the early identification of the issue to be solved to the gathering of evidence and policy development, consultation with relevant parties, to actual policy development, implementation, before going to the concluding monitoring and evaluation of the given policy.

To shape policy making, it is fundamental to have a clear understanding of the policy cycle and be able to intervene timely by connecting with the relevant governance framework. Therefore, the **Figure 4 below is our contribution to represent how mapped governance mechanisms interact with the different phases of the policy cycle (i.e. when it is relevant to engage with them).**

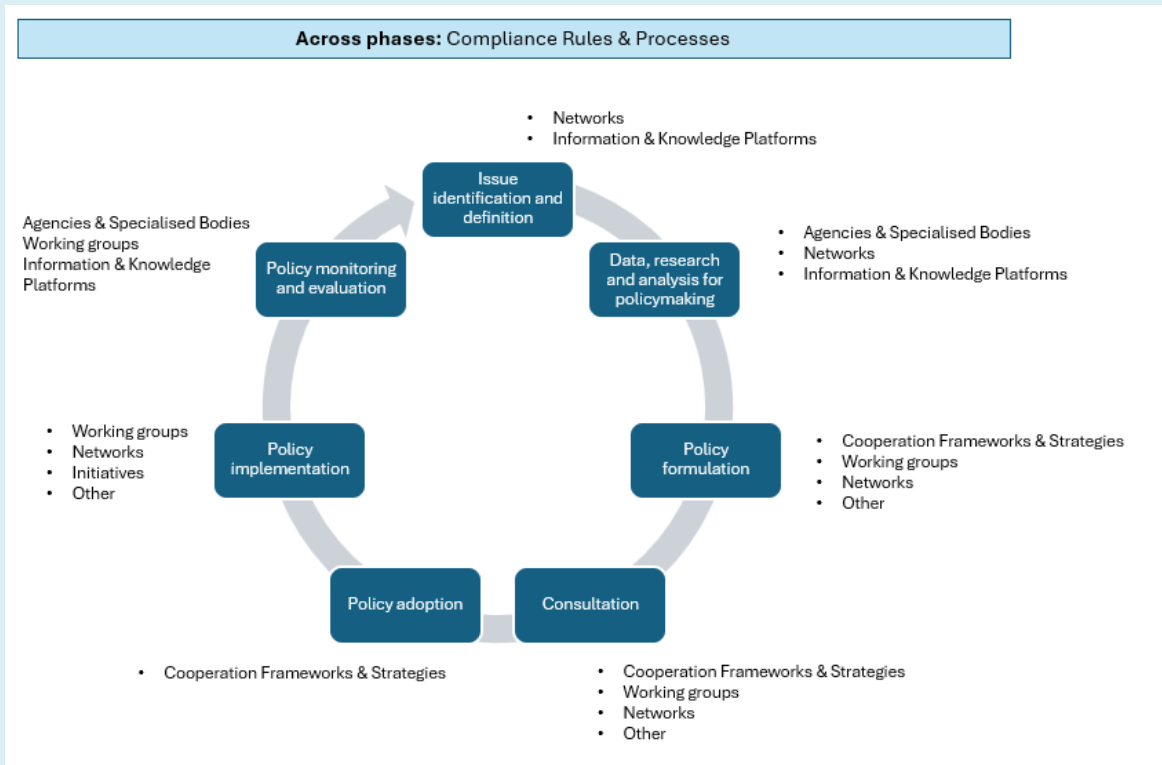


Figure 4 Interaction between EU governance frameworks and the policy cycle. Adapted from European Commission (2019).

However, it is worth considering that – in real life – the policy and decision-making process does not follow such a linear approach.

An illustrative and non-simplified version of the policy cycle in EU policies (just before policy proposal) is provided with Figure 5.

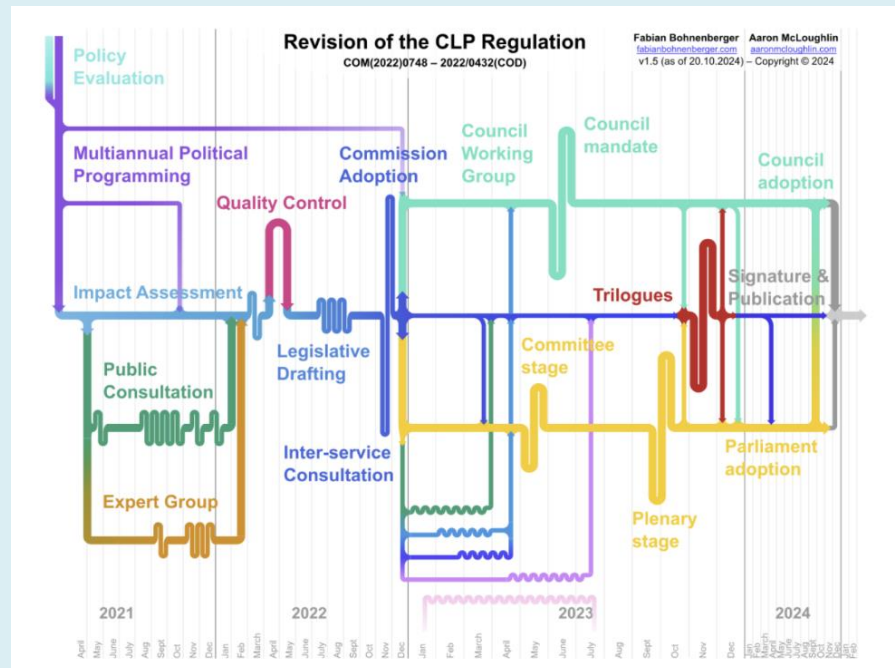


Figure 5 [A detailed Map of EU Law-Making: Explained](#). Source: Fabian Bohnenberger, 2024.

4.4 EU Stakeholder Positions on Community-Led Innovation

At EU level, we observe an interesting consensus around the need to boost rural innovation both from policymakers and civil society organizations. Rural innovation and the ‘smartification’ of the rural economy is perceived as normatively desirable (i.e. something good) to revitalize the rural economy by leveraging local strengths and assets (Lostrangio, 2024). This positiveness is also welcomed and sustained by scholarly research on the potential socio-economic effects of smart innovation in rural areas (*Ibid.*).

Attention to rural innovation and Smart Solutions is anyhow quite new. It began to substantially enter the EU policy discussion with the [Cork Declaration 2.0](#) (2016), leading towards an EU-strategic approach to rural revitalisation ([European Parliament, 2021](#)). This declaration was followed by several pilot initiatives aimed at developing an EU approach to innovation revolving around the actions of rural communities. Among them, the most relevant ones include: [EU Action for Smart Villages](#) and the [Smart eco-village project](#) (2017), the ENRD [thematic working group on Smart Villages](#) (2017-2020), the EU Parliament Intergroup [RUMRA & Smart Villages](#) (2019-2024), the EU-funded projects [SMART Rural 21](#) and [SMART Rural 27](#) (2020-2024), [EU Startup Village Forum](#), and specific smart rural projects funded under the EU’s Long-Term Vision for Rural Areas (e.g. FUTURAL, SMARTERA, RURACTIVE). In these projects, communities often wish for more innovation in rural areas to become more attractive and address challenges they face.

At political level, this sustained interest in community-led rural innovation was enshrined into the new Smart Villages measure, which entered the 2021-2027 regulations on the Cohesion Policy and Common Agricultural Policy. Furthermore, on several occasions, EU institutional bodies called on reinforcing Smart Villages and other forms of community-led innovations for making rural areas more attractive (e.g. Committee of the Regions, 2023a, 2023b, 2025; European Economic and Social Committee, 2024). **On the side of civil society, several EU level organizations kept asking for stronger support to rural and community-led innovation in current and future policies** (AEIDL, 2024; Bled Declaration 2018; ELARD Declaration, 2024; European Rural Parliament, 2025; Rural Pact Coordination Group, 2025).

Table 4 illustrates the positions of EU-level stakeholders and bodies on community-led rural innovation. This analysis offers a simplified understanding of the latest views from EU-level institutional actors (EU Commission, EU Parliament, Council of the EU, EESC, CoR), as well as EU Member States/national authorities, regional authorities, private and other civil society actors²⁵. By doing so, it underlines some important differences in terms of perceptions, interests and leveraging/hindering factors to influence decisions and actors of relevant actors.

Table 4 EU-level Stakeholder positioning on smart and community-led innovation in rural areas (+, interests to pursue; -, shortcomings to address).

Actor	Position
EC – DG AGRI	(+) Digitalisation, competitiveness, security and strategic autonomy of the agrifood sector (+) Support vibrant rural areas (e.g. Updated Rural Action Plan and Rural Pact) (-) CAP main priority remains on agricultural modernisation and farming
EC – DG REGIO	(+) Align territorial cohesion to EU’s growth/innovation ambitions

²⁵ Please consider that this table is based on FUTURAL review of policy documents, meeting reports and public declaration, and own understanding and it is not an official declaration from listed stakeholders.

	<ul style="list-style-type: none"> (+) A simpler and more responsible Cohesion Policy supporting the 'Right to Stay' principle (-) Avoid policy incoherence with other DGs on rural development (-) Fund absorption issues across beneficiaries
EC– DG GROW	<ul style="list-style-type: none"> (+) Strengthen innovation and strategic autonomy in key sectors (defense, energy, digital, biotech, raw materials) (+) Increase scale-ups and SMEs support (-) Avoid market fragmentation, reinforce the Single Market
EC- DG RTD	<ul style="list-style-type: none"> (+) Stronger Member States' budget for R&I (target: 3% of GDP) (-) Address EU's innovation divide across countries/regions (-) Collect more granular-level data (LAU, grid) on EU's rural areas
EC- JRC	<ul style="list-style-type: none"> (+) Indicators and analysis on rural innovation and entrepreneurship (-) Conceptualize & gather granular data on rural innovation dynamics
EC – Other DGs	<ul style="list-style-type: none"> (+) Contribute to EU's political priorities for 2024-29 (competitiveness, security, freedom) (-) Reduce policies working in 'silos', simplify/cut red tape
EU Parliament	<ul style="list-style-type: none"> (+) Stronger LEADER/CLLD via mandatory earmarking both from CAP and Cohesion Policy and simplification (+) Diversification of the rural economy and sets up preconditions for innovation (digital skills, connectivity, differentiated rules for rural SMEs etc.) (-) Address geography of discontent in rural areas, gap in essential services & infrastructure (-) Implement rural proofing through strong multi-level cooperation
Council of the EU	<ul style="list-style-type: none"> (+) Support the rural revitalisation via LTVRA and place-based development (-) Solve EU's investment gap, including repaying NGEU debts²⁶, and simplify EU administrative burden (-) Demographic trends, geography of discontent, climate challenges, competitiveness, defence
EU Committee of the Regions	<ul style="list-style-type: none"> (+) Reinforce LEADER/CLLD, Smart Villages and mainstream them into existing policy frameworks (+) Couple digital & social innovation, with local and granular data for monitoring & evaluation (-) Equal access to services, high speed broadband & digitalisation in rural areas as a precondition for innovation and competitiveness (-) Address rural issues beyond CAP II, harmonising policy frameworks (-) Oppose centralisation of EU policies and weakening of subsidiarity and partnership principles
EU Economic and Social Committee	<ul style="list-style-type: none"> (+) Supports citizen-driven digital transition (Smart Villages, CLLD), empowering digital learning for all and upskilling and unlocking digital transformation across sectors (+) SMEs as engine of innovation, Single Market integration, higher investments in RDI and simplification (-) Lack of data on Smart Villages, CLLD and innovative best cases (-) Oppose centralisation of EU policies, and weakening of social dialogue
Member States/ National Authorities	<ul style="list-style-type: none"> (+) Maximize absorption of EU funding (-) Address needs from the farming sector, yet more difficult to generate interest in Smart Villages (-) Allow flexibility in allocating budget
Regional Authorities	<ul style="list-style-type: none"> (+) Seek opportunities to strengthen rural innovation, address development trap (-) Difficult to generate interest in Smart Villages
Private Actors	<ul style="list-style-type: none"> (+) Funding and simplification opportunities (-) Reduce administrative burden
NGOs/CSOs	<ul style="list-style-type: none"> (+) Holistic approach to rural development (+) develop innovation and make rural attractive for living and working (-) Fear centralisation of funds at the detriments of community-based and place-based initiative

Source: Own Elaboration. Adapted from Pazos-Vidal (2014)

²⁶ Mind the gap: Europe's strategic investment needs and how to support them; Future of EU long-term financing: Post-2027 needs and how to finance them | Think Tank | European Parliament.

4.5 Evolution of the EU framework and implications

The policy and governance frameworks mapped in the previous chapters are not written in stone. Conversely, they are subject to change with the evolving landscape of EU political affairs, as we are leading towards the end of the **current multiannual financial periods** (end of 2027). **At EU level, the shift of political priorities has already emerged with the appointment of the European Parliament and European Commission in the second half of 2024.**

Both constituencies show a relevant shift in terms of priorities, composition and structuring. Some preliminary documents offer an overview of European future priorities, *inter alia* the European Council's [Strategic Agenda](#), the [Mission Letters to the European Commissioners](#) and the [Commission's Work Programme for 2025](#). In these documents, European bodies warn the fragmentation of European funds to innovation and the risk of Europe's to lag behind other global players in the innovation race. As a result, the 2024-2029 political priorities of the European Commission are shifting away from the ecological transition, to affirm the role of **competitiveness, security and democracy**.

In July 2025, the European Commission will table its proposal for the **post-2027 EU Budget**. This proposal will be used as a starting point to facilitate discussion with the co-legislators and result in the consolidation agreement of the EU budget for 2028-2034. Against this background, **three main discussions have the potential to significantly affect the political support for community-led rural innovation.**

A New Architecture for the EU Budget

First, a **radical restructuring of the EU budget around competitiveness and defence** – as presented in the '[The road to the next EU multi-financial framework](#) (2025) - might largely change how policies and governance actors interact. The EU Commission called for a new **European Competitiveness Fund** to support Europe's innovation alongside with the establishment of a **Single Plan** where each Member States would list all country's policy interventions across different sectoral areas and link them with policy reforms (Figure 6) (EU Commission, 2025). The reframing of multiple national and regional plans under one single national plan is likely to change **profoundly the planning and delivery of European policies**, for which the 2023-2027 CAP could provide an example²⁷. Most of regional and local authorities are currently warning the negative implications this centralisation could have for stakeholder engagement, consultation and multi-level governance²⁸ (EU Parliament, 2024).

The **EU Competitiveness Fund** would presumably support investment in strategic sectors and critical technologies, presumably in line with the strategic priorities of the [EU's Competitiveness Compass](#)²⁹. **Closing the innovation gap** figures out among these priorities, and focuses particularly on young innovative start-ups, promotes industrial leadership in high growth sectors based on deep technologies and the diffusion of technologies across established companies and SMEs. Unfortunately, Competitiveness Compass does not provide sufficient background on the intentions of addressing the territorial aspects of this innovation gap and refers to the EU Vision for food and agriculture and the EU Bioeconomy Strategy to set a vision on rural

²⁷ Over the 2023-2027 period, each Member States issued its national CAP Strategic Plans (28 in total). These plans replaced the 28 Partnership Agreements and 118 Rural Development Programmes for the 2014-2020 period ([By country - European Commission](#)).

²⁸ [EU regional and local leaders call for stronger role against centralisation | European Committee of the Regions](#)

²⁹ [https://ec.europa.eu/transparency/documents-register/detail?ref=COM\(2025\)46&lang=en](https://ec.europa.eu/transparency/documents-register/detail?ref=COM(2025)46&lang=en)

innovation. The increase of budget to EU defense is possibly going to reduce Cohesion Policy support³⁰.

