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The role of rural areas in the green transition

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Webinar: Supporting the Rural Low-Carbon Transition

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What is “rural”?

While the majority of the population lives in cities, the 80% of the territory (of OECD countries*) is still rural**.

*Organisation for Economic Co-operation and Development (OECD)

**<https://www.oecd.org/regional/rural-development/climate-change-net-zero.htm>

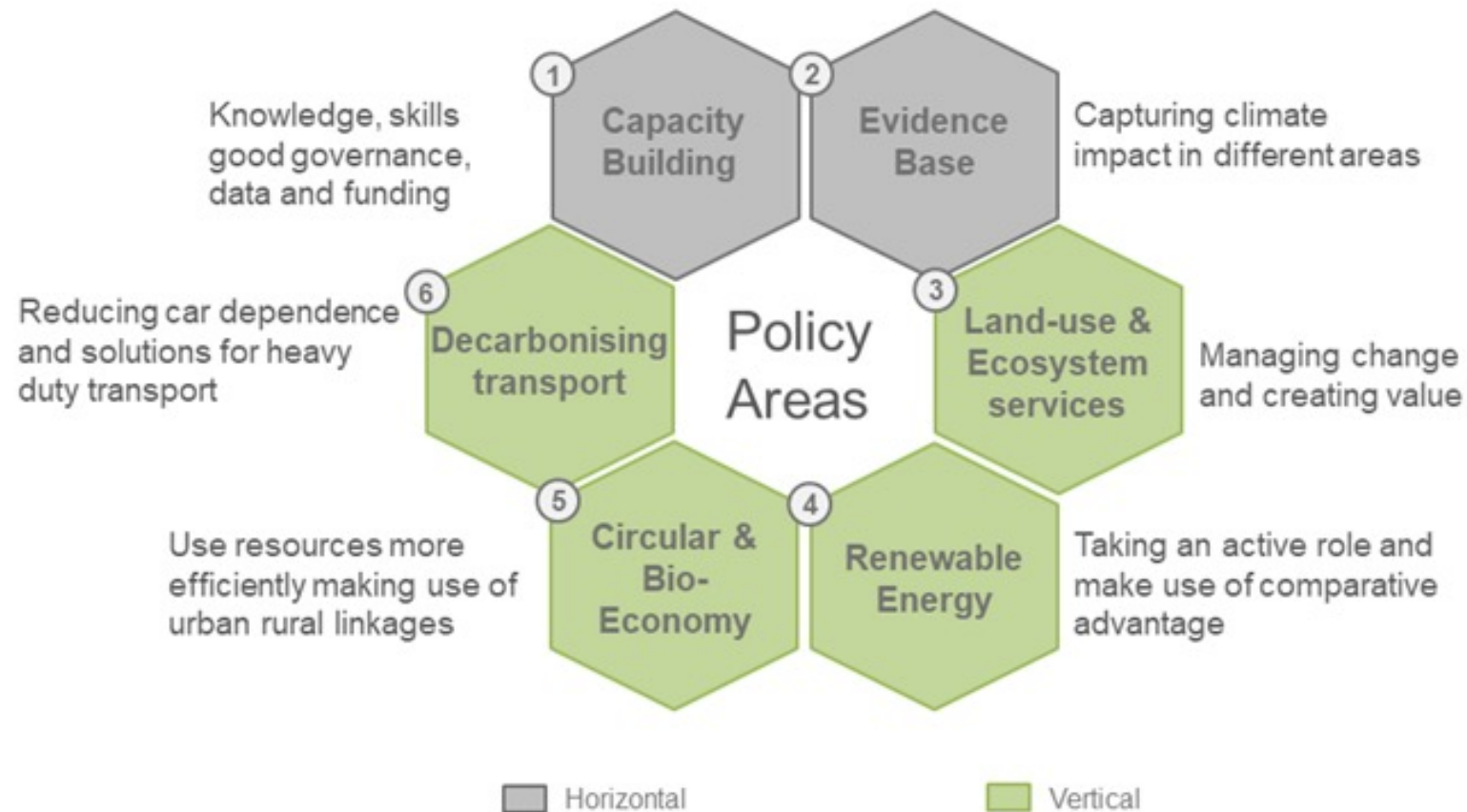
Why

is it key to think dedicated policies and strategies for the green transition of rural areas?

