



Rural Revival: Empowered Communities and Sustainable Energy in a Changing Climate

March 1, 2024 - 10:00-12:00 CET - online



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Some rules for the webinar



During the meeting:

- Please make sure your microphone is muted

How to ask questions?

- Use the chat function to ask questions during the sessions or raise your hand to be unmuted for verbal questions

Technical support

- Please address all technical questions via the chat function to Roberta D'Angiolella, IEECP or Kristina Eisfeld, Climate Alliance

Note: *Today's presentation is being recorded and will be made available within two weeks*

Agenda

10:00 Welcome and introduction, Dr. Kristina Eisfeld, Climate Alliance

10:10 Bridging Gaps, Building Futures for All: Upgrading the framework of energy poverty and energy efficiency in rural areas with RENOVERTY – Dimitris Papantonis, Technoeconomics of Energy Systems laboratory (TEESlab), University of Piraeus Research Center (UPRC) and Marco Peretto, Institute for European Energy and Climate Policy (IEECP)

10:40 Engaging, Connecting and Empowering rural actors – Multi Actor Approach in RURALITIES project – Gabor Mester, PEDAL Consulting

11:05 Rural development examples in Latvia Regional Hub in RuralBioUp project – Kristaps Makovskis, LSFRI Silava

11:30 Discussion and conclusions

12:00 END





Welcome and introduction

Dr. Kristina Eisfeld, Climate Alliance



Bridging Gaps, Building Futures for All: Upgrading the framework of energy poverty and energy efficiency in rural areas with RENOVERTY

Dimitris Papantonis, Technoeconomics of Energy Systems laboratory (TEESlab), University of Piraeus Research Center (UPRC)

Marco Peretto, Institute for European Energy and Climate Policy (IEECP)



Home Renovation Roadmaps to Address Energy Poverty in Vulnerable Rural Districts

Webinar Rural Revival: Empowered Communities and Sustainable Energy in a Changing Climate

1st March 2024

Dimitris Papantonis, Akis Apostoliotis

Technoeconomics of Energy Systems laboratory (TEESlab)- University of Piraeus Research Center (UPRC)

Stefan Bouzarovski, Marco Peretto

Institute for European Energy and Climate Policy Foundation (IEECP)



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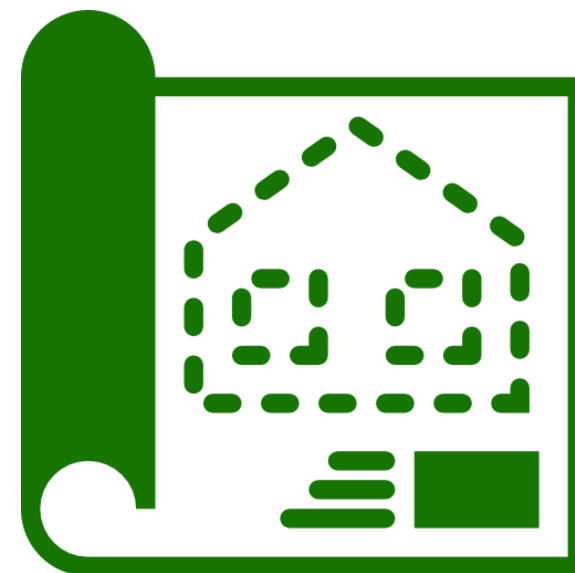
RENOVERTY context

- Causes of energy poverty at the local, regional, national, and European scales have recently become clearer, yet an [absence of practical and theoretical understanding](#) of how to address the issue in rural areas exists.
- [Rural areas](#) across Central Eastern (CEE), Southern Eastern (SEE), and Southern Europe (SE) are traditionally much poorer, and more vulnerable to energy poverty.
- Despite their need for support, they are left behind in the energy transition, and [practices to reduce energy poverty are lacking](#).



RENOVERTY Main Objective

Design a scalable series of **renovation roadmaps** with operating models for rural areas across CEE, SEE, and SE, while ensuring the replicability of the model in the European Union.



RENOVERTY Specific Objectives

Promote renovations to increase the energy efficiency of **vulnerable rural areas across 7 regions** through:

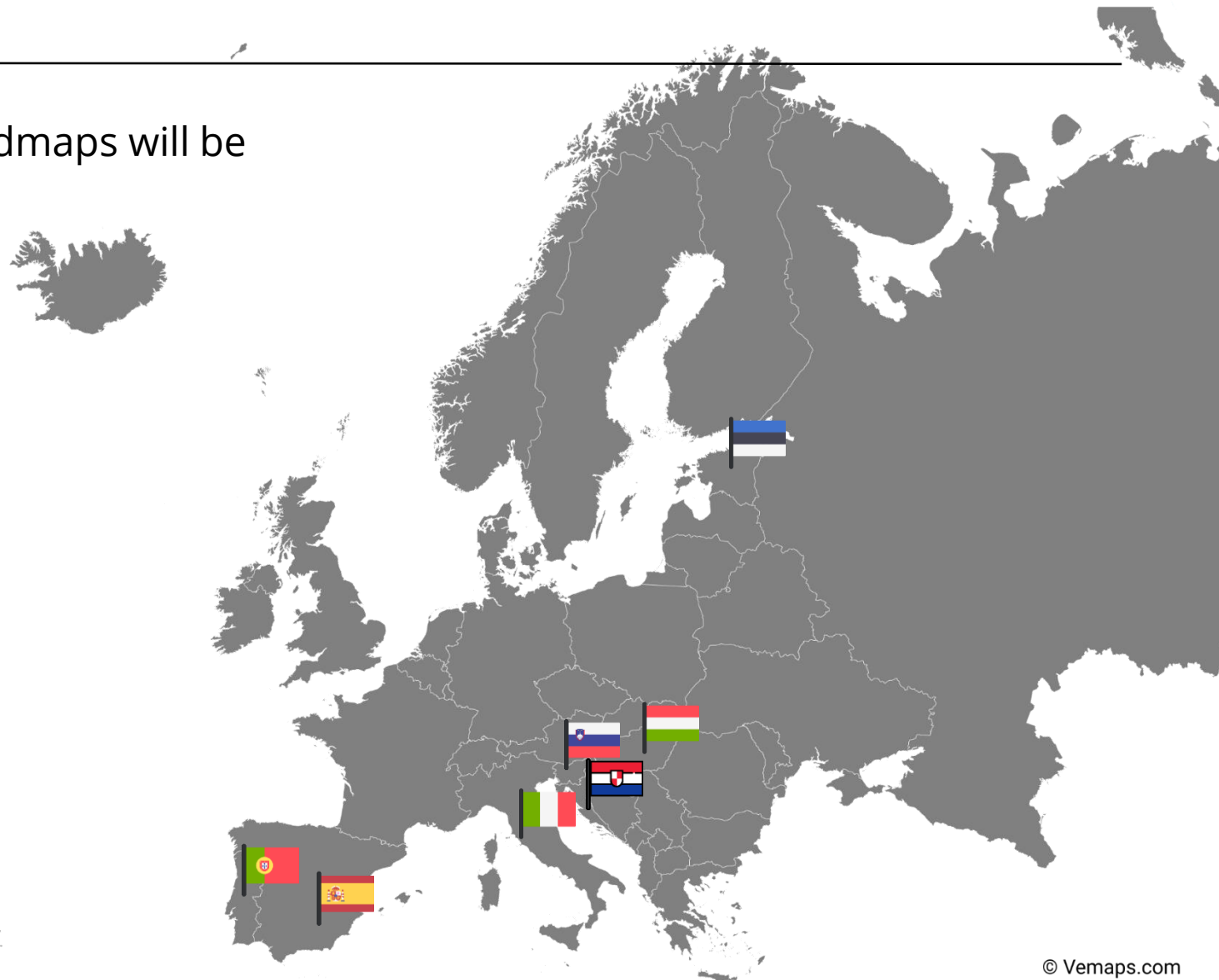
- Supporting [12 Local Action Groups \(LAGs\)](#) for the creation and implementation of [Rural Energy Efficiency Roadmaps \(REERs\)](#).
- [Empowering](#) all (non) public actors in rural areas to become involved in the process of renovating vulnerable districts/buildings.
- Delivering [a scalable operating model](#), to support the replicability of REERs and guide more public actors to renovate rural vulnerable districts after the project ends.



Geographical Coverage

Over the project's three years, the roadmaps will be implemented by seven pilots:

1. Sveta Nedelja (*Croatia*)
2. Tartu (*Estonia*)
3. Bükk-Mak & Somló-Marcalmente-Bakonyalja Leader (*Hungary*)
4. Zasavje (*Slovenia*)
5. Parma (*Italy*)
6. Coimbra (*Portugal*)
7. Osona (*Spain*)

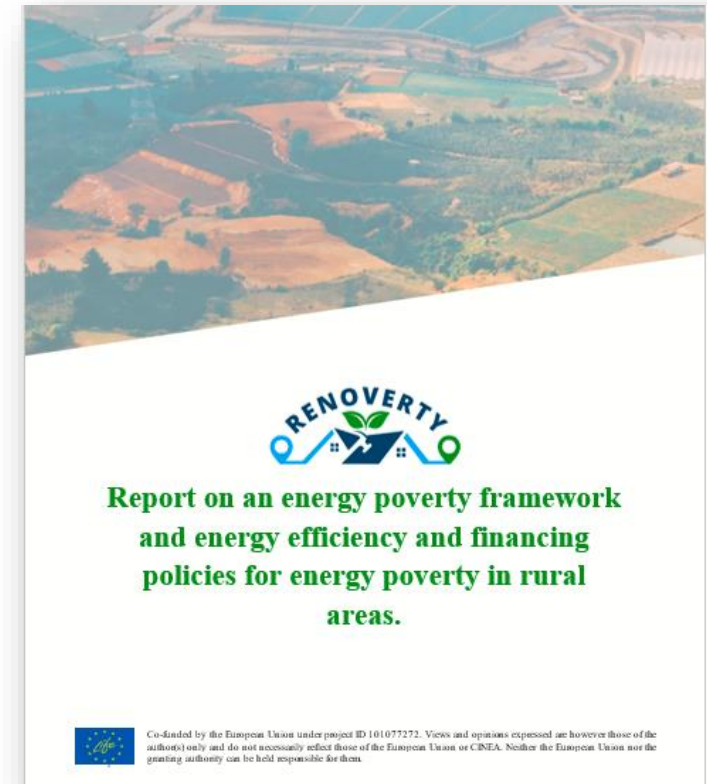


Conceptualisation: Energy Poverty and Energy Efficiency in rural areas






Desk-Research:

- Review of scientific and policy literature: over 70 relevant sources
- Outcomes of relevant EC-funded projects
- Recording and analysis of existing energy poverty and/or energy efficiency policies in rural areas



Conceptualisation Outcomes

- ▶▶ Framing and conceptualisation of rural energy poverty in the relevant literature, with the aid of a systematic review of relevant sources.
-  Exploration of socio-economic drivers and specific characteristics, that increase exposure of rural areas to energy poverty.
-  Map-out, assess, and categorise policies targeting energy poverty and/or energy efficiency in rural contexts.
-  Identification of the distinct barriers to designing and implementing energy efficiency policies to alleviate energy poverty in rural contexts.



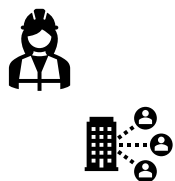
Outcomes: Identified characteristics of rural areas



Specific **demographic structures** (more **elderly** people, young people aged 10 to 19, **fewer** people of **working age**)



Educational capabilities (**Limited access** to education, specifically **tertiary** education)



Lower **labour capabilities** (fewer **job prospects**, narrower **variety** of activities, **unemployment rate**)



Lack of **infrastructure** and **services** (**Transportation** limitation, access to **grids** and resources)



Literature reports evidence of increased **exposure to energy poverty** in rural areas while the current policy landscape **does not** necessarily **address** the **particularities** of rural areas

Outcomes: Energy poverty drivers in rural areas



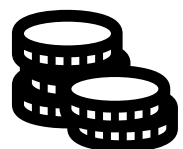
Nature of the **housing stock** – challenges in renovation



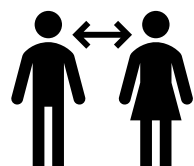
Limited choice of **Energy Sources**



Increased **exposure** to energy poverty



Lower **Incomes** – Higher **energy costs**



Consumer **Behaviour**

Outcomes: Barriers and gaps analysis



Financial barriers



- Lack of capital / High upfront cost
- Higher energy Burdens / Low income
- Credit access / Debt Aversion



Geographic barriers



- Geographic isolation
- Shortage of local energy efficiency workers
- Lack of expertise



Awareness / Access barriers

- Lack of awareness / Skepticism
- Lack of time / Priorities
- Lack of access to marketing channels



Regulation barriers



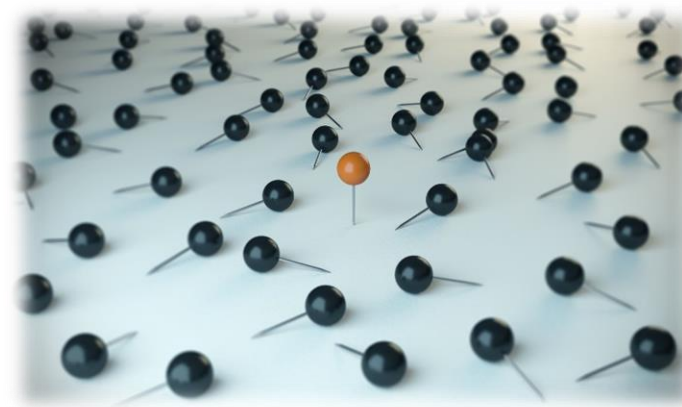
- Unsupportive and inconsistent policy setting
- Lack of strong sub-national territorial components in policy making



Outcomes: Policy status in rural contexts

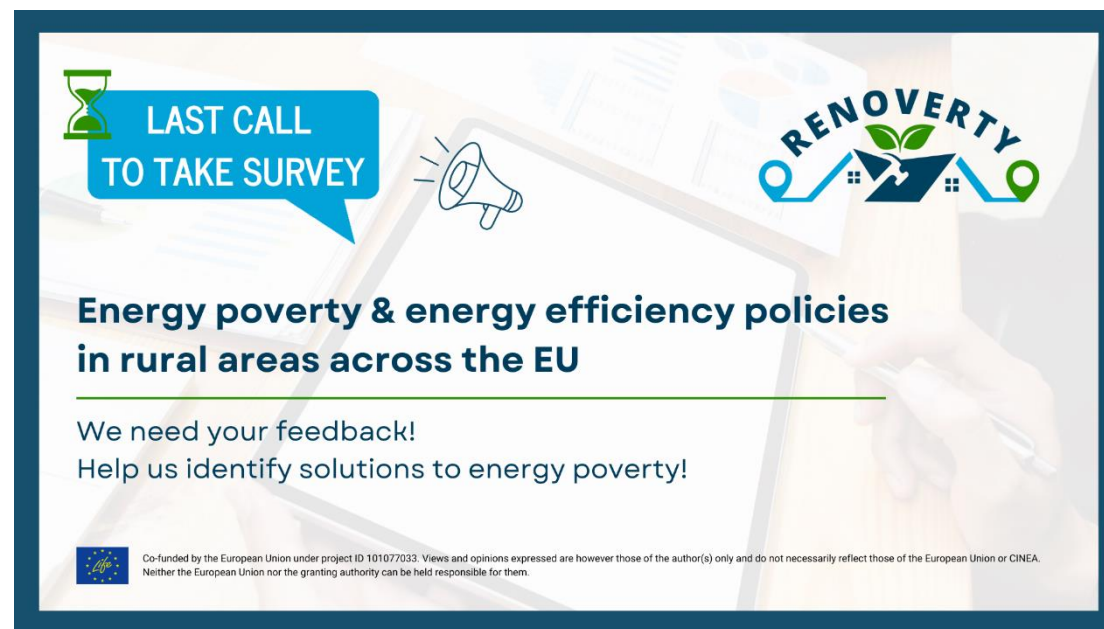
25 policies from European countries were gathered and analysed:

- ✓ Most policies are implemented at the national level.
- ✓ Mention in rural areas - no special requirements
- ✓ Policies started after 2013.
- ✓ Lack of monitoring/evaluation
- ✓ Lack of relevant policies in Southern (SE), and Southern Eastern (SEE) Europe



Assessment of stakeholders' viewpoints and needs

- Survey of relevant stakeholders across Europe
- Key insights on existing needs, barriers, and proposed solutions for energy poverty and energy efficiency in rural contexts
- 130 stakeholders/experts from the fields of academia, policymaking, private and social sectors

A graphic with a blue border and a background of a hand holding a pen over a document. It features a blue speech bubble with a green hourglass icon and the text "LAST CALL TO TAKE SURVEY". A megaphone icon is also present. The RENOVERTY logo is in the top right. The main text reads "Energy poverty & energy efficiency policies in rural areas across the EU". Below this, it says "We need your feedback! Help us identify solutions to energy poverty!". At the bottom left is the European Union flag, and at the bottom right is a small disclaimer.

LAST CALL TO TAKE SURVEY

RENOVERTY

Energy poverty & energy efficiency policies in rural areas across the EU

We need your feedback!
Help us identify solutions to energy poverty!

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Outcomes: Assessment of Energy Poverty Drivers in rural areas



Most important Drivers of energy poverty (EU level):

- Poor Public Transport
- Underinvestment in rural areas
- Geographical remoteness
- Demographic structure
- Poor housing quality



Southern Eastern Europe :

- Poor Public Transport
- Geographical remoteness



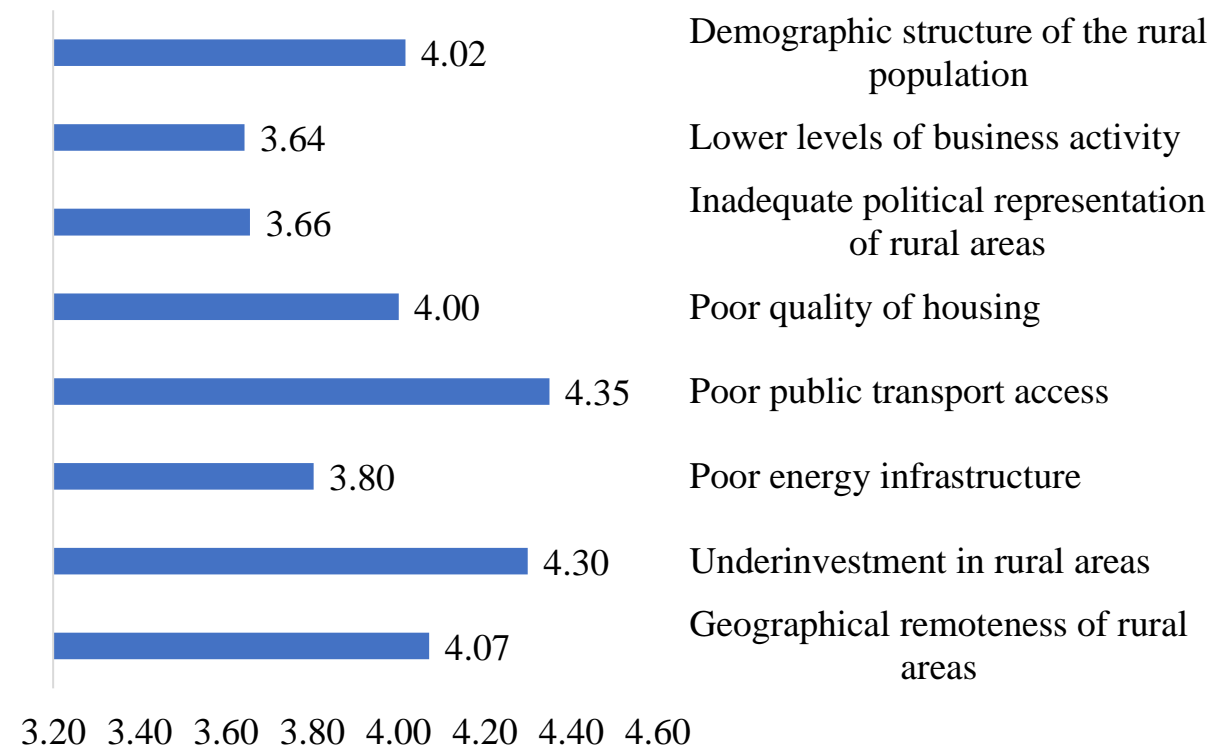
Central Eastern Europe :