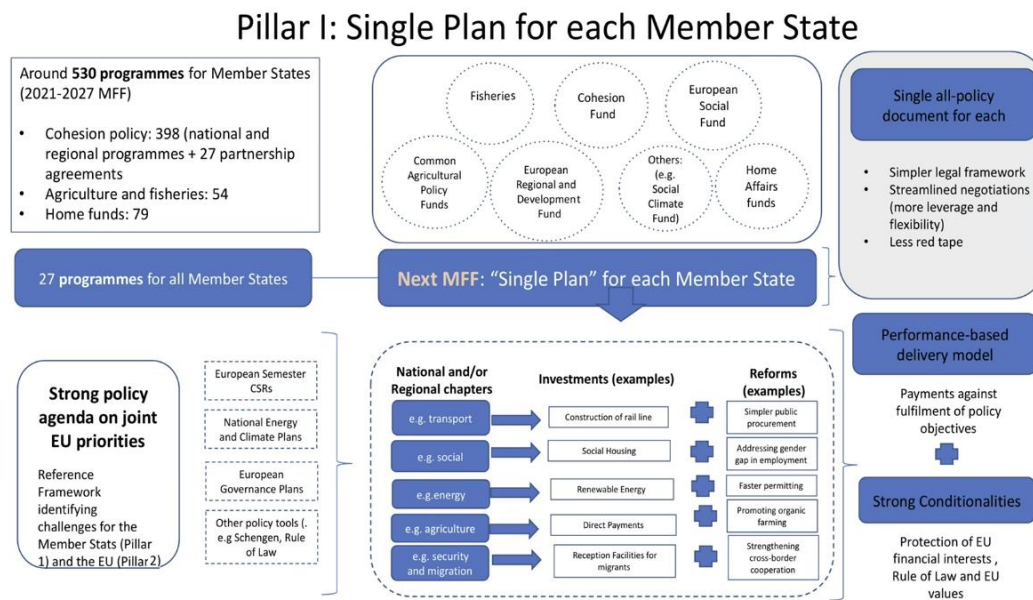


Figure 6 Potential structure of the National Single Plan in the post-2027 period, Source: Pazos-Vidal (2025).

A Stronger and Simpler Single Market

The successive crises have led to an increasingly complex set of EU policies and EU funding programmes. Under the theme **"Europe faster and simpler"** and becoming an **"Investment Commission"** a focus is made in [reducing the number of EU programmes](#). The EU Multiannual Financial Framework became much more complex in response to successive crisis and notably the Next Generation EU recovery package to COVID-19 crisis doubled the EU budget until 2026 by way of the first ever large-scale EU debt issuance (instead of relying on transfers from the net contributing Member States as have previously been the case).

Part of this simplification is particularly focused on small businesses³¹. It also considers the promotion of **EU frontier technologies** such as digital, sustainable solutions or AI, including via the preference for EU suppliers in strategic sectors, a marked shift from the more free-market policies of the past, where the EU was far more open and stricter in its subsidiary rules than other major trading blocs.

In the future, the new European Commission also committed to identifying actions and strategies to reinforce the integration of the EU Single Market³², and hence possibly reinforcing the role of the European Union into ensuring smooth coordination across policies where the EU does not have full competence. The revised **EU Single Market Strategy** (expected by mid-2025) will identify a set of legislative and non-legislative initiatives to reinforce economic

³⁰ Von der Leyen. [Press statement by the President on the defence package](#). 4th March 2025.

³¹ For instance, the introduction of the new SME Test to reduce the burden of small businesses to emerge, survive and trade across EU national borders, the reduction of financing problems of SMEs and small MidCaps, and the protection against destructive non-EU takeovers.

³² As recommended by the Letta Report 'Much More than a Market'. Namely the European Commission should publish its revised EU Single Market Strategy is expected by mid-2025.

dynamism across EU countries while also providing conditions for enabling the 'Right to Stay' in all territories. Despite this potential evolution.

The Right to Stay

Introduced within the Letta Report (2024) '[Much more than a Market](#)', as *freedom* to stay, repurposed by the [European Commission Political Guidelines 2024-2029](#) as the ***Right to Stay***, this concept gained its momentum in the EU policy making bubble as possibly the ***fifth fundamental right*** for the EU citizens. This principle argues for the right of citizens to not only move freely across the EU but also the right to **remain and live where they wish**. This is based on an activist reading of the EU Treaties from Article 3 TEU, Article 174 TFEU but also the Charter of Fundamental Rights and the EU Social Pillar.

The Right to Stay principle can become a key provision to guide EU policies and investments for rural areas as it insists on the responsibility of governing bodies to protect services of general economic interest, guarantee a minimum level of basic services (public or private) no matter where one lives. Mirroring the protectionist bent across the world, Letta also includes some activist language in the use of **state aid** and more obliquely the reform of **public procurement** to support local development.

5. Case Studies Analysis

FUTURAL [Case Studies](#) cover rural communities at sub-regional level from Western to Central and Eastern Europe in 6 EU Countries: **Austria (Pongau), Belgium (Westhoek), Greece (Kythira), Lithuania (Jonava), Romania (Birda), Spain (Dunragaldea)**. This chapter analyses policy and governance frameworks related to community-led innovation in selected countries. By doing this, we identify some good practices.

5.1 Context Analysis

FUTURAL Case Studies include a diverse set of rural territories ranging across mountains, coastal areas, islands and rural areas close or far from cities. In four of the six countries covered (Austria, Greece, Lithuania and Romania), the **share of rural population and rural land surface** is above the EU average. The percentage of **rural remote areas** (vs. *rural areas closer to cities*), is also diversely represented in this subset, with countries such as Greece mostly characterized by remote rural areas (>60% of national surface), compared to more urbanized rural areas in Belgium (Table 5).

Furthermore, a **benchmarking of selected indicators** from the Regional Innovation Scoreboard and Digital Economy and Society Index (DESI) provide a more composite of these countries in terms of strength of the regional innovation ecosystem and digital readiness (Table 5). **Austria and Belgium emerge as generally more innovative and digitised ecosystems, followed by Spain.** Greece and Lithuania are considered as moderate innovators and perform slightly below EU average on the digital economy. Romania is more generally below EU average on selected performance indicators except for broadband penetration.

Table 5 Comparison of FUTURAL countries per rural population and surface, level of innovation and digital economy

	Rural Land Surface				Innovator	DESI Index			
	Rural Population	Close to City	Remote	Total		Broadband penetration	Basic digital skills	Above basic digital skills	Internet take up
AT	38.9%	39.9%	46.6%	86.6%	Strong	67.6	64.7%	32%	94.9%
BE	15%	41.2%	6.64%	47.8%	Strong	109.9	59.4%	28.3%	94.5%
GR	30.7%	29.3%	63.9%	93.2%	Moderate	37.5	52.4%	20%	86.9%
LT	34.8%	45.8%	36.9%	82.7%	Moderate	100.4	52.9%	25.9%	88.6%
RO	41.8%	39.8%	45.4%	85.3%	Emerging	144.4	27.7%	8.9%	92%
ES	13.1%	33.5%	39.7%	73.2%	Moderate	142.2	66.2%	38.6%	96.4%
AVERAGE EU-27	25.8%	34.2%	41.5%	75.7%		122	55.6%	27.3%	93.1%

Source: Rural Observatory (reference year: 2021); Regional Innovation Scoreboard (2024); DESI Index 2024 (Reference year: 2023).

Additionally, Table 6 identifies the **most relevant challenges and opportunities characterizing FUTURAL Pilot Regions based on the feedback of local experts**. All Case Studies are affected by an aging population and negative demographic trends, followed by lack/limited presence of essential services. Climate change and economic attractiveness are also major difficulties. Opportunities rise from digitalisation, sustainable tourism and leverage of rural-urban links.

Table 6 Case Study regions in FUTURAL, and their main challenges and opportunities. Source: Own Elaboration.

	Case Study	Challenges	Opportunities
Austria (Pongau)	The Pongau region is a mountain area covering 25 municipalities for a population of approx. 80,000 inhabitants. It is an economically well-developed district in southern Salzburg that is strongly positioned in many economic sectors due to the proximity to commercial and industrial areas, with good transport hub and tourism industry.	<ul style="list-style-type: none"> • Overtourism • Land use, urban sprawl • Work seasonality • Population decline/stagnation • Lack/loss of essential services • Climate Change Exposure 	<ul style="list-style-type: none"> • Climate-neutral & all-your round tourism • Bio-circular economy, Renewables • Digitalisation • Multi-local lifestyle & urban-rural links
Belgium (Westhoek)	Geographically, the region is situated in the west corner of Belgium, flanking by the North Sea and the French border. It extends across 18 municipalities and over 220k residents. The agrifood sector is the main economic sector for Westhoek. Since 2016, this sector has been seriously challenged by extreme weather events .	<ul style="list-style-type: none"> • Climate change & extreme weather events • Ageing and brain drain • Lack/loss of essential services • Poor public transport 	<ul style="list-style-type: none"> • Digitalisation
Greece (Kythira)	The island of Kythira is located in the southwestern region of Greece. The unspoilt natural landscape , rich biodiversity , cultural heritage and traditional lifestyle , characterize this island and makes it a strong point of attraction for the tourism sector.	<ul style="list-style-type: none"> • Youth out migration • Local Engagement • Economic dynamics • Overtourism • Infrastructure maintenance 	<ul style="list-style-type: none"> • Natural & cultural capital • Crowdsensing/sourcing technologies • Digitalisation
Lithuania (Jonava)	Jonava is one of the smallest municipalities in Kaunas County (central Lithuania). Jonava is situated in a favorable location for business development, next to main roads and an airport. It was also awarded for the village with the best material living conditions . Wood processing and chemical industry are developed in the Jonava district, without particularly added value for the territory.	<ul style="list-style-type: none"> • Demographic decline, Ageing • Financial Resources • Infrastructure Deficiencies • Land Use • Digital Divide 	<ul style="list-style-type: none"> • Digitalisation of agriculture
Romania (Birda)	Birda is a Municipality in southwestern Romania consisting of three villages. Agriculture is the strongest pillar of the region. The proximity to urban centres such as Timisoara (40 km) and Gataia (11 km) makes it an attractive centre for living.	<ul style="list-style-type: none"> • Population decline, Ageing • Economic Disparities • Climate change, Water • Brain drain 	<ul style="list-style-type: none"> • Border location • Sustainable tourism • Digitalisation
Spain (Basque, Durangaldea)	This region gathers 13 Basque Municipalities, and it is full of contrasts between quite populated urban areas, with a high degree of industrial, urban and infrastructural occupation, and large sparsely populated rural areas . The region's economy has been based on metallurgical and automotive industries, but in recent years employment in the services sector has reached the same level as the industrial employment due to the tourism industry.	<ul style="list-style-type: none"> • Depopulation, Ageing • Jobs, Economic Diversification • Infrastructure, Connectivity • Environmental Sustainability, Climate Change • Access to Services 	<ul style="list-style-type: none"> • Rural & green tourism • Proximity to urban areas • Economic diversification • Digitalisation

5.2 Policy frameworks

This chapter provides a comparative overview of policy frameworks supporting rural innovation in the six countries covered by FUTURAL Case Studies. To begin with, we identified how rural innovation is promoted by countries by making use of the **LEADER and CLLD interventions**, respectively under the Common Agricultural Policy and the Cohesion Policy. It follows a broader analysis of how rural innovation is embedded within **EU shared management policies** – notably the Common Agricultural Policy and the Cohesion Policy. This second part includes a comparison of how **Smart Villages** have been supported across analysed countries. To conclude, we listed **national policies** relevant for rural innovation and community-led development, as identified by our countries' experts and supported by desk research.

Community-led innovation through the LEADER and CLLD approach

Community-led local development is a mandatory measure under national CAP Strategic Plans (the so-called 'LEADER') and optional under the national and regional Operational Programmes of the Cohesion Policy. Table 7 illustrates targets and respective budgets planned within approved CAP and Cohesion Policy to sustain community-led rural development for the period 2021-2027.

Table 7 Comparison of LEADER/CLLD approach across FUTURAL countries (2021-2027 programming period)

	Output Indicators					Budget (mln €)		
	LEADER Rural Population Coverage (% , mln people)		LEADER Local Development Strategies	LEADER Preparatory Actions or projects	CLLD mln people	LEADER	LEADER (% of EAFRD)	CLLD rural areas
AT	83.12%	5.77	80	0	0.33	130.2	5%	6.94
BE-FL	81.59%	1.9	14	14	n/a	25.28	8%	n/a
BE-WA	35%	2.19	21	0	n/a	9.94	5%	n/a
GR	72.16%	5.87	50	0	n/a	200	6%	n/a
LT	100%	0.91	49	0	n/a	62.91	6%	n/a
RO	85.59%	8.9	255	0	n/a	424.75	8%	n/a
ES	55.21%	22.33	263	163	n/a	516.65	10%	n/a

Source: Own Elaboration. Adapted from [CAP Catalogue of Interventions](#), [EU CAP Network CAP Factsheets](#), national ERDF Operational Programmes 2021-2027 for targeted countries.

The data above shows that the LEADER initiative is crucial to promote community-led development in rural areas. In 2021-2027, only Austria and Wallonia financed LEADER interventions at the mandatory earmarking of 5% (of the EAFRD funds). Spain is the country planning the highest budget for LEADER, equivalent to 10% of their EAFRD funds.

Additionally, four countries (Austria, Greece, Lithuania, Romania) and one region (Flanders) aim to target more than 70% of their rural population via the LEADER approach. Only Wallonia and Spain are targeting a lower share of the rural population via this measure. It is worth highlighting how Flanders and Wallonia, though being located in the same country, have quite a different approach to rural development as illustrated by these figures and by the existence of two distinct CAP Strategic Plans (an exception at EU level). Spain and Romania are the countries supporting the highest number of LEADER Local Development Strategies (in absolute terms). However, if we look at the relative number of planned LEADER

strategies, actions and projects planned per rural population coverage³³, **Austria** is the leading country, followed by **Greece** and **Wallonia**. **By contrast, it is not possible to extract similar output indicators on the country's targets for community-led development (CLLD) within the national ERDF programmes**, except for Austria. The reason behind this is that countries have not opted for the proper territorial code to identify measures targeted at community-led development in their Operational Programmes.

In the case of Austria – the only one planning community-led intervention both under the national CAP and ERDF plans, figures show that the planned LEADER are (by far) more relevant for community-led development well beyond the Cohesion Policy support. This is true both in terms of beneficiaries and budget. This figure is more astonishing considering that the rural development budget (i.e. beyond farming) under the Cohesion Policy is more important than the one in the CAP ([EC, 2023](#)). It also provides an argument to confirm the worries of EU community networks' claim that without earmarking the community-led investments might be overlooked by Managing Authorities (ELARD, 2024).

It is worth noting that the **countries' national/regional tradition** on local development and related **governance structure** have a strong influence on the use and adoption of the LEADER/CLLD approach³⁴. In this framework, **Austria** is an example of a pioneer country in this approach as this state has implemented a similar policy ('Endogenous Rural Development'), relying on strong coordination between the Federal State and Länders (regions).

Coordination between community-led innovation in LEADER and CLLD is also strongly dependent on the governance structure of the Authorities managing the funds and the adoption of multi-funding options for community-led development. Also in this case, Austria is quite a relevant example as since 2018 the ERDF was integrated under the Federal Ministry of Agriculture, Regions and Tourism (the same managing the LEADER programme). The use of multi-funded CLLD is decided by regional governments in Austria.

Wider support to rural innovation through CAP Strategic Plans

In this section, we compare how FUTURAL Case Study countries target rural innovation through their CAP Strategic Plan and beyond the LEADER approach. The Table below illustrates some selected **result indicators (R) and output indicators (O) related to innovation, digitalization and economic dynamism of the farming and non-farming sectors** within the countries CAP Strategic Plans. To facilitate reading, we highlighted in green and red respectively the highest and lower amounts in absolute terms.

³³ The equation: LEADER Rural Population Coverage/(LEADER Local Development Strategies+ LEADER Preparatory Actions or Projects).

