



Uniting Europe's Energy, Today

CROSS-BORDER SUSTAINABLE RENEWABLE  
ENERGY ACCELERATION IN UKRAINE -  
MAPPING SYNERGY RENEWABLE ENERGY  
ACCELERATION AREAS BETWEEN UKRAINE,  
EU MEMBER STATES, AND MOLDOVA

## 2<sup>nd</sup> Technical Webinar on **Renewables Acceleration Areas**

Energy Community  
Secretariat

Aleksandra Bujaroska  
Lead Centre for RES Acceleration  
Senior Expert in Environmental Governance,  
Permitting and Planning

25 August 2026, Vienna

# MC RECOMMENDATION



## RECOMMENDATION OF THE MINISTERIAL COUNCIL OF THE ENERGY COMMUNITY

2024/1/MC-EnC on accelerating the deployment of renewable energy projects and implementing the energy efficiency first principle

The Ministerial Council of the Energy Community,

Having regard to the Treaty establishing the Energy Community ("the Treaty") and in particular Articles 2, 24, 25, and 79 thereof,

Having regards to the proposal of the European Commission

Whereas:

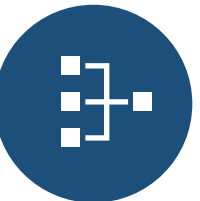
- (1) One of the main objectives of the Treaty is to improve the environmental situation in relation to network energy and related energy efficiency and to foster the use of renewable energy;
- (2) The acceleration of domestic renewable energy projects and the full implementation of the energy efficiency first principle will enhance security of energy supply and reduce demand in the Contracting Parties, and help them in achieving their respective targets for 2030, set by Regulation (EU) 2018/1999 of 11 December 2018 on the Governance of the Energy Union and Climate Action, as incorporated and adapted by Ministerial Council Decision 2021/14/MC-EnC of 30 November 2021 and amended by Ministerial Council Decision 2022/02/MC-EnC of 15 December 2022 ("the EnC Governance Regulation");
- (3) With regard to renewable energy, the European Union, by adopting Directive (EU) 2023/2413 of the European Parliament and of the Council of 18 October 2023 amending Directive (EU) 2018/2001, Regulation (EU) 2018/1999 and Directive 98/70/EC as regards the promotion of energy from renewable sources ("Directive (EU) 2023/2413"), recently committed to facilitating the deployment of renewable energy projects, namely through (1) mapping RES potential and available areas for the deployment of renewable energy and the necessary grid and storage infrastructure, designating renewable acceleration areas, while excluding high-value environmental areas such as protected areas for nature and biodiversity conservation under national and international legislation and ensuring public participation and acceptance as much as possible, and (2) introducing fast permit-granting procedure for renewable energy projects and repowering, minimizing complex and lengthy administrative procedures in favour of stringent timelines for project permitting especially within renewables acceleration areas, digital single point of contact in support of the applicants and the presumption that RES projects are of overriding public interest for the purposes of the assessments foreseen in three Directives (Habitats, Birds and Water framework).;
- (5) With regard to energy efficiency, the European Union, by adopting Directive (EU) 2023/1791 of the European Parliament and of the Council of 13 September 2023 on energy efficiency ("Directive (EU) 2023/1791") reinforced the application of the energy efficiency first principle as introduced in the Energy Community by the EnC Governance Regulation. Directive (EU) 2023/1791 follows a holistic approach taking into account the overall efficiency of the



## RES MAPPING (NECP)



## RENEWABLE ACCELERATION AREAS



## PERMIT STREAMLING

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## ➤ ROLE OF CONTRACTING PARTIES

### Prepare legal & institutional frameworks for:

- Mapping RES potential & infrastructure
- Designating Renewable Acceleration Areas

## ➤ ROLE OF THE SECRETARIAT

### Support Function

- Assists Contracting Parties in implementing selected provisions of Revised **RED (Directive 2023/2413)**

### Monitoring & Reporting

- Tracks progress of Contracting Parties
- Reports annually to the Ministerial Council

| 1

# CENTRE for RES Acceleration

## Purpose:

- Accelerates renewable energy deployment
- Promotes streamlined permitting & strategic planning

## Structure:

- Led by Secretariat; supported by experts & consultants
- Operates via a Core
- Backed by Secretariat units

## Key institutional links:

- Task Force on Environment → environmental alignment
- RE Coordination Group → permitting & planning reforms

## Delivery:

- Technical support & capacity building
- Cooperation with external experts
- Pilot projects

## RES CENTRE WEBSITE



# CENTRE for RES Acceleration

## Platform for cooperation

among authorities, institutions, and stakeholders



## Capacity building & knowledge exchange

workshops, training, best practice



## CORE FUNCTIONS

## Technical support on permitting

Streamlining & digitalising procedures

One-stop-shops & single contact points

Dispute resolution mechanisms



## Planning & programming of RES projects

Spatial mapping (GIS-based)

Identification of Renewable Acceleration Areas

Integration of environmental safeguards



# CENTRE for RES Acceleration



## Partnerships and projects



### Open Society Foundation - Western Balkans (OSF-WB)

The OSF-WB supports the Centre for Renewables Acceleration by providing tailored technical assistance to Western Balkan Contracting Parties to accelerate renewable energy deployment.



### European Climate Foundation (ECF)

The European Climate Foundation supports the Secretariat in advancing renewable energy deployment in Ukraine, with a focus on enabling a resilient and accelerated green transition in the context of recovery and reconstruction.