- Poor housing quality

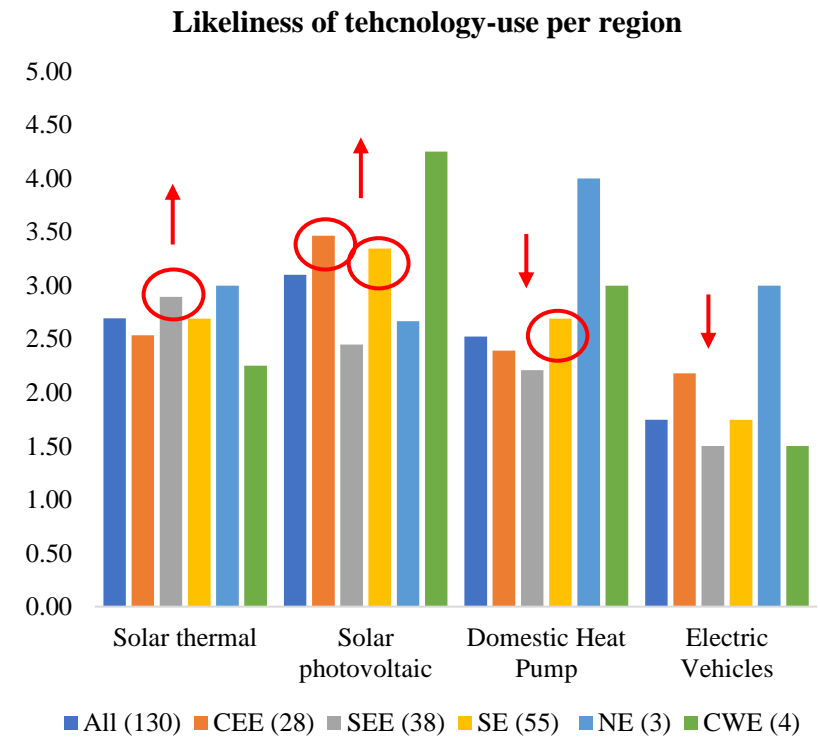
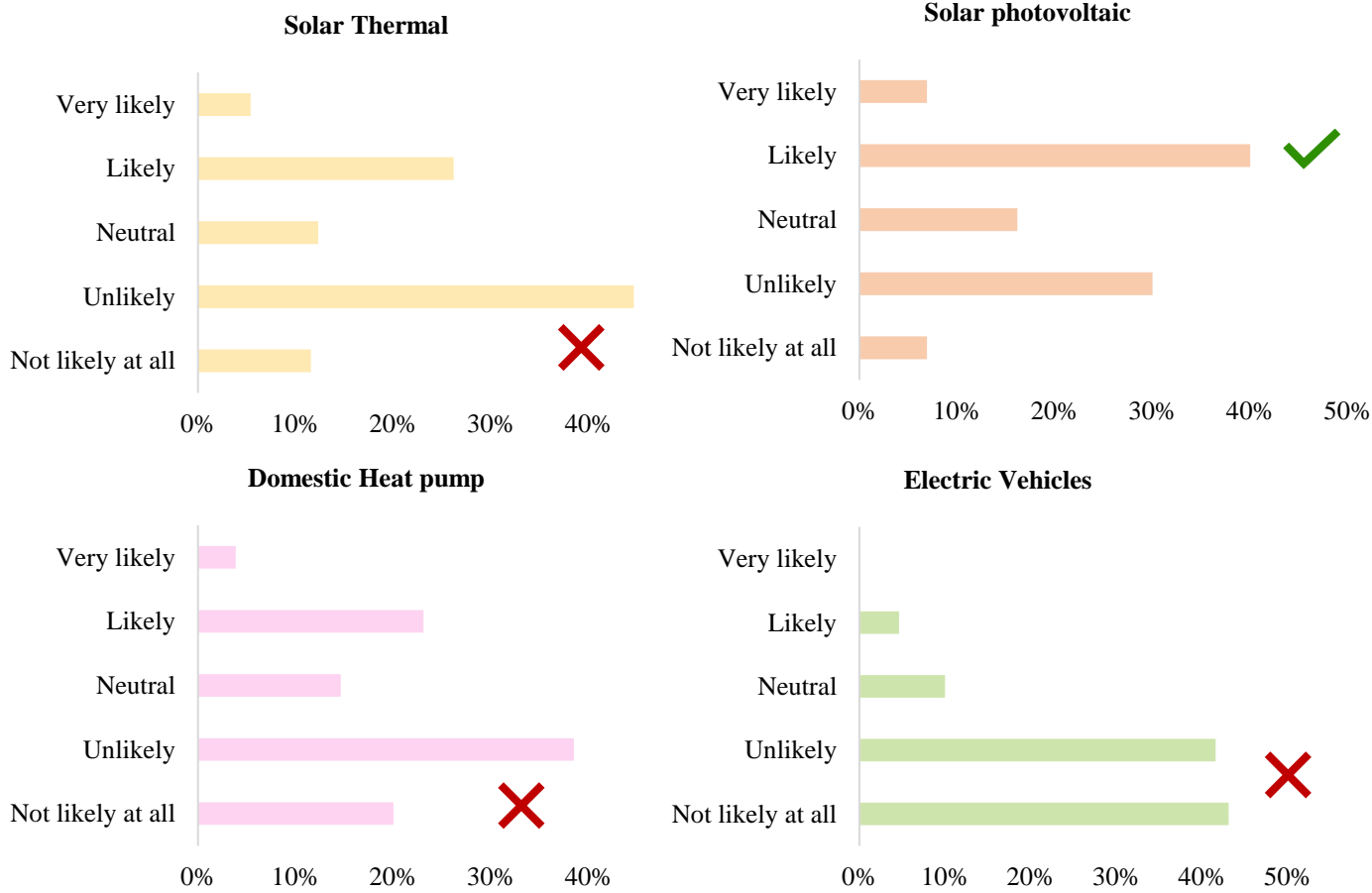
Southern Europe :

- Poor Public Transport
- Underinvestment in rural areas

Ranking of energy poverty drivers



Outcomes: Utilisation of renewable energy/ electrification technologies in rural areas

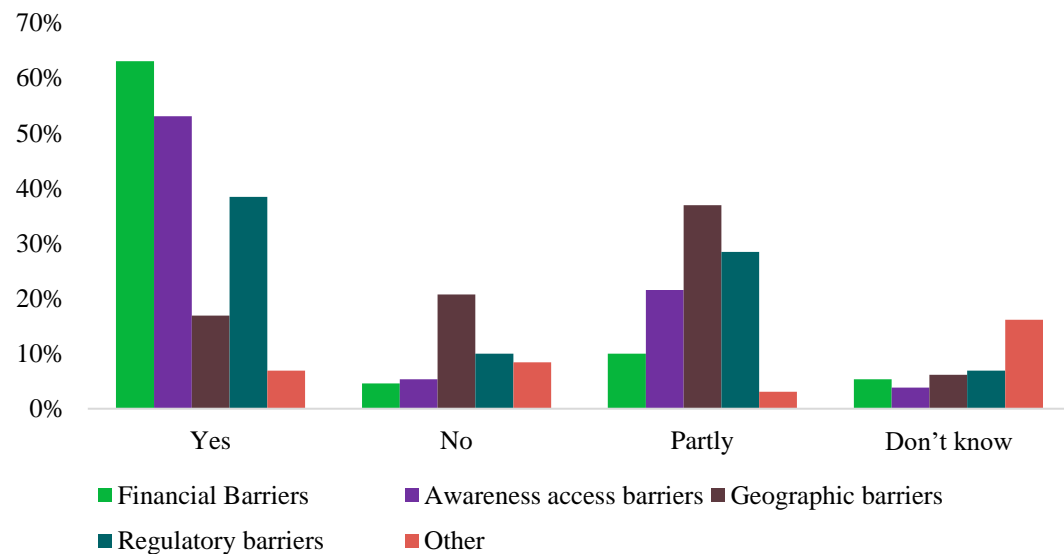




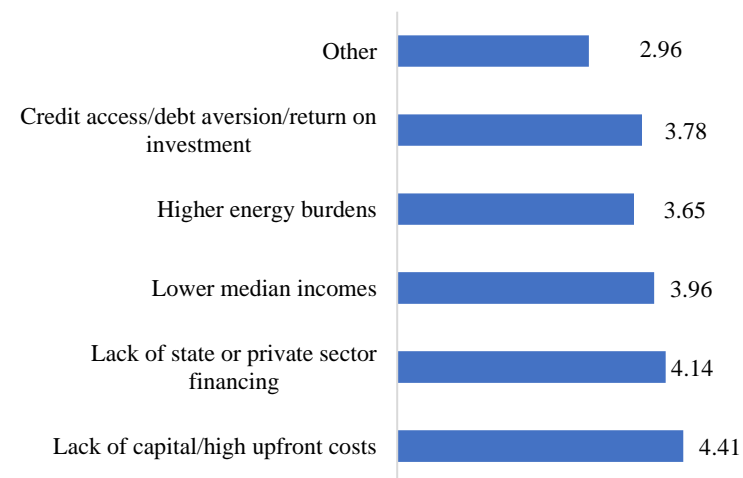
Outcomes: Assessment of barriers to implementing energy efficiency policies in rural areas

Financial barriers the most **prominent ones**, followed by **awareness/access**, **regulatory** barriers, and **geographical**.