³⁴ Countries experience on CLLD: [CLLD country profile – LDnet](#)

Table 8 Comparison of CAP Result and Output Indicators for the 2021-2027 programming period

	Indicators	AT	BE-FL	BE-WA	GR	LT	RO	ES
R1 Enhancing performance through knowledge and innovation	No people benefitting from advice, training, knowledge exchange or participating in EIP operational groups	1355703	365013	86	208113	45223	65749	1165582
R3 Digitalising agriculture	Farms support for digital agriculture technology - % of farms	7.75%	80.71%	0.21%	17.50%	0.33%	0.03%	3.23%
R.39 Rural Economy	No rural business developed (incl. bioeconomy)	1864	39	212	7640	25	986	58699
O1 Cooperation	No. EIP operational group projects	156	100	9	394	40	71	851
O23 Investments	No. supported off-farm non-productive investment operations or units	376	200	314	120	1700	n/a	904
O24 Investments	No. supported off-farm productive investment operations or units	6957	32	263	73	30	527	1422
O27 Cooperation	No. rural businesses receiving support for start-up	100	240	n/a	n/a	n/a	n/a	86

Source: Own Elaboration. Adapted from [CAP Catalogue of Interventions](#), [EU CAP Network CAP Factsheets](#), European Commission (2023c).

As illustrated in the Table, indicators vary sensibly across countries and, in some cases, across regions (as the case for the Wallon and Flemish regions, as Belgium is the only region with two distinct CAP Strategic Plans). For instance, **investments on farm digitalization (R3)** go from above 80% for the Flemish region to less than 1% in the case of Wallonia (Belgium), Lithuania and Romania.

Large differences are also recorded on results and output indicators related to CAP support beyond farming (R.1- R.30; O.1-O.23-O24). For instance, result indicators on the rural economy (R.39) and outreach of the EU Innovation Partnership also show a large gap from, potentially showing key differences in terms of accounting systems across countries. **Only two countries and one region define an output indicator (O.27) on the number of rural businesses receiving support for start-ups (grants, financial instruments).** In the Table above, we did not report result indicator 40 which is expressively on Smart Villages which instead is addressed in Table 9.

The table below exclusively focuses on the **Smart Village instrument**, a novelty for the 2021-2027 programming period (European Commission & E40, 2025). It provides an overview of how analysed countries included Smart Village within their CAP Strategic Plans in terms of: i) providing a Smart Village definition, ii) describing areas eligible for Smart Village support, iii) designing planned interventions (dedicated and other interventions), iv) attributing a budget, v) setting up a result indicator (R.40) to be achieved by 2029.

Table 9 Comparison of Smart Villages in approved CAP Strategic Plans across FUTURAL countries

	Smart Village 's Definition	Village/Rural Area	CAP Strategic Plans – Planned Interventions	Budget	R 40
AT	Rural communities who develop innovative solutions to address local challenges. Digitalisation is a key aspect. In accordance with ENRD Guidelines .	Municipalities <30,000 inhabitants, or mapped rural municipalities with >30,000 inhabitants	Dedicated: i) supporting village & city centers – revitalize, refurbish or rebuild empty, misused or underused buildings or public areas (73-10, INVEST); ii) Vacancy reactivation through awareness raising & consulting, Development concepts & management for town and village center strengthening (77-04, COOP); iii) Rural innovation systems under the EU Innovation Partnership (77-03, COOP). Other(s): LEADER (77-05, COOP)	Not possible to define	54 Smart Villages strategies projects
BE-FL	Tool to address societal challenges and transition issues leveraging co-creation and actor engagement to develop social, digital, tech innovation	Areas with min 3 rural municipalities and a population density <= 350 inhabitants/km ² or a land take of maximum 30%	Dedicated: LEADER – design and realisation of local development strategies (COOP, 3.18 & 3.19):	N/A	No target
BE-WA	N/A but general approach to Smart Territories . Smart territories are often associated with the digital dimension.	Statistical unit with population density i) <150 hab./km ² or ii) >150 hab./km ² but rural areas cover >80 % of the total area	N/A	N/A	N/A
GR	N/A	N/A	Dedicated: N/A. Other(s): Support for local development through LEADER (CLLD) (P-77-4.1, COOP)	N/A	Referenced but no target
LT	Innovative and change-oriented communities who adopt/develop place-based solutions to improve the quality of life, leveraging local strengths & community engagement. Digital innovation is a recommended selection criterion	Villages, small towns, towns, or other residential areas with a population <= 6000 inhabitants	Dedicated: Smart villages (KP21sum). Other(s): Community-led local development (LEADER) (KP20vvg)	KP21sum budget: €15 mln, €600.000 / SV Strategy	25 Smart Villages strategies/projects by 2028
RO	Projects leveraging the local community knowledge to identify solutions using technology and innovation in order to improve the quality of life in rural areas	Communes with villages component at Territorial Administrative Units level (TAU). Eligible LEADER territory: TAU-common & TAU-small towns with <= 20,000 inhabitants	Dedicated: LEADER - Community-led local development (DR-36, COOP)	N/A	Programmed but no target
ES	N/A	N/A	Dedicated: Non-productive investments in basic services in rural areas (6872) (Specific intervention title for Galicia region: Digitization. Smart villages (GAL6872_06). Other(s): i) Investment aid for agricultural diversification (6864, INVEST); ii) Cooperation for the structuring of the territory (7163, COOP); iii) Aid for investments in agricultural infrastructure to promote competitiveness (6843.2, INVEST)	Total: N/A. €750 per operation	16 SV Strategies by 2026 (only Galicia targeted)

Source: Smart Rural 27 (2024) [Austria](#), [Belgium-Flanders](#), [Belgium- Wallonia](#), [Greece](#), [Lithuania](#), [Romania](#), [Spain](#); European Commission & E40 (2025).

Smart Village definition is provided in four (out of seven) CAP Strategic Plans, and it mostly follows the [ENRD Guidelines](#) and preparatory work on Smart Villages. Wallonia does not propose a definition for Smart Villages, but it describes more widely Smart Territories. Greece and Spain do not have a suggested definition.

Village area varies significantly in terms of rural population, density and existing administrative units. This is somehow in line with the notion of rural diversity (Stejbern *et al.*, 2023) and the diverse administrative and territorial organization of selected countries (see also following Chapter).

Except for Wallonia and Greece, all other countries included Smart Villages in dedicated CAP interventions. Smart Villages are often planned within LEADER interventions (as the case for Austria, Greece and Lithuania). Smart Villages are mostly planned as part of cooperation interventions (COOP), although Spain and Austria also foresaw Smart Villages within investment interventions (INVEST).

Only three countries (out of seven) have some dedicated budget for Smart Villages. However, only for Lithuania is it possible to identify both the total and per intervention budget.

Three countries provide targets with the Result indicator 40 (Number of supported smart-village strategies), namely Austria, Lithuania and Spain (only Galicia). Other three countries planned R.40 but did not provide any other. Wallonia did not plan R.40. Partially, this is due to a certain reluctance of Managing Authorities to community to a new instrument.

Box 5. Lithuania Smart villages intervention in the CAP

In its 2021-2027 CAP National Strategic Plan, Lithuania targeted Smart Villages via the KP21m intervention. This intervention is aimed at making rural areas more attractive and innovative through the adoption of technology-based solutions and actions.

The intervention will finance **25 Smart Rural Strategies** with a financial envelope of **600,000 EUR** per strategy (on average). Such a strategy should address rural challenges and inequalities, producing **clear and measurable change at local level**. The financial aid can be used to cover any costs related to the development, coordination and management of the Strategy, and **Simplified Cost Options** are used for up to 12% of the total costs.

The beneficiaries of this intervention are LEADER LAGs, potentially in cooperation with other natural and legal persons, local authorities or other urban/rural LAGs. However, these strategies **might take place in rural areas which are not targeted by the LEADER programme**. The territorial perimeter of 'villages' should correspond to the ones of one or more administrative units (e.g. existing village or groups of villages, city, functional area).

In the case of LAGs, another intervention (KP20vvg) also allows the development of Smart villages within the framework of the LAG Local Development Strategy.

Wider support to rural innovation through the Cohesion Policy

Regional policy is a shared management policy. Managing Authorities at national and/or regional level are responsible for designing the interventions based on the EU's Cohesion Policy priorities.

This section introduces how national and/or regional authorities aimed to target rural and community-led innovation within their approved Operational Programmes (2021-2027 period).

First, it is worth highlighting that **some countries rely simply on national Operational Programmes (OPs), where other(s) combine both national and regional OPs**. This depends on the administrative organization of the country, as well as the historical tradition. The existence of both national and regional Operational Programmes might imply **better place-based interventions**. On the drawbacks, they also might lead to a **lack of coordination across Operational Programmes**, especially across regions. ESPON DESIRE, 2025; Leonardi & Nanetti, 2011). Table 10 illustrates the level of Cohesion Policy planning across FUTURAL Case Study countries. It also compares their planned budget and the EU contribution (in absolute and percentage terms).

Table 10 Comparison of Cohesion Policy Planning and Budget (2021-2027). Million EUR.

	Planning level	Total Budget (Planned)	EU Budget	% of EU Contribution
AT	National Operational Programmes	€ 2,951	€ 1,067	36%
BE	Regional (ERDF), Regional & Communities (ESF+)	€ 5,740	€ 2,503	44%
GR	National (Sectoral Themes) & Regional (1 per region) Operational Programmes	€ 25,734	€ 20,540	80%
LT	National Operational Programmes	€ 7,792	€ 6,274	81%
RO	National (Sectoral Themes) & Regional (1 per region) Operational Programmes	€ 44,430	€ 30,986	70%
ES	National & Regional (1 per region) Operational Programmes	€ 51,618	€ 35,561	69%

Source: Own Elaboration. Data extracted from the [Open Cohesion Portal](#).

In some countries, regional policy is mostly financed through the EU contribution (e.g. Greece, Lithuania). These countries have considered less developed regions and therefore receive larger funding.

Table 11 details measures designed in FUTURAL Case Study Countries to support rural innovation through their national ERDF Operational Programmes (2021-2027). Only the European Rural Development Funds (ERDF) Operational Programmes planned at national level were analysed due to capacity constraints, however, it is worth underlining that European Social Fund Plus (ESF+) is also fundamental to create and enhance skills for innovation. Some regional Operational Programmes were consulted, when possible, to provide additional examples.

Table 11 Measures to support community-led and rural innovation in FUTURAL Case Studies Countries through their 2021-2027 ERDF Operational Programmes

	Priorities	Dedicated measures for community-led innovation	Other measures targeting innovation and/or rural communities
AT	Regional innovation ecosystems SMEs/startups Green Innovation	Smart regions Integrated regional development using CLLD (SO5.2)	Interventions targeting rural innovation are foreseen within SO1.1 and SO1.3 (emphasis on support to businesses), SO2.1 (eco-innovation for energy efficiency), JTF (innovative pilots for transition to low/zero emission technologies).
BE-FL	Smart Flanders (60% of the budget). Digitalization is a cross-cutting priority in all areas of social and economic life.	CLLD measures were not activated under ERDF	Several specific objectives target rural areas (including via Integrated Territorial Investments) and the possibility to finance collective projects are mentioned. These include potential actions such innovations to address societal needs, establish Living Labs & innovation ecosystems (SO1.1) data-driven digital technologies for local governance & service provision (SO1.2), skills for smart specialization (SO1.4), innovative collective projects for energy efficiency, renewable energy and climate adaptation (SO2.1, 2.2, 2.4), innovative mobility concepts , local distribution projects, multimodality (SO2.8).
BE-WA	Economic dynamism, mobility, green and digital transition	No dedicated measures to CLLD in rural areas. Wallonia did not adopt any code to earmark funds to specific territories.	Measures promoting innovation (in particular PME support , green and eco-innovation) are defined under PO1, PO2. Smart mobility is also targeted within PO3. In the Programme description, rural areas are very marginal in the ERDF OP and only mentioned in relations to mobility and waste management/valorization. PO5 (Closer to citizens) is mainly used to finance initiatives for urban and industrial revitalization.
GR	Resources are mainly targeted to PO4 'More Social' (30%), 'Greener' (27%), 'Smarter' (20%).	Yes, differently according to regional Operational Programmes ³⁵	At national level, other sectoral programmes target competitiveness (EUR 3 885 mln); digital transformation (€943). Just the Transition Development Transition Programme (€ 1 629) targets smart communities through small scale interventions but so far this was implemented in cities (territorial targets are not planned).

³⁵ A few examples: Western Greece Regional OP 5.2 on Strengthening sustainable local development through integrated interventions in the Region of Western Greece (31 mln EUR); Ionia Nisia Regional OP supporting community-based care for children and adults within PO4; Epirus OP RSO2.2 2A.ii Pilot Action to Support the establishment of (Non-Profit) Energy Communities.

LT	Aligned to the 5 Policy Objectives of the Cohesion Policy. Emphasis on territorial divide between the capital city and the rest of the country.	Community-based services run by NGOs and community-based organisations (SO4.8), promote social businesses in communities (SO4.9); integrated strategies/actions functional non-urban areas targeting mobility, innovation, social inclusion, service accessibility, creative economy (SO5.2) ³⁶ .	Support for innovation is provided via SO1.3 (SMEs), support to social innovation in creative and cultural industries (SO4.6), enhancement of volunteering and greater participation of local communities via local development strategies (SO4.7). Additionally, the national OP has a special priority on innovative solutions (6.1: supporting innovative and accessible services), and digital connectivity (ultra-fast broadband).
RO	Aligned to the 5 Policy Objectives of the Cohesion Policy.	Social Inclusion and Dignity OP foresees community centres in rural areas and measures to social integration needs in rural communities via Local Development Strategies , support to social economy in rural areas. Specific measures depending on regional OPs ³⁷ .	Increasing capacity of actors in water and wastewater sector (Sustainable Development OP, SO2.5), Integrated Territorial Investments for rural and mountain areas focusing on preventive care and school health care services (Health OP, SO1.1, SO4.5), (Smart Growth OP), startups hub and innovation aid to SMEs, support to digital innovation hubs and digitalization of economic sectors including to engage with communities (Smart Growth OP). In some regional OPs, references to rural innovation in Policy Objectives related to innovation and greener investments are available but not targeted value nor measures are foreseen.
ES	Aligned to the 5 Policy Objectives of the Cohesion Policy. Strong focus on territorial divide.	National Pluri-regional OP aims to support supra-municipal actions to counter depopulation and strengthen innovative and entrepreneurial activities based on local economic development in marginal areas (RSO5.2). Regional OPs include more dedicated interventions ³⁸ .	Financial Support to 5G and Cloud Edge Computing Infrastructure Services in rural areas; digitalization of public services and SMEs; Nature Based solutions, green infrastructure and biodiversity conservation for climate adaptation (National Pluri-regional OP, RSO1.1, 2.4, 2.7),

Source: Own Elaboration, based on countries approved Operational Programmes.

³⁶ The aim is to upscale a methodology tested in the 2014-2020 period. Local Action Groups, communities, NGOs are expected to contribute.

³⁷ For instance, network of rural-urban localities to boost ICT-based cultural heritage (Bucharest OP, SO5.2); or the establishment of digital communities and SMEs for a smart region; valorisation of UNESCO cultural heritage sites via innovative practices including social innovation (Centru OP).

³⁸ A few examples: Extremadura planned interventions for 'Pueblos inteligentes' in tourism, mobility, government, environment and energy efficiency (RSO1.2).

Four countries defined measures targeting expressively community-led innovation in rural areas through their national ERDF Operational Programmes. In many cases, more dedicated measures were established via regional Operational Programmes.

Austria is the only example – of the analysed countries - which targets rural innovation through CLLD in the Specific Objective 5.2 with an intervention on ‘*Smart regions*’, which target mountain areas with an intervention equivalent to approximately 7 million EUR (Box 6). Other dedicated measures are available in Lithuania, Romania and Spain to support **community-based services, social economy and local development initiatives**. However, none of these countries planned to use CLLD.

Box 6. Smart Regions Integrated Regional Development using CLLD

In the 2014-2020 period, the South Tyrol Region in Austria decided to implement CLLD under the Cohesion Policy to increase the cooperation among small-scale municipalities, reduce competitive thinking, and promote more integrated territorial development. The Austrian experience with CLLD revealed to be a **success** to the extent that the 2021-2027 (now) national ERDF Operational Programme in Austria designed a specific intervention on ‘Smart Regions’ using CLLD.

The current intervention targets **rural areas** and provide its supports along three thematic areas: i) **Cooperation** between local authorities and regional stakeholders; ii) **Climate change** interventions (e.g by sustainable energy and mobility solutions, resource efficiency, circular economy, regions and smart villages approaches, local and regional climate adaptation); iii) **Innovation-oriented local development**, in particular intermunicipal business locations (and complementary infrastructure), R&D, innovation and SME development and digitalization.

A local development strategy will be developed to guide the overall approach. Austria opted for multi-funded approach, with EAFRD being the lead fund.

However, all countries designed measures targeting rural innovation more broadly without using the CLLD approach. Most countries also designed interventions to innovation without targeting expressively rural communities. Digital connectivity and digital innovation, promotion of innovative SMEs and green innovation are the most planned interventions which could be exploited by rural communities. Mobility is also mentioned by some countries, though most often in connection to urban or functional urban areas

Other national and regional policies

National policies, strategies, plans and targets also contribute to defining the country’s approach to innovation, rural development and potentially community-led development especially in areas where national and regional governments have shared or exclusive competence (e.g. industry, digitalization, social and education policies). The Table below provides a (non-exclusive) list of policies identified via FUTURAL country experts and desk research.

Table 12 List of national policies and programmes related to innovation and rural development in FUTURAL countries

National and Regional Policies & Programmes	
AT	Digital and Innovation: Research, Technology and Innovation (RTI) Strategy 2030 - AplusB programme - Forschungsprämie - Austria Digital Broadband Strategy 2030 – Digital Austria Act - Future Fund Austria – Municipal Digitalisation Package –

	Digitalisation Fund – Klima- und Energiefonds Social: Austrian Youth Strategy at the Federal Chancellery Rural and Local Development: Austrian Spatial Development Concept (“ÖREK 2030”) ; EUSALP Strategy; EU Strategy for the Danube Region; Alpine Convention; Interreg Alpine Space
BE -FL	Digital and Innovation: Cluster Policy - DigiBank - 5G for smart communities – Flemish Smart Specialisation 2.0 Social: Caring Neighbourhood – Neighbourhoods on the Outside Rural and Local Development: Flemish Rural Policy 2024 – 2029 - Smart Regions Flanders – Blue Deal
BE -W A	Digital and Innovation: Digital Wallonia 2019-2024 - Plan de relance de la Wallonie - Plan Horizon Proximité – Wallonia Smart Specialisation Social: Stratégie wallonne de Développement durable Rural and Local Development: Déclaration de politique régionale (2024-2029)
GR	Digital and Innovation: National Broadband Plan 2021-2027 - Digital Transformation Bible 2020-2025 - National Growth Strategy 2018 Social: National Demographic Action Plan - National Strategy for Social Inclusion and Poverty Reduction - National Strategy for Sustainable and Fair Growth 2030 Rural and Local Development: National Demographic Action Plan - GR-eco islands - Fund for the Decarbonization of the Islands - Special Spatial Planning Framework of Tourism (under development)
LT	Digital and Innovation: Smart Specialisation – Innovation Reform - Law on Technology and Innovation of the Republic of Lithuania (2018) - Law on the Innovation Promotion Fund of the Republic of Lithuania (2020) – Kurk Lietuvai Social: Strategy for Demography, Migration, and Integration 2018–2030 - Rural and Local Development: n/a
RO	Digital and Innovation: Smart Specialisation - National Competitiveness Strategy 2021-2027 Social: National strategy regarding social inclusion and poverty reduction for the period 2022–2027 - Social Economy Law no. 219/2015 - Rural and Local Development: Law No. 156/2020 - National Local Development Program
ES	Digital and Innovation: Regional and National Smart Specialisation Strategies - Strategy for the Digitalisation of the Agri-Food and Forestry Sector and the Rural Environment - Plan Espana Digital 2025 Social: Comprehensive plan to promote the social economy 2024-2025 – Climate Change and Energy Transition Law - Estrategia de Movilidad Segura, Sostenible y Conectada 2030 Rural and Local Development: 130 Plan against the Demographic Challenge – General Guidelines of the National Strategy against the Demographic Challenge - National Food Strategy

Box 7. Community-Led Innovations from FUTURAL Countries

[Interreg Italia-Austria](#) is a cross-border programme for territorial cooperation. Since 2014, this programme has opted to finance small-scale and medium-scale CLLD initiatives through four projects ([Terra Raetica](#), [Wipptal](#), [Dolomiti Live](#), [HEurOpen](#)), for respectively 50,000 EUR and 200,000 EUR. Funding community-led initiatives was a novelty in Interreg programmes, and, given its success, has been continued in the 2021-2027 programming period. Eligible areas for

community-led projects include Areas covered include **tourism, culture, multilingualism, and smart villages**.

[DigiBanks \(Belgium\)](#) are local initiatives funded by the Flemish government to reduce the digital divide and support digitally low-skilled or low-income population into digital tasks. Since 2024, the Flemish Government funded more than 50 [DigiBanks](#) with a financial envelope between 350,000 euros and 500,000 euros (per bank). DigiBanks are run by local partnerships which can include local authorities, civil society organisations, local training providers and educational institutions, social economy companies.

[Association for Smart City \(and Smart Villages\) \(Romania\)](#)- is an independent NGO promoting the development of Smart City and Smart Villages across Romania. Since 2016, the association connects companies and professionals to cities and rural municipalities seeking Smart Solutions in their territory. This association proposes a **Smart Village Kit**, with solutions for local authorities covering the fields of Smart Governance, Smart Environment, Smart Mobility, Smart Economy, Smart Citizen and Smart Living. An example of Smart village project they are accompanying is in the [Snagov Commune](#) into the adoption of technologies for digital transition, economic dynamism and clean air transition.

[Spanish Network of Territorial Innovation Centres \(Spain\)](#) was launched by the Ministry of Ecological Transition and Demography in 2022. Operating at the provincial and multi-provincial level, these centres support the activation and development of rural innovation ecosystems. The Provincial councils oversee offering physical spaces and resources targeting rural innovation, set up annual activity plans and reports, facilitate the events and networking, whereas the Ministry provides the overall steering and coordination support. An example of territorial innovation centre is [CIT de Teruel - CIT de Teruel](#).

Policy (and Other) Factors slowing down vs. accelerating Smart Solutions

We asked the coordinators of FUTURAL MAPs what are the factors limiting or enhancing the adoption of Smart Solutions by rural communities. Factors were divided across six macro-categories (Table 13). As per political and legal factors, the FUTURAL MAPs suggested that the ones hindering Smart Solutions' adoption are the **limited capacity of local authorities** (financial, technical), **geopolitical instability** (and its repercussions on pricing, dependency along the value chains), and **excessive bureaucracy, outdated laws and inflexible regulations**. On the contrary, enabling factors are linked to the level of **democracy** and **community involvement in decision making**, as well as the appropriateness of **local governance structures** to ensure community engagement. Strategic autonomy in resource supply was mentioned as a factor to increase societal resilience.

Table 13 Contextual factors affecting smart community-led innovation in rural areas in FUTURAL Case Study areas

	Enabling factors	Hindering factors
Societal	<ul style="list-style-type: none"> • Quality Education³⁹ 	<ul style="list-style-type: none"> • Lack of diverse and skilled workforce • Limited local engagement • Less cohesive family & societal models

³⁹ Mentioned only by the Austrian MAP.

	Enabling factors	Hindering factors
Technological	<ul style="list-style-type: none"> • High speed internet • Digital skills 	<ul style="list-style-type: none"> • Low cooperation between communities/innovative actors and Universities/research centres • Poor digital infrastructure
Economic	<ul style="list-style-type: none"> • Economic benefits of Smart solutions on the economic sectors • Unfragmented Entrepreneurial - innovation ecosystem • Access to financial resources 	<ul style="list-style-type: none"> • Financial Constraints & high running costs • Limited Innovation Capacity • Affordability & Low-Income Levels
Environmental	<ul style="list-style-type: none"> • Circular resource use • Renewable energy sources • Urgency of climate situation 	<ul style="list-style-type: none"> • Ineffective management of natural resources
Political/ Legal	<ul style="list-style-type: none"> • Democratic political system • Community involvement in decision making • Local governance structures • Strategic autonomy 	<ul style="list-style-type: none"> • Limited capacity of local authorities • Geopolitical instability • Excessive bureaucracy, outdated laws, and inflexible regulations
Ethical	<ul style="list-style-type: none"> • People and nature before profit • Wellbeing and social justice 	<ul style="list-style-type: none"> • Loss of cultural heritage and knowledge • Decline of community values
Demographic	n/a	<ul style="list-style-type: none"> • Ageing population & Outmigration • Housing shortages

Source: Own elaboration.

5.3 Governance frameworks

Understanding governance frameworks is fundamental to **spotlight the background** within which certain policies occur. It provides discrimination **criteria** to understand why the same policies might deliver their divergent results according to the context (and not in others) (Nadin *et al.*, 2018). Factors such as institutional inadaptability or weak problem-solving capability can be at the root causes behind rural stagnation (Sarkki *et al.*, 2025). The EU has developed a range of tools to develop multilevel governance frameworks such as the previously cited Better Regulation Guidelines, themselves the result of prior inter institutional arrangements (European Commission, 2018a; 2018b; Committee of the Regions 2009; 2024).

In this chapter, we analyse how national governing structures and processes relevant to rural innovation are shaped across the FUTURAL countries. Without much surprise, **governance frameworks across these EU countries are often quite diverging and changing over time**. These frameworks emerge from the continuous **interactions** between institutional and non-institutional actors (Filgueiras *et al.*, 2023). **State traditions** provide rules within which national and sub-regional governments operate, both in terms of limits and opportunities (Loughlin *et al.*, 2012). The organization of **non-state actors** (e.g. NGOs, private actors, civil society etc.) and their evolving interrelations with state actors (e.g. hierarchy, networks, structures) also shape political decisions and their implementation (Meuleman, 2011).

The FUTURAL countries provide a diverse set of institutional frameworks which includes **2 Federal States** (Austria and Belgium), **2 Decentralised states** (Greece and Spain), and **2 Centralised states** (Lithuania and Romania). The table below synthesizes institutional and administrative frameworks governing the FUTURAL countries. It also compares at what level (State, regional, municipal) relevant policies are discussed. It is worth noting that the level of governance complexity is only partially conveyed by the institutional framework, but yet more practically throughout the administrative organisations of the country and their historical developments.

Table 14 Comparison of Institutional and Administrative Frameworks in FUTURAL Case Study countries

	Austria	Belgium	Greece	Lithuania	Romania	Spain
Institutional Framework	Federal state	Federal state	Decentralised state	Centralized state	Centralized state	Decentralised (regional) state
Administrative Levels	3 Levels State, Länder, sub-local	6 federated entities (3 regions, 3 communities), provinces and municipalities	4 Levels State, Decentralised regions, regions, Municipalities	2 Levels State, municipalities	3 Levels State, counties, municipalities - towns - communes	3 Levels State, Regions, local
EU Entrance	1995	1958	1981	2004	2007	1999
Competence level						
CAP, Rural Development (incl. LEADER)	State & Länder	Regions	State, Regions	State, Municipalities	State	Regions
Regional Development (incl. CLLD)	State & Länder	Regions	State, Regions	State Municipalities ⁴⁰	State, Counties	State, Regions
Digital Policies	State	Federal, Regions, communities	State, Regions	State	State	State, Regions
Social Policy/ Social Innovation	State (Länder) level; varies by state	Regions, Communities	State, Regions, Municipalities	Municipalities	Counties, Municipalities	State, Regions
Power Distribution						
	Länder have significant influence over territorial	Regions play a crucial role due to federal structure	Central government holds primary authority, with regions	Centralized decision-making with some regional implementation	Regions have substantial autonomy in rural development	Autonomous communities have essential duties in policy making &

⁴⁰ As per local development.

	development policies		implementing policies			implementation
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Source: Own Elaboration based on inputs from Loughlin et al., 2012.

As illustrated in the Table above, **Greece and Lithuania** are the two countries where the central government has the highest power in terms of policy making and implementation. Other countries rely on a more decentralised system, where regions and sub-level authorities have a stronger role both in theory and in practice.

Country institutional frameworks have a direct effect on the effectiveness and efficiency of **multi-level governance**. As argued by Leonardi & Nanetti (2011), federal states (e.g. Austria) and asymmetrical states (e.g. Belgium) scores better in implementing multi-level governance management and partnership approaches in Cohesion Policy than centralised countries (e.g. Lithuania, Greece, Romania) or regionalised states. Federal and asymmetrical states achieve better multi-level governance engagement and built-in relationship for decision making between institutions and other actors (Figure 7).

Member State Structure Functions of Management Authorities	Federal	Regionalised	Asymmetrical	Centralised
a) Management of Operational Programmes	Concertation	Coordination	Adjustment	Feed-back
b) Definition of nature of partnership	Equal status	Consultative	Differentiated	Top-down

Figure 7 Conceptual framework of Multi-Level Governance in Cohesion Policy. Source: Leonardi & Nanetti, 2011.

Country Governance and Evolutions

Austria is a leading example of a **multi-level and decentralised** governance model based on the cooperation between three levels (State, 9 regions/Länders, sub-local level). Policy making for rural areas – both the CAP and other EU Structural and Investment Funds - is under the competence of the Ministry of Agriculture, which has existed in this form since February 2000. This Ministry has a specific unit dealing with [Innovation, Local Development and Cooperation](#). For the 2021-2027 period, Austria shifted to a single National Cohesion Policy Operational Programmes (instead of 9 regional ones) to increase efficiency, though multi-level coordination is expected to be maintained.

In Austria, the Federal Constitution and Article 15a of the Federal Constitutional Act Agreement provides for the division of legislative, executive and financial duties between the federal government and Länders. Länders are granted a **degree of autonomy**, including their own separate financial management and the right to levy taxes, broad spatial, territorial development and innovation strategies at their regional level (Keuffer & Lander, 2021). Each Länder has a distinct **regional development agency** to support their strategies. Since the 1980s, Austria pursued a territorial development policy based on endogenous local development (**Fund for Endogenous Local and Regional Development**). This evolved into the LEADER initiative and increasingly focused on innovation since the 2000s (Lukesh, 2000). Municipalities are independent and self-organising economic entities, and neither their population nor their size influence the scope or number of their tasks (Neugebauer & Stroissnig, 2021). **Local**

Development Agencies bring together local actors and facilitate access to funding programmes (Neugebauer & Stroissnig, 2021).

Since 1970, **Belgium** also transitioned to a federal state but – *compared to Austria* – it is characterised by one of the **most complex administrative structures** in the EU. Belgium consists of 6 federated entities (3 regions, 3 communities) – with 5 governments and 5 parliaments. Belgium is the only country in the world where an ‘**equipollence of norms**’ applies among communities, regions and the federal state (Halleux & Lacoere, 2023). Another specificity of Belgium is that **territories** covered by regions and communities overlap each other. Yet, the difference stands in the **policy competences** they deal with. Notably, communities are mostly responsible for linguistic and societal policies, whereas regions cover economic and territorial policies. Since the 1988-89 constitutional reform, local territories follow the provisions of **regional legislative frameworks** (Flanders, Wallonia, Brussels). In practice, this means that different rules apply to municipalities and provinces within the same country, as their organisation, responsibilities and finances depend on different regional policies (Halleux & Lacoere, 2023). **Intermunicipal cooperation** and intermunicipal companies (*intercommunales* in both French and Dutch and *interkommunale* in German) are widespread in rural development matters.

Greece is a decentralised parliamentary republic in relatively recent times. Two administrative reforms powered this transition at national level. Namely, the **Kallikratis Plan** (Law 3852/2010) which led to the merging of communities and small municipalities into bigger administrative units, and the **Cleisthenes Reform** (Law 4555/2018) which reviewed the electoral system and addressed the overlap and unclear assignment of functions across the different levels of governance (OECD, 2020). Despite these reforms defining a transfer of competencies towards regional and local governments, the practical divisions of roles remain unclear and sometimes overlapping (Hlepas, 2020). Furthermore, the country failed to couple **administrative with fiscal decentralisation**. This makes Greece as one of **the most centralised OECD countries** with **local and regional authorities** mostly dependent on the central government revenues (OECD, 2020). The 2007-2017 financial crises worsened the government revenues, with a knock-on effect on central government transfers to subnational levels (Chrysomallidis, & Tsakanikas, 2017; OECD, 2020). In 2021, the country raised the number of municipalities to meet their demand to have better administration and less area to manage (Law 4804/2021; Lada & Manos, 2021).

Since the dissolution of the URSS in 1990, **Lithuania** became a **highly centralised state** with two administrative levels (the State and municipalities). Since 2010, there are no corresponding administrative units for regions and counties, and their duties were transferred to the central government and Regional Development Councils (the latter ones consisting of municipal representatives were created in 2020) (Burinskienė, 2022; Blöchliger & Tusz, 2020). In its Constitution, the country proclaims the ‘**right of local self-government**’ which stipulates local authorities with the right to regulate and manage public affairs in the interests of the local population (Council of Europe, 2018). This right also establishes the **no-subordination of municipalities** to state institutions. Furthermore, municipal councils have the right – if needed – to set up smaller institutions for local territorial administration (**eldershops**). Eldershops are quite present in rural areas. Despite this right, local governments mostly depend on tax transfers from the central government, making them practically tight to State provisions.

Romania is a semi-presidential republic divided in three administrative levels (State, regions, municipalities). The **local level** comprises 2862 communes, 216 towns and 103 municipalities (cities). It is worth noting that, in Romania, the eight development regions (NUTS2) are not administrative territorial units and have *no legal status*. Therefore, **the Regional Development**

Council and Regional Development Agencies are the Managing Authorities of regional policy. Furthermore, Romanian Communes, Towns and Municipalities (local level) do not correspond to the EU territorial subdivision of **Local Administrative Units** (LAU) 1 and 2 Runceanu, 2022).

Spain became a decentralised state in 1978. The country is composed of three levels of governments (state, regions, local) and all levels enjoy autonomy in the management of their interests and duties (Art. 137, Spanish Constitution). Since its inception, the **17 Autonomous Communities** (regions) were left with large freedom to adopt their own model in terms of policy competences and fiscal autonomy. This led to an **asymmetrical decentralised system** in terms of regional functioning, where only the parliamentary structure is kept the same. Additionally, although the role of regions was strengthened in recent decades, their capacity to impact national legislation is more limited than in other federal states (De Gregorio Hurtado & Tomàs, 2022). At local level, two important legislative frameworks are the **Local Government Law** (Ley Reguladora de las Bases del Régimen Local, 1985), listing the general provisions linked to local government organizations and duties, and the **Law on Local Finances** (Ley Reguladora de Haciendas Locales, 1988) setting up the economic resources of municipalities and provinces (Del Pino & Colino, 2024). The Local Government Law allows Autonomous Communities to establish special regimes for small or rural municipalities.

Local Governments

Local governments are the closest administrative and political level to citizens. Their action is essential to deal with the impacts that global changes have on people. Local governments are particularly relevant in areas in rural and remote areas, as they ensure provision of essential services and infrastructure in areas where the private sector would not intervene (ESPON DESIRE, 2025). However, the **capacity of local governments** to act is dependent on several factors such as the **competences and responsibilities** it has, its **size**, and **local autonomy**. These factors are generally defined by national legislation and therefore differ across countries. Table 15 provides a comparison of some of these factors across our Case Studies Countries.

Table 15 Local administrative units and local government competences in FUTURAL countries

	Local units	Local government competencies	Local Autonomy Index ⁴¹
AT	2095 municipalities	Traffic and transport, gas, water and electricity supply, waste collection, sewage disposal, social welfare/education, culture and sport.	Medium-high (but decreasing)
BE	581 municipalities	Local public affairs, social welfare- services, education, local police. Higher authorities might ask to perform additional tasks.	Medium-High
GR	332 municipalities divided in 947 municipal units & 6103 communes	Housing, infrastructure, community amenities; environmental protection; education; recreation, culture; social protection; health; economic affairs & development; public order & safety; general public services.	Slightly above mean

⁴¹Local Autonomy Index 2.0 Mean Value (2015-2020): Ladner *et al.*, 2021. Mean value: 21.42. Country mean values: AT (24.31), BE (22.22), GR (23.71), LT (23.04), RO (18.31), ES (26.45).

LT	60 municipalities	46 independent functions (education, social services, area development etc.) and 40 State-delegated functions	Slightly above mean
RO	2862 communes, 216 towns, 103 municipalities	Housing, town planning; environmental management, waste management; local transport; water & electricity; public health; education; cultural heritage; public order emergency; public/green areas management.	Low
ES	8131 municipalities	Defined by each Autonomous Community	High

Source: Own Elaboration.

The number of local units differs strongly across countries and is not related to the country size but rather the consequences of country historical evolution and administrative re-organisation. At the two extremes we can observe Austria - a small country with a high number of municipalities- and Greece - a big country with few local units.

Local government competencies also vary across countries. In most cases, local government deals with competencies which lie into the ‘**communal interests**’ such as duties related to town planning, village and local resource management, and social services provision. Local economic matters are not always under the competences of the Local Government. Furthermore, digital connectivity and digitalization policies are often addressed at supra-local level except for lower-level digital education and digital awareness programmes.

The concept of **local autonomy** relates to the capacity of local governments to undertake independent and implement decisions independently, and it is a feature of good governance. The Local Autonomy Index 2.0 measures local autonomy along seven dimensions⁴² (Ladner *et al.*, 2021). In aggregate terms, **Romania is the least performing within the Local Autonomy Index 2.0** (Table 14) and below the country average in four out of the seven dimensions of the index (Table 15). However, other FUTURAL countries have below-mean scores especially on the Policy Scope and Non-Interference Dimensions (Table 15). **Financial autonomy of local governments** – often due to high dependency from central government’s transfers – is relatively low in Lithuania and Romania (Table 16).

Table 16 Local Autonomy Index 2.0 for FUTURAL Case Study Countries

	Legal Autonomy	Policy Scope	Political Discretion	Financial Autonomy	Organisational autonomy	Non-interference	Access
AU	67	43	57	62	63	67	100
BE	100	50	56	74	75	26	33
GR	83	40	61	63	48	89	67
LT	78	59	70	35	75	50	100
RO	100	46	51	37	71	39	33

⁴² Legal autonomy (The legal status and protection of local governments), Political discretion (Formal distribution of power and the effective decision-making competences with respect to services delivery), Policy scope (scope of services for which local governments are responsible), Financial autonomy (financial resources available and the possibility to decide on their sources), Organisational autonomy (free organisation of local political arenas and administration), Non-interference (Liberty left by higher levels of government in their control), Access (degree of influence of local governments on political decisions at higher levels of government). [The Concept of Local Autonomy](#).

ES	100	35	48	74	73	83	100
Mean (N=57)	72	48	50	53	71	57	64

Source: Ladner et al., 2021

The alignment between municipal size, capacity and level of financial autonomy was found as problematic in several countries. For instance, in Austria, duties of local authorities are not weighted to the size of local governments (**‘principle of municipal uniformity’**). This means that bigger and small local administrative units are both due to perform similar functions regardless of their surface or population size, or revenues (Kössler et al., 2024; Schantl et al., 2021). Similar cases are the ones of Lithuania and Greece, where local government revenues are strongly dependent on money transfers from the central state.

Non-institutional Actors and Networks

In-depth policy analysis requires an understanding of non-institutional actors and networks relevant to a given issue. Such actors might have different interests and therefore pursue advocacy actions to support their cause, being the **beneficiaries** of a certain policy, **knowledge actors** or **wider community** (Pazos-Vidal & Lostrangio, 2024). Besides being outside the public institutions, non-institutional actors can influence decision-making. Table 17 outlines the most relevant non-institutional actors and networks supporting rural innovation at the level of FUTURAL countries.

Table 17 Relevant non-institutional actors and networks in FUTURAL Case Study Countries

	Austria	Belgium	Greece	Lithuania	Romania	Spain
Rural Networks	Zukunftsraum Land network, LEADER Forum, LAGs	Flemish Rural Network, Walloon Rural Network, Landelijke Gilden, Association of Flemish Cities and Municipalities, LAGs	Greek National Rural Network, LAGs	National Rural Network, Lithuanian Rural Communities Union, LAGs, Network of Sustainable Greek Islands	National Rural Network, Romontana, Romanian Association for Smart City and Mobility LAGs	Red Rural Nacional, Red Espanola de Desarrollo Rural, Red Estatal de Desarrollo Rural, Federacion Espanola de Minicipios y Provincias
Innovation Networks	Federal Institute of Agricultural Economics, Rural and Mountain Research, Digital Innovation Hubs	Innovatiesteunpunt vzw, RURANT vzw, ILVO, INAGRO, Digital Innovation Hubs, Digital Wallonia Hubs	Open Technologies Alliance, Digital Innovation Hubs	Innovation Agency Lithuania, Lithuanian Innovation Centre, Lithuanian Space Science and Technology Institute, Digital Innovation Hubs	Agency for Financing Rural Investments, CEMONT, Digital Innovation Hubs	Centro para el Desarrollo Tecnológico y la Innovación, Red.es, EEN Spain, Cotec Foundation, Fundacion CTIC, Digital Innovation Hubs

Source: Own Elaboration.

Additionally, FUTURAL Pilot Regions performed detailed stakeholder mapping within their territory within the specifics of the [thematic areas](#) covered by their Smart Solutions. This analysis underlines motivations, incentives and barriers to build a stronger rural innovation ecosystem in the FUTURAL Pilot Regions.

The **most relevant reasons to proceed with Smart Solutions** are interest in making the region future-proof, increasing territorial coordination, increasing business opportunities and attracting new entrepreneurs, enhancing societal wellbeing and reversing negative trends in rural areas.

In particular, the representatives of FUTURAL MAPs said **smart community-led innovation can contribute to addressing 13 different issues affecting rural areas** (Figure 8). These issues cover a wide variety of trends spanning across demographic, environmental and socio-economic ones. Above others, FUTURAL MAPs stressed the added value of Smart Solutions to address **demographic loss** and **increase management of natural and physical assets and infrastructures**.

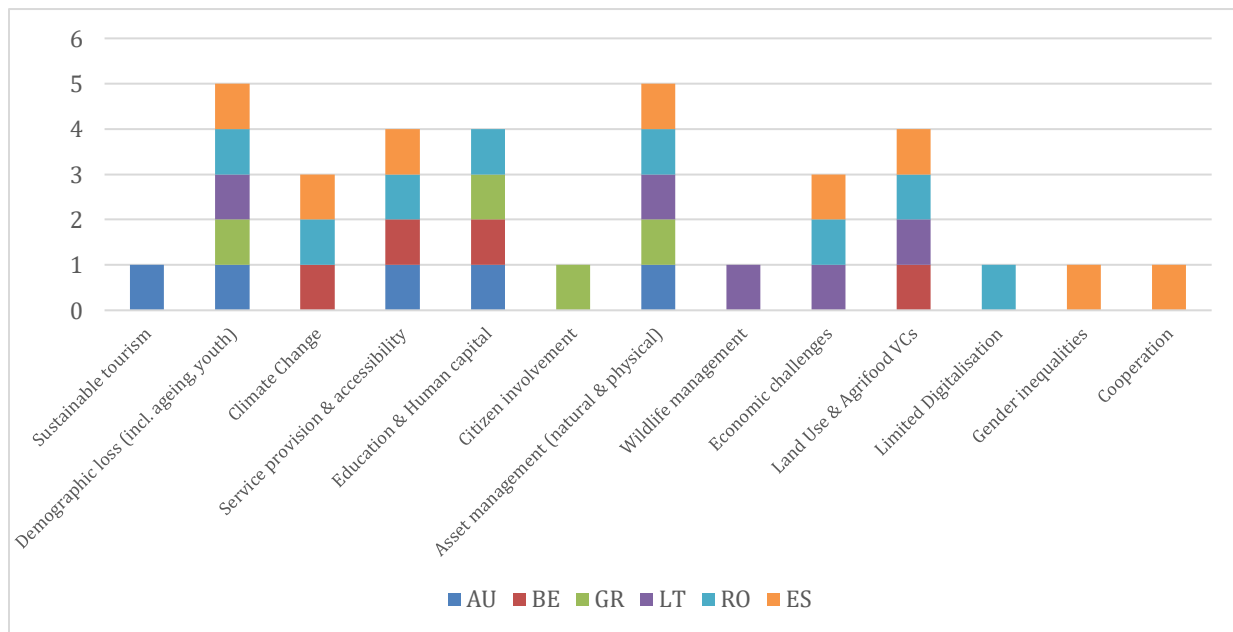


Figure 8 What is the critical issue(s) affecting the rural territory in your country for which smart community-led innovations could bring a valuable contribution? (N=6). Source: Own elaboration.

In terms of **barriers**, FUTURAL Pilot Regions underline that the lack of technical skills and financial resources often acts as a **main hindering factor for all actor groups**. Additionally, limited time availability, market competition and bureaucratic hurdles are other **major issues for professionals and the private sector**. When it comes to **communities and individuals**, one of the main barriers are low digital skills, the lack of formal recognition, and some resistance to change. The lack of integrated strategy to bring together all stakeholders was also found as problematic.

FUTURAL Pilot Regions also identifies **several incentives to encourage rural actors** to engage into rural community-led innovation. These incentives go from **incentives for municipalities and public actors**, such as offering cost reduction option for municipalities, to developing new project ideas and networking opportunities; **incentives for innovators, entrepreneurs, communities and farmers**: increasing financial aid (especially to kick-start projects and reduce the risk of initial investments costs), offering more training programmes, providing more supportive measures to facilitate startup in rural areas (e.g. business development support, differentiate fiscal regimes), indirect personal incentives (e.g. enhanced career or sales); **incentives for the community**: local

development funds and innovation grants or scholarships, community support grants, increase recognition of community results, social care services, community engagement measures.

5.4 Perceptions and Positions on Smart Rural Communities

In this section, we present the findings that emerged from the **consultation with representatives from the FUTURAL Multi-Actor Platforms (MAPs)** and **interviews with external actors**. We investigated how these actors perceive community-led innovation for smart rural communities. We queried their understanding of the concept, added value to solving pressing issues, and policy gaps and recommendations. This section summarizes the contribution from the FUTURAL MAPs and the results from interviews with 39 external actors.

Understanding the concept

Respondents – regardless of their background or profession – have a similar understanding of smart community-led innovation. This concept was mostly described as a **process/methodology** to increase the quality of life in rural areas, enhance rural attractiveness and deliver economic opportunities in these territories. To be functioning, **local participation** and the **bottom-up approach** shall be the core of this process. Additionally, respondents underlined the need for **strategic vision** (e.g. local or smart development strategies) to ensure that innovation is fit to community needs and it goes beyond individual projects to unleash wider territorial development. Community-led innovation ranges from digital innovation to traditional approaches, social and other forms of innovation.

Digital skills and connectivity are important for reviving rural dynamism and unlocking new opportunities. However, smart rural communities go well beyond the digital dimension, and the technology should not be seen as an end to itself. Some respondents mentioned potential risks related to digital exclusion, overreliance on digital solutions, excessive costs of technology, ownership and control, data protection and security, resistance to change. **Innovation** is understood as a related concept, which depends on the place, community and time.