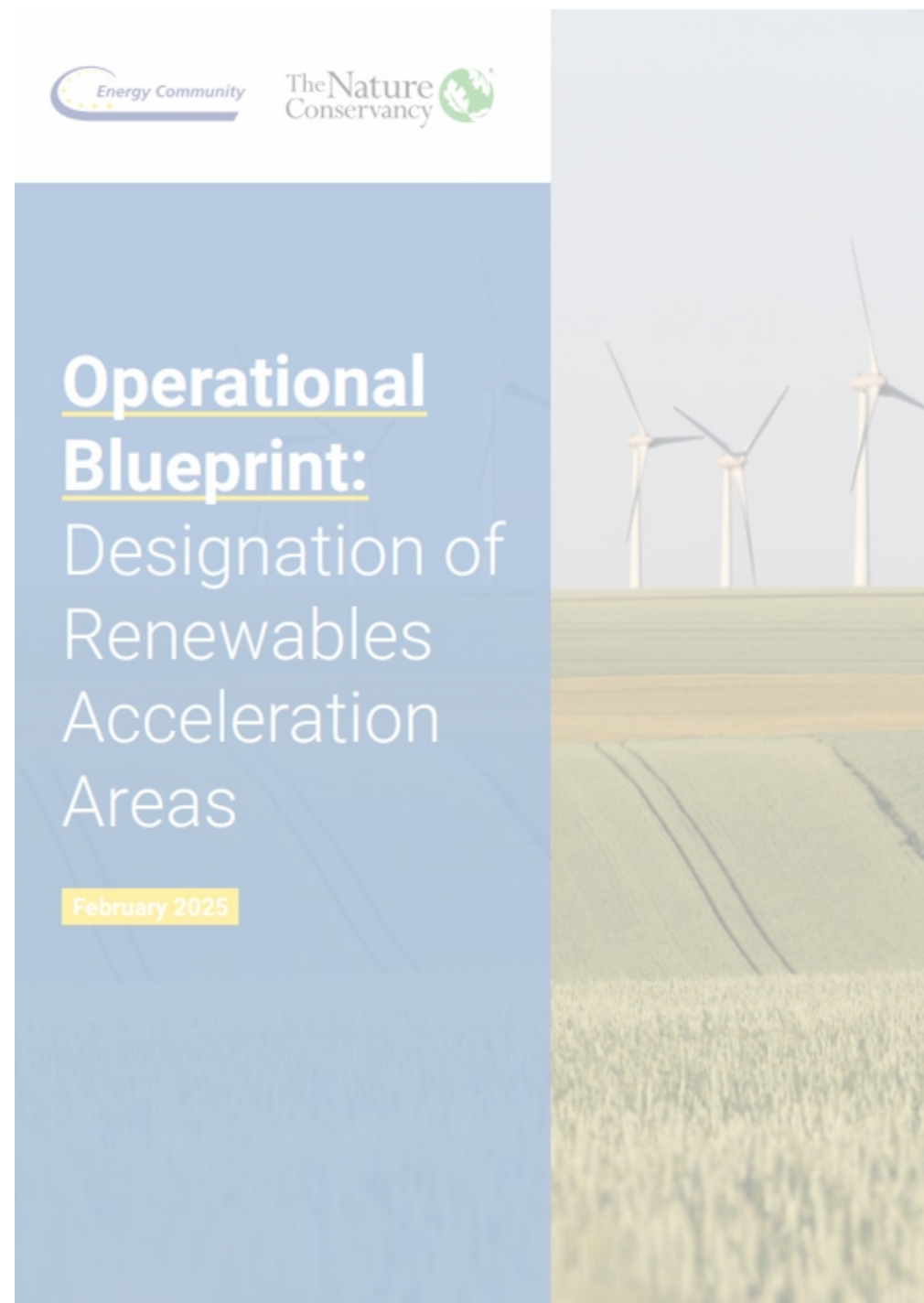
The partnership combines



### The Nature Conservancy (TNC)

The Secretariat partners with The Nature Conservancy (TNC) to advance renewable energy deployment in line with environmental safeguards. The collaboration combines spatial planning and biodiversity expertise with policy support, delivering practical tools to identify suitable sites and minimise environmental conflicts. TNC also provides a delegated expert

# OPERATIONAL BLUEPRINT



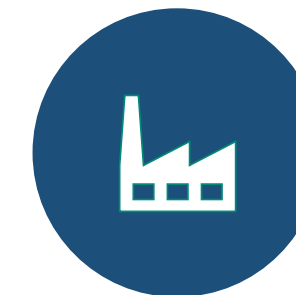
ROOFTOPS OF BUILDINGS



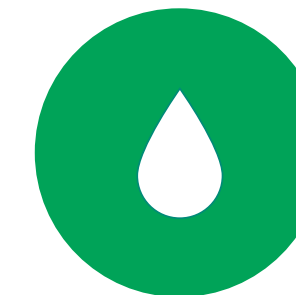
TRANSPORT CORRIDORS  
AND PARKING AREAS



DEGRADED AGRICULTURAL  
LAND

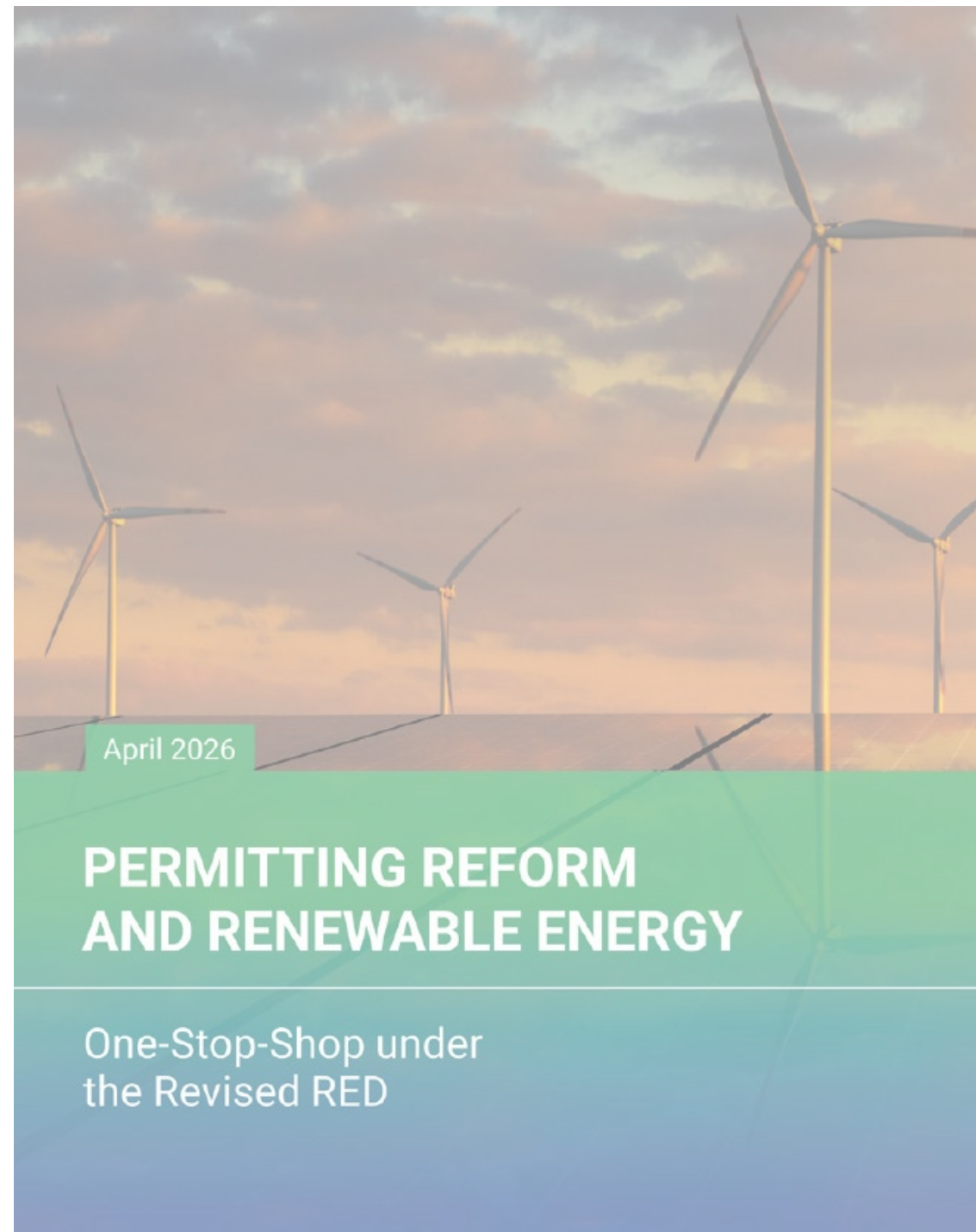


COAL MINES, INDUSTRIAL  
AND WASTE SITES

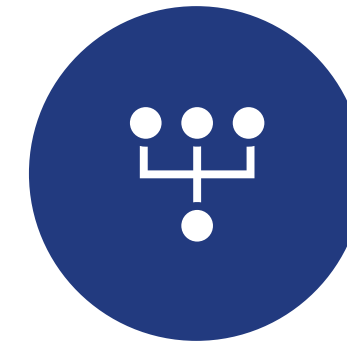


ARTIFICIAL INLAND WATER  
BODIES

# PERMITTING PROTOCOL



RED II AND REVISED  
RED



OSS



SET UP



CONCLUSIONS AND  
BEST PRACTICE

# BACKGROUND – BUILDING UP FROM PHASE I



**ROBUST CRITERIA**  
ENVIRONMENTAL AND RENEWABLE



**RES MAPPING**  
INPUT LAYER TO SPATIAL PLANNING



CROSS-BORDER  
RENEWABLE  
ENERGY  
ACCELERATION IN  
UKRAINE

**METHODOLOGY AND  
QUESTIONNAIRES**  
DATA COLLECTION



**SYNERGY,  
COLLABORATION,**  
WITH KEY STAKEHOLDERS FOR  
LEVERAGING EU FINANCING  
MECHANISMS



# BACKGROUND – BUILDING UP FROM PHASE I



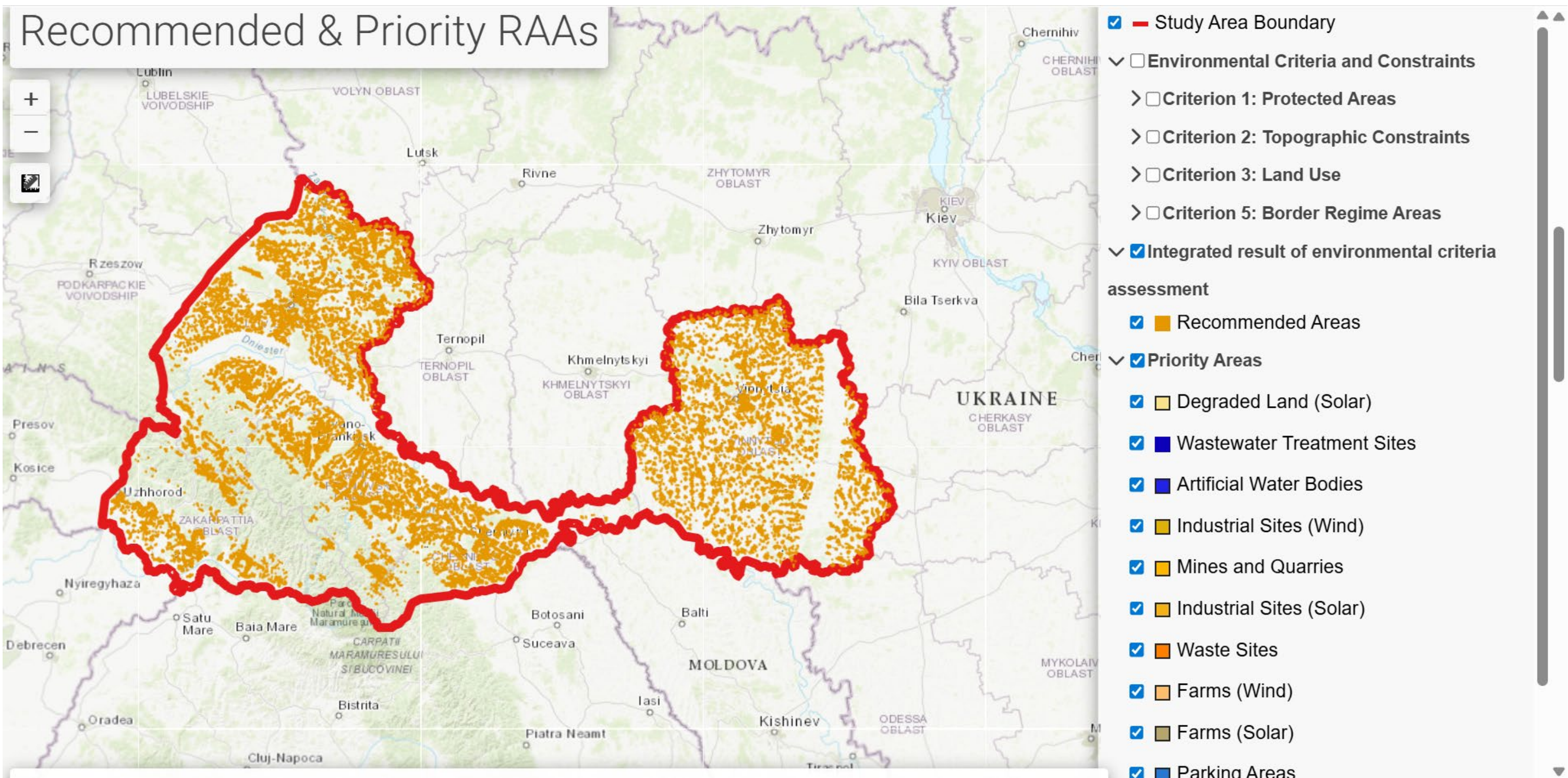
## PROJECT GEOGRAPHICAL SCOPE AND CROSS BORDER DIMENSION



### KEY oblasts (regions)

- Lviv Oblast (Lviv),
- Zakarpattia Oblast (Uzhhorod),
- Ivano-Frankivsk Oblast (Ivano-Frankivsk),
- Chernivtsi Oblast,
- Vinnytsia Oblast (Vinnytsia)

# BACKGROUND – BUILDING UP FROM PHASE I



# PHASE II – MAIN GOALS



## APPLICATION OF RAA CRITERIA IN SPATIAL PLANNING



- Online/hybrid meetings in 5 pilot regions
- Integration support for national, regional & local planning
- Targeted consultancy support
- 5 tailored concept notes



## INSTITUTIONAL CAPACITY BUILDING



- Targeted online workshop (Strategic Environmental Assessment (SEA), Streamlined permitting (one-stop-shop approach))
- Structured curriculum and training materials
- Interactive digital manual