Existence of barriers to energy efficiency improvements in rural areas among all respondents



Importance of Financial Barriers



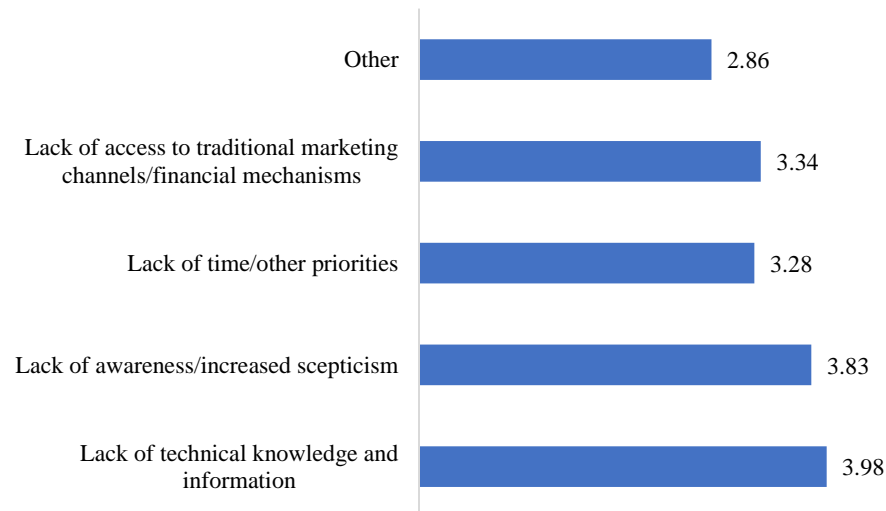
The most prominent financial barriers

- ❖ Lack of capital
- ❖ High upfront costs

Outcomes: Assessment of barriers to implementing energy efficiency policies in rural areas



Importance of Awareness Access Barriers



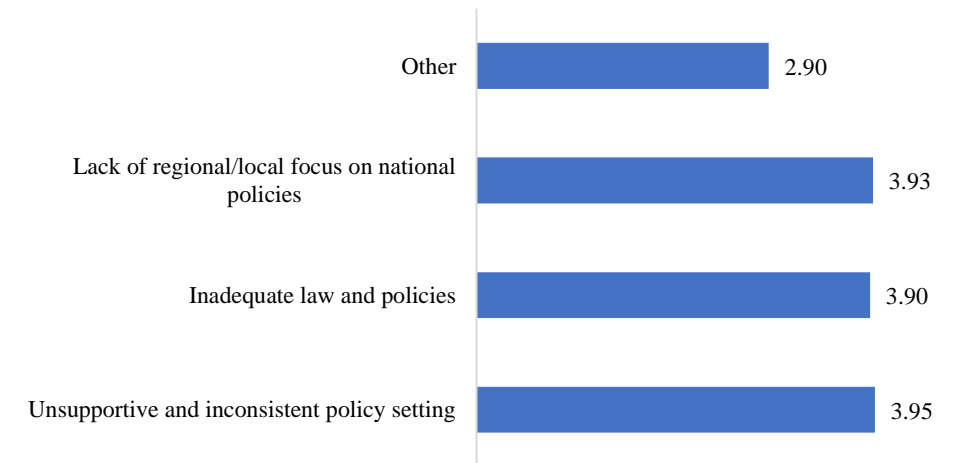
Most important awareness/access barriers:

- ❖ lack of technical information,
- ❖ skepticism of rural households.

Most important regulatory barrier:

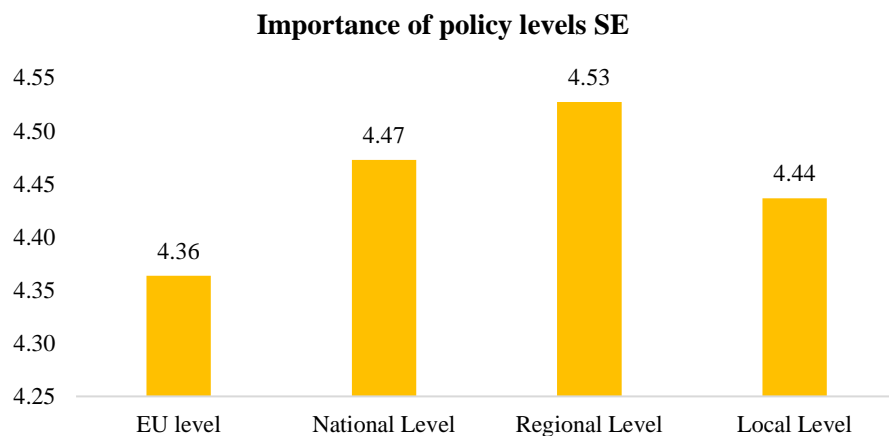
- ❖ Unsupportive and inconsistent policy setting.

Importance of Regulatory Barriers

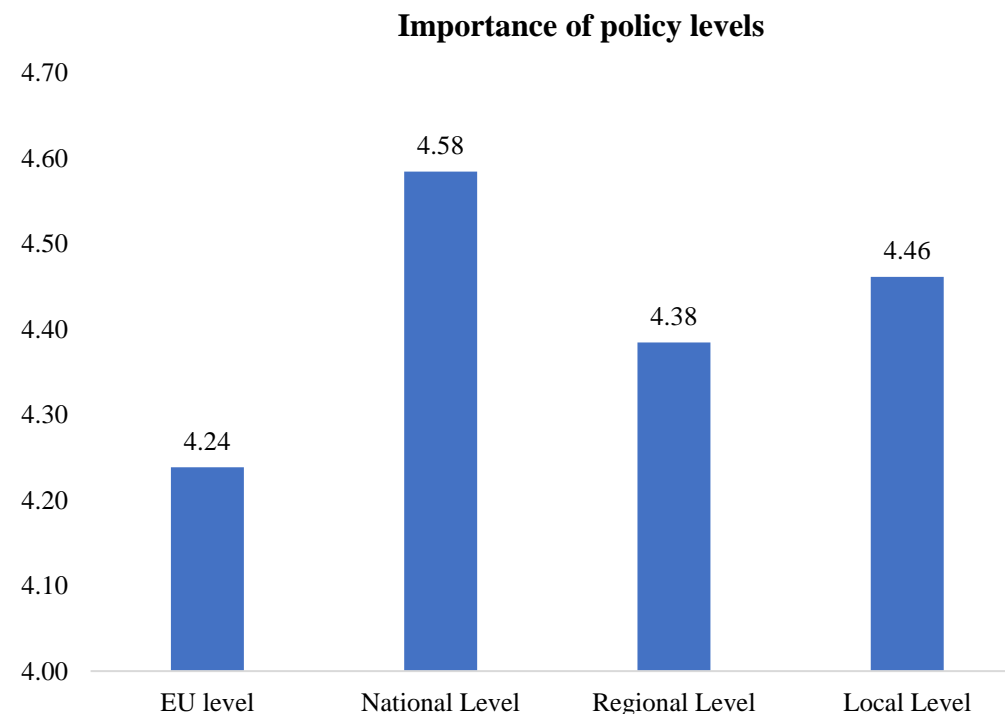


Outcomes: Importance of policy levels

! Most of the respondents consider policy at the national level to be the most impactful for the alleviation of energy poverty in rural areas.



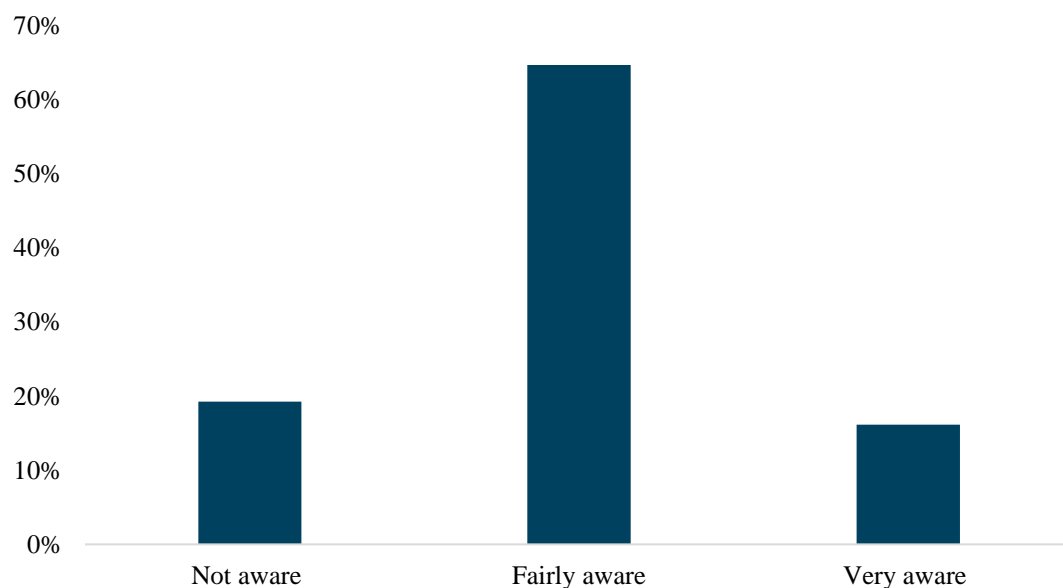
For Southern Europe, regional policy is considered of higher importance



Outcomes: Policy awareness in rural contexts

Most of the respondents declared themselves as *"fairly aware"* of rural energy efficiency policies.