A few respondents reflected on the meaning of ‘**community-led**’. One respondent stressed that community **could be seen as a more contested concept**, being used to convey a positive image of certain projects or policies, but in practice, it is very hard to define a community and ensure that communities are representative of a broader population. Other respondents positively acknowledged a raised interest in community-led initiatives by scientists and policymakers, yet warming to the fact that community is not a unique persona but could gather different and conflicting perspectives.

Community-led innovation addresses rural challenges

Community-led innovation was mentioned as beneficial to many sectoral areas. Respondents could easily come up with illustrative examples ranging across health, ICT, agrifood, tourism, innovation, energy, water and waste control and management, transport, e-government.

Box 8. Community-Led Innovations Around Europe

[ACRE Network](#) (United Kingdom) has assembled rural community support charities since 1920. This network supports community-led initiatives through small-scale funding coming from the UK Government’s investments. Every year, the network lever over £40 mln to support rural

communities. The innovative model of this network relies on their distributed governance relying on over 1,100 staff members and reaching over 28,000 community groups or organisations annually.

With approximately 100 inhabitants, the [Orexa energy community](#) is the small village of the Gipuzkoa province (**Basque country, Spain**). Located in a mountainous area, this community decided to develop its legal energy community to achieve energy autonomy. Today, 70% of the energy is produced locally and the most vulnerable households are the priorities to benefit from economic energy savings. This project did not benefit from LEADER or other funds, but it relies on the determination of citizens and the local mayor.

[Co:worx \(Ireland\)](#) is a community-led remote work and enterprise hub for rural innovation. Co:worx is part of the National Hub Network, an interdepartmental initiative of the Irish Government, which seeks to develop an integrated ecosystem of remote work hubs across Ireland. The expansion of this network aligns with national policies to support the revitalisation of towns and villages, including Making Remote Work, Our Rural Future, and Town Centre First. Co:worx serves remote workers and private actors (start-ups, SMEs) by offering workspace, training, and business development support.

The [Smart Villages for Tomorrow \(Slovenia\)](#) was an interregional cooperation project carried out by 5 Local Action Groups aimed at addressing out migration and ageing in rural areas. Rural villages of these networks question themselves around the concept of 'Smart Villages' and developed Smart Solutions to help elderly and youth people to have better living in these areas. Examples of solutions include *do-it-yourself informal socializing programs, knowledge transfer workshops from the elderly to the youth, smart mobility solutions for elderly people, and self-care solutions for the elderly.*

The [Innovation Center for Rural Areas](#) in Southeast Skåne (**Sweden**) connect rural entrepreneurs with academic actors and other support system, which is often a big barriers for isolated entrepreneurs located in rural areas. Besides this, the centre also provides counselling, facilitate networking opportunities and participation at events, support idea generation.

Other Community-Led Innovations are available at: [Smart solutions – Smart Rural Areas](#) (Smart Rural 21 website), [FUTURAL](#), [SMARTERA](#), [RURACTIVE](#).

Policy perceptions, gaps and needs

The narrative around rural policies have improved considerably in the past years, a few respondents said. Rural areas are not considered anymore as lagging regions – requiring compensatory measures – but active contributors to wellbeing and socio-economic dynamism. This is perceived as a notable step forward.

Policies such as the Rural Development Policies and the LEADER programme are seen as the primary policies to boost community-led development in rural areas. Several respondents also mentioned the Long-Term Vision for Rural Areas and Smart Village initiatives as enabling frameworks for rural innovation. Other sectoral policies were found to be directly linked to enhance or hinder innovation such as the EU Data Strategy, Interoperable Data Act, Smart Specialisation Strategy, Connecting Europe Facility.

In particular, the LEADER programme was often referred to by respondents as the best-known example of effective policies at local level⁴³. Yet, as said by some respondents, the 'innovative part' is not a mandatory component of LEADER but strongly dependent on the Local Development Strategy of the area. Some actors suggested LEADER should evolve to finance more innovation, while others disagreed with this. Respondents also highlighted some limits of LEADER, such as the fact that this is not available in all rural areas, and it does not allow us to finance cross-border Local Development Strategies and LAGs, whose added value would be seriously relevant for many cross-border and mountain communities. In addition to those shortcomings mentioned in the interviews, the European Court of Auditors reports the lack of sufficient evidence to claim its additional benefits of the LEADER programme⁴⁴.

Overall, current policies and policy instruments are felt as inadequate to support innovation and rapid changes in innovation trends. In rural areas, inflexible and outdated laws hinder innovation by creating legal barriers that delay or prevent the adoption of new technologies and business models. For instance, the design of current policies and initiatives is often unsuited to allow **innovation procurement** (e.g. in LEADER). **Some respondents also said that programmes are often urban centric and hence fail short to address rural needs.**

At both the EU and national levels, rural development policies are perceived as not very well aligned with industrial policy or innovation policy, and mostly urban centric. Rural innovation often refers to more traditional sectors (e.g. food and tourism) but it fails to adopt a more holistic approach (e.g. including entrepreneurship, broad innovation). In addition, digitalisation policies have significantly evolved since the COVID period, yet they need to be integrated into wider community innovation and long-term development not to become an end to itself. Policy on remote working, education and skill development have yet to be fully fledged to enhance innovation in rural areas.

At EU level, respondents mentioned that most interventions planned through Cohesion Policy and Smart Specialization Strategies are territorially blind since EU Member States do not use territorial codes. These codes have exponentially grown from 4 in the 2014-2020 period to 33 in the 2021-2027, leading eventually to too much complexity.

Respondents also mentioned that current governance models are inadequate to get views from larger pools of the rural community, both at the EU and country/local levels. Poor implementation and lack of proper support to sustain local actors undermine the effectiveness of policies and programmes. Additionally, interest groups or usual suspects participate in decision making, defending their own interests rather than the interests of the wider community. In these dynamics, the youth and civil society representatives are insufficiently involved. In some cases, the key issues around non-participation is due to the lack of skills: technical skills, innovation skills, administrative skills, community involvement skills etc. Advisory actors, such as the Local Actor Groups, or other networks were particularly praised in their role of increasing the capacity of communities.

Some respondents stressed that local authorities are not sufficiently involved in the discussions before policies are adopted (both at national and EU levels). Yet, they are the ones mostly responsible for implementing policies and dynamizing local territories so their opinions should not be overlooked. Furthermore, **some respondents signalled the need for**

⁴³ Benefits of LEADER have also been evidenced by the EU CAP Network. [Assessing the added value of LEADER | EU CAP Network](#).

⁴⁴ [Special Report 10/2022: LEADER and community-led local development facilitates local engagement but additional benefits still not sufficiently demonstrated | European Court of Auditors](#).

more capacity building for people, Local Action Groups and businesses. Rural areas lack people who can guide on the adoption and use of Smart Solutions. This role could be taken by Local Innovation Advisors.

Respondents also highlighted that calls for projects and funds are somehow unfit for the needs of communities in both their content, structure and administrative process. In most cases, the complexity of the calls, evaluation and implementation process act as an (unwanted) discrimination criteria to exclude communities. Competitive grants imply limited and selective accessibility to funds especially for communities or actors relying on volunteers rather than paid workers. Existing calls often target bigger than small projects, hence reducing the capacity of communities to participate in such calls for projects. In addition, calls for continuously asking for 'new ideas', pushing actors to either give them up ongoing projects or rebranding them, instead of focusing on the 'user-driven' and 'community-led/supported' dimensions of innovative ideas, or on their consolidation and growth of successful innovative ideas.

Finance was not an issue for some respondents but yes for others. The discontinuity of funds or delay in payments (e.g. the 6-month gap for the EU Structure Investment Funds) reduce community participation in public calls or cut the funds before solutions achieve marketability or readiness for implementation. Foundations were mentioned as an important actor in supporting rural communities and innovation practices.

Recommendations from actors

Interviewed actors called politicians to enhance political support and investments targeting community-led innovation. First above all, the LEADER programme should be continued and reinforced. Some actors asked to increase cross-border dimensions and internationalization of the LEADER, as they both fuel knowledge transfer and innovation. Some respondents suggested that, in the next programming period, Local Action Groups should focus only on their core functions (setup the strategy, select project and animate the community), whereas administrative functions should be performed at upper levels. This change would increase the added value of LEADER in targeted areas.

Simplification of rules and regulatory frameworks was mentioned at several instances. Respondents called for the removal of unnecessary governance layers and less inconsistent policies. A degree of flexibility was mentioned as a solution to overregulation, which is often slowing down innovation.

Policies should embed more measures to support innovative procurement (rather than penalize it), and they **should privilege funding to the innovative ecosystems or strategies**, rather than just on individual projects. For instance, investments in third place or long-term community building were considered as bringing more sustained benefits to local communities than one-shot solutions. Respondents called for more physical places where the community can meet, and innovation would happen, also allowing greater interactions between private actors and communities. Funds should also offer targeted support to the different phases of innovation.

Respondents also advocated more funds and smaller scale reaching rural areas and investing in 'broader' innovation (beyond agriculture). At present, most funds for innovation are not territorially targeted and end up in urban areas, nurturing the vicious cycle of development traps and geography of discontent. Further, small-scale investments are the most suited to ensure the participation of rural communities.

6. Conclusions and Initial Recommendations

Rapid (and less rapid) demographic, green, and digital changes are driving communities to develop their own innovative solutions (technological, social, economic, or organizational ones) **driven by necessity**. This is particularly true in rural areas, where public action is often lacking or limited, and market intervention is not financially viable. **In the EU, community-led solutions are a European public good**, as – by providing essential goods and services for rural and non-rural communities- **they can unlock greater value on societal well-being, institutional trust, as well as innovation and competitiveness across Europe**. Community-led solutions enable rural communities to pursue the **EU Right to Stay** and contribute Europe to **tackle the geography of discontent**.

Community-led innovations span across sectors – such as energy, housing, essential services, waste and water management – and contribute to addressing Europe’s roots of widening territorial disparities. Community-led solutions are also **more effective than top-down solutions** as they respond to community needs and they are more likely to rely on community engagement and adoption. **The right mix of policy and governance mechanisms can facilitate these initiatives to set up, grow and evolve over time**. By supporting these initiatives, policy makers can drive **place-based innovation** and address unmet needs even in those areas where their actions do not arrive. They can reach vulnerable communities and enhance societal cohesion, renewing a sense of community belonging and governmental trust. Additionally, governance frameworks influence design, delivery and evaluation of policies and policy instruments, and they allow for more fruitful collaboration and knowledge sharing between State actors and civil society in rural areas.

In the FUTURAL Policy report, we analysed approximately 100 EU policies and governance mechanisms and how they support community-led innovation in rural areas. We also looked at the experience of **six countries**: (Austria, Belgium, Greece, Lithuania, Romania, and Spain), and carried out in-depth interviews with local actors to get their views on **how policy makers could improve their support for community-led innovation**. **On the basis of our findings, we drafted our initial recommendations** which were discussed and validated with more than 200 actors among policy makers, rural actors and representatives in May 2025 at the [EU Rural Innovation Forum](#) and [Policy Webinar](#).

Take-aways on policy:

Multi-Level policy landscape: Rural innovation is influenced by policies competences both at EU (e.g. CAP, Cohesion Policy) and Member State levels (e.g. education, industry). At EU level, the CAP and Cohesion Policy are the two main policies providing for rural innovation. At the same time, policies on sectors such as education, industry or health depend fully on Member States.

Cohesion Policy's significant role: Contrary to common perception, Cohesion Policy allocates more funds to rural development beyond farming than CAP Pillar II. Notably, Cohesion Policy planned €45.6 billion for rural policy beyond farming which is more than the rural development policy itself (CAP Pillar II, €24.6 billion) (2021-2027 period) (EC, 2024a; Kah et al., 2020). Yet, community-led initiatives benefit more from LEADER under CAP (2023-2027, €7.7 billion), than via CLLD in Cohesion Policy (approx. €375 million via ERDF and ESF+, 2021-2027). Evidence from analysed countries seems to show that a lack of CLLD earmarking in Cohesion Policy (compared to CAP) seem to make Managing Authorities more reluctant to define such support.

LEADER's popularity and limitations: the LEADER approach is highly valued for community-led development thanks to its integrated and place-based approach but faces some challenges. In addition to the challenges in defining and measuring innovation, LEADER encounters structural and bureaucratic limitations and its eligibility does not cover the entire EU territory. LEADER criticisms from the EU Court of Auditors should equally be truthfully addressed (EU Court of Auditors, 2022).

Smart Villages, an untapped potential: Since 2021, the Smart Villages instrument offers a targeted approach for community-led innovation within both CAP and Cohesion Policy. Thus far, five EU Member States have designed dedicated Smart Village interventions into their CAP Strategic Plans, and 18 countries have opted to support Smart Villages through LEADER. By 2029, a total of 2,624 Smart Village projects and strategies are anticipated under CAP Pillar II (Result Indicator 40) (Makrandreou, 2025). However, the overall uptake and budgetary allocation of Smart Villages remain limited. Member States have been reluctant to assign ambitious budgets or targets for Smart Villages, and there are no figures on the uptake of Smart Villages within the Cohesion Policy's Operational Programmes.

EU rural Innovation can be supported beyond CAP and Cohesion Policy: Rural innovation can be financed by sectoral programs beyond rural and territorial development policies, like Horizon Europe, the New EU Bauhaus, the Digital Decade Programme, the Social Economy Action Plans, Social Climate Plans. However, these policies are often spatially blind (not specifically targeting rural areas) or not aimed at bottom-up community initiatives (due to excessive bureaucracy or competition, and larger funds being less accessible to local communities).

Lack of specific national strategies: most analysed countries lack dedicated policies for community-led innovation, which is often embedded within broader digital, social innovation, or rural development policies.

Policy misalignment: Rural development policy is often poorly integrated with industrial and innovation policies at both EU and national levels, leading to interventions that are not specifically targeting rural areas and less effective interventions.

Take-aways on governance:

EU governance mechanisms exist: At EU level, Treaties and Fundamental Principles are explicitly supportive of providing a special attention to rural areas, and they implicitly support the notion of community-led innovation. However, policies for community-led innovation are not exclusively an EU competence but rather the result of collaboration with EU Member States. In our report, we mapped 55 EU-level governance mechanisms through which communities can engage into EU-level policy making to ask support for community-led innovation.

National governance variations: At the national level, factors influencing a country's support for community-led innovation include the level of state centralization, the historical evolution of country multilevel and horizontal (cross sectoral) governance, and the financial autonomy of local governments. Countries with high decentralised systems (e.g. Austria) or asymmetric governance frameworks (e.g. Belgium) rely on more built-in options to include multi-level actors than centralised or regionalised states.

Local governments are crucial but constrained: Local authorities are the closest tier to citizens, especially in more remote rural areas, cross-border, mountain territories and islands. Nevertheless, the action of local governments is strongly limited by high financial dependency from central governments (e.g. Lithuania, Greece), which hamper them from focusing on broader territorial development tasks. Other factors that limit the capacity of local authorities are an imbalance between local duties, the size of the municipality, its financial capacity (e.g. 'right on municipal uniformity' in Spain), lack of technical capacity, geopolitical instability, excessive bureaucracy, or rigid regulations.

Civil society actors: Rural movements and networks play an essential role to spark, drive and implement innovation in rural areas. Ranging across village and regional associations, development trusts, social enterprises, community councils, local partnerships, and national and European rural parliaments, should be recognised as essential components of rural governance.

Technical and financial needs: even though community-led innovation provides added value in 13 rural development areas (*see full report*), the lack of technical and financial resources are the main barriers to kick-start community-led innovations.

FUTURAL Initial Recommendations

1. Formally recognise the transformative impacts of community-led rural innovation in providing sustained wellbeing and innovation in the EU.