- Rural regions **contain natural resources**, biodiversity and ecosystem services needed to sustain our lives.
- there is an urgent need to transform **emission-intensive activities** in rural regions into environmentally friendly and net-zero alternatives.
- Increased frequency and intensity of extreme weather events threaten their resource-dependent livelihoods
- Rural communities can also struggle to adapt and prepare for transformational challenges required to face climate change pressures (vulnerability)

Challenges

Rural regions have an essential role to play in the transition to net-zero emissions economies and to build resilience against climate change - yet rural development policies do not always reflect this.



Ref: picture adopted from <https://www.oecd.org/regional/rural-development/climate-change-net-zero.htm>

Depopulation and equity

Remote areas are often susceptible to become what a JRC reports*** defines, with a newly-coined term, “lonely places”, suffering from insufficient local services, accessibility, or connectivity.

These territories are often also referred to as “lagging behind”. However, while the term ‘lagging behind’ is mostly limited to economic aspects, the designation “lonely places” captures the position and connection of places from demographic, economic, social and infrastructural points of view.

But solutions exist.

***https://joint-research-centre.ec.europa.eu/jrc-news/not-lagging-behind-anymore-lonely-places-places-opportunities-2022-06-23_en

**Governance, policy design,
scale issues and spatial
distribution**

**Better rural-urban linkages or
"close" systems?**



The case of renewable energy production

a zoom on one aspect to open up the discussion to specific challenges and possible way forward



Barriers to the massive upscale of renewable energy production

- Lacking governance and **institutional capacity** (regional/local level)
- Poor policy design and **incentives**
- Lacking awareness and citizens' ownership
- (Potential) **environmental** side effects
- (Potential) **social** side effects
- ...



The IRENES project has been investigating and trying to respond to some of the multiple and complex challenges for a increasing renewable energy production, while ensuring a sustainable development

Let's be more precise

Renewable energy are ecosystem services and, as such, **can trigger negative** or positive **impacts** on the provisioning of **other services and goods provided by nature** (with many social and economic implications, on top of environmental implications)

Examples:

- Agricultural biomass production VS food production
- Solar farms VS eastetical value of a landscape (and tourism)
- Hydropower production VS fauna's habitat (and fishing)

What has the IRENES project been doing?

5 pilots

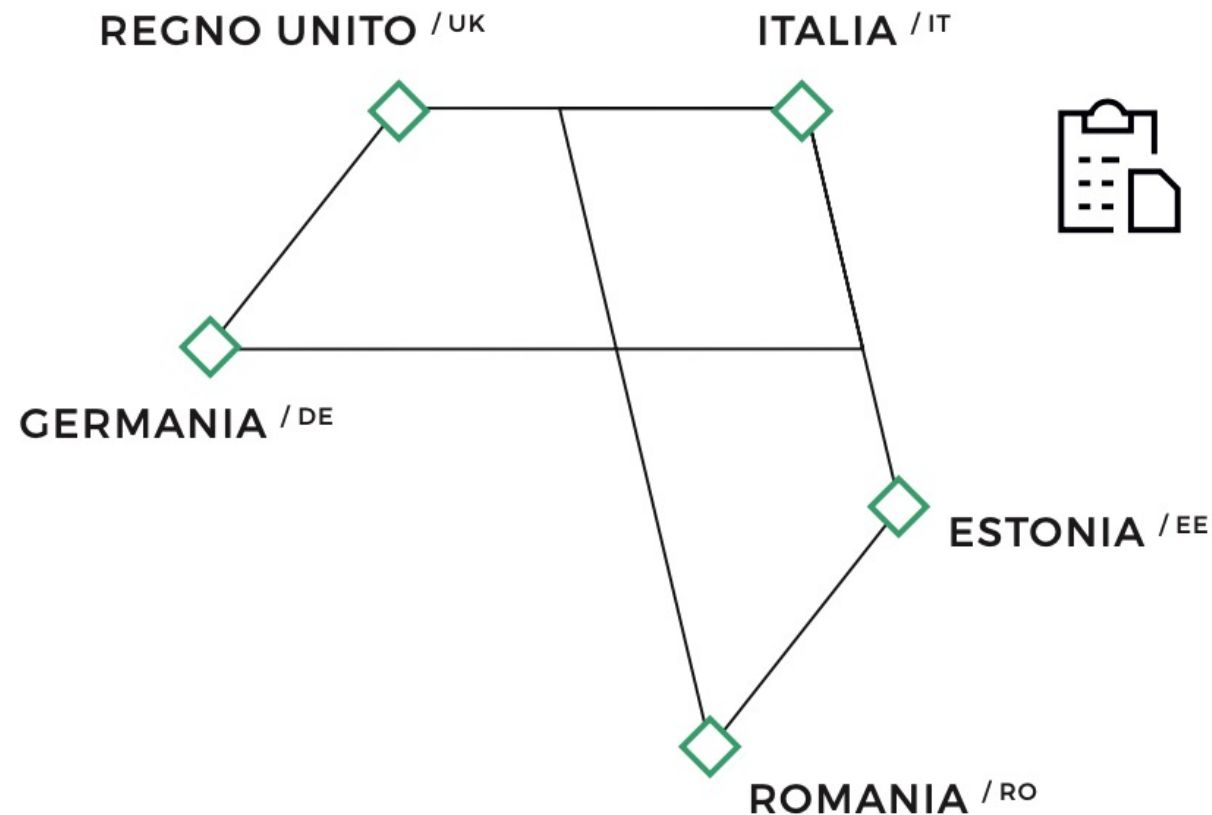
Analysis of ES inclusion in key policy instruments (**SOTA AND SWOT analysis for each pilot**)