Awareness of policies that address barriers to energy efficiency in rural areas



However, when asked to name specific policies in their contexts, they mentioned general EU strategies and directives.



Invisibility of rural areas



Rural Energy Poverty Alleviation: What can governmental bodies do more? (1/4)

EU-level



Financial mechanisms and support

- ✓ Development of new funding mechanisms and financial support
- ✓ Make projects feasible and sustainable in rural settings

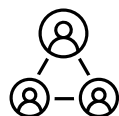


Policy transformation

- ✓ Introduction of policy changes in the existing legal and policy framework
- ✓ Setting targets for energy efficiency and energy poverty reduction in rural areas

Education and awareness building

- ✓ Large-scale outreach efforts such as workshops, training programmes and public campaigns
- ✓ Enhance awareness and understanding of energy poverty issues



Stakeholder engagement and collaboration

- ✓ Engage with all relevant stakeholders, including governments, communities, and institutions
- ✓ Collectively address energy poverty

Rural Energy Poverty Alleviation: What can governmental bodies do more? (2/4)

National level



- ✓ Dedicated funding for rural regions
- ✓ Tax incentives and subsidies for energy-efficient upgrades

- ✓ Implement nationwide campaigns, educational programs, and community outreach efforts
- ✓ Disseminate information about available resources, technologies, and energy-efficient practices

- ✓ Propose plans and strategies that consider the unique challenges of rural areas
- ✓ Create subsidies, monitoring mechanisms, and legislation that encourages energy efficiency improvements

Rural Energy Poverty Alleviation: What can governmental bodies do more? (3/4)

Regional level



Empowerment and customised strategies

- ✓ Extend beyond urban-oriented strategies enabling the development of unique solutions for rural challenges
- ✓ Regional-level education and awareness campaigns

Financial support and accessibility

- ✓ Long-term funding, innovative financing tools
- ✓ Funding directed at areas with higher energy poverty prevalence



Inclusive infrastructure and innovation



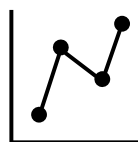
Collaboration and advocacy

- ✓ Effective collaboration and cooperation between local, national, and European entities
- ✓ Advocacy for changes at higher levels, including harmonising regulations and access to incentives

Data-driven planning and accountability

- ✓ Creation of dedicated departments to oversee local government activities can ensure accountability in implementing plans
- ✓ Facilitation collaboration between various stakeholders in data sharing

- ✓ Initiatives include enhancing public transportation connectivity, upgrading energy systems, and promoting sustainable building practices
- ✓ Transition from dormitory villages to vibrant, self-sufficient rural communities



Rural Energy Poverty Alleviation: What can governmental bodies do more? (4/4)

Local level



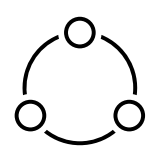
Financial support and funding allocation

- ✓ Allocate funds for retrofitting buildings, implementing energy-saving technologies, and supporting energy-poor households
- ✓ Emphasis on the targeted allocation of funds based on the specific needs of different regions



Local policy development

- ✓ Prioritise the energy challenges faced by rural regions
- ✓ Facilitate access to technical expertise, and develop specialised plans
- ✓ Provide support to the most remote and vulnerable communities



Co-ordination and collaboration with higher levels of government

- ✓ Work closely with authorities at other governance scales to overcome structural barriers and adapt policies
- ✓ Act as intermediaries to communicate the specific needs of their areas



Local engagement and participation

- ✓ Co-produce policies with local stakeholders
- ✓ Encourage rural residents to participate in local energy projects, and establish local energy communities



Thank you.

For more info, follow our hashtag, visit our website or contact us:

 #RENOVERTY

 <https://ieecp.org/projects/renoverty/>

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Engaging, Connecting and Empowering rural actors – Multi Actor Approach in RURALITIES project

Gabor Mester, PEDAL Consulting

Engaging, Connecting and Empowering rural actors

Multi Actor Approach in RURALITIES project.

Gabor Mester

PEDAL Consulting

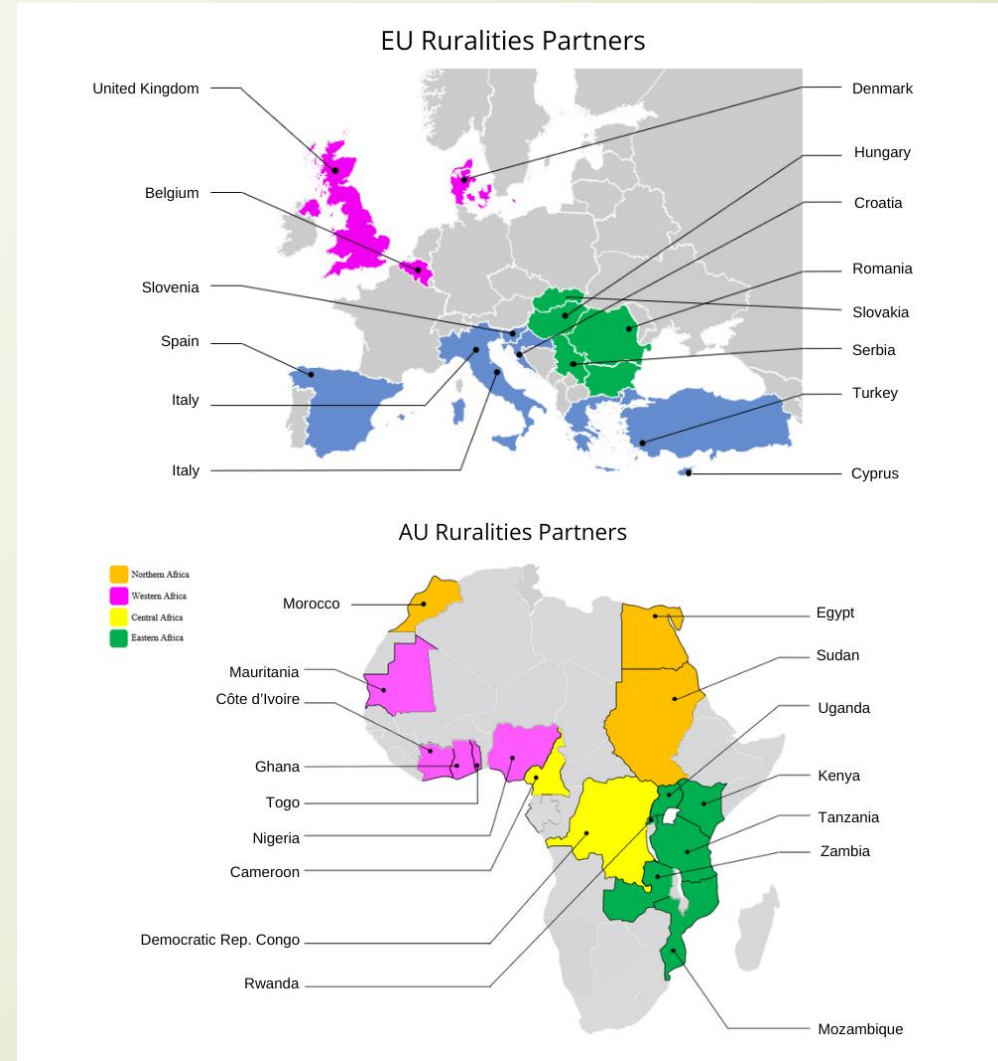
g.mester@pedal-consulting.eu

Rural Revival: Empowered Communities and Sustainable Energy in a Changing Climate – Online
Webinar
1 March 2023



Introduction to RURALITIES

- HE coordination and support action
- 5 Years long project (M17)
- 52 partners in the consortium
- Engage, connect and empower rural actors focusing on collaboration and innovation
- Creating learning HUBs – Climate-smart Expertise and Training centers in 6 pilots
- AU – EU collaboration



