



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

KEY PROJECT DELIVERABLES AND OPTIONS FORWARD ENVIRONMENTAL ASPECT

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THE RAAS ENVIRONMENTAL CRITERIA SET



Background / Considering

- ✓ The revised Renewable Energy Directive (2018, amended 2023)
- ✓ The Operational Blueprint for designation of Renewables Acceleration Areas was prepared by the Energy Community Secretariat and The Nature Conservancy
- ✓ Ukrainian regulations, practices, conditions



Wildlife protection

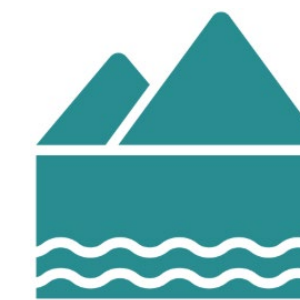
Land use regulations

Reverse inclusion criterion

Environmental Constraints

Planning Constraints

Natural conditions



CRITERIA GROUP 1. Wildlife Protection Constraints



Criterion 1.1: Areas protected under international legislation

Indicator 1.1.1: Areas of Emerald Network Sites with 700 m buffer zones

Indicator 1.1.2: Areas of Ramsar Sites with 700 m buffer zones

Indicator 1.1.3: Areas of UNESCO Biosphere Reserves with 700 m buffer zones

Criterion 1.2: Areas designated under national protection schemes for nature and biodiversity conservation