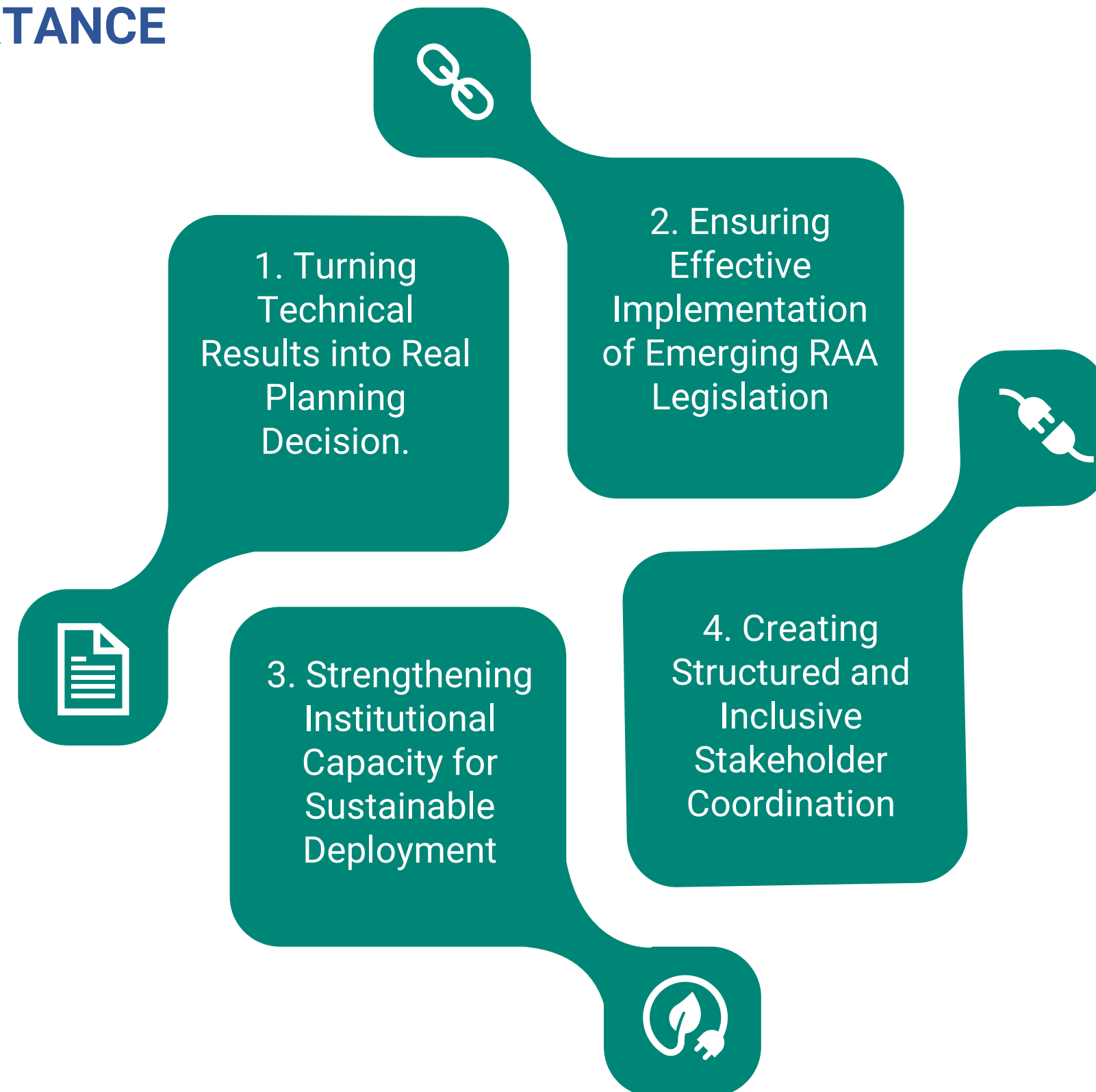
## ESTABLISH STRUCTURED STAKEHOLDER DIALOGUE



- Establishing a Multi-Level Platform
- Monthly virtual open meetings
- Semi-annual stakeholder feedback reports
- Continuous improvement of training & guidance

# PHASE II – IMPACT & IMPORTANCE

## IMPORTANCE



## Expected Overall Impact

- RAAs integrated into planning practice
- Institutions capable of implementation
- Structured stakeholder dialogue operational
- Practical step toward accelerated renewable deployment

→ **Supporting Ukraine's energy transition & EU integration**



# THANK YOU!



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[energy-community.org](https://energy-community.org)



# LAND FOR RENEWABLES

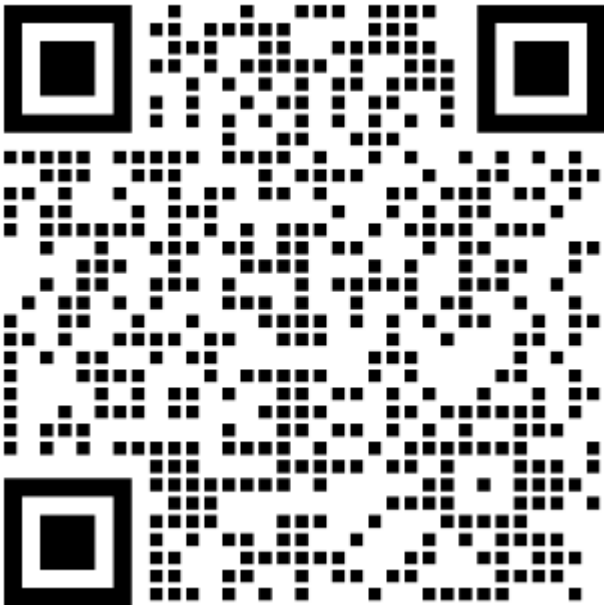


Briefing on spatial requirements for a sustainable energy transition in Europe by EEB



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The European Environmental Bureau (EEB) is the largest network of environmental citizens' organisations in Europe. It unites 180 civil society organisations from 38 countries, working for a better future where people and nature thrive together.

