

**ESPON**



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*Plānotāju plenērs - “Presentation of results of the  
ESPON MAK-RES Project”*

David Monic, Idea Consult in partnership with  
ÖIR – Austrian Institute for Regional Studies

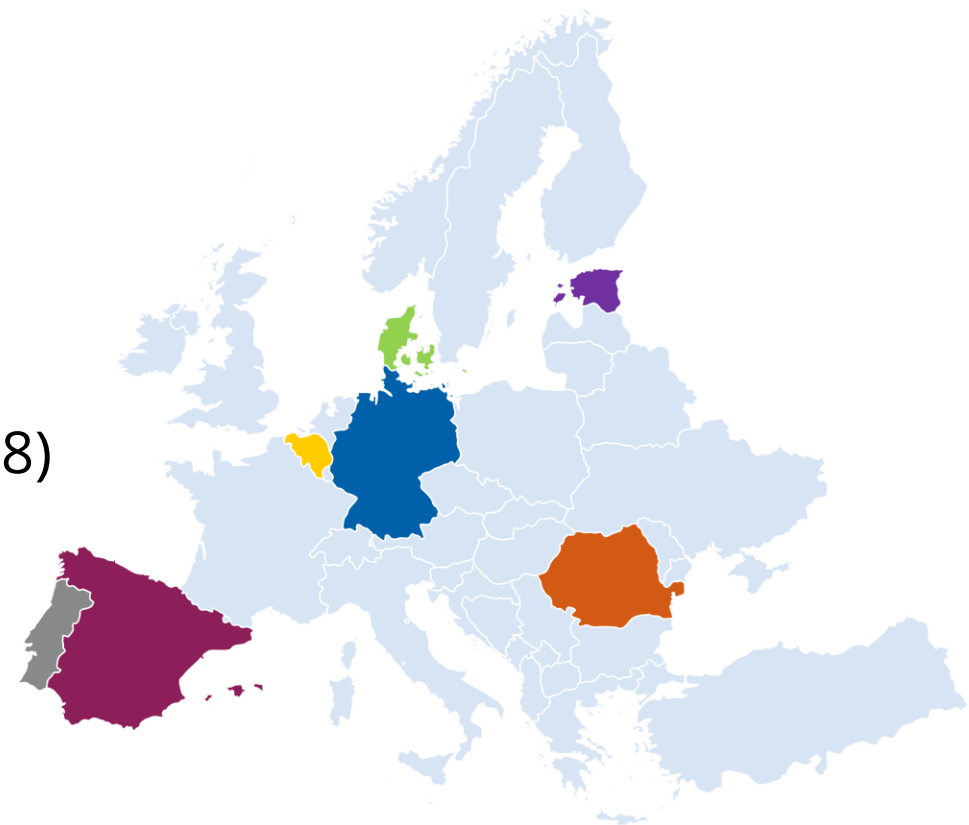


# The ESPON MAK-RES Project

Source: OIR

# MAK-Res Project

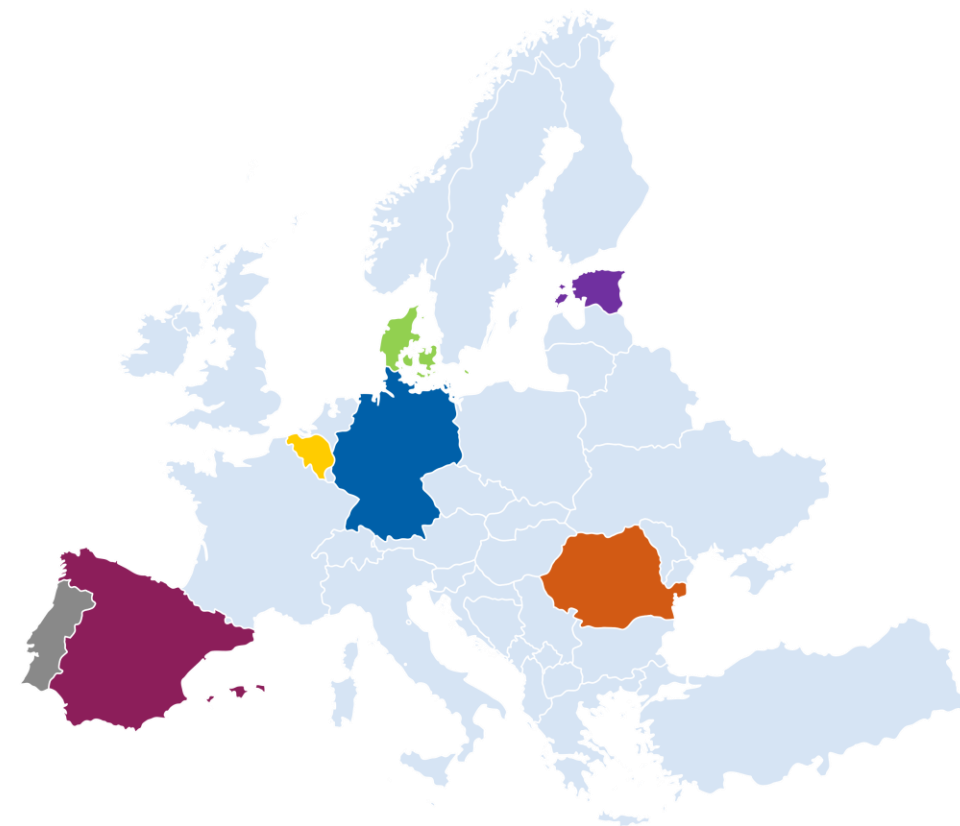
- BE: Solar park “Ostende airport” (2024)
- DK: Wind park “Vibberstoft Thy til Vind” (2024)
- EE: Hybrid park “Sopi-Tootsi” (2024/2025)
- DE: Hybrid park “Energy Park Wörrstadt” (ca. 1998)
- PT: Wind park in the Algarve region
- RO: Wind park Casimcea (2012)
- ES: Solar Park “Talayuela II” (2003)