Indicator 1.2: Nature Reserve Fund of Ukraine areas with 700 m buffer zones

Criterion 1.3: Major bird migratory routes

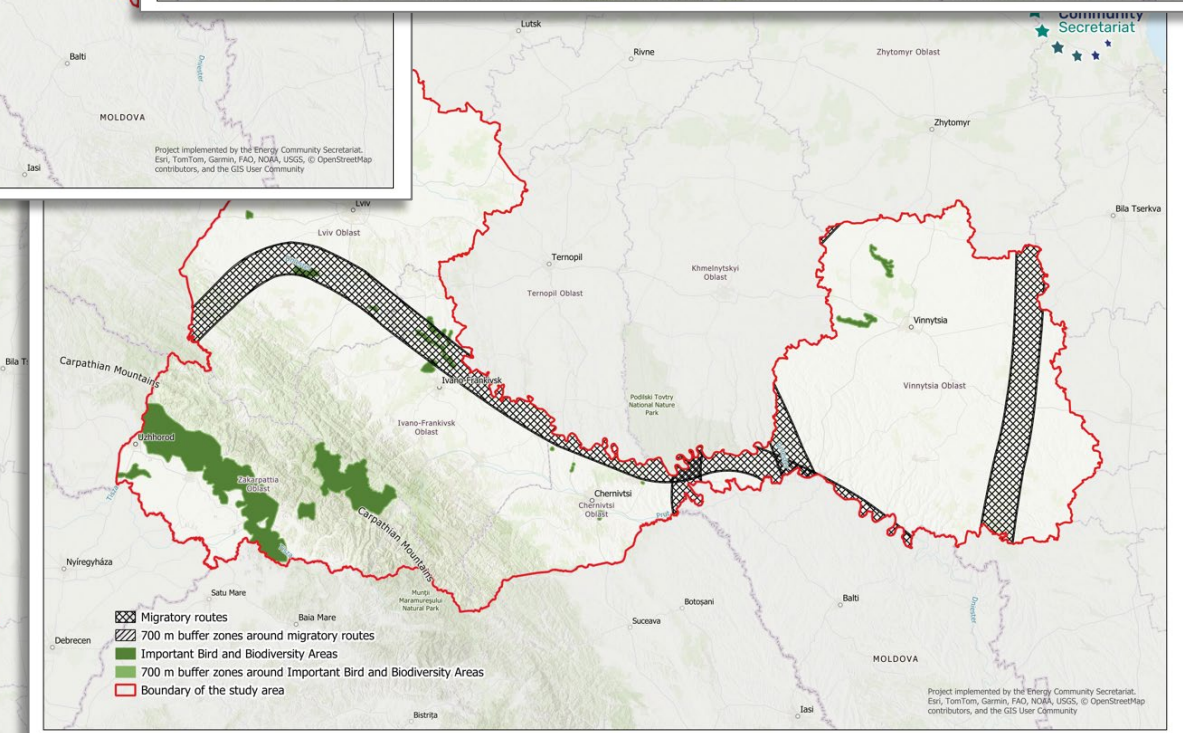
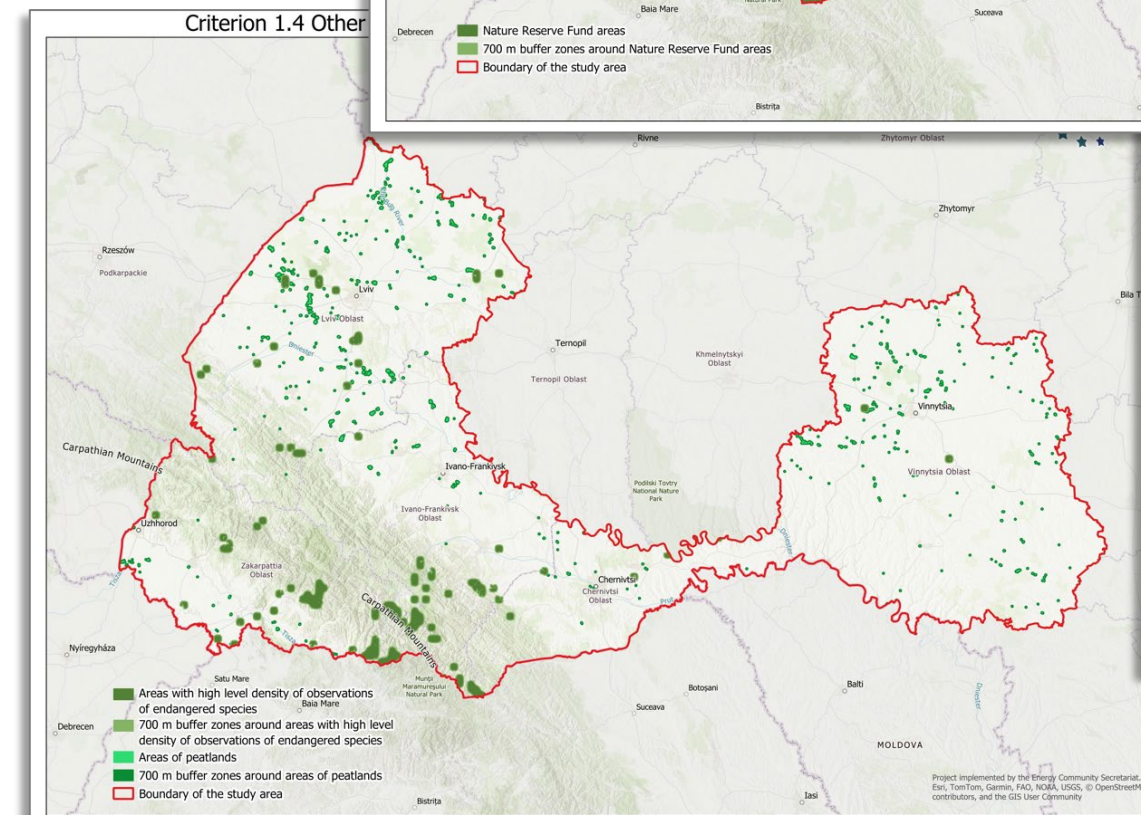
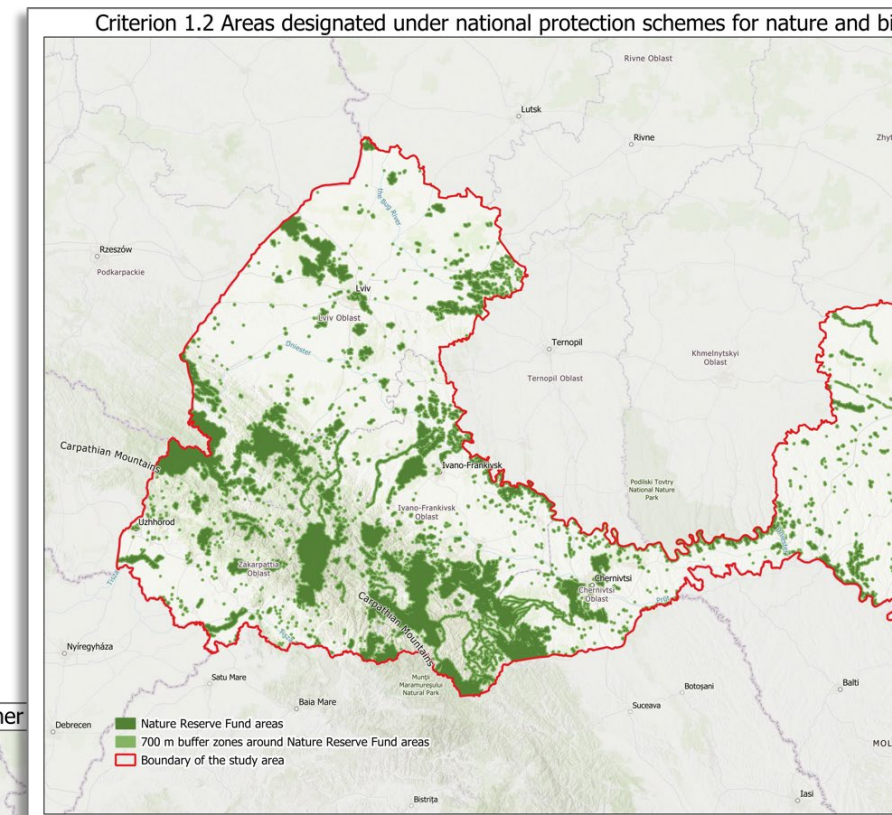
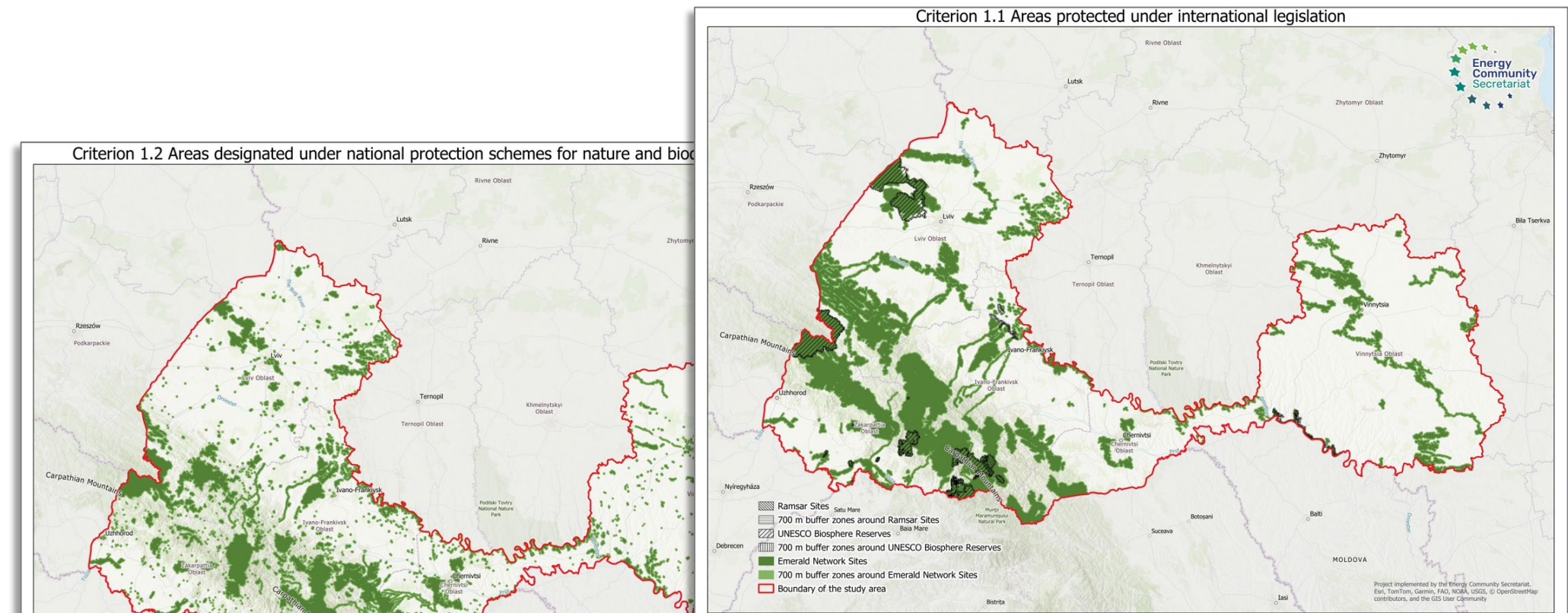
Indicator 1.3.1: Migratory routes with 700 m buffer zones

Indicator 1.3.2: Important Bird and Biodiversity Areas with 700 m buffer zones

Criterion 1.4: Other sensitive areas identified through sensitivity maps and relevant tools

Indicator 1.4.1: Areas with high level density of observations of endangered species including 700 m buffer zones

Indicator 1.4.2: Peatlands with 700 m buffer zones



CRITERIA GROUP 2. Natural Conditions



Criterion 2.1: Elevation

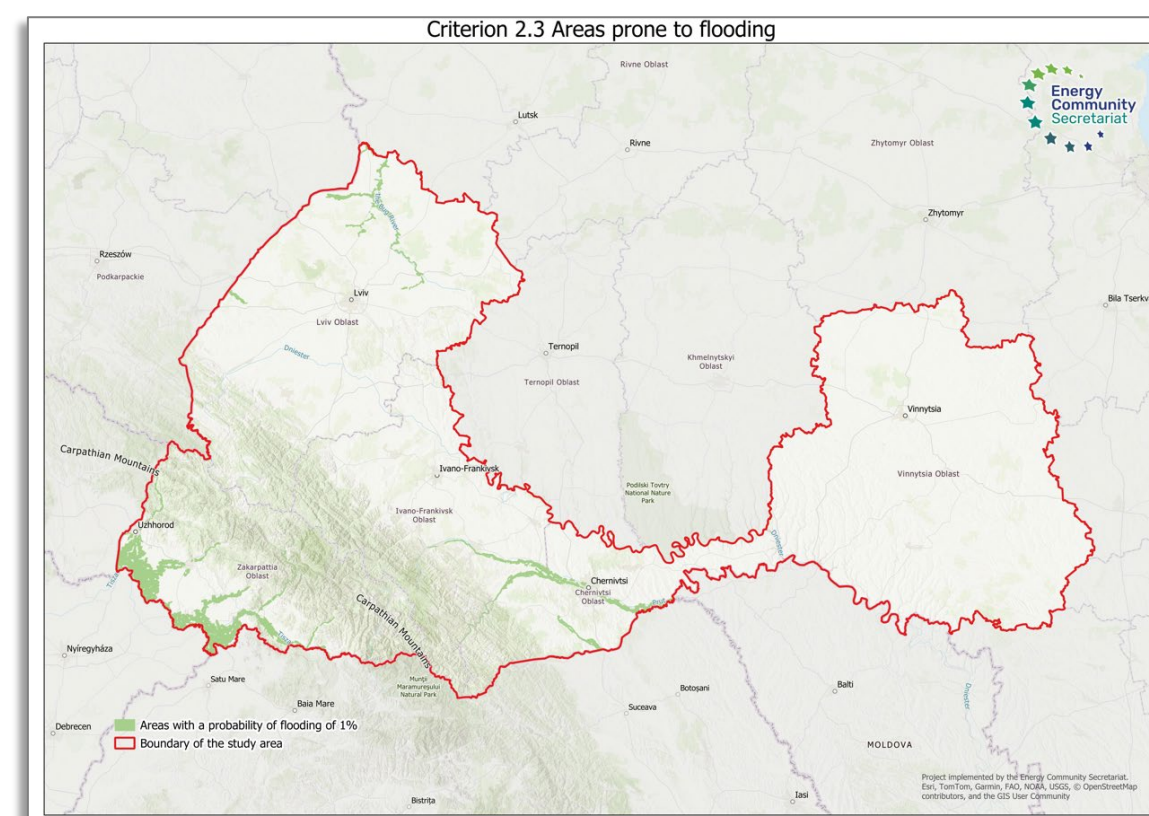
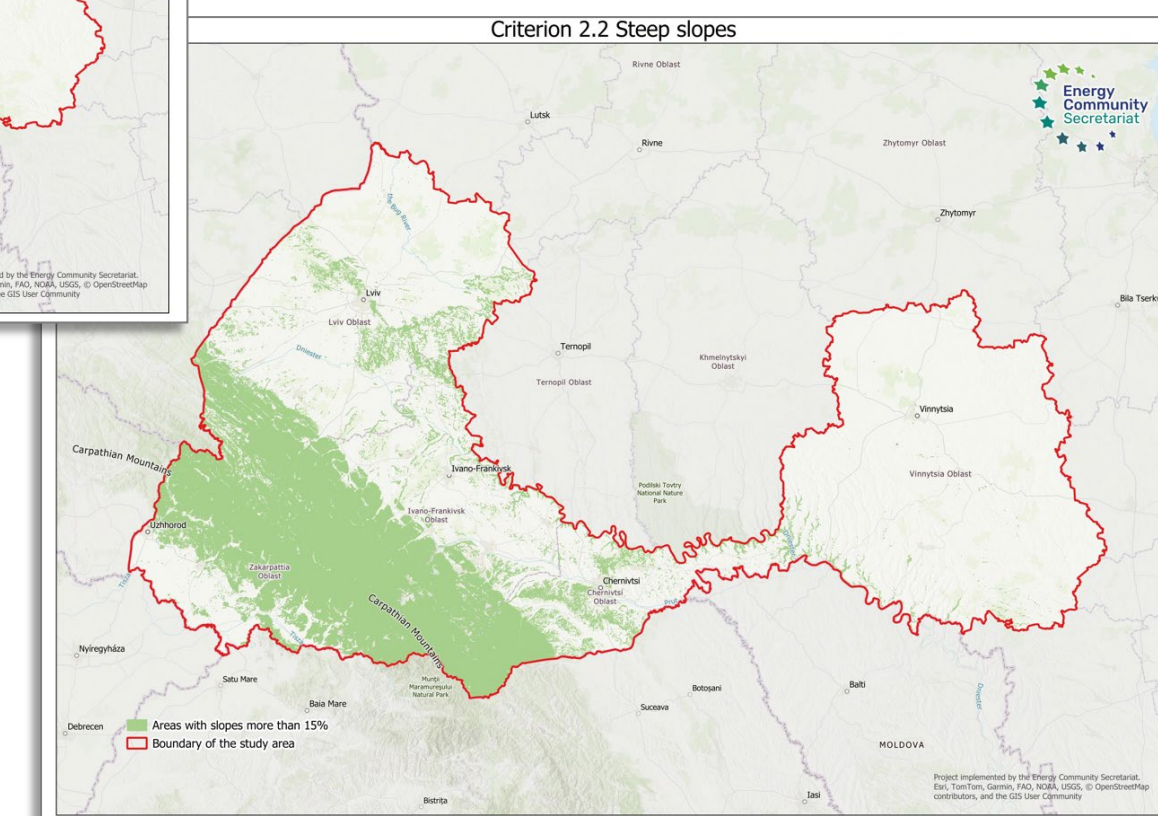
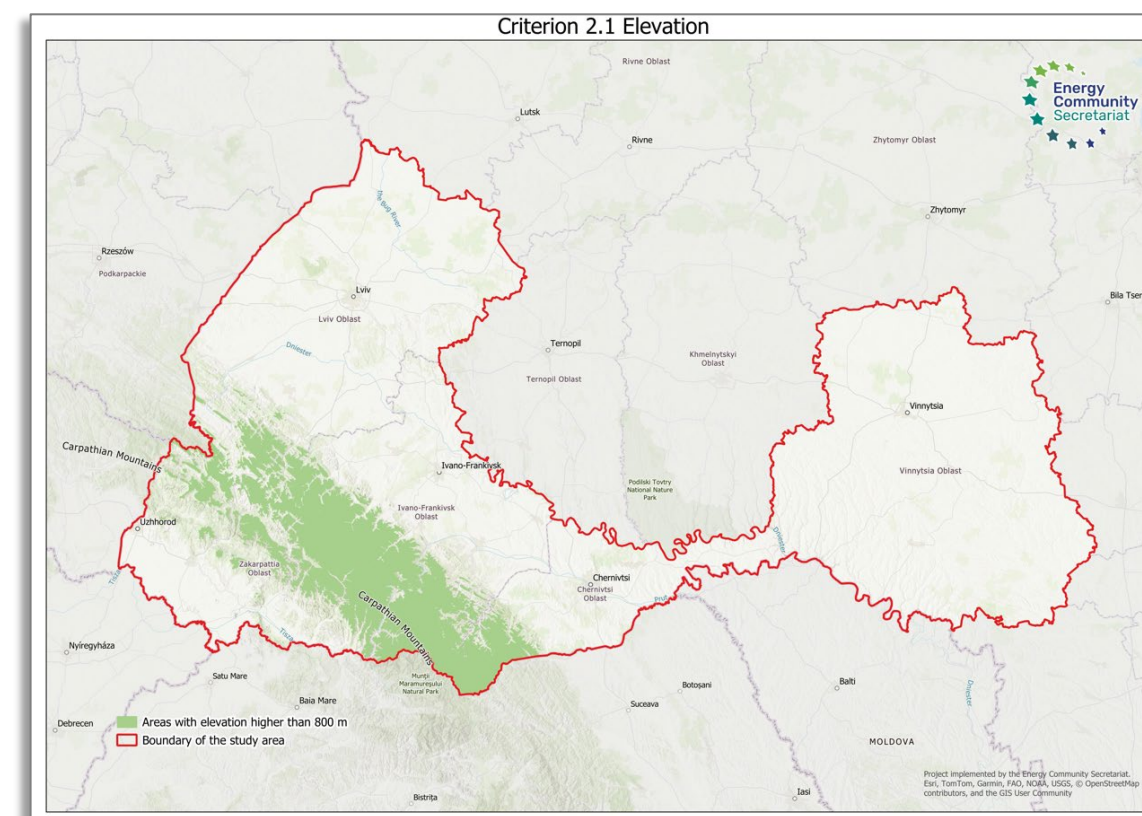
Indicator 2.1: Areas with elevation higher than 800 m

Criterion 2.2: Steep slopes

Indicator 2.2: Areas with slopes more than 15%

Criterion 2.3: Areas prone to flooding

Indicator 2.3: Areas with a probability of flooding of 1%

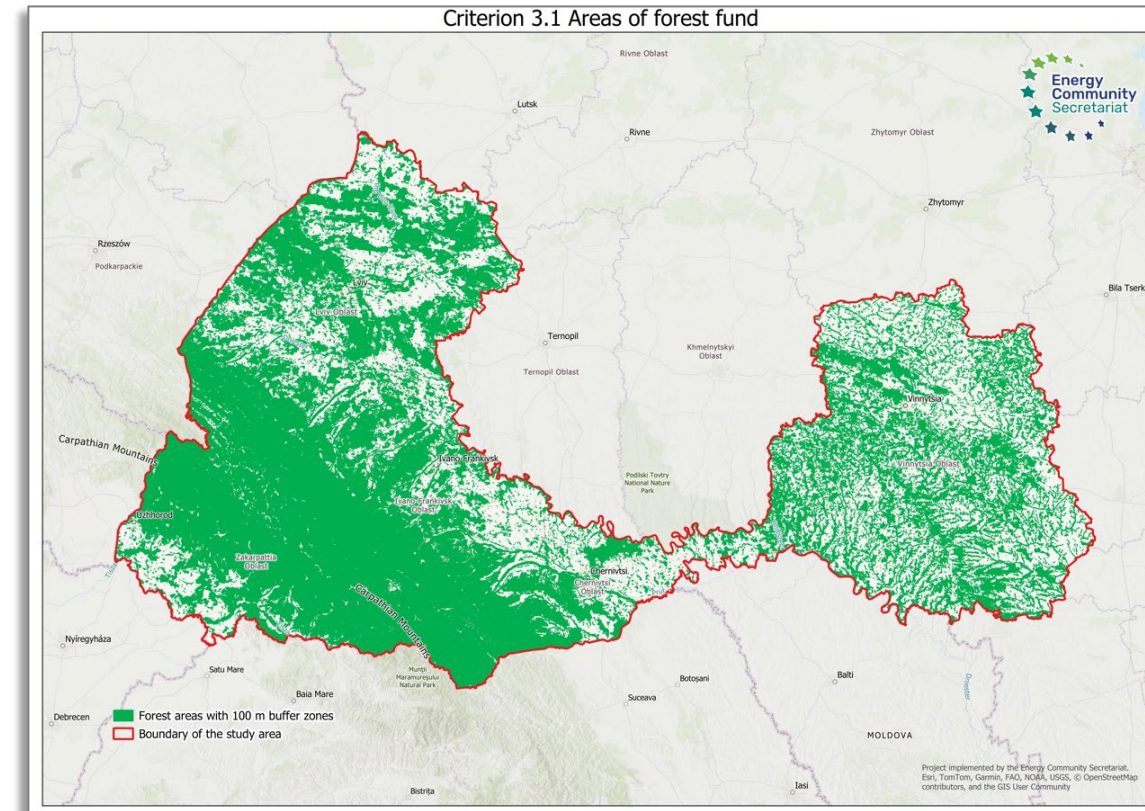


CRITERIA GROUP 3. Land Use Regulations



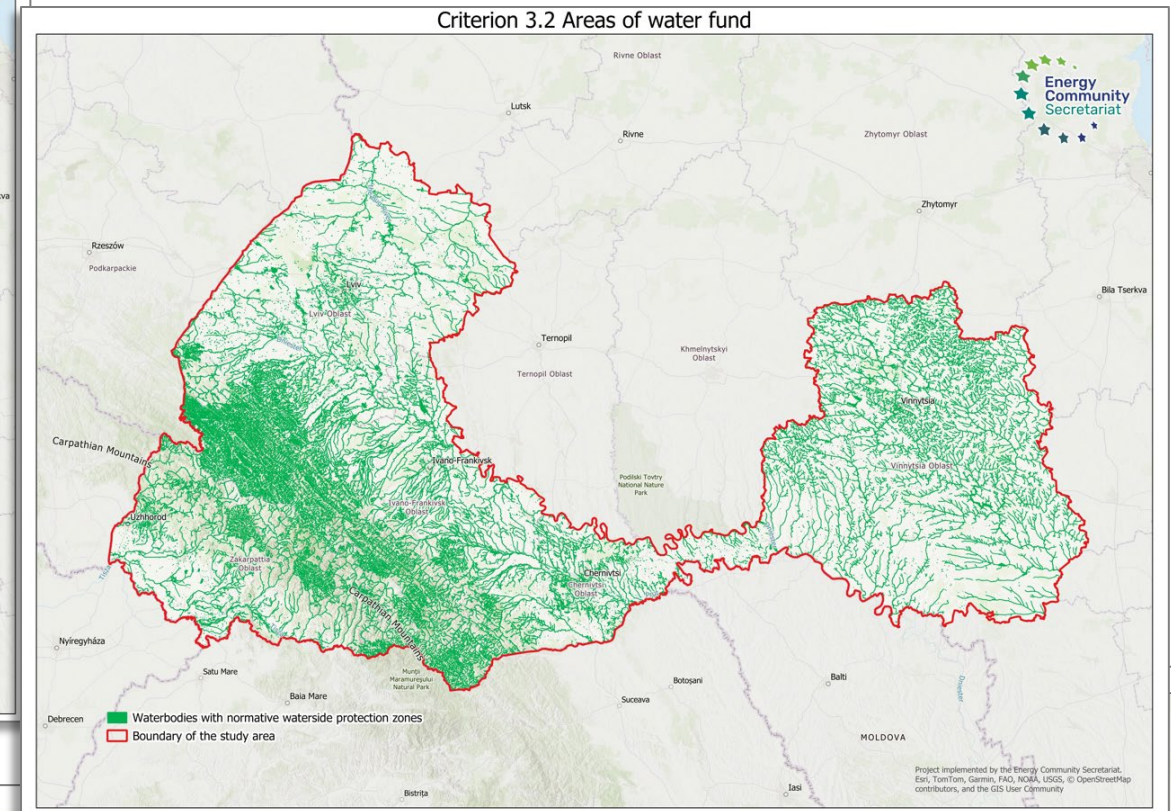
Criterion 3.1: Areas of forest fund

Indicator 3.1: Forest areas with 100 m buffer zones



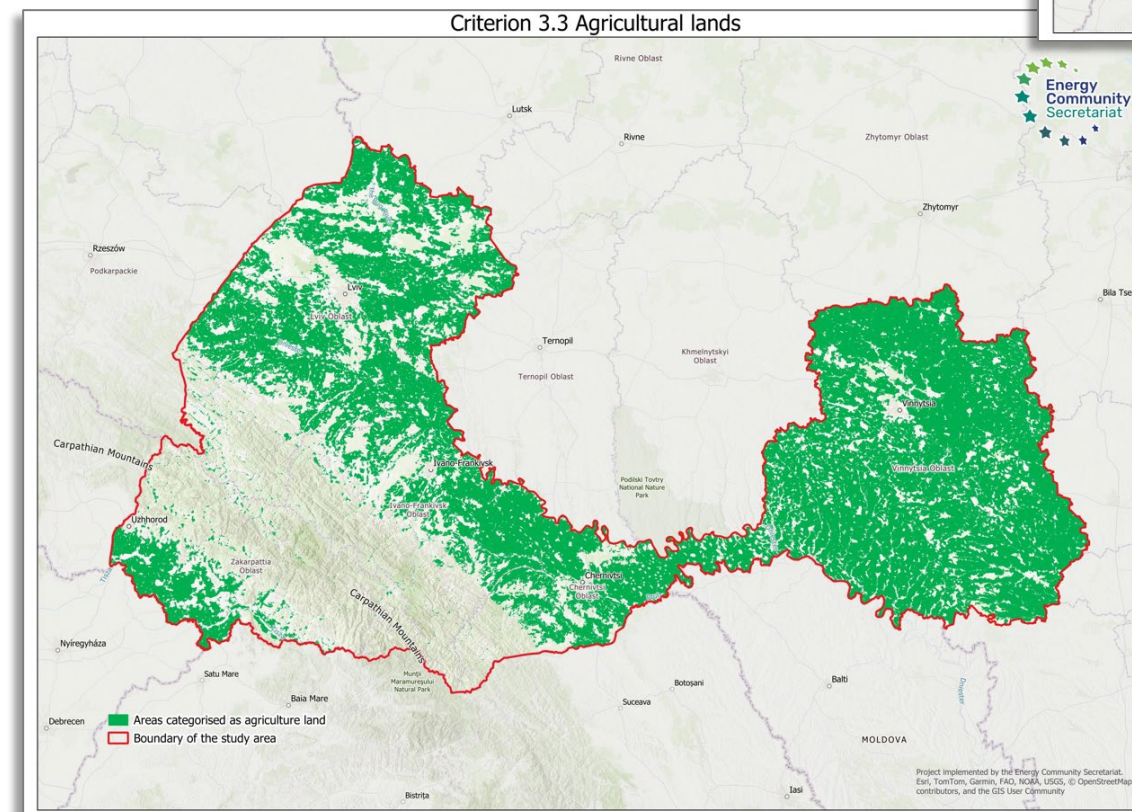
Criterion 3.2: Areas of water fund

Indicator 3.2: Waterbodies with normative waterside protection zones



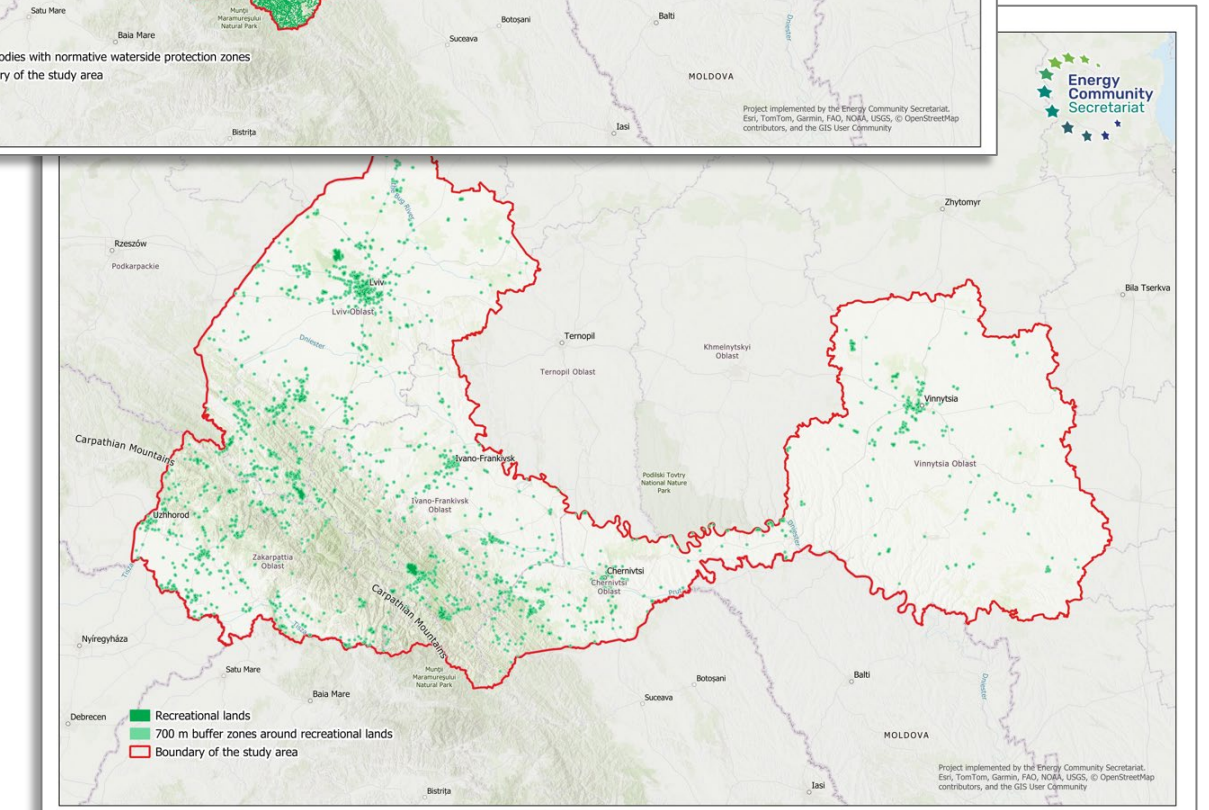
Criterion 3.3: Agricultural lands

Indicator 3.3: Areas categorised as agriculture land



Criterion 3.4: Recreational lands

Indicator 3.4: Recreational lands with 700 m buffer zones



CRITERIA GROUP 4. Reverse Inclusion Criterion

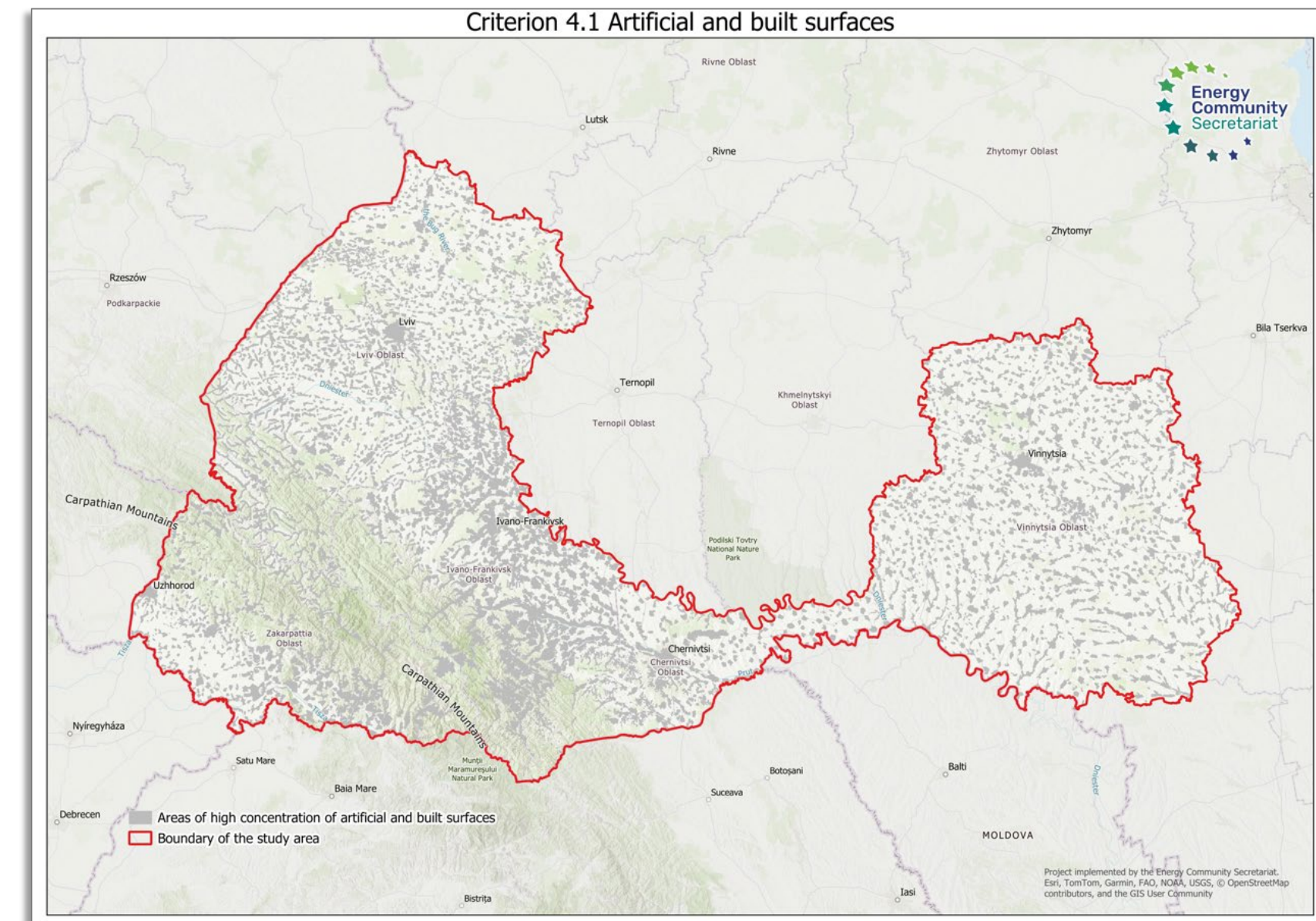


Criterion 4.1: Artificial and built surfaces

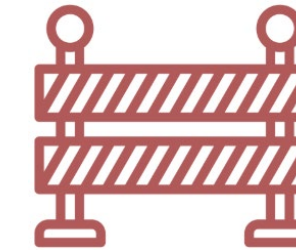
Indicator 4.1: Areas of high concentration of artificial and built surfaces

applied to areas meeting
Natural Conditions and
Land Use Regulations
Criteria

but not to areas
meeting Wildlife Protection
Constraints Criteria



CRITERIA GROUP 5. Planning Constraints

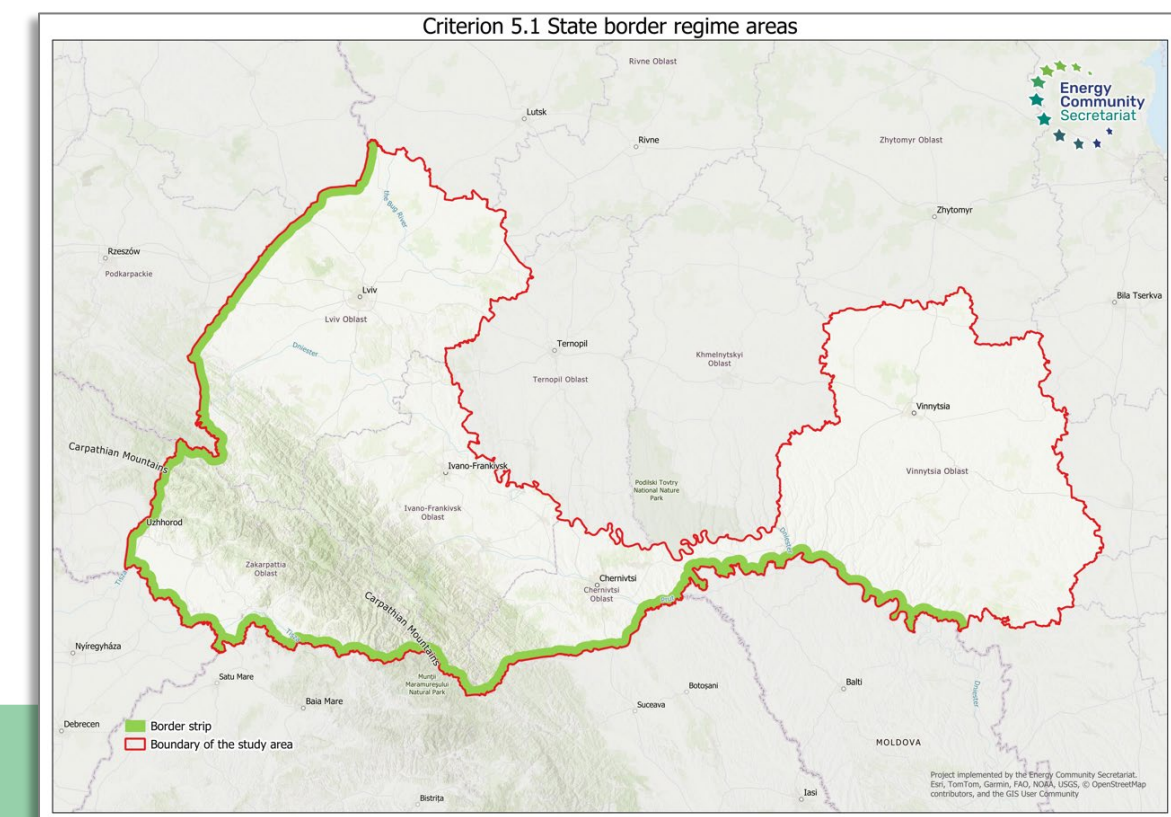


Considering is possible only within **detailed planning** at the local level

- historical and cultural restrictions
- sanitary, aviation and security restrictions
- development regulations

Criterion 5.1: State border regime areas

Indicator 5.1: Border strip



INTEGRATIVE ENVIRONMENTAL CONSTRAINTS MAP

High-level spatial analysis outcome for the Project region area

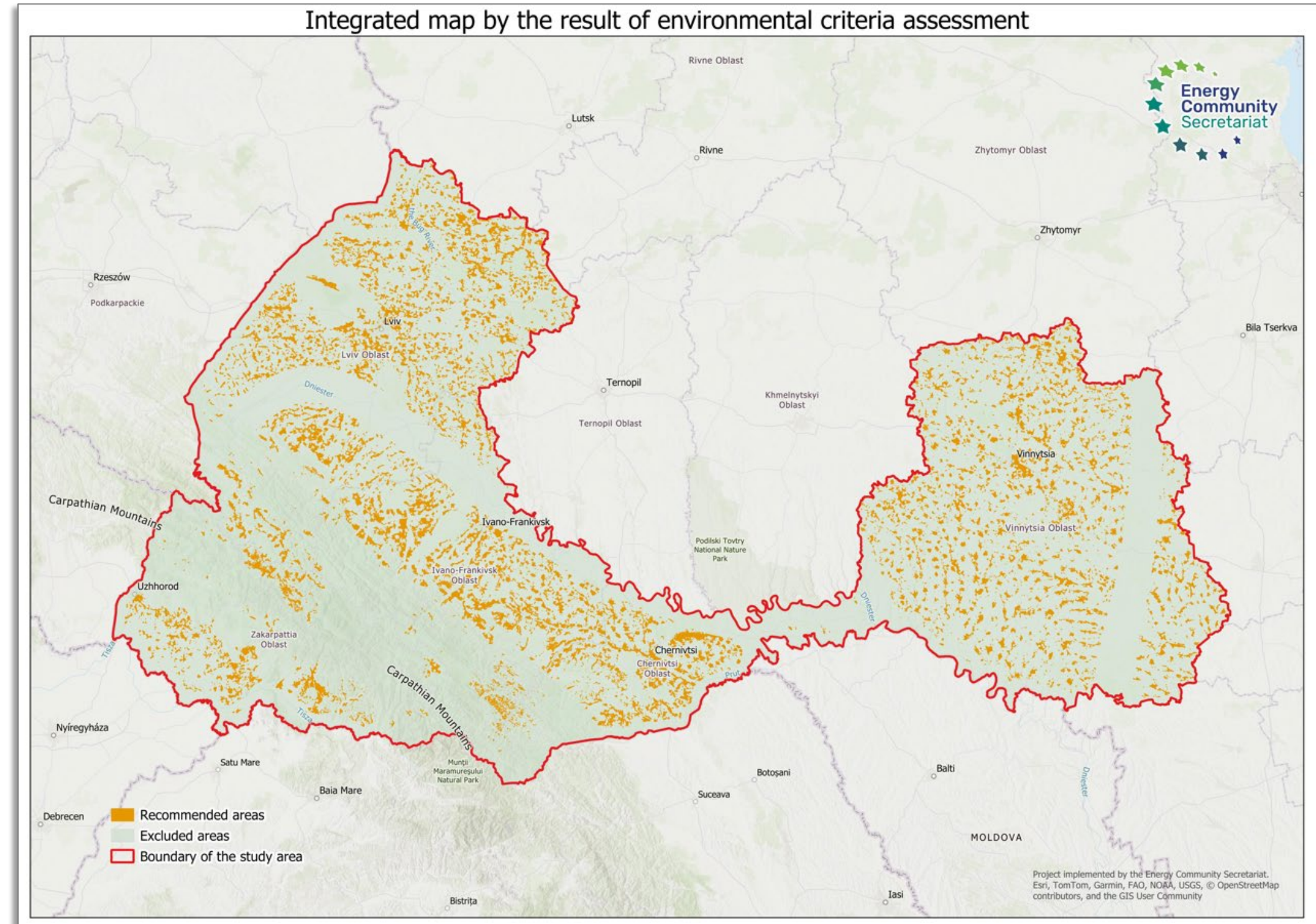
represents the division of the study territory into

- ✓ areas that are a subject to certain environmental restrictions
- ✓ areas that have a reduced probability of environmental conflicts when placing RAAs

Dynamic spatial-analytical tool providing

- ✓ in-depth modelling and variant analysis
- ✓ refinement at local levels
- ✓ integrating new criteria and indicators
- ✓ updating and clarification of input data
- ✓ considering the specifics of individual types of RES facilities

Integrated map by the result of environmental criteria assessment



FURTHER ASSESSMENT IMPROVEMENT

- ❑ Clarification, detailing and refinement of the environmental RAA criteria
- ❑ Collecting official reliable, updated and metrically accurate input data on defined RAA criteria
- ❑ Identifying areas with the lowest potential environmental impact of RES based on geospatial analysis of the criteria data
- ❑ Carrying out the refinement of the spatial model pointwise, within a specific territory of interest, supplementing with indicators of existing planning restrictions and other spatial development conditions



Potential
improvements

- completing and checking databases on protected areas and land resources
- supplementing the data on agricