Energy Community Secretariat

Uniting Europe's Energy, Today

CROSS-BORDER SUSTAINABLE RENEWABLES ACCELERATION AREAS IN UKRAINE – PHASE II

APPLICATION OF RAA CRITERIA IN SPATIAL PLANNING

Support to planners and authorities in five oblasts

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Агенція геопросторових рішень
АГЕОРА

NOVEMBER 2026

Working side by side with communities

Phase II: direct work with planners, authorities and hromadas in five oblasts

Why it matters

RED III calls for coordinated mapping and the designation of Renewables Acceleration Areas (RAAs)

Energy Community Recommendation 2024/1/MC-EnC (Dec 2024) asks Contracting Parties to set up the preconditions

Phase I (2025): RAA criteria set and priority areas in five pilot oblasts

Phase II (2026): turning criteria into practice for planners, authorities and communities

Lvivska · Zakarpatska · Ivano-Frankivska · Chernivetska · Vinnytska

Oblasts along the borders with the EU and Moldova

5
pilot oblasts

277
planners and authorities in online sessions

5
web applications to propose sites

A bottom-up way of working

1 Listen

Online technical sessions with planners and authorities in every oblast: needs, data gaps and procedures

2 Equip

Guiding Note and Technical Note put in the hands of planners and community representatives

3 Co-create

Web applications let each oblast explore candidate territories and propose its own sites

4 Support

Pilot assessments, geodata layers and a Regional Concept Note handed over to every oblast

Regional technical sessions

Five online sessions for planners and authorities · 7–16 July 2026 · Zoom · 10:00–12:00

5
oblasts, one session each

277
participants in total

2 h
per session, online on Zoom

Participants per session



Who

Planners and authorities of the pilot oblasts: oblast administrations, territorial hromadas and local planning bodies, with the Energy Community Secretariat.

Why

Present RAA requirements and criteria, share Phase I results, introduce the web tool for site proposals and collect needs for further support.

How

Five-block programme, open discussion, minutes of meeting for each session; presentations and video records shared with all participants.

How a technical session ran

The same five-block programme in every oblast

1. **Welcome**
   Energy Community Secretariat (Kyiv Office), the oblast chief architect or urban development department and AGEORA set the context and goals

2. **The concept of RAAs**
   EU requirements and steps taken in Ukraine; environmental criteria and planning constraints; technical criteria and Phase I results

3. **Prospects in the oblast**
   Solar and wind potential; potential RAAs from Phase I; the web map and the mapping web tool for site proposals

4. **Discussion panel**
   Questions and proposals from planners and authorities on data, procedures and planning documents

5. **Closing remarks**
   Summary, next steps; presentations and video record shared with all participants within days



Opening slide of a regional session



Environmental criteria presented to planners

What planners and authorities discussed

Common themes across the five sessions and the agreed follow-up

Additional territories

Degraded agricultural land (all sessions); post-mining land, quarries, dumpsites, greenhouses and roofs

Grid and infrastructure data

Network parameters, substation capacities, distances to connection points, upgrade needs

Geodata for planning documents

Phase I geodata for oblast planning schemes; RAAs as a restriction layer in local geodatabases

Procedures and permitting

Functional zoning, SEA and EIA, the full document package, permits for wind plants

Land and legal constraints

Forest belts, soil-quality data, land-use practices, valuation of agricultural land

Cooperation

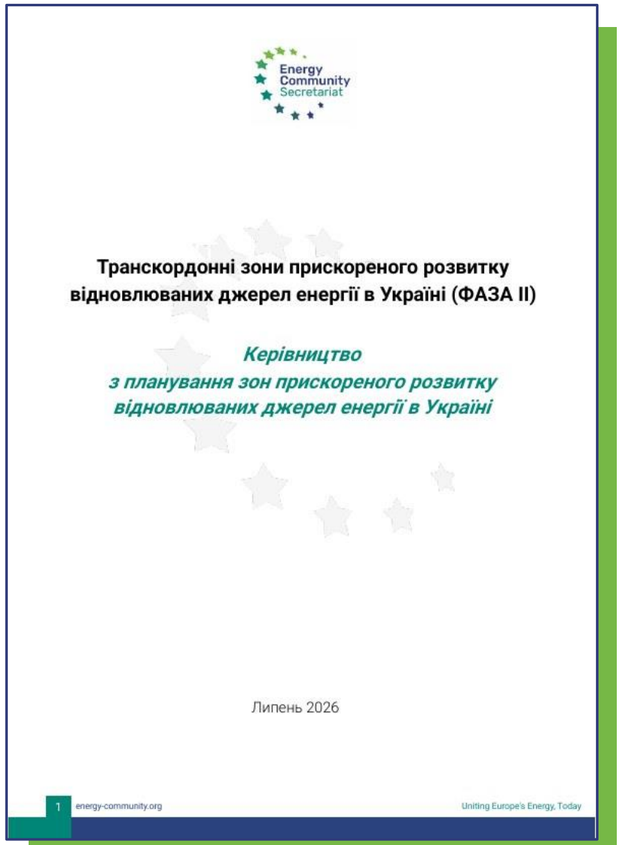
Communities and investors, cross-border links with neighbouring countries, continued dialogue