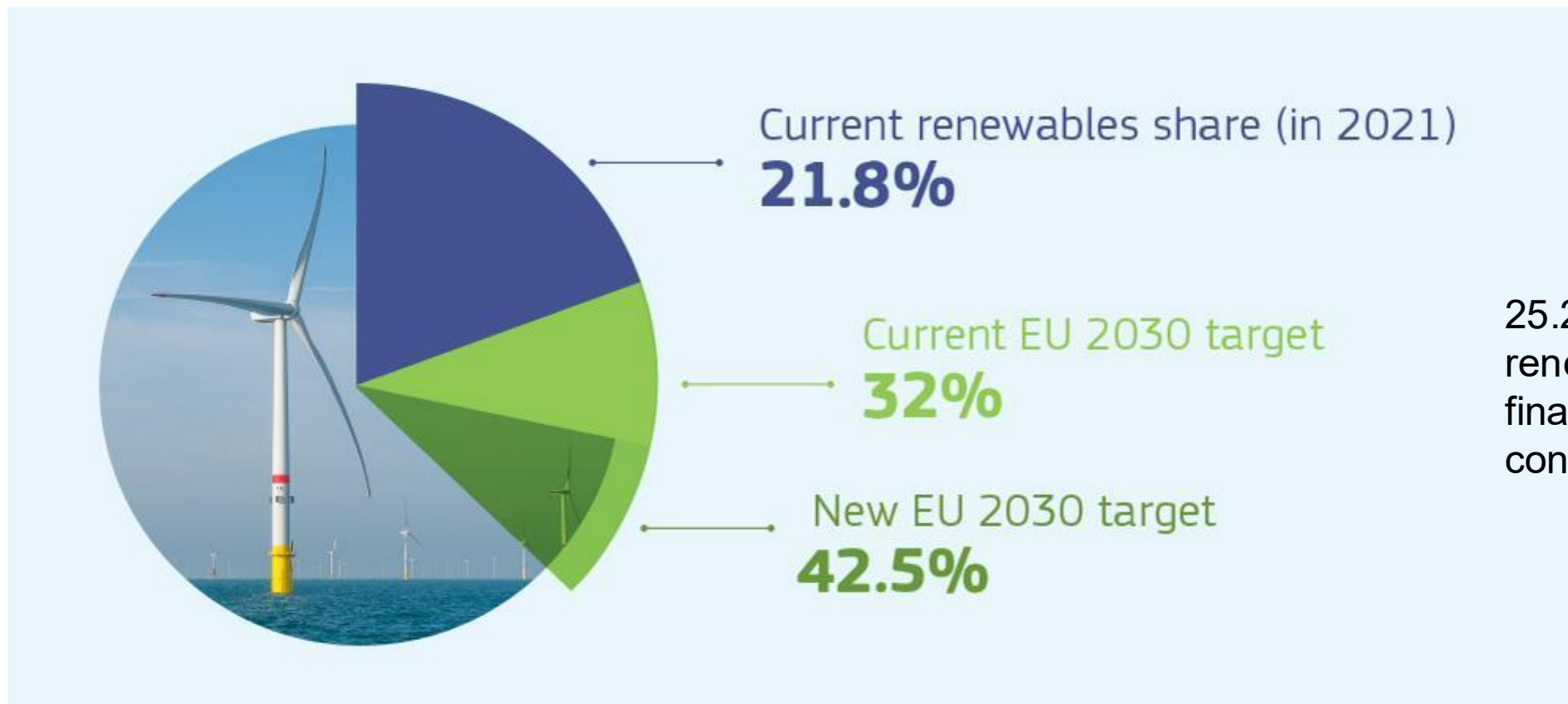


# MAK-Res Project

Sopi-Toosti (Es)	Ostende (BE)
Wind turbines (255 Mwh) and 112.000 PV pannels	> 60.000 Pv pannels
95 Ha	30 Ha
400 M€	35 M€
75.000 MWh/yr	37.000 MWh/yr
480.000 t CO <sup>2</sup> saved/yr	Approx 10.000 t CO <sup>2</sup> saved/yr



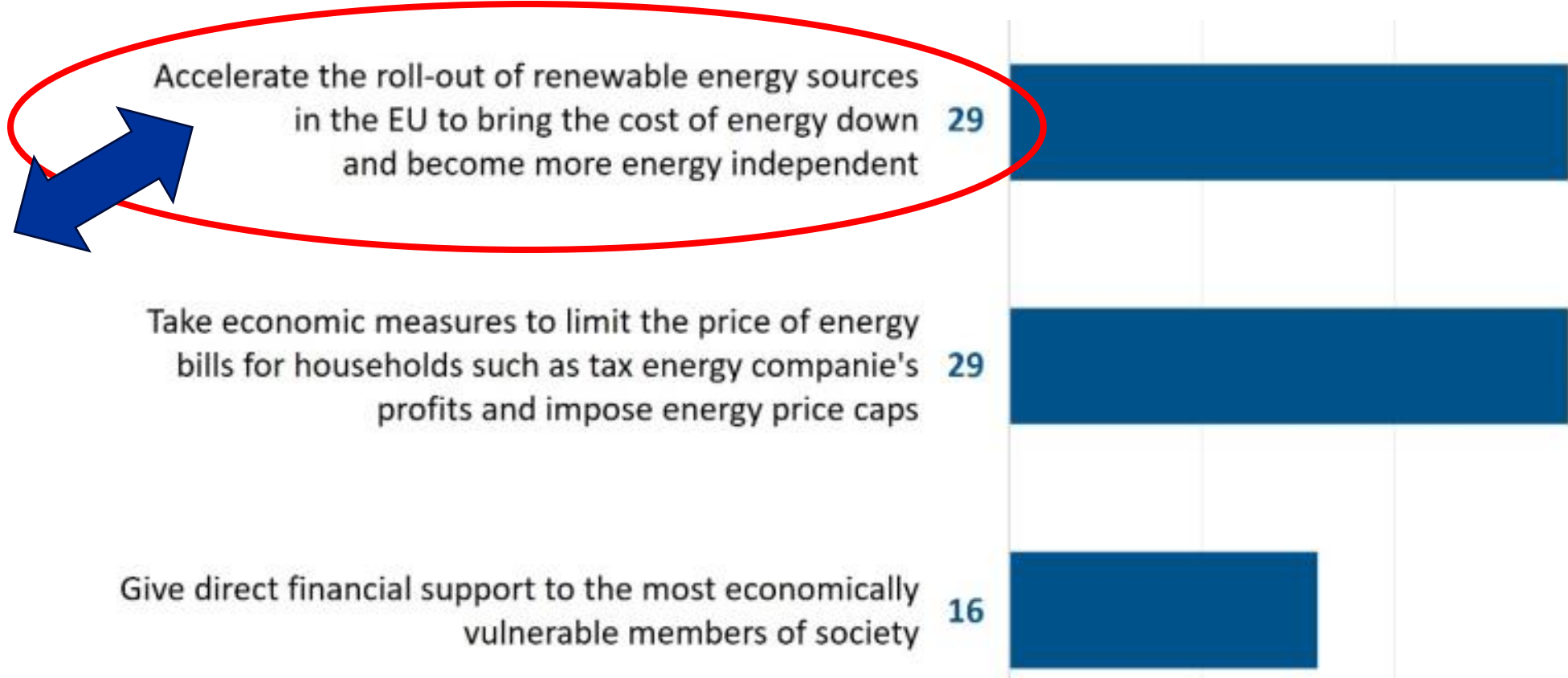
# Energy goals and RES development



25.2% share of renewables in EU final energy consumption 2024

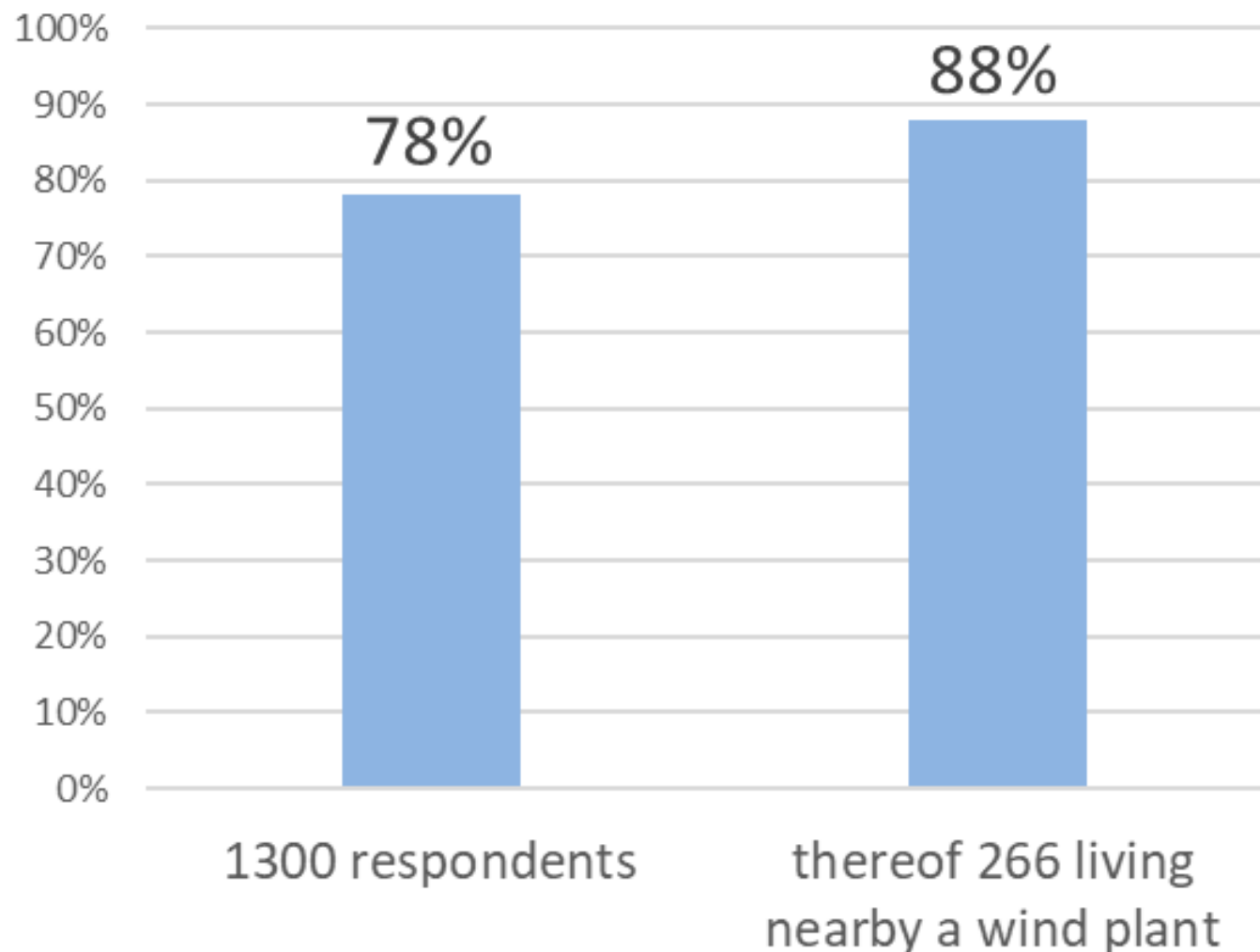
*“In which of the following ways should the EU and the member state governments respond to relieve the economic pressure caused by the energy crisis?”*