Community-led innovations have a critical transformative potential in rural areas⁴⁵ across EU strategic and high-value sectors (e.g. energy communities, circular economy initiatives, community-based care services, mobility) (Diercks & *al.*, 2019; ECOLISE, 2024; Penha-Lopes & Henfrey, 2019). Community-led innovations increase socio-economic and environmental resilience of rural areas, the security and wellbeing of their communities despite often relying marginally (or not at all) on public money support. Therefore, we ask the **European Commission to issue a communication on the relevance of community-led initiatives** to pursue Right to Stay and no-one left behind principle and achieve Europe's ambitions on innovation and wellbeing.

2. Mainstream political & financial support to community-led rural initiatives with an 8% mandatory earmarking in the next EU Budget (incl. EU Competitiveness Fund).

Whereas it is estimated the Cohesion Policy provides wider support to rural development than the CAP itself (€45.6bn or 11.6%, with a similar percentage is spent in the Recovery and Resilience Facility 2021-2026 for Cohesion investments in both urban and rural areas), only €750 mln go to CLLD in rural and non-rural areas from the Cohesion Policy compared to €7.7 bn from CAP via the LEADER programme⁴⁶. **We advocate for mandatory earmarking to be established both in the CAP and Cohesion Policy** to ensure the continuity of the LEADER/CLLD programme, **in a similar manner to the minimum earmarking of 8% ERDF funds for urban development** (AEIDL, 2024; ELARD, 2024; European Parliament, 2023, 2024, 2025b). More evidence is needed on how Cohesion Policy supports CLLD across Member States. We advocate the EU to simplify CLLD/LEADER rules for beneficiaries and SMEs in rural areas,

⁴⁵ 'An innovation is considered 'transformative' if it addresses the systemic causes of societal problems and activates systemic mechanisms to fix them' (Brunori & Muro, 2025).

⁴⁶ EC (2024). *The long-term vision for the EU's rural areas: key achievements and ways forward*; EC (2023). *Cohesion 2021-2027: forging an ever stronger Union Report on the outcome of 2021-2027 cohesion policy programming*.

guarantee better access to cross-border and less-developed regions, and support the diversification of the rural economy (European Parliament, 2024; European Parliament 2025a).

We advocate the EU Commission to **‘rural proof’ the Competitiveness Compass** and ensure that the next EU Competitiveness Fund is fit to rural needs, and it allows for localized funding, small-scale investments, it finances projects of common interests and community building in rural areas. Additionally, we advocate EU policy makers to acknowledge the crucial role of community-led innovations **by increasing the possibility to finance community-led initiatives through existing programmes** (e.g. Interreg, LIFE, Erasmus+) and provide 100% refunded technical, financial and administrative support to communities for capacity building, project design and preparation, identifying and building a project pipeline, as well as strategic planning capabilities (European Parliament, 2024). A single one-shop platform, like the EU Rural Toolkit, should be kept and updated to simplify accessibility of information and funds.

3. Shift the focus to Rural Innovation Ecosystems rather than individual solutions.

Actors, relations and process to connect these are more important than the solution(s) for self-running and nurturing innovative ecosystems. While EU should continue its **commitment to pursue a strategic approach not rural development through the EU Long-Term Vision for Rural Areas**, we advocate the EU Commission to encourage Member States to adopt their **strategy and action plan** to foster rural innovation and embed this in their **strategic territorial development strategies** (including CAP, Cohesion Policy, CLLD/ Leader, Smart Specialisation Strategies, Operational Programmes, National Plans). In doing so, the EU and Member States to define **targeted objectives, measures and investments** for community-led rural innovation (EU Committee of the Regions 2023a, 2023b; Pazos-Vidal, 2023). We also call the EU Commission to ensure that territorial lenses and rural proofing is embedded into supranational documents and processes, in particular the **EU Semester, Territorial Agenda, EU Industrial and Innovation policies, macro-regional strategies as already provided by the EU Better Regulation** (European Parliament, 2023). Without this political alignment, the EU risks incurring territorial imbalances.

To ensure that funds do not discriminate against rural communities, we **pledge small-scale innovation schemes** to support common interest and strategic projects (e.g. Interreg Alpine Space small funds, Erasmus+ Small Partnerships), **simplified cost options** (Horizon Europe cascade funding) and **one stop-shop platforms** (e.g. Rural Toolkits) to facilitate local actors accessing and using funds for rural smartification, and the integration of **open innovation mechanisms**. Authorities should promote differentiated funds for different stages of the innovation system and support **Local Innovation Advisors** within innovative ecosystems to brief on opportunities and accelerate the process.

4. Systematise the inclusion of local voices (rural actors, local authorities) in the decision-making process systematically beyond token approaches.

The EU should ensure the implementation of the **Partnership Principle and multi-level governance** in all EU funds having a territorial dimension. While doing so, we call the EU to **oppose any centralisation attempts** as a result of the creation of National Single Plans that mirror the governance of the National Recovery and Resilience Plans without sitting above any regional plans or chapters. Rather than an instrument of recentralisation, the **proposed National Single Plans for the post 2027 budget must be a tool to ensure that there is proper horizontal and multilevel coordination, ensuring synergies and avoiding gaps between EU**

programmes (CAP, Cohesion, Just Transition Fund, Social Climate Plan, National Climate and Energy Plans) and their domestic equivalents, ensuring that **the structural reforms are linked to investments that correspond to the legal competences that local and regional authorities are actually responsible for them**. The **EU Better Regulation Guidelines** (particularly rural proofing and the Territorial Impact Assessment) **should be operationalized across EU and national policies**. The **Rural Pact** should be continued in the EU and more efforts should be made to decline it at national and regional levels through dedicated strategies and governance structures.

5. Develop governance mechanisms (not new structures) to better connect rural development policy with industrial and innovation policies, and other sectoral policies (transport, energy, water and waste etc.).

Rural development requires focused attention beyond the traditional sectors of agrifood and tourism (European Parliament, 2025). This attention requires other sectoral policies to be territorially sensitive and to design and deliver intervention in a holistic fashion (e.g. **functional rural area, value chain**). We call the EU Commission and national/regional authorities to establish **governance mechanisms to address the limited connectivity** between the rural policy with industrial, innovation and other sectoral policies (Monastiriots & Gamtkitsulashvili, 2025). This could be done by setting up specific unit applying rural lens within the existing department (e.g. DG MOVE Unit working on rural mobility), cross-department governance mechanisms (e.g. cooperation framework such as the EU's Long-Term Vision for Rural Areas), ad-hoc governance mechanisms (e.g. national or regional Rural Pacts), ensuring there is a clear competence distribution across those mechanisms so that rural actors know who is responsible for which political file.

6. Enhance digital skills and infrastructures in rural communities, with caution on marginalised communities.

Digital transition should not be an end to itself, but it can widely increase the capacity of rural communities to engage with and expand to new market opportunities in the digital sector (Sasso, 2024), increase eGovernment options and unleash remote working opportunities. We call EU, national and regional policy makers to overcome the rural-urban digital gap both in terms of skills and infrastructure by providing **ambitious investments and awareness/training opportunities**, providing **simple and interoperable digital platforms**. We also call for strong policymakers to adopt the **principle of caution** to ensure that the negative implications of digital transition (e.g. exclusion, data security, digital exclusion, overreliance on digital solutions, technology costs, ownership and control, data protection and security) are addressed at the policy planning phase and **digital transition is co-defined, supported and driven by citizens and not imposed on them**.

7. Allow regulatory flexibility to permit innovation to happen and be adopted without delay.

The administrative burden beyond existing frameworks (e.g. Procurement Directives, LEADER Programme, Cohesion Policy) is **unfit to support innovative experiments**, adoption of novel technologies or initiatives at the local level. Innovation-proofed policy mechanisms and flexibility rules should be introduced. For instance, the criticisms on the LEADER approach could be lightened by introducing new tools already part of the EU financial regulation, such as financial

management rules that are already used in the Horizon Europe projects aimed at smart rural development in local living labs such as in FUTURAL (Committee of the Regions, 2024).

8. **Apply the ‘Do not harm to EU Cohesion’ principle across all territorially relevant EU policies (including EU Procurement and State Aid policies).**

Introduced in 2022 within the 8th Cohesion Report, we regret that the EU still lacks details and application of the ‘Do Not Harm EU Cohesion’ principle. The full application of this principle is essential to avoid policy inconsistencies and to create the enabling conditions to ensure the Right to Stay, such as the (public and private) provision of basic services, in particular, in the framework of the next Multiannual Financial Framework. Therefore, we call on the **EU to embed this principle in the post-2027 EU regulations** at the same length as what was done for the Do Not Significant Harm Principle, establishing it as a horizontal principle across all territorially relevant EU policies.

References

- AEIDL (2024). [Policy Statement for the new EU Term](#).
- Alemanno, A. (2020). Europe's Democracy Challenge: Citizen Participation in and Beyond Elections. *German Law Journal*, 21(1), 35–40. doi:10.1017/glj.2019.92
- Altun, N., Schulz-Ruhtenberg, E. (2022). [How to make the voice of regions heard in EU legislation](#). Strengthening the role of the Committee of the Regions. Hertie School, Jaques Delors Centre.
- Barca, F. (2009). [An Agenda for a Reformed Cohesion Policy. A place-based approach to meeting European Union challenges and expectations](#).
- Bled Declaration (2018). Smarter Villages for a Smarter Future of the Rural Areas in the EU.
- Blöchliger, H., Tusz, R. (2022). Regional Policy in Lithuania: A Tale of Two Economies. OECD Economic Department Working Papers No. 1650. <https://dx.doi.org/10.1787/5d6e3010-en>
- Brunori, G, Muro, M (2025) 'Transformative innovation for the ecological transition of food systems'. Policy Brief, Institute for European Environmental Policy, Brussels.
- Burinskienė, M. (2022): Country Profile of Lithuania. Hannover. = ARL Country Profiles. <https://www.arl-international.com/knowledge/countryprofiles/lithuania/rev/4316>. (18/03/2024).
- Cambra-Fierro, J. J., & Pérez, L. (2022). (Re)thinking smart in rural contexts: A multi-country study. *Growth and Change*, 53(2), 868–889. <https://doi.org/10.1111/grow.12612>
- Castillo, C. P., Barranco, R. R., Curtale, R., Kompil, M., Jacobs-Crisioni, C., Rodriguez, S. V., Aurambout, J., Silva, F. B. E., Sulis, P., & Auteri, D. (2023). Are remote rural areas in Europe remarkable? Challenges and opportunities. *Journal of Rural Studies*, 105, 103180. <https://doi.org/10.1016/j.jrurstud.2023.103180>
- Černič Istenič, M. (2023). Social dimension of rural areas. SHERPA Position Paper. DOI: 10.5281/zenodo.7807982
- Chrysomallidis, C., & Tsakanikas, A. (2017). The implementation of smart specialization strategy in Greece: Re-balancing governance between the central state and the regions. *Regional Science Policy & Practice*, 9(3), 183–200. <https://doi.org/10.1111/rsp3.12095>
- Ciasullo, M. V., Troisi, O., Grimaldi, M., & Leone, D. (2020). Multi-level governance for sustainable innovation in smart communities: an ecosystems approach. *International Entrepreneurship and Management Journal*, 16(4), 1167–1195. <https://doi.org/10.1007/s11365-020-00641-6>
- Collantes, F. (2009). Rural Europe reshaped: the economic transformation of upland regions, 1850–2000. , 62(2), 306–323. doi:10.1111/j.1468-0289.2008.00439
- Cork Declaration 2.0 (2016). [A Better Life in Rural Areas](#).

- Courades, J. M., & Brosei, P. (2018). CLLD/LEADER: Applying the partnership principle to local development. *European Structural and Investment Funds Journal*, 3, 210-222.
- Cowie, P., Townsend, L., & Saleminck, K. (2020). Smart rural futures: Will rural areas be left behind in the 4th industrial revolution? *Journal of Rural Studies*, 79, 169–176. <https://doi.org/10.1016/j.jrurstud.2020.08.042>
- Council of Europe (2018). Local Democracy in Lithuania. <https://rm.coe.int/CoERMPublicCommonSearchServices/DisplayDCTMContent?documentId=09000016808e676b>. CPL35(2018)02final.
- Curtale, R., Stut, M., Alessandrini, A., Deuster, C., Batista E., Silva, F., Natale, F. and Dijkstra, L. (2025). Outlook and demographic perspectives for EU's rural regions. A modelling-based exercise, European Commission, Ispra, 2025, JRC140514.
- De Dominicis, L., Dijkstra, L., & Pontarollo, N. (2022). Why are cities less opposed to European integration than rural areas? Factors affecting the Eurosceptic vote by degree of urbanization. *Cities*, 130, 103937. <https://doi.org/10.1016/j.cities.2022.103937>
- De Gregorio Hurtado, S.; Tomàs, M. (2022): Country Profile of Spain. Hannover. = ARL Country Profiles. <https://www.arl-international.com/knowledge/country-profiles/spain/rev/3839>. (24/03/2025).
- Del Pino, E., & Colino, C. (2024). Subnational governance in Spain. In *Handbook on Subnational Governments and Governance* (pp. 375-392). Edward Elgar Publishing.
- Diercks, G., Larsen, H., Steward, F., 2019. Transformative innovation policy: Addressing variety in an emerging policy paradigm. *Res. Policy* 48, 880–894. <https://doi.org/10.1016/j.respol.2018.10.02>
- Dokupilová, D., Stojilovska, A., Palma, P., Gouveia, J. P., Paschalidou, E. G., Barrella, R., Feenstra, M., Horta, A., Sánchez-Guevara, C., Kádár, J., Tesanovic, M., Thomaidis, N. S., & Hamed, T. A. (2024). Exploring energy poverty in urban and rural contexts in the era of climate change: A comparative analysis of European countries and Israel. *Energies*, 17(12), 2939. <https://doi.org/10.3390/en17122939>
- ECOLISE (2024). Time for Collective Action Manifesto. [Time For Collective Action | Sign the Manifesto](#)
- ELARD (2024). [Declaration on the Future of CLLD within European policies](#).
- ENRD (2021). [How to support Smart Villages strategies which effectively empower rural communities? Orientations for policy-makers and implementers](#).
- ENRD (2022). [A Framework of Rural Proofing Actions](#). ENRD Thematic Group on Rural Proofing.
- ESPON DESIRE (2025). [Analysis on provision of public services in lagging regions and areas with special needs](#).

Eurofound (2023), Bridging the rural–urban divide: Addressing inequalities and empowering communities, Publications Office of the European Union, Luxembourg.

European Commission (2008). Communication from the Commission to the Council, the European Parliament, the Committee of the Regions and the European Economic and Social Committee of 6 October 2008 - Green paper on territorial cohesion: Turning territorial diversity into strength[COM(2008) 616 Final

European Commission (2018a). The Principles of Subsidiarity and Proportionality: Strengthening their Role in the EU's Policymaking. Communication COM(2018) 703 Final

European Commission (2018b). European Commission (2018b) Report on the Task Force on Subsidiarity, Proportionality and “Doing Less More Efficiently”.

European Commission (2019). Taking Stock of the Commission's Better Regulation Agenda. Accompanying the document. Better regulation: taking stock and sustaining our commitment. Staff working Document SWD/2019/156 final.

European Commission (2021). [A long-term Vision for the EU's Rural Areas - Towards stronger, connected, resilient and prosperous rural areas by 2040.](#) COM/2021/345 final

European Commission (2022). [8th Cohesion Report: Cohesion in Europe towards 2050.](#) {SWD(2022) 24 final}

European Commission (2023a). [Taking stock of how CAP Strategic Plans contribute to the objectives of the Long-Term Vision for the EU's rural areas. Final Report.](#)

European Commission (2023b). [Cohesion 2021-2027: forging an ever stronger Union Report on the outcome of 2021-2027 cohesion policy programming.](#) SWD(2023) 134 final

European Commission (2023c). [Approved 28 CAP Strategic Plans \(2023-2027\) Summary overview for 27 Member States.](#) Facts and figures June, 2023.

European Commission (2024a). [The long-term vision for the EU's rural areas: key achievements and ways forward.](#) COM(2024) 450 final

European Commission (2024b). [Ninth Report on Economic, Social and Territorial Cohesion.](#)

European Commission (2025). [The road to the next EU multi-financial framework.](#) COM(2025)46

European Commission & E40 (2025). [Preparatory Action - Smart Rural Areas in the 21st Century - Bis Final Report. Smart Rural 27 project.](#) 10.2762/66416

European Committee of the Regions (2009). [The Committee of the Regions' White Paper on multilevel governance.](#) 2009/C 211/01.

European Committee of the Regions (2023a). [Enhancing Cohesion Policy support for regions with geographic and demographic handicaps \(Article 174 TFEU\).](#) Opinion 2023/C 79/07. Rapporteur: Marie-Antoinette Maupertuis.

European Committee of the Regions (2023b). [Opinion of the European Committee of the Regions on targets and tools for a smart rural Europe](#). Opinion COR 2022/04320. Rapporteur: Radim Sršeň.

European Committee of the Regions (2024a). [EU budget and place-based policies: proposals for new design and delivery mechanisms in the MFF post-2027](#). Opinion CDR-2161-2024. Rapporteur: Marie-Antoinette Maupertuis.

European Committee of the Regions (2024b). [Active subsidiarity: a fundamental principle of the EU better regulation agenda \(own-initiative opinion\)](#). Opinion C/2024/5366. Rapporteur: Mark SPEICH.

European Committee of the Regions (2025). [How post-27 LEADER and CLLD programming could contribute to better implementation of the long-term vision for the EU's rural areas](#). Opinion CDR-2569-2024. Rapporteur: Thibaut Guignard.

European Court of Auditors (2022). LEADER and community-led local development facilitates local engagement but additional benefits still not sufficiently demonstrated. Special Report 10/2022.

European Economic and Social Committee (2024). [Towards a greater involvement of Member States, Regions and Civil Society actors in the implementation of the Long-Term Vision for the EU's Rural Areas](#). NAT/914-EESC-2023. Rapporteur: Marc Decoster.

European Environmental Agency (2020) The European environment — state and outlook 2020: knowledge for transition to a sustainable Europe. European Environment Agency, Copenhagen.

European Parliament (2023). REPORT on the implementation of territorial development (CPR, Title III, Chapter II) and its application in the European Territorial Agenda 2030 ([2023/2048\(INI\)](#)). Committee on Regional Development. Rapporteur: Marcos Ros Sempere

European Parliament (2024). REPORT on cohesion policy 2014-2020 - implementation and outcomes in the Member States. ([2023/2121\(INI\)](#)). Committee on Regional Development. Rapporteur: Andrey Novakov

European Parliament (2025a). DRAFT REPORT on strengthening rural areas in the EU through cohesion policy (2024/2105(INI)) Committee on Regional Development Rapporteur: Denis Nesci.

European Parliament (2025b). OPINION of the Committee on Agriculture and Rural Development for the Committee on Regional Development on strengthening rural areas in the EU through cohesion policy (2024/2105(INI)) Rapporteur for opinion: Cristina Guarda.

European Rural Parliament (2025). [Mid-term event](#). 30/01/2025.

Eurostat. Rural Europe. https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Rural_Europe&stable=1.

- Eurostat (2021). [Applying the Degree of Urbanisation - A methodological manual to define cities, towns and rural areas for international comparisons](#). doi: 10.2785/706535
- Eurostat (2023). KEY FIGURES ON EUROPEAN LIVING CONDITIONS 2023 EDITION. <https://ec.europa.eu/eurostat/documents/15216629/17704280/KS-HC-23-001-EN-N.pdf/bb6d79fb-7664-d4da-3b49-8c50ee57b7bb?version=4.0&t=1700573366444>
- ESPON (2017). Shrinking rural regions in Europe. Towards smart and innovative approaches to regional development challenges in depopulating rural regions. [Policy Brief: Shrinking rural regions in Europe | ESPON](#)
- Filgueiras, F., Palotti, P., & Testa, G. G. (2023). Complexing Governance Styles: Connecting Politics and Policy in Governance Theories. *SAGE Open*, 13(1). <https://doi.org/10.1177/21582440231158521>
- Jouen, M., Kolosy, K., Pellegrin, J., Ramsden, P., Szegvari, P., Chambon, N., (2010). Cohesion policy support for local development: best practice and future options. DG REGIO CCIn.2009.CE.16.0.AT.081 http://ec.europa.eu/regional_policy/consultation/terco/cp_support_local_dev_en.pdf
- Garben, S., & Govaere, I. (Eds.). (2017). *The Division of Competences between the EU and the Member States: Reflections on the Past, the Present and the Future*. Bloomsbury Publishing.
- Kah, S., Georgieva, N., Fonseca, L. (2020). [EU Cohesion Policy in non-urban areas](#). Research for REGI Committee.
- Keuffer, N., & Ladner, A. (2021). Local and regional autonomy—indexes and trends. In *A Research Agenda for Regional and Local Government* (pp. 19-34). Edward Elgar Publishing.
- Kokkonen, E., Koljonen, A., Uusikartano, J. (2024). Overview of the EU Macro-Regional Strategies: Fostering Smart Villages and Smart Communities. [SMART-ERA-Comparative-study-of-MRS20250129.pdf](#)
- Kössler, K., Stafa, E., & Janevska, J. (2024). LoGov White Paper: How can local governments cope with changing urban-rural relations?. Zenodo. <https://doi.org/10.5281/zenodo.13850502>
- Halleux, J.-M.; Lacoere, P. (2023): Country Profile of Belgium. Hannover. = ARL Country Profiles. <https://www.arl-international.com/knowledge/country-profiles/belgium/rev/4130>. (17/03/2025).
- Hlepas, N. K. (2020). Checking the mechanics of Europeanization in a centralist state: The case of Greece. In *Europeanization and Territorial Politics in Small European Unitary States* (pp. 120-138). Routledge.
- lackstock, K., Flanigan, S., Creaney, R., Matthews K., Hopkins, J., Miller, D., Ahmed, A., Chabdu, A., Bacigalupo, A., Thompson, C., (2022). Participatory Value Chain Analysis. Report on the structure and valorisation of 23 mountain value chains across Europe, including evaluation of tele-coupling, assemblage, and enabling institutions and infrastructure.

- Lada, A.; Manos, E. (2021): Country Profile of Greece. Hannover. = ARL Country Profiles. <https://www.arl-international.com/knowledge/country-profiles/greece/rev/3738>. (18/03/2025).
- Ladner, A., Keuffer, N., Bastianen, A. (2021). Self-rule index for local authorities in the EU, Council of Europe and OECD countries, 1990-2020" (CCI N° 2019CE16BAT176).
- Leonardi, R., Nanetti, R. (2011). Multi-level Governance in the EU: Contrasting Structures and Contrasting Results in Cohesion Policy. Paper prepared for the RSA Research Network on Effectiveness, Added Value and Future of EU Cohesion Policy. First Workshop on 'Multi-level governance and partnership in the EU cohesion policy' organized by the Institute for European Integration Research (EIF) of the Austrian Academy of Sciences, Vienna, 28-29 November, 2011. FOR RSA-ONLINE
- Loughlin, J., Hendriks, F., Lidström, A. (2012). [The Oxford handbook of local and regional democracy in Europe](#)
- Lostrangio, C., Mosdale, L., Ottolini, I. (2021). [An overview of sustainable practices for the management of mountain grasslands in Europe – policy report – Euromontana](#).
- Lostrangio (2024). Smart Rurality: Reconciling Convergence with Growth and Wellbeing at Local Level? AEIDL Policy Brief. 10.5281/zenodo.14515456
- Lukesh, 2000. [Actors, Institutions and Attitudes to Rural Development: Austrian National Report](#).
- Maes, J., Teller, A., Erhard, M., Conde, S., Vallecillo Rodriguez, S., Barredo Cano, J.I., Paracchini, M.-L., Abdul Malak, D., Trombetti, M., Vigiak, O., Zulian, G., Addamo, A., Grizzetti, B., Somma, F., Hagyo, A., Vogt, P., Polce, C., Jones, A., Marin, A., Ivits, E., Mauri, A., Rega, C., Czucz, B., Santos-Martín, F., (2020). [Mapping and Assessment of Ecosystems and their Services: An EU ecosystem assessment, Publications Office of the European Union, Luxembourg](#).
- Makrandreou, M. (2025). EU Commission - DG AGRI. [Smart Villages in CAP Strategic Plans](#). 3rd meeting of the Subgroup on LEADER and Territorial Dimension. 5-6 March 2025.
- Mantino, Francesco, 2009. "[Typologies of governance models](#)," [Reports](#) 157975, National Institute of Agricultural Economics, Italy - INEA, Rural Development Policies.
- Meuleman L. (2011). Metagoverning governance styles. Broadening the public manager's action perspective. In Torfing J., Triantafillou P. (Eds.), *Interactive policy making, metagovernance, and democracy* (pp. 95–104). ECPR Press.
- Mishbah, M., Purwandari, B., & Sensuse, D. I. (2018). Systematic Review and Meta-Analysis of Proposed Smart Village Conceptual Model: Objectives, Strategies, Dimensions, and Foundations. 2018 International Conference on Information Technology Systems and Innovation (ICITSI). doi:10.1109/icitsi.2018.8696029
- Mukti, I. Y., Iacob, M. E., Aldea, A., Govindaraju, R., & Van Hillegersberg, J. (2021). Defining Rural Smartness and its Impact: A Systematic Literature review. *Journal of the Knowledge Economy*, 13(2), 956–1007. <https://doi.org/10.1007/s13132-021-00736-7>

- Monastiriotes V., Gamtkitsulashvili, T. (2025). [Taking the territorial dimension of industrial policy seriously: Industrial and cohesion policy in the EU](#). LUHNIP Working Paper 7/2025. April 22 2025.
- Montemayor, E. (2025). Unlocking rural innovation. Rural Pact Good Practice Webinar on Rural Innovation. 22 May 2025.
- Nadin *et al.*, (2018). COMPASS- Comparative Analysis of Territorial Governance and Spatial Planning Systems in Europe. Final Report. ESPON project.
- Neugebauer, W.; Stroissnig, U. (2021): Country Profile of Austria. Hannover. = ARL Country Profiles. <https://www.arl-international.com/knowledge/country-profiles/austria/rev/4121>. (31/01/2025).
- OECD (2020). Regional Policy for Greece Post-2020. <https://doi.org/10.1787/cedf09a5-en>
- OECD (2024). Getting to services in towns and villages. <https://doi.org/10.1787/df1e9b88-en>
- Papantonis D., et. al. (2024). Updating the energy poverty and energy efficiency framework in rural areas across the EU. Deliverable 2.1. EC-LIFE RENOVERTY project. University of Piraeus Research Center (UPRC), Piraeus, Greece.
- Pazos-Vidal, Serafin. (2014). The Partnership Principle in Cohesion Policy 2014-2020 European Structural and Investment Funds Journal Volume 2, Issue 4 (2014) pp. 277 – 288 https://estif.lexxion.eu/data/article/7647/pdf/estif_2014_04-006.pdf
- Pazos-Vidal, S. (2019). *Subsidiarity and EU multilevel governance: Actors, networks and agendas*. Routledge. <https://doi.org/10.4324/9780429453373>
- Pazos-Vidal, S. (2023). EU support for regions with geographic and demographic handicaps, AEIDL Policy Brief. . <https://doi.org/10.5281/zenodo.15193479>
- Pazos Vidal (2025) [Key challenges of Cohesion policy: Why and how is it going to change? - Ldnet Webinar](#), (19.2.2025) – “A new architecture of EU policies and funds post-2027 – what place for local development?”
- Pazos-Vidal, S., Lostrangio, C. (2024). Guidelines for Policy Audit. SMARTERA. <https://doi.org/10.5281/zenodo.15182905>
- Penha-Lopes, G. & T. Henfrey (2019). Reshaping the Future: how communities are catalysing social, economic and ecological transformation in Europe. The First Status Report on Community-led Action on Sustainability and Climate Change. Brussels: ECOLISE. ISBN 978-2-9602393-0-0
- Perpiña Castillo, C., Hormigos Feliu, C., Dorati, C., Kakoulaki, G., Peeters, L., Quaranta, E., Taylor, N., Uihlein, A., Auteri, D. and Dijkstra, L. (2024). Renewable Energy production and potential in EU Rural Areas, Publications Office of the European Union, Luxembourg. doi:10.2760/458970, JRC135612.

- Ray, C. (2000). The EU LEADER Programme: Rural Development Laboratory. *Sociologia Ruralis* 40(2), 163–171. DOI: 10.1111/1467-9523.00138.
- Rodríguez-Pose, A. (2018). The revenge of the places that don't matter (and what to do about it). *Cambridge Journal of Regions Economy and Society*, 11(1), 189–209. <https://doi.org/10.1093/cjres/rsx024>
- Rodriguez-Pose, A., Dijkstra, L., Poelman, H. (2023). The geography of EU discontent and the regional development trap. <https://doi.org/10.1080/00130095.2024.2337657>
- Runceanu, C. (2023): Country Profile of Romania. Hannover. = ARL Country Profiles. <https://www.arl-international.com/knowledge/country-profiles/romania/rev/3754>. (02/04/2025).
- Rural Pact Coordination Group (2025). [Declaration on the future of rural areas and rural development policy in the European Union](#).
- Rural Pact Support Office (2024). [Enhancing policy coordination for vibrant rural areas: Learning from experience to build a sustainable rural future. Highlights Report](#).
- Sapala, M. (2024). [Social and territorial cohesion in the Recovery and Resilience Facility. European Parliament Research Service](#). PE 757.590.
- Sarkki, S., Lynn, T., Hiedanpää, J., Vizzarri, M., Christoforidi, I., Brnkalakova, S., ... Ficko, A. (2025). Polytraps in European rural mountainous regions: an expert view. *European Planning Studies*, 1–21. <https://doi.org/10.1080/09654313.2025.2473380>
- Schantl, A., Pichler, D., Prorok, T. (2021). Local Government in Austria: Responses to Urban-Rural Challenges
- Simone Sasso (2024). [Data for rural areas: the Rural Observatory and new metrics on innovation and entrepreneurship](#). GRANULAR Webinar.
- Shanahan, E. A., Jones, M. D., McBeth, M. K., & Radaelli, C. M. (2018). The narrative policy framework. In *Theories of the policy process* (pp. 173-213). Routledge.
- Smart Rural 21 (2023). Guidebook on how to become a Smart Village. [Guide_EN.pdf](#)
- Smart Rural 27 (2024). Country Factsheets. [Austria](#), [Belgium-Flanders](#), [Belgium- Wallonia](#), [Greece](#), [Lithuania](#), [Romania](#), [Spain](#).
- Stephenson, P. (2013). Twenty years of multi-level governance: 'Where does it come from? What is it? Where is it going?'. *Journal of European public policy*, 20(6), 817-837.
- Stjernberg, M., Norlén, G., Vasilevskaya, A., Tapia, C., & Berchoux, T. (2023). Scoping report on European rural typologies. GRANULAR. <https://doi.org/10.5281/zenodo.13767183>
- Stojanova, S., Lentini, G., Niederer, P., Egger, T., Cvar, N., Kos, A., & Duh, E. S. (2021). Smart Villages Policies: past, Present and future. *Sustainability*, 13(4), 1663. <https://doi.org/10.3390/su13041663>

- Torre, A., Corsi, S., Steiner, M., Wallet, F., Westlund, H. (2020). Smart Development for Rural Areas. Smart development for rural areas. Routledge. <https://doi.org/10.4324/9780429354670>
- Wang, Q., Luo, S., Zhang, J., & Furuya, K. (2022). Increased attention to smart development in rural areas: A scientometric analysis of Smart Village research. Land, 11(8), 1362. <https://doi.org/10.3390/land11081362>
- Zavratnik, V., Kos, A., & Duh, E. S. (2018). Smart Villages: Comprehensive review of initiatives and practices. Sustainability, 10(7), 2559. <https://doi.org/10.3390/su10072559>