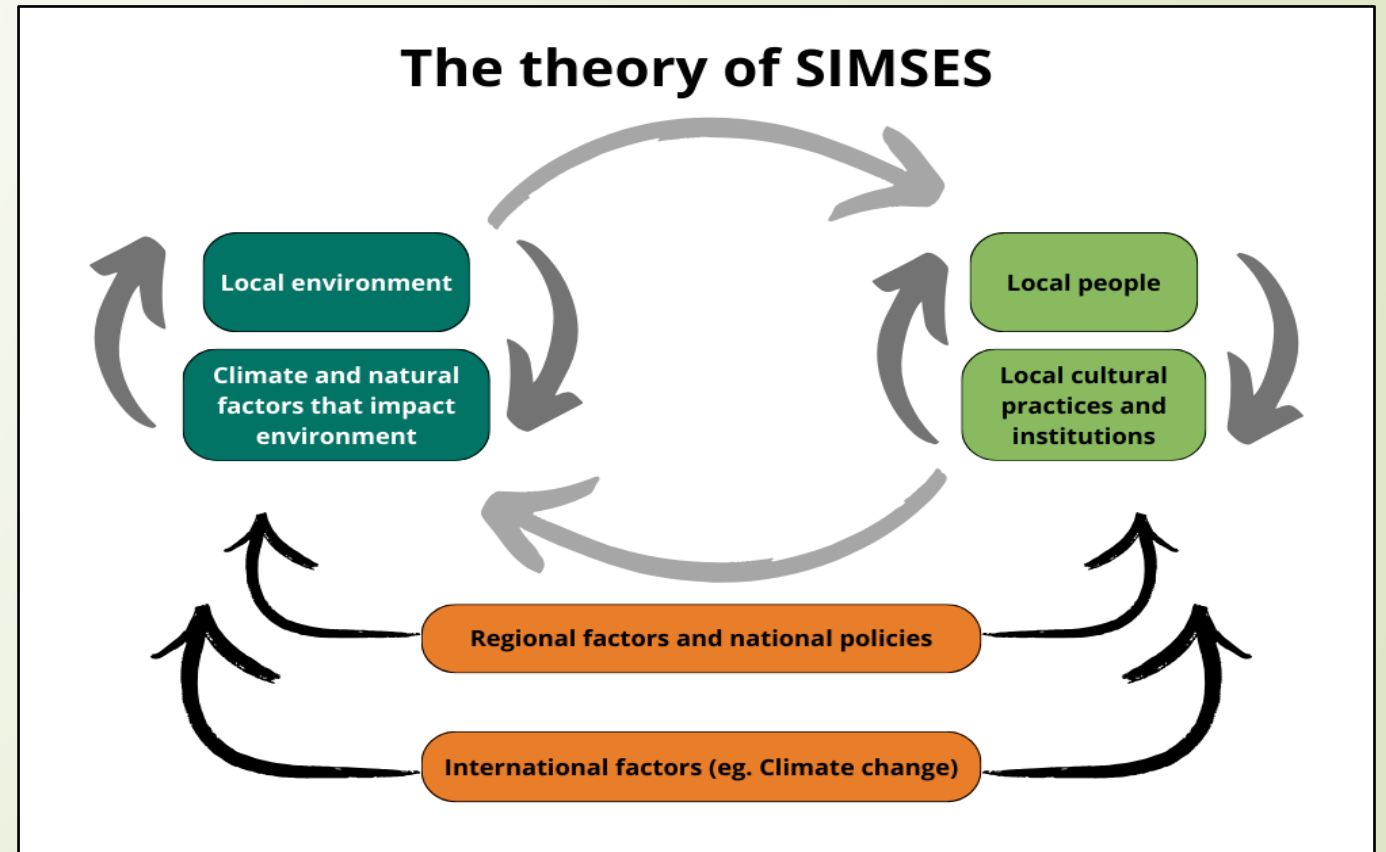
MAP OF PILOT AREAS SIMSES (Simplified Rural Socioecological Systems)

- Marche, Italy
- Veneto, Italy
- Highlands and Islands, Scotland
- Posavje, Slovenia
- Asturias, Spain
- Iasi, Romania



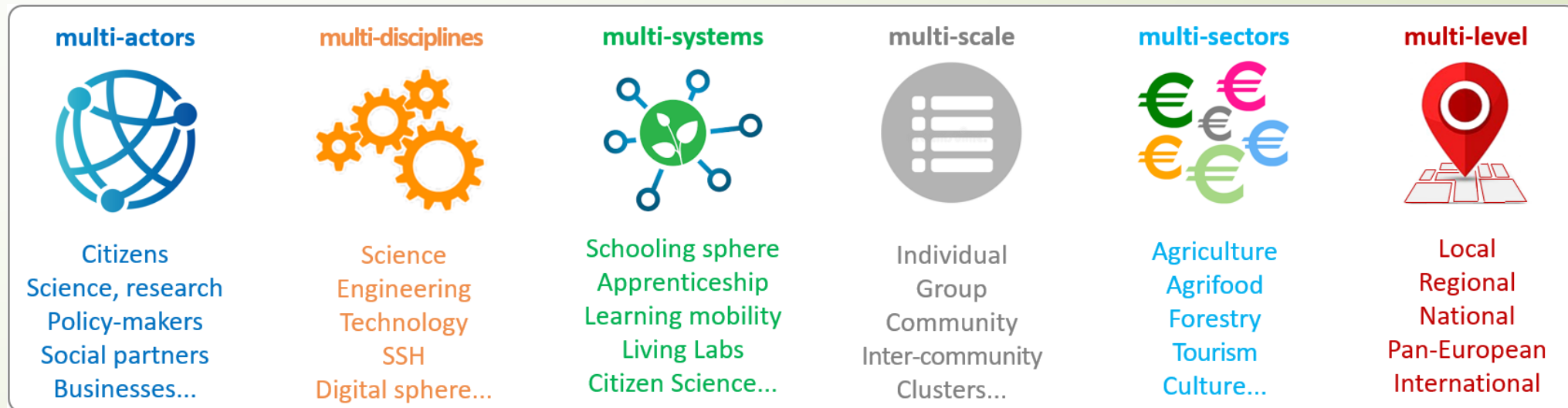
Holistic approach approach

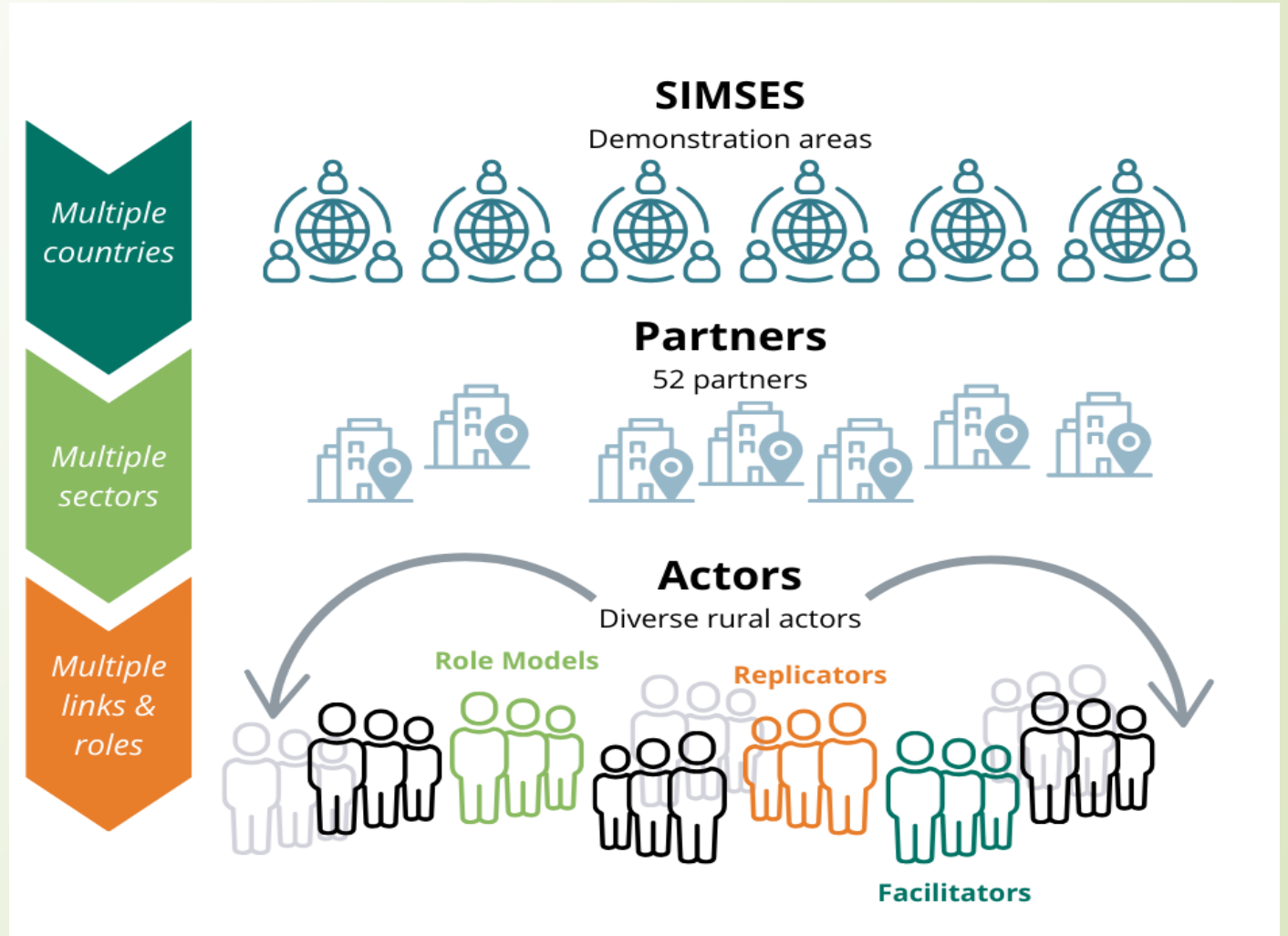
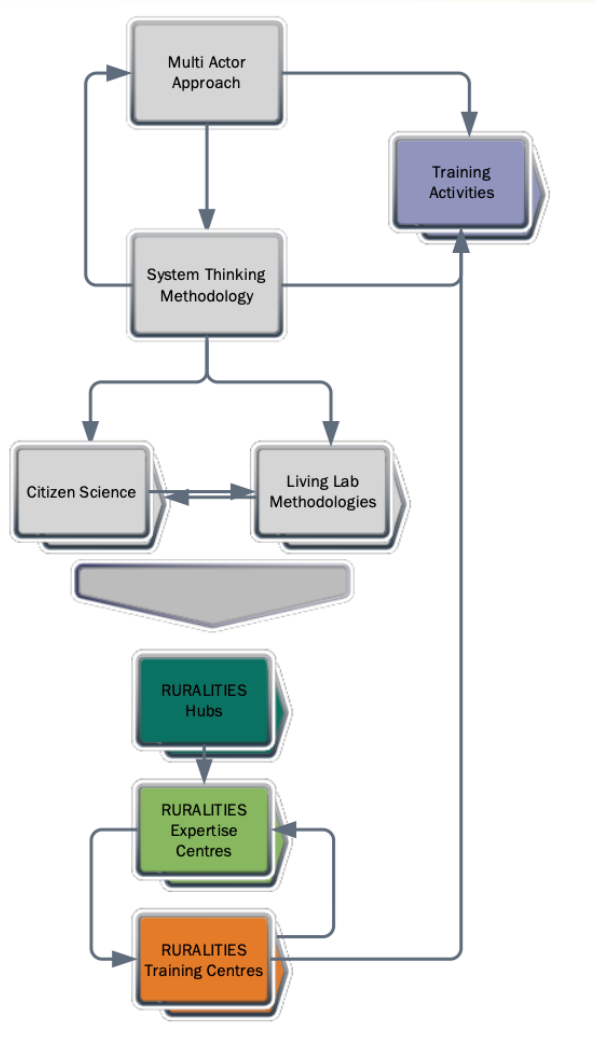
- SIMSES (Simplified Rural Socio-ecological Systems)
- Citizen science
- System thinking methodology
- Living Lab methodology