Study:  
10 km minimal distance between home and renewable energy production



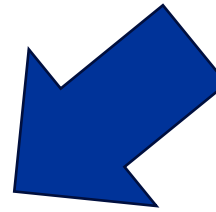
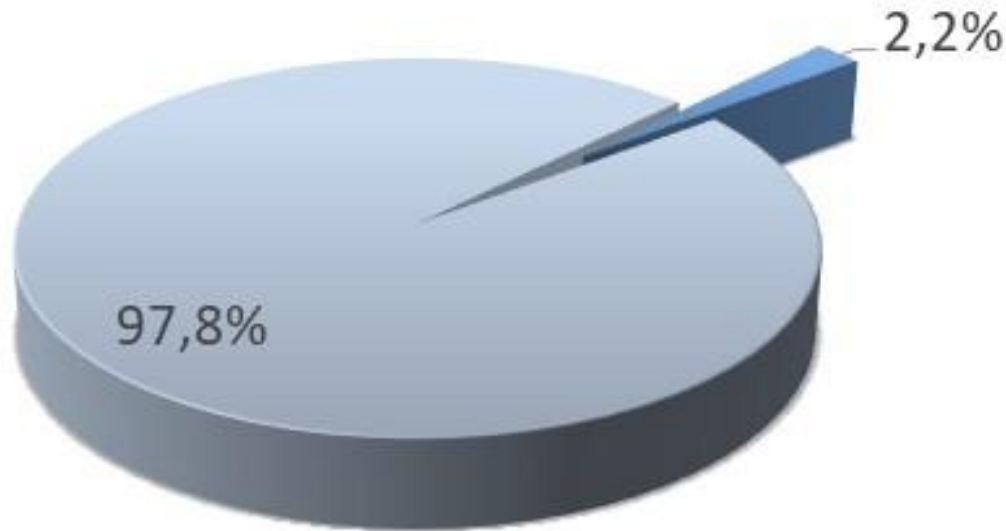


*„I would (rather) agree to a windpark development in my municipality outside of the village“*



Source: Hampl, Nina; Sposato, Robert; Dworzak, Veronika; Schneider, Nina (2021): Studie zur Akzeptanz von Windenergie. Universität Klagenfurt

Share of land needed in EU to achieve  
100% renewable energy sustainably



**Why is it so difficult?**

Study:  
10 km minimal distance  
between home and  
renewable energy  
production

Source: EEB (2024) Briefing on spatial requirements  
for a sustainable energy transition in Europe.