Dialogue

With Municipal Authorities and stakeholders
To understand knowledge gaps, context's needs, and set up a fit for purpose analysis of trade-offs between (specific) renewables and other ecosystem services

Analysis

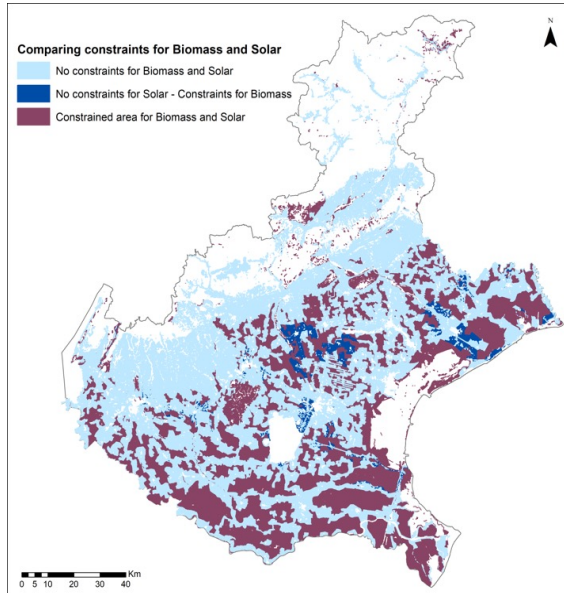
Identification, assessment and mapping of such trade-offs



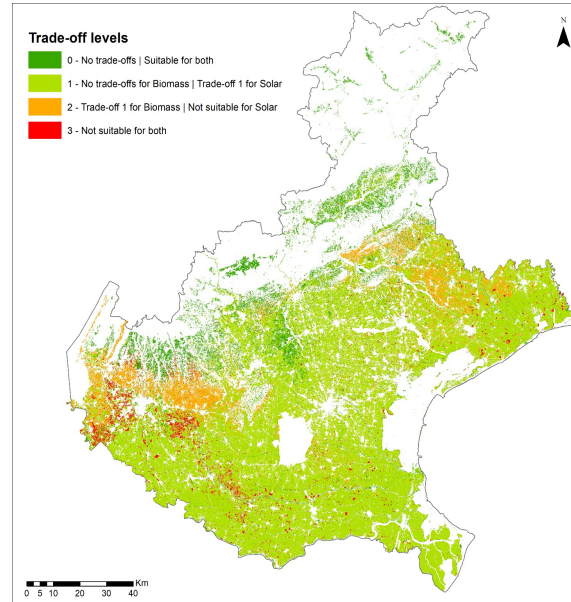
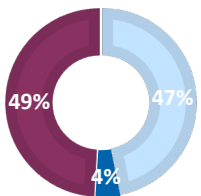
Type of interventions a zoom on the Italian case (Veneto Region). Results from the analysis:

1. Policy constrains (BvsS) 2. ES Trade-offs (BvsS)

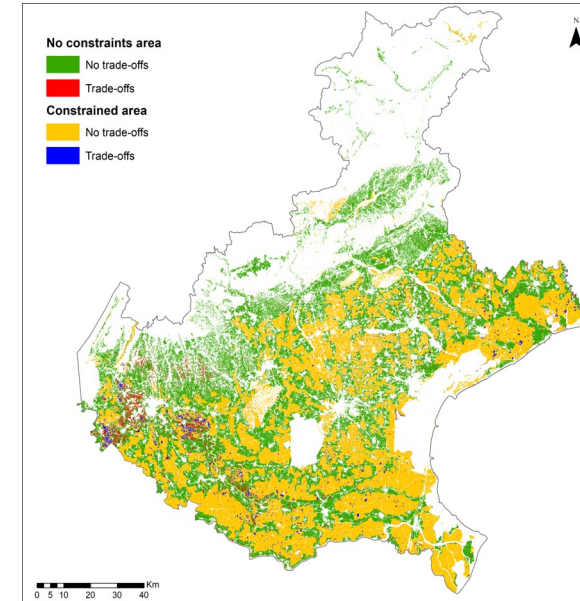
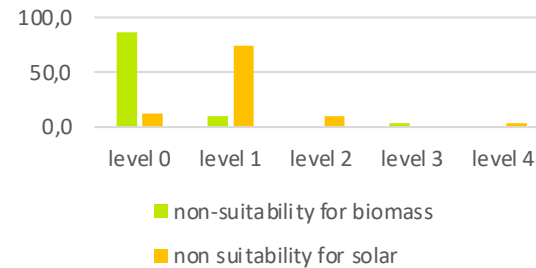
3a. Constrains vs tradeoffs 3b. Constrains vs tradeoffs



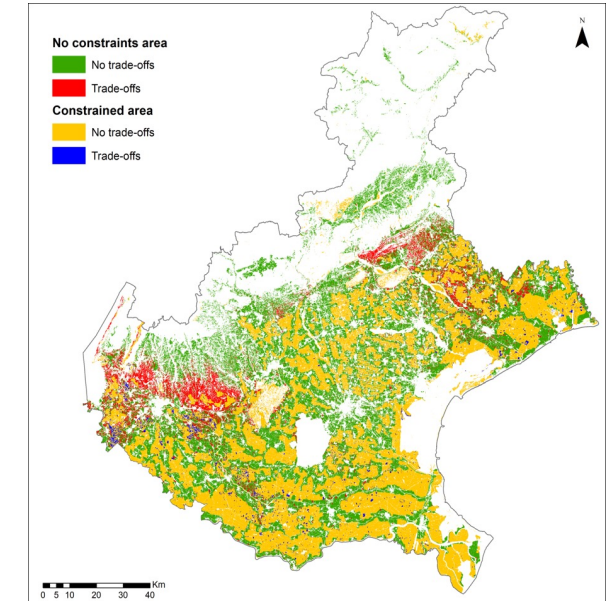
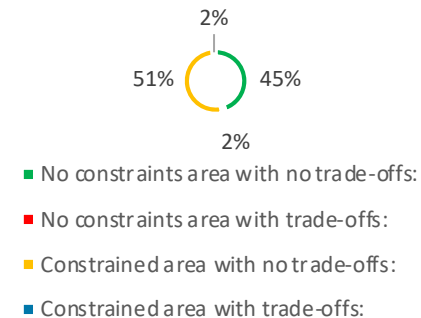
- No constraints for agricultural biomass nor solar farms
- No constraints for solar farms, but constraints exist for agricultural biomass
- Constraints for both agricultural biomass and solar farms



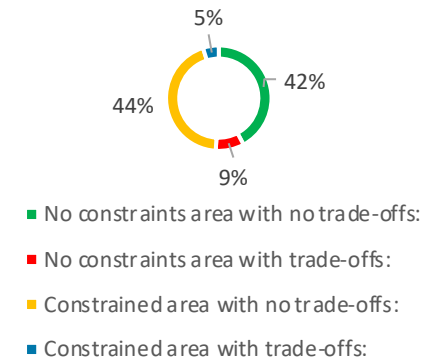
Non-suitability level for biomass and solar compared



Agricultural biomass



Solar farms



Some conclusions

- Green transition in rural areas faces specific challenges, hence needs a dedicated approach
- A **collaborative** and **place-based approach** reflecting **local interests**, circumstances, and geographic location can accelerate and increase effectiveness of green transition-related strategies
- Policymakers need to think about **integrated policy approaches at the local level** to reinforce the impact of different actions and address trade-offs.
- There is need to **think about win win (for both urban and rural areas) or**, at least, **no-regret green transition** strategies. To do so, **spatialization** of analysis, as well as of possible solutions, can help an effective policy design
- **Sustainable development (considering environmental, social and economic aspects)** need to be at the centre of any initiative
- **Capacity building**, knowledge sharing, **participation** and awareness raising can help building a sound path. **Monitoring** and evaluating practices shall be mainstreamed at all level

KEY POLICY AREAS: MOBILITY, LAND USE AND ECOSYSTEMS SERVICES, RENEWABLE ENERGY, CIRCULAR AND BIO-ECONOMY

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Thank you!

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