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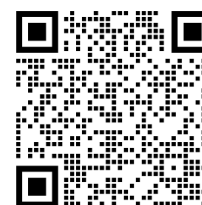
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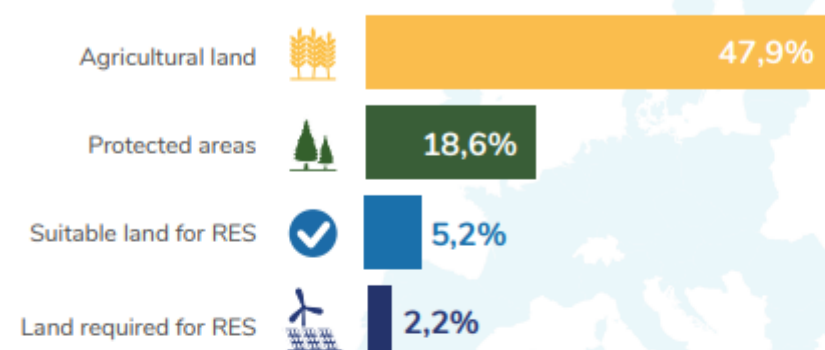
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# LAND FOR RENEWABLES

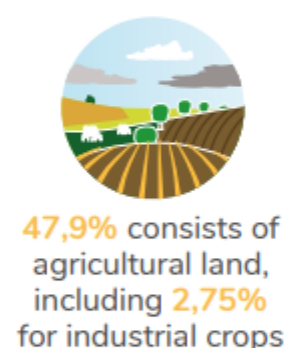
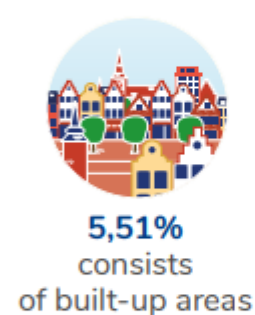


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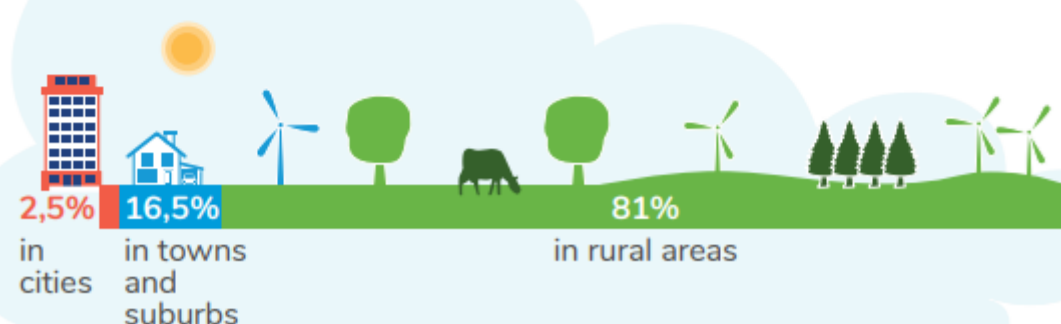
## EU27 FACTSHEET Share of total land



## Types of current land use



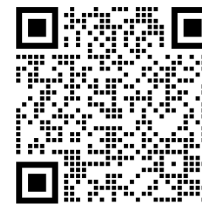
## Suitable land for renewables



## EU27 – Enough land for a 100% renewable Europe

- Only **2.2% of EU land** is required for solar PV and onshore wind under the **2040 climate-neutrality / 100% renewable PAC scenario**
- Around **5.2% of EU land** is identified as **suitable for renewables** – more than twice the area required
- Suitable areas already exclude **Natura 2000, key biodiversity areas, high-value agricultural land** and other environmentally sensitive areas
- Renewable potential is predominantly **rural: 78% of suitable solar land** and **83% of suitable wind land**
- **Rooftops and industrial areas alone are not enough** → some rural land will be needed, with priority given to **degraded and low-productivity agricultural land**
- Land availability is **uneven across Member States** → Germany and Italy face constraints, while Spain and Romania have significant surplus potential
- **Grid development and cross-border interconnection** are therefore essential to make best use of Europe's geographically uneven renewable potential
- **Spatial planning, environmental safeguards, community participation and benefit-sharing** are key to avoiding conflicts with nature, agriculture and local communities

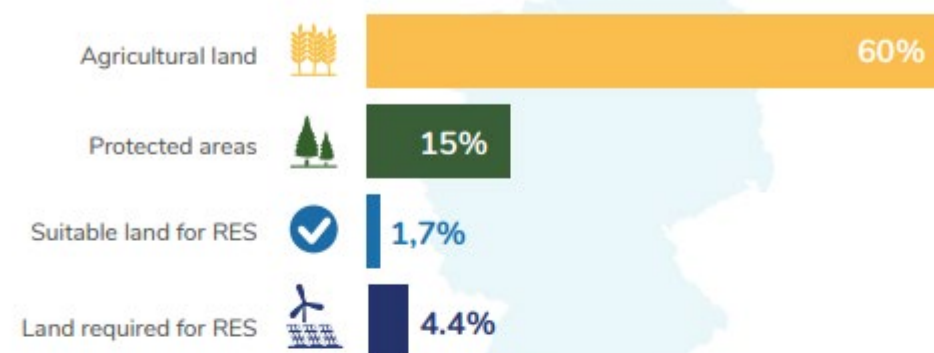
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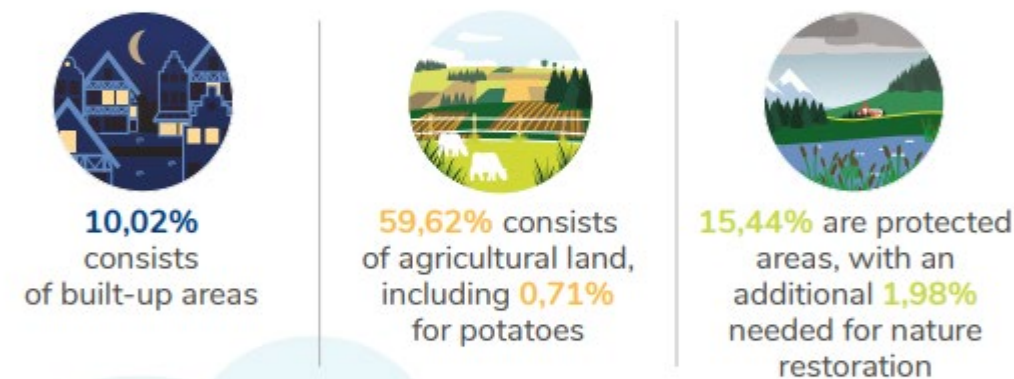
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## GERMANY

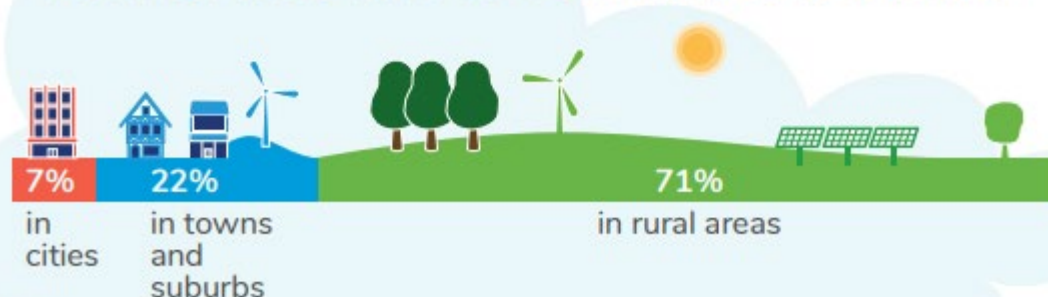
### Share of total land



### Types of current land use



### Total suitable land for renewables is located\*

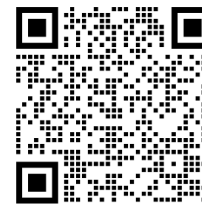


\* Suitable land for renewables refers to areas identified by the EU's Joint Research Centre as optimal for sustainable deployment of renewables, excluding biodiversity-rich zones, natural reserves, and productive agricultural land, while favouring built-up areas and degraded agricultural land with limited prospects.

## GERMANY — Land constraints mainly for wind

- **2040 target:** 346 GW solar PV + 113 GW onshore wind
- **Land required for RES by 2040:** 4.4% of national territory — significantly above the EU average of 2.2%
- **Suitable land identified:** only around 1.7% overall
- **Solar:** sufficient suitable land; ground-mounted PV requires only 0.33% of territory
- **Wind is the challenge:** around 3.35% of land required vs only 0.66% identified as suitable
- **Planning priority:** degraded/low-productivity agricultural land and artificial/industrial areas for PV; dual-use agricultural land + mitigation measures for wind
- **Key message:** Germany demonstrates that **RAAs alone may not provide enough suitable land for the required onshore wind expansion**; grid expansion and offshore wind become particularly important.

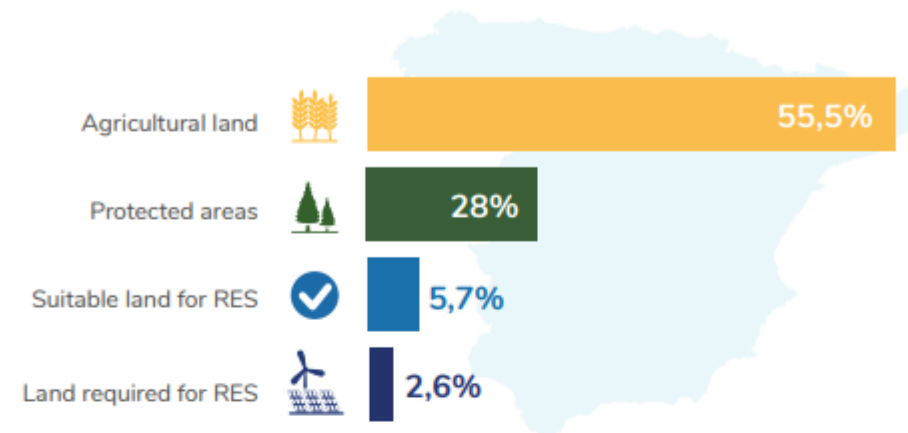
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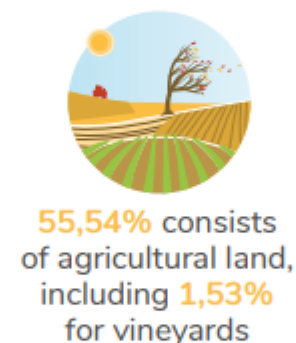
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## SPAIN

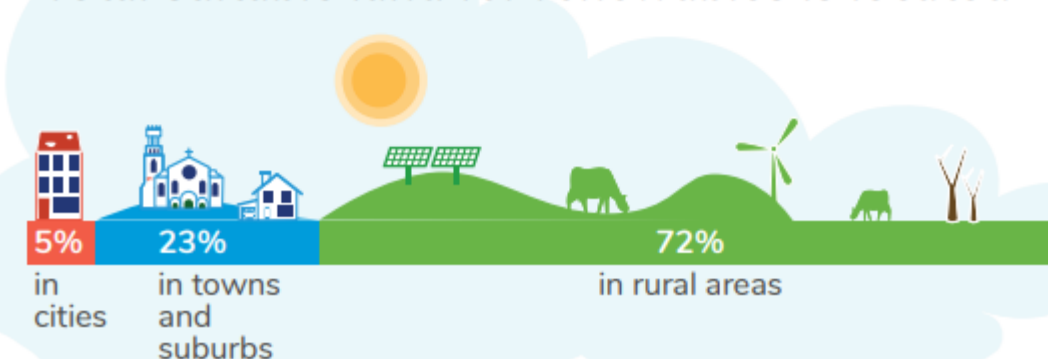
### Share of total land



### Types of current land use



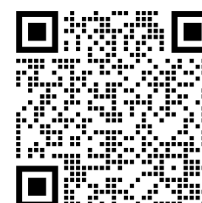
### Total suitable land for renewables is located



## SPAIN — Abundant suitable land

- **2040 target:** 247 GW solar PV + 98 GW onshore wind
- **Land required for RES by 2040: 2.4%**
- **Suitable land:** around 5.7% of national territory
- **Ground-mounted solar:** only ~0.5% required vs 3.28% suitable
- **Onshore wind:** 1.62% required vs 2.35% suitable
- More than 70% of suitable land is rural
- **Planning priority:** designate RAAs rapidly in already suitable areas; improve sensitivity mapping, data and coordination between governance levels
- **Key message:** Spain can accommodate its required solar and wind capacity **without using protected areas or high-value agricultural land**; the bigger challenges are good siting, environmental safeguards and public acceptance

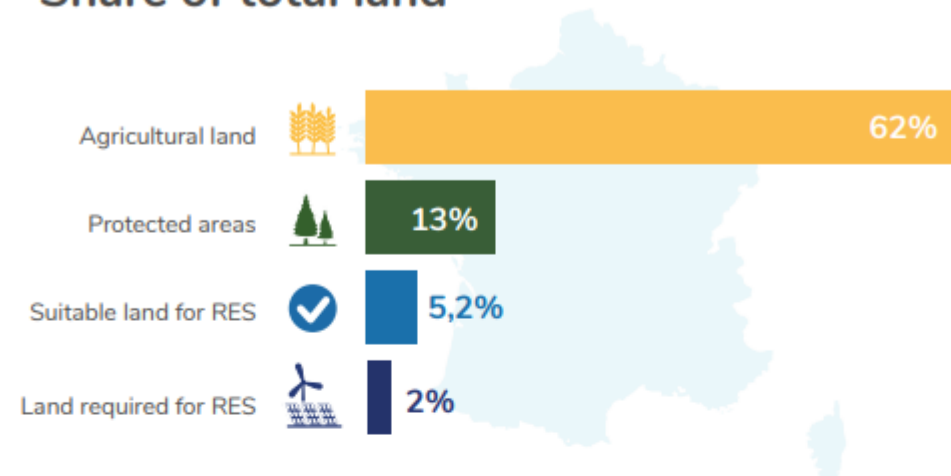
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## FRANCE

### Share of total land



### Types of current land use



7,22% consists of built-up areas

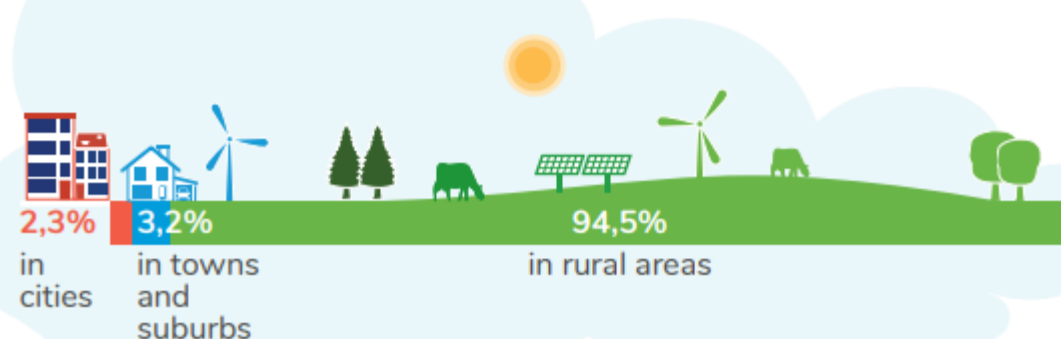


61,8% consists of agricultural land, including 0,92% for vineyards



12,97% are protected areas, with an additional 15,27% needed for nature restoration

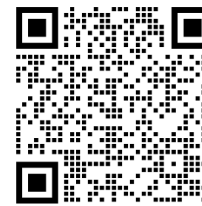
### Total suitable land for renewables is located



## FRANCE – Comfortable spatial potential

- **2040 target:** ~260 GW solar PV + 83 GW onshore wind
- **Land required for RES by 2040: 2.0%**
- **Suitable land:** around 5.2%
- **Ground-mounted PV: 0.3% required vs 2.22% suitable**
- **Onshore wind: 1.46% required vs 2.72% suitable**
- More than **90% of suitable renewable land is in rural areas**
- **Planning priority:** prioritise areas with existing grid capacity/minimal grid-extension needs
- **Key message:** France has enough suitable land to accommodate the required solar and wind capacity **while excluding Natura 2000 and high-value agricultural areas**; implementation, grid access and meaningful local consultation are more important constraints than land availability.

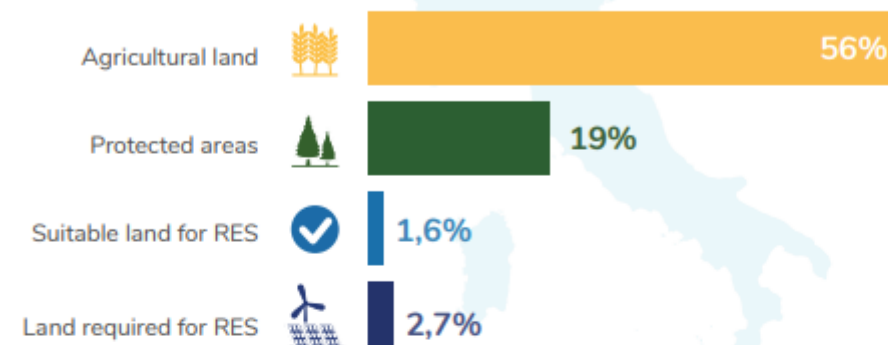
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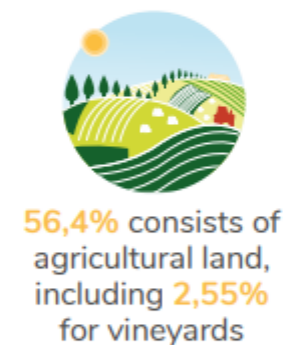
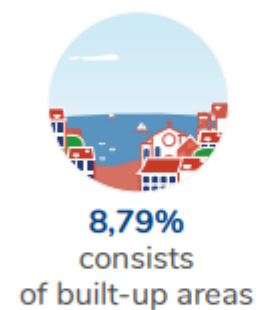
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## ITALY

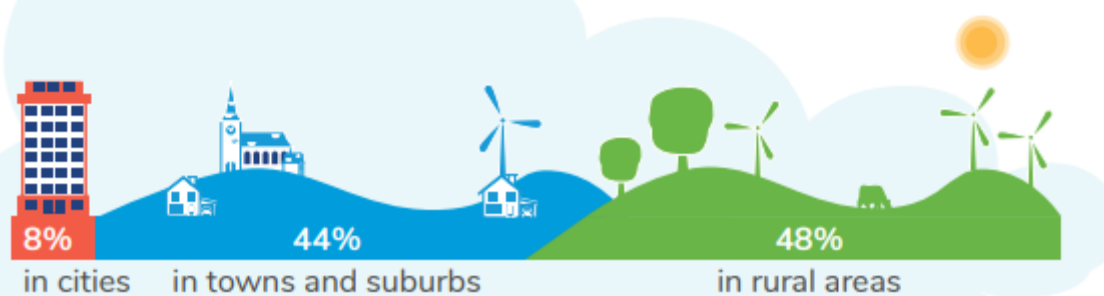
### Share of total land



### Types of current land use



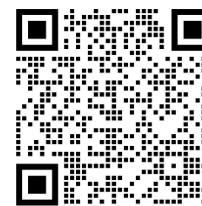
### Total suitable land for renewables is located



### ITALY – Solar fits; wind is constrained

- **2040 target:** 228 GW solar PV + 39 GW onshore wind
- **Land required for RES by 2040: 2.7%**
- **Ground-mounted PV: 0.47% required vs 0.91% suitable**
- Solar therefore presents **no major land constraint**
- **23% of agricultural land is highly/very highly degraded** → major opportunity for sustainable solar siting
- **Wind:** around **1.32% required** vs only **0.46% suitable**
- **Planning priority:** rapidly designate solar RAAs; promote agri-PV/dual land use; identify additional appropriate areas for wind with mitigation
- **Key message:** as in Germany, **the spatial challenge is primarily onshore wind rather than solar**; dual land use and careful mitigation become important

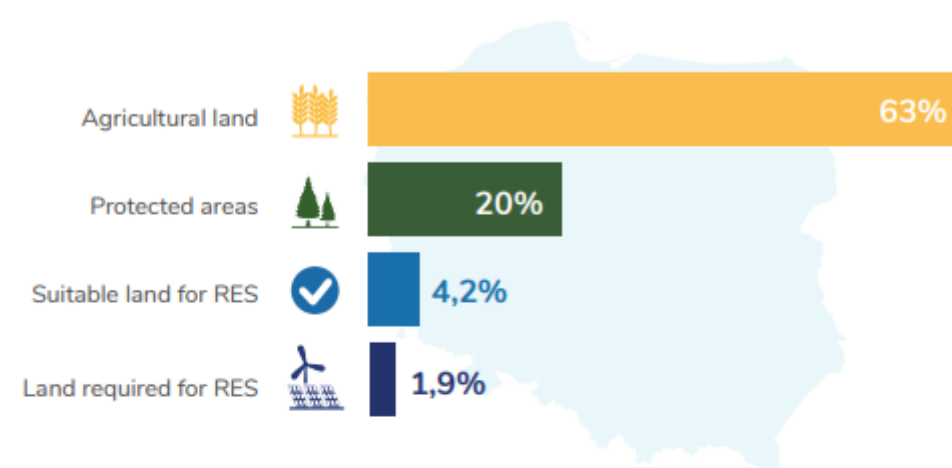
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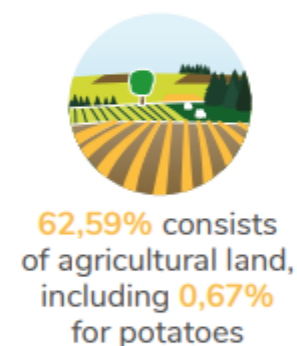
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## POLAND