Agreed follow-up

- Transfer Phase I geodata sets to oblast and hromada planners
- Share presentations and video records with all participants
- Collect site proposals via the web tool and run pilot assessments
- Further analysis: solar panels above melioration canals, post-mining land, quarries, greenhouses, roofs; soil-quality data
- Develop technical tools to reflect RAAs in spatial planning documentation

Guiding Note on RAA planning

Practical guidance for planners and authorities · 20 pages · July 2026



1 General provisions

RED III principles; RAAs as low-conflict priority areas; 42.5% EU target; presumption of no significant environmental impact

2 Implementation in Ukraine

Recommendation 2024/1/MC-EnC and the National Energy and Climate Plan to 2030 (27% renewables target)

3 RAA criteria

Environmental criteria; renewable potential and infrastructure readiness criteria; geospatial data processing

4 Bottom-up planning

A step-by-step approach for regional and local authorities to plan RAAs from the ground up

Environmental criteria: five groups, with 700 m buffers around protected areas

Wildlife protection | **Natural conditions** | **Land-use restrictions** | **Built-up surfaces** | **State border regime**

Ten priority zones: rooftops and façades · transport infrastructure · parking areas · farms · landfills · industrial sites · mines and quarries · artificial water bodies · wastewater treatment plants · degraded land

Агенція геопросторових рішень АГЕОРА

Technical Note on the RAA dataset

Structure of the geodatabase and methods of spatial analysis · 16 pages · July 2026

RAA_proj_[Oblast].gdb
five geodatabases · WGS 84

Criteria

Constraint layers and buffers
Important bird areas · migratory routes · Emerald network · Ramsar sites · biosphere reserves · nature reserve fund · peatlands · endangered species · forest, water, agricultural and recreational lands · elevation above 800 m · steep slopes · 1% flood risk · 5 km border buffer

Priority_areas

12 classes of priority areas
rooftops
transport_infrastructure
Parking_Areas
farms_solar / farms_wind
industrial_sites_solar / _wind
Waste_sites
Mines_and_quarries
Artificial_Inland_Water_Bodies
Urban_Wastewater_Treatment_Sites
Degraded_Land (solar)

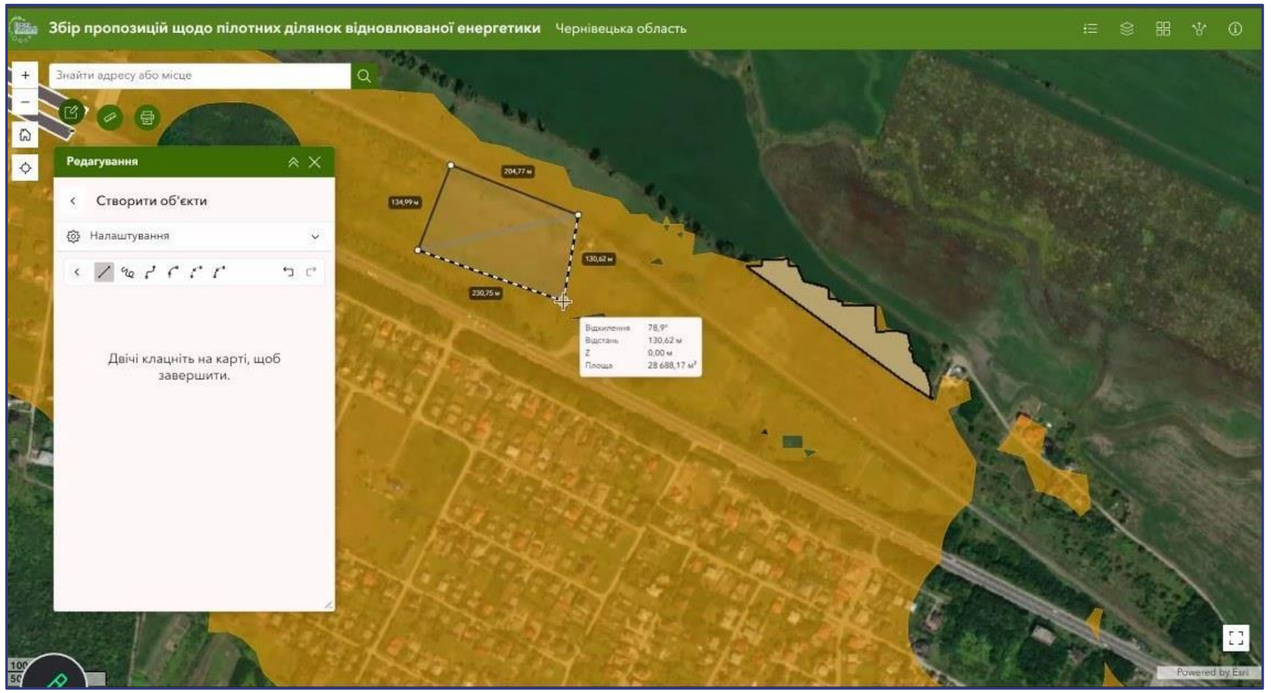
Open dataset: sharing and reuse under CC BY 4.0