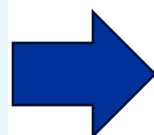
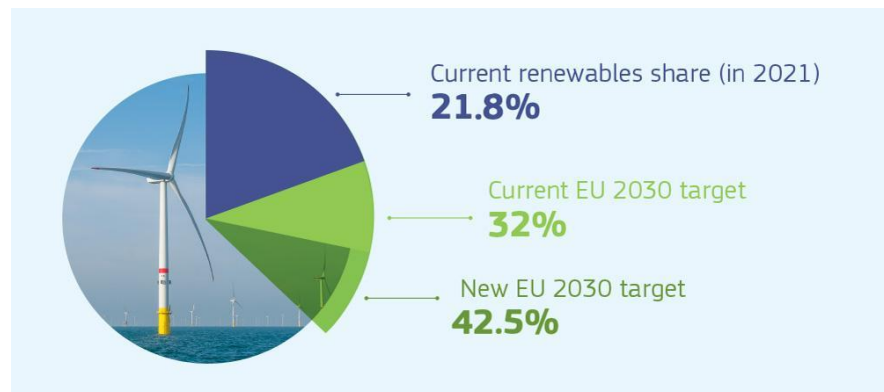
# MAK-Res Project: From European energy goals to concrete RE plants ...

	Decision level
Energy goals	EU, national, regional
National/regional zoning (incl SEA)	national, regional
Land use plan (incl SEA)	local
Environmental impact assessment	environment authority
Planning permission	approving authority

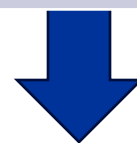
# Missing Link: energy goals and space

European

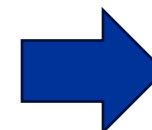
National



	Denmark	Latvia
2030 target		
Reduction in GHG emissions	70%	65%
Total energy consumption covered by RES	55%	61%
Total electricity consumption covered by RES	100%	80%
2050 target	Climate neutral society, no more greenhouse gases than it absorbs	



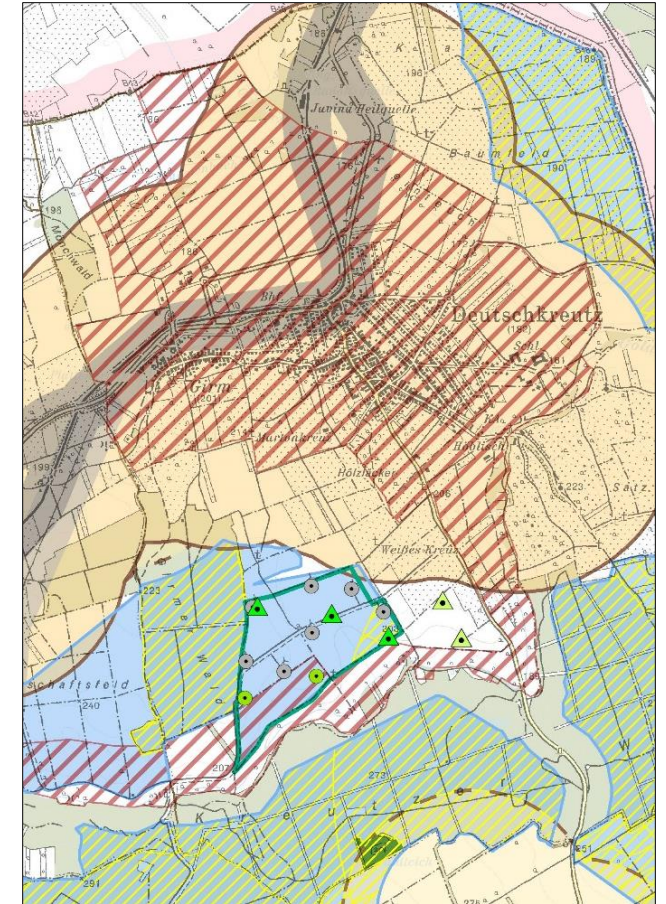
Regional



territorial

# 5 levers

1. Spatial planning
2. GIS and data
3. Dual land use
4. Relation public – private
5. Social acceptance



Source: OIR

# The role of spatial planning

Renewable-energy targets become more effective when anchored in space

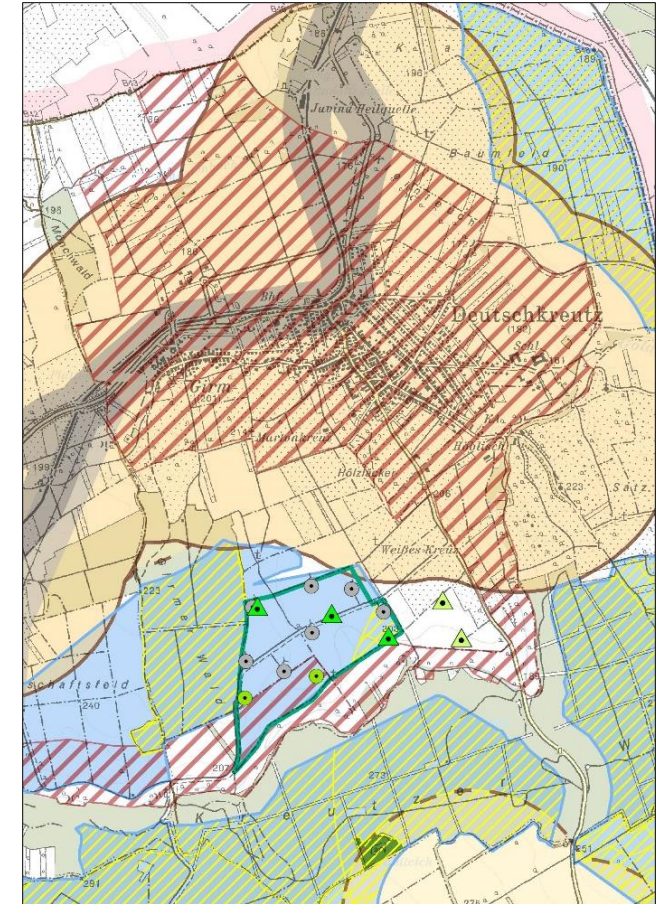
Conflicts between different public interests

-> land use conflicts

should be solved at regional / national level:

- Criteria how to deal with land use conflicts
- Regional no-go areas
- Regional priority areas

Absence suitability zoning / robust higher-level framework, siting is reactive -> case-by-case



Source: OIR

# The role of GIS and data

- multi-criteria GIS approach to identify low-conflict areas – especially during preliminary stages
- biodiversity data gaps



Source: OIR

# Dual land use

Land-use conflicts are structural, but they can be managed

Spatial planning shall enable and support dual land use

- Agrivoltaics
- Biodiversity-oriented renewable solar plant
- Hybrid parks
- Brownfield solar



Source: OIR, Koscher

# Municipalities vs. Developers



Source: OIR, Mollay

- Developers are usually the driving force for the identification of suitable areas
- municipalities are overstrained with the responsibilities of implementing energy goals

# Social acceptance – local benefits

Social acceptance depends on tangible benefits, not on attitudes towards renewables

Generating local benefits is crucial

- Ownership
- energy price benefits
- compensation
- socio-economic & infrastructural benefits



Source: <https://www.rescoop.eu/news-and-events/news/the-social-impact-of-energy-communities-ten-benefits-they-bring>



# Social acceptance – fair involvement

- early public engagement and transparent communication foster trust → a precondition for social acceptance
- Possibility to influence development: Credible mitigation measures developed in collaboration with environmental NGO, citizen associations, local communities enhance social acceptance
- A positive, locally rooted narrative helps clarify relative advantages despite localised impacts



# Conclusion

- There are possibilities to cover the gaps identified, mainly through spatial planning governance and instruments
  - Anchoring the targets,
  - Coordination,
  - Priority areas,
  - Permitting procedures,
  - Multifunctional uses...



# Conclusion

- Communication is key
  - Building shared territorial vision,
  - From late communication to continuous, structured engagement

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[espon.eu](https://www.espon.eu)

**Thank you!**

*Reports can be downloaded from the ESPON website :*

*<https://www.espon.eu/projects/mak-res-making-space-renewable-energy-transition>*