RURALITIES Multi-point learning framework

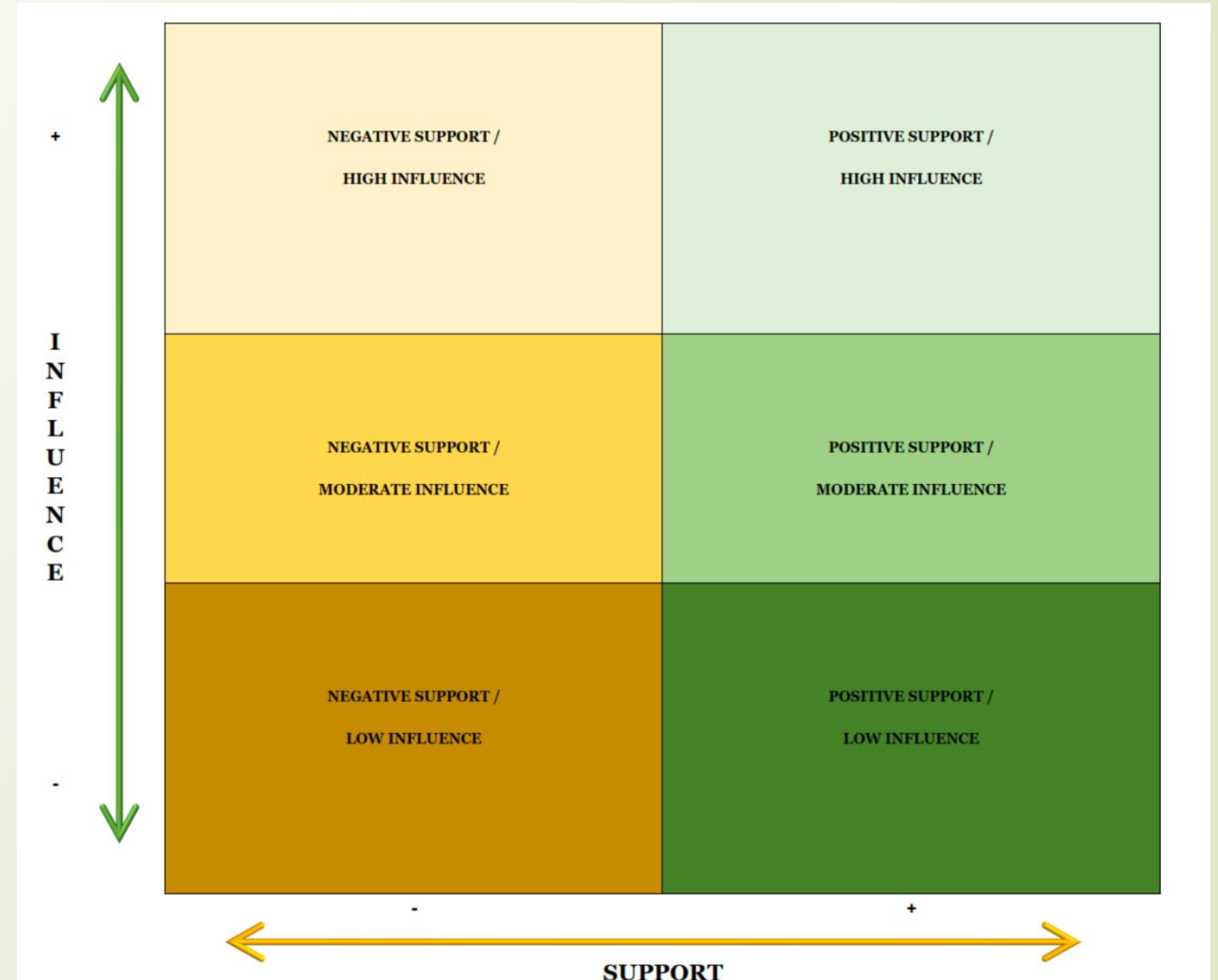
- Bringing together diverse stakeholders
- To collaboratively create solutions that are relevant
- Directly applicable to the challenges faced by end-users





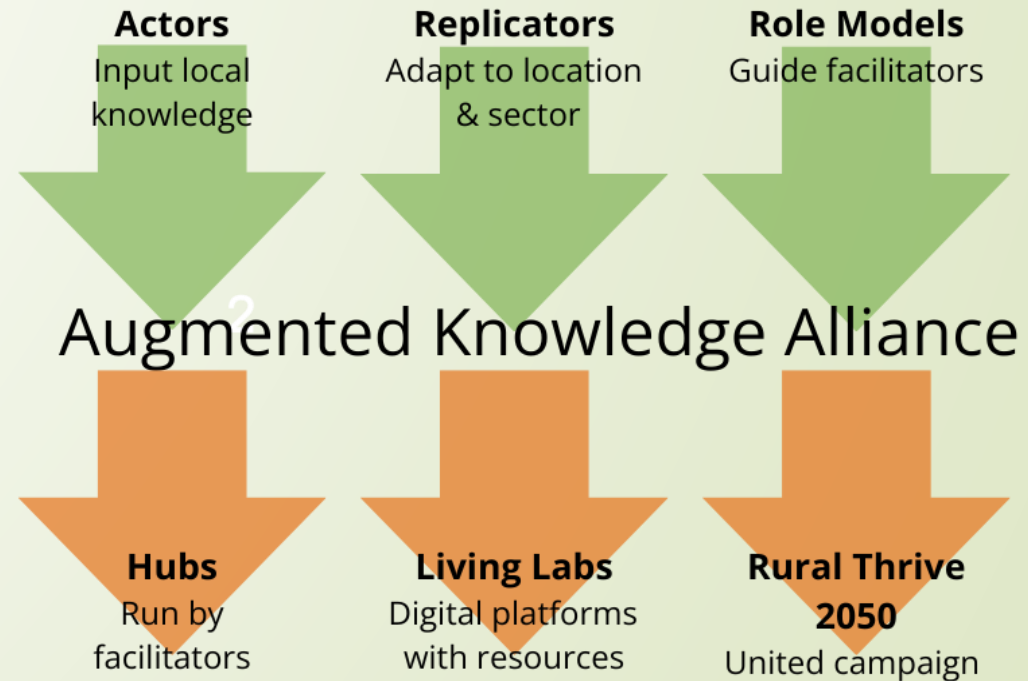
Influence and Support matrix

- Currently we apply the Influence and Support Matrix.
- 100 + role models and replicators identified by end of March



How can you get involved?

- Overlap in pilot areas or countries
- Living Lab approach
- Multi actor approach



Stay Connected and Informed



<https://www.ruralities-project.eu/>

 Ruralities Project

 Project RURALITIES

 @ruralities52

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Rural development examples in Latvia Regional Hub in RuralBioUp project

Kristaps Makovskis, LSFRI Silava



Rural development examples in Latvia Regional Hub in RuralBioUp project

Kristaps Makovskis (LSFRI Silava; Latvia HUB)

Rural Revival: Empowered Communities and Sustainable Energy in a
Changing Climate, 01.03.2024.

Latvian State Forest Research Institute “Silava”



Latvian State Forest Research Institute "Silava" is the main center of forest science in Latvia and leader of scientific ideas in forestry and the related research and development in the country.

The Latvian Institute of Forestry Problems was established in 1946.

Latvian State Forest Research Institute “Silava”



Research areas:

- Forest ecology and silviculture
- Forest entomology
- Forest operations and energy
- Forest phytopathology and mycology
- Forest products processing
- Forest regeneration and establishment
- Forest tree breeding and climate change
- Genetic Resource Centre
- National Forest Inventory
- Other areas
- Wildlife management



Rural
BioUP



BIOSERVICES



InBestSoil



RuralBioUp - Overview

- **Project Acronym:** RuralBioUp
- **Project Name:** Empowering EU Rural Regions to scale-Up and adopt small-scale Bio-based solutions: the transition towards a sustainable, regenerative, inclusive, and just circular bioeconomy
- **Type of action:** Horizon Europe Coordination and Support Action
- **DURATION:** 36 months | October 2022- September 2025

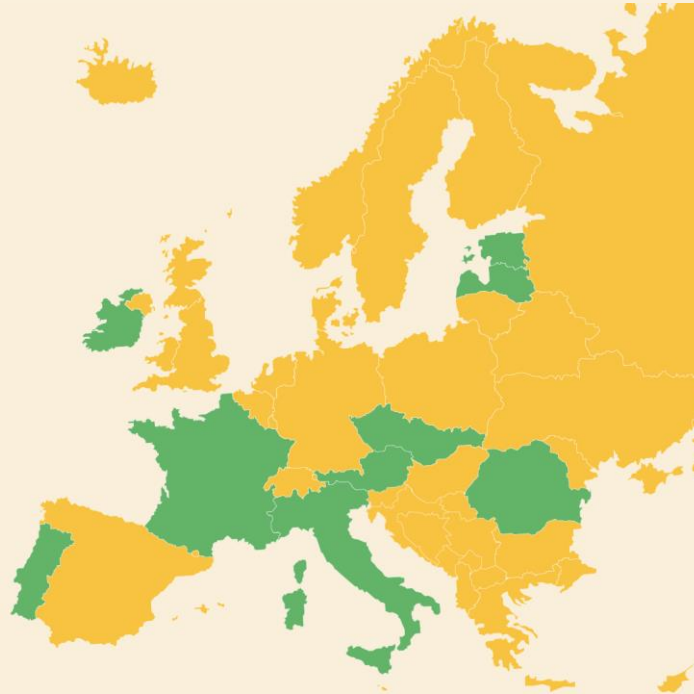
RuralBioUp - consortium



12 partners from 9 EU countries

- ITALY / APRE SPRING ITABIA
- PORTUGAL / LOBA
- ESTONIA / CIVITTA
- AUSTRIA / V
- CZECH REPUBLIC / ZVT
- IRELAND / H
- FRANCE / VISEPOLY VALLEY
- ROMANIA / R
- LATVIA / L

Funded by the European Union



RuralBioUp Regional Hubs



Italy - Lombardy, Marche, Apulia

Czechia - Charles Spa

France - Pays La Loire, Auvergne-Rhône-Alpes

Latvia – The Hub region is going to be at the National level

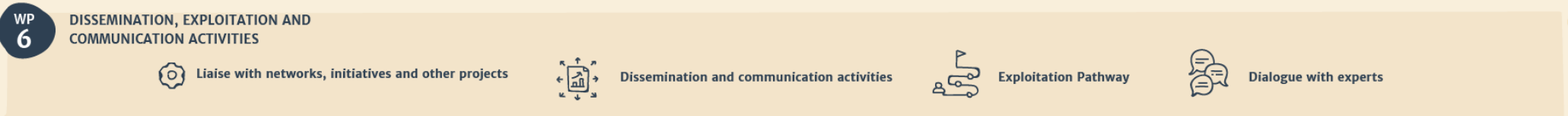
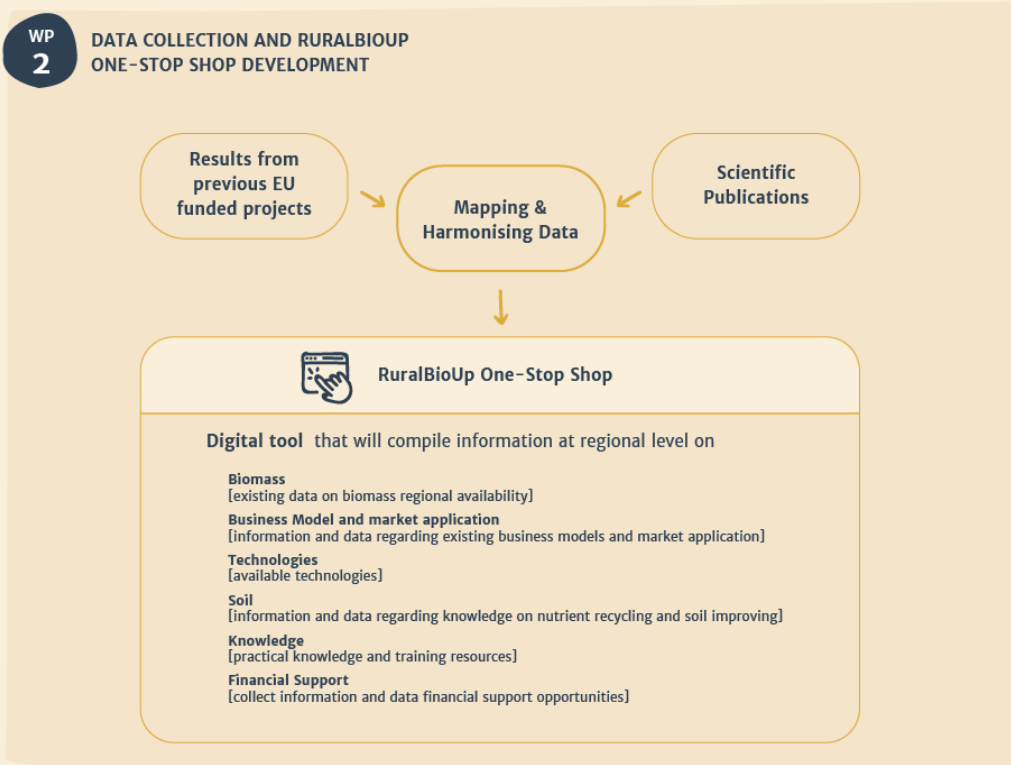
Ireland - The Hub region is going to be at the National level

Romania - Centru Region



RuralBioUp – Methodology in the nutshell

WP 1 Project Management



Regional HUB



Multi-actor platform of 30 people co-operating to identify and implement activities needed to adopt local bio-based solutions

Regional Hubs Activities

Stage 1

Oct. 2022- Jul. 2023



Empowering the Regions

- Mapping Stakeholders in each Regional Hub
- 2 trainings for Regional Facilitators & Hub Contact Points
- Collecting data to develop RuralBioUp One-stop shop

Stage 2

Jul. 2023- Jan. 2024



Establishing the Regional Hubs

- Kick off 9 Regional Hubs
- Choose at least 2 value chains per Regional Hub
- Define an action plan in each Regional Hub (including coaching/training needs)

Stage 3

Nov. 2023- Jan. 2024



Implementing the Action Plans

- Regional hub & follower regions exchanges
- Networking
- Coaching & training
- 2 Regional Hubs meetings
- Cross-learning meetings (2 mobilization and mutual learning workshops)
- Study visits

Stage 4

Jul. 2025- Sept. 2025



Promoting the Regional Hubs Long-Term Sustainability

- Elaborate manual for replication recommendations & actionable items
- Define Regional Hubs long-term sustainability strategy

Local stakeholders:

- Farmers
- Foresters
- Clusters
- Business support organisations
- Policymakers
- Civil society organisations
- Investors
- EEN local contact point, etc.

Regional Facilitator:

project partner who oversees and coordinates the hub activities

Hub Contact Point:

representatives of the region collaborating in the Hubs' activities and identified as the main actor to continue the RuralBioUp model after the project's end

Value chain in RuralBioUp project



The production of renewable biological resources and the conversion of these resources and waste streams into value-added products such as food, feed, bioproducts and bioenergy.

Wood ash+ peat + biochar = pellets for soil improvement



(Nr. 1.1.1.1/19/A/112)

Pellets for soil improvement – Rural Development example



Waste management

Wood ash

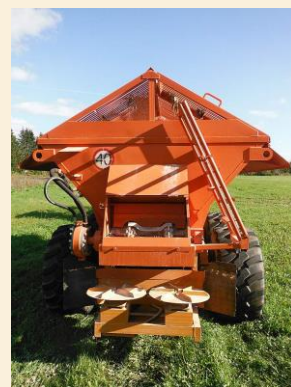
- Municipal boiler houses
- Manufacturing companies

Peat

- Peat companies (bad quality peat)

Biochar

- Small fraction charcoal



Rural business

Making pellets

- Small family company
- Side business out of season (farmers)

Application to the soil

- Farmers

Tree growing, planting, management

- Farmers
- Nurseries
- Foresters

Rural economy

Tree plantations

- Woodchips – energy
- Timber – construction materials
- Different tree products - furniture

Ecosystem services

- Bees in willow plantations
- Shelter for animals



Examples for rural development (other projects) – tree wool



Resource management

Laying trees in forest (mostly for free)

- Foresters
- Others



Rural business

Collecting tree bark

- Foresters
- Farmers (in winter)
- Others

Fiber formation

- Small independent company
- Side business out of season (winter)

Making clothes or other products

- Small independent company
- Side business out of season (winter)

Rural economy

Selling different products

- Clothes
- Design elements
- Branding local name

Tourism

- Museum
- Workshops



Examples for rural development (other projects) – wool ribbons



Waste management

Sheep wool

- Farmers (wool producers)
- Farmers (pasture)
- Meet producers



Rural business

Doing logistic

- Collecting wool for ribbons

Making wool ribbons

- Small independent company
- Side business out of season (winter)

Application to the trees

- Farmers (out of season)
- Small family company
- Foresters to private forests

Added value compared to usual tree protection

Rural economy

Wood products

- Woodchips – energy
- Timber – construction materials



Our idea behind Latvia HUB for rural development



- We are research institute – we try to add some scientific edge or different approach to rural development,
- We try to use forest or agriculture side products – what others are not using (land, waste, technologies)
- We try to establish long value chains with many beneficiaries
- We try to mix forest with agriculture or other industries (wool + tree protection, peat + fertilization, tree + clothes)
- We try to add value to the new products by making the value chain longer by involving more people from local communities (wool protection vs traditional tree protection)





Thank You!

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Our Consortium



ruralbioup.eu/



Panel discussion



Kristina Eisfeld,
Climate Alliance



Dimitris Papantonis,
TEESlab



Stefan Bouzarovski,
IEECP



Gabor Mester,
PEDAL Consulting



Kristaps Makovskis,
LSFRI Silava

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