Eight methods of spatial analysis

- **2.1 Buffer analysis**
- **2.2 Spatial overlay**
- **2.3 Exclusion of territories**
- **2.4 Terrain analysis**
- **2.5 Proximity and accessibility**
- **2.6 Multi-criteria suitability (GIS-MCDA)**
- **2.7 Area analysis and ranking**
- **2.8 Zonal statistics by administrative unit**

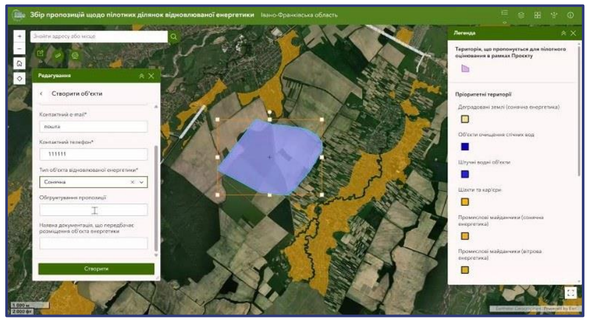
A web application for every oblast

Explore candidate territories and put forward sites for pilot assessment



Proposing a site: the user outlines a polygon on the map

1. **Explore** Priority territories by category, for solar and wind
2. **Draw** Outline the proposed site with the editing tool
3. **Describe** Contacts, type of renewable energy, justification, documents
4. **Submit** Proposals collected on 17–29 July for pilot assessment



Submission form and legend of priority territories

Lvivska arcg.is/0WWrWS1

Chernivetska arcg.is/05GHqv

Ivano-Frankivska arcg.is/1n41m82

Zakarpatska arcg.is/1vDHHP2

Vinnytska arcg.is/1u5iny

Pilot territories in five oblasts

Model sites for detailed approbation of the research results

Lvivska



Drohobych hromada

39.97 ha

- Forest cover; municipal land
- 47.06 MW theoretical
- 35 kV line at 0.36 km

Zakarpatska



Yasinia hromada

110.86 ha

- Rooftop PV on 412 buildings in the Black Tisza valley
- 4.36–7.76 MW roof scenarios
- 35 kV line at 0.41 km

Ivano-Frankivska



Kolomyia hromada

20.59 ha

- Abandoned pasture, open land
- 24.22 MW theoretical
- 35 kV line at 0.21 km

Vinnytska



Horodkivka hromada

15.09 ha

- Open land, state reserve land
- 17.75 MW theoretical
- Substation at 2.08 km

Chernivetska



Rukshyn hromada

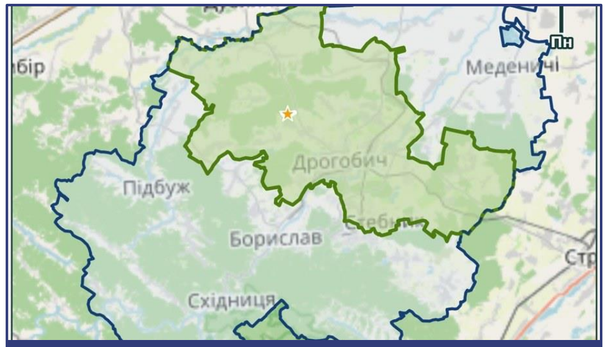
3.0 ha

- Uncultivated arable land by a local road
- 3.53 MW (2.82 MW free of constraints)
- Substation at 1.09 km

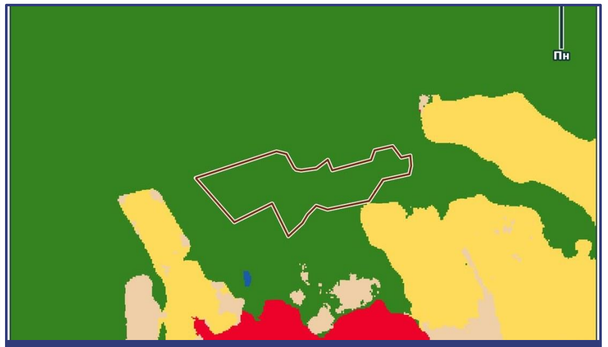
What each pilot assessment covers

Seven analytical blocks, illustrated for a pilot territory in Lvivska oblast

1. **Location and context**
   Hromada, district, coordinates, access roads
2. **Land cover and cadastre**
   Sentinel-2 land cover; parcel number, category, ownership
3. **Terrain**
   Elevation, slope and aspect from SRTM
4. **Environmental constraints**
   Protected areas, Emerald network, forests, water: overlaps and distances
5. **Energy indicators**
   Solar irradiation, PV yield, wind speed, theoretical capacity
6. **Grid and infrastructure**
   Nearest 35 kV line, substation and existing generation
7. **Overall assessment**
   Strengths, limiting factors and verification steps



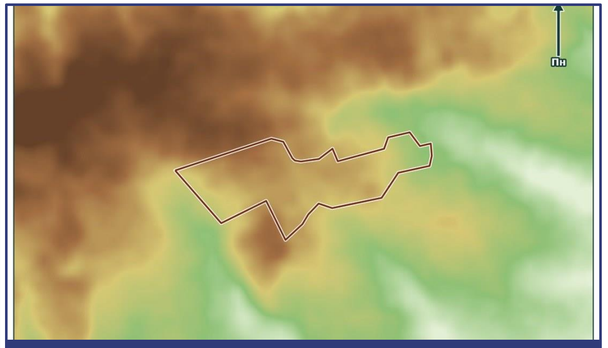
Location in hromada and district



Land cover (Sentinel-2)



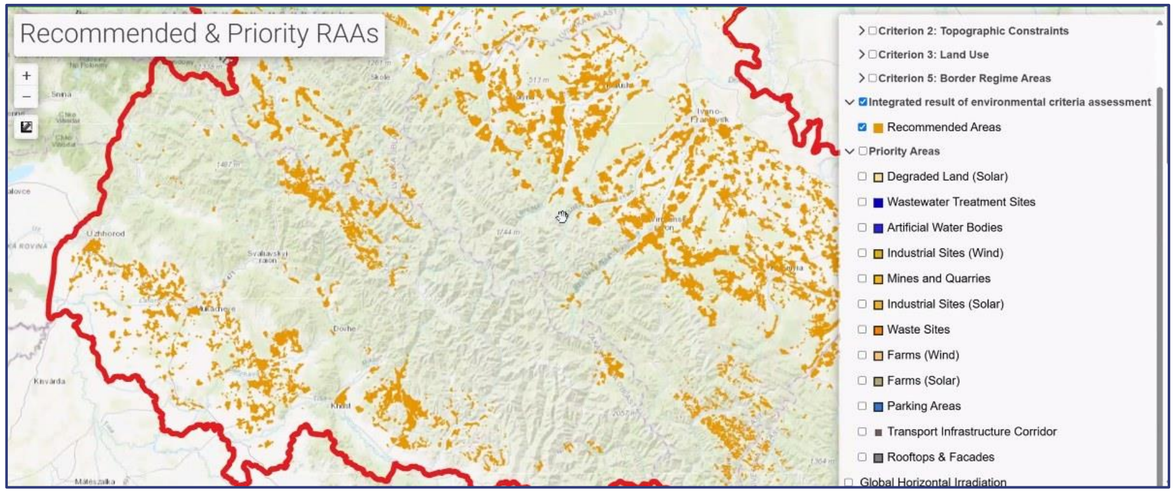
Satellite image with cadastral parcel



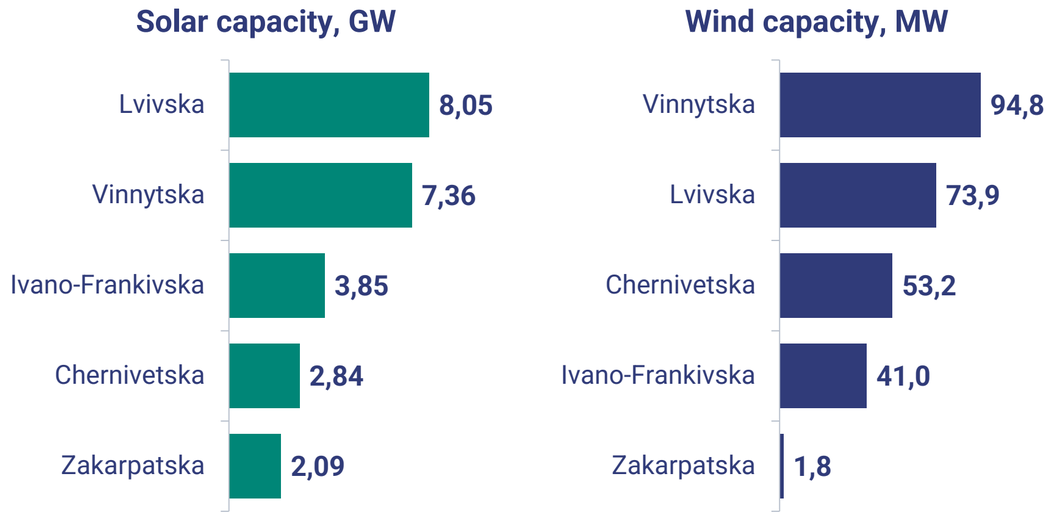
Elevation (SRTM)

Geodata layers for communities

Criteria-based analysis of regional territories, handed over as geodatabases



Phase I results on the Energy Community web map: recommended and priority RAAs



5
geodatabases
RAA_proj_[Oblast].gdb

2
datasets in each
Criteria and Priority_areas

12
priority-area classes
rooftops to degraded land

24.2 GW solar and **265 MW** wind
Estimated spatial potential of priority areas in the five oblasts, not spare grid connection capacity

Regional Concept Notes

A tailored note for each pilot oblast, structure illustrated by Chernivetska oblast

Regional Concept Note

Planning Renewables Acceleration Areas

Chernivetska Oblast

October 2026 · Phase II

× 5 oblasts

Handed over to regional representatives

1 Renewable energy potential

Solar and wind resource, capacity by land category, existing generation

2 Parallel initiatives

Seven recent projects identified and mapped; coordination and synergies

3 Environment and spatial planning

Criteria maps and an integrated map of constraints

4 Infrastructure readiness

Electricity networks (330–35 kV), roads and grid-proximity scenarios

5 Proposed priority areas

RAA categories, distribution by hromada, analysis of a pilot RAA

6 Roadmap for integration

17 steps from preparation to implementation in spatial planning

7 Next steps for authorities

Immediate actions, rebuilding the planning basis, capacity building

8 Institutional support

Roles at national, regional and local levels; coordination mechanism

Roadmap for RAA integration

From the Regional Concept Note: 17 steps in two phases

PREPARATORY PHASE · before formal designation · steps 1–11

Preparation and baseline

1. Technology frame and long list of areas
2. Required volume and aggregate area

Spatial and legal screening

3. Analyse valid planning documentation
4. Screen planning and land allocation initiatives
5. Analyse cadastre and ownership
6. Verify grid connection and readiness
7. Confirm environmental and local constraints

Engagement and prioritisation

8. Map stakeholders; consult landowners and investors
9. Hold preliminary public discussions
10. Prioritise, rank, compile area dossiers

Readiness

11. Monitor state initiatives; formalise interest

IMPLEMENTATION PHASE · after designation · steps 12–17

12 Reconcile the approved plan with the regional portfolio

13 Reflect designated RAAs in planning documentation

14 Prepare land and detail areas at local level

15 Apply the simplified permitting regime

16 Align grid development and engage investors

17 Monitor implementation; initiate plan revision

What was delivered

Outputs of the work on integrating RAA criteria · click a tile for details

5
technical sessions
with minutes of meetings, presentations and video records

277
participants
planners and authorities of five pilot oblasts

5
web applications
to explore candidate territories and propose sites

5
pilot territories
assessed on maps and in numbers

5
geodatabases
criteria and priority-area layers for communities

1
Guiding Note
on planning RAAs in Ukraine

1
Technical Note
on the dataset of proposed RAAs

5
Regional Concept Notes
one for each pilot oblast

Looking ahead

- Reflect RAA layers in spatial planning documentation
- Detail pilot sites with hromadas and investors
- Monitor national implementing acts and align criteria
- Continue the dialogue with planners and authorities

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THANK YOU!

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