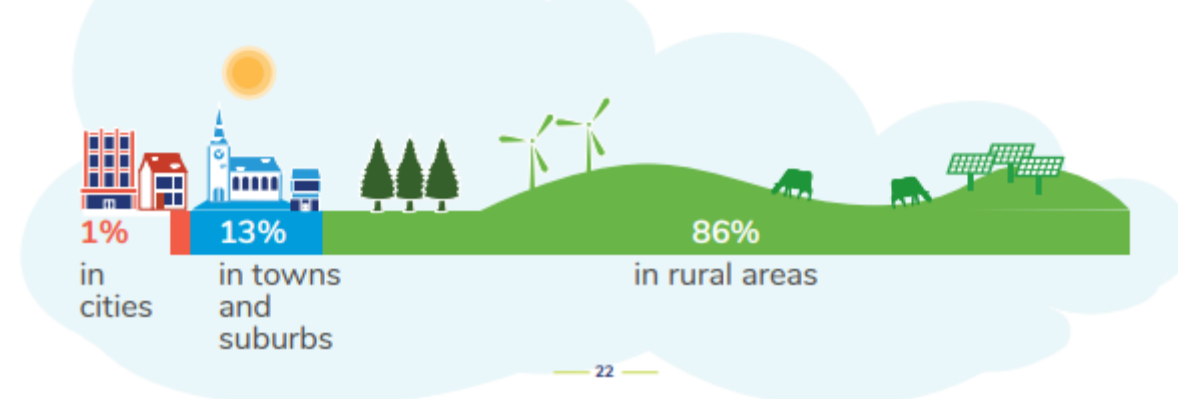
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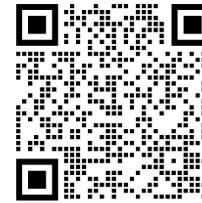
### Total suitable land for renewables is located



### POLAND — Land is available; grid is the bottleneck

- **2040 target:** 84 GW solar PV + 51 GW onshore wind
- **Land required for RES by 2040: 1.8%**
- **Suitable land:** around 4.2%
- **Ground-mounted PV:** only 0.16% required vs 1.63% suitable — roughly 10× more suitable land than needed
- **Wind:** 1.24% required vs 2.44% suitable
- More than 80% of suitable land is rural
- **Planning priority:** industrial/degraded areas and former coal sites, coupled with grid planning
- **Key message:** Poland has sufficient land for both solar and wind **without sacrificing valuable agricultural or biodiversity areas**; the main constraint is electricity-grid availability and modernisation.

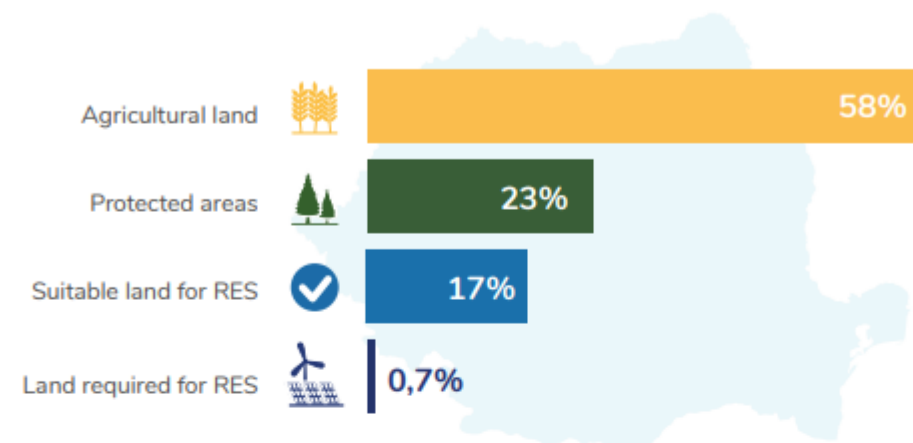
# LAND FOR RENEWABLES



Briefing on spatial requirements for a sustainable energy transition in Europe by EEB

## ROMANIA

### Share of total land



### Types of current land use



3,78% consists of built-up areas

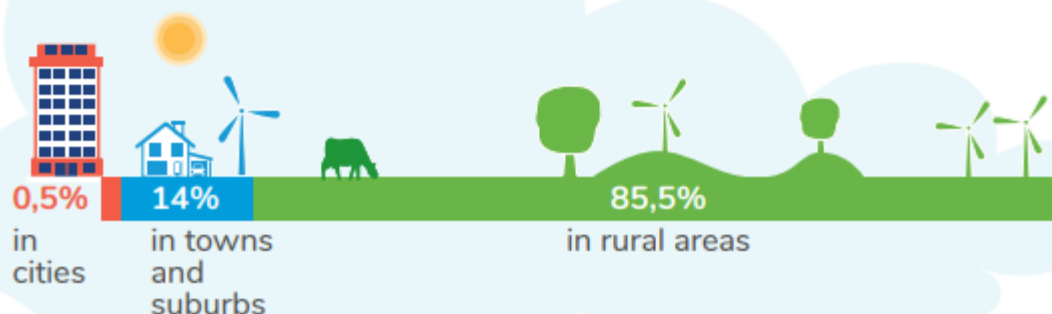


57,98% consists of agricultural land, including 0,67% for vineyards



22,74% are protected areas, with an additional 14,61% needed for nature restoration

### Total suitable land for renewables is located



## ROMANIA — Very large surplus of suitable land

- **2040 target:** ~74 GW solar PV + 7 GW onshore wind
- **Land required for RES by 2040:** only **0.7%**
- **Suitable land:** around **17%** — by far the largest surplus among the six cases
- **Ground-mounted PV:** **0.35% required** vs **7.68% suitable** → about **21× more** suitable land than needed
- **Onshore wind:** JRC identifies **9.08% of territory as suitable**
- Around **85% of suitable land is rural**
- **Planning priority:** locate first RAAs near existing grid infrastructure and coordinate future grid investments with additional suitable areas
- **Key message:** Romania faces **virtually no land-availability constraint** for solar and wind; grid capacity rather than land is likely to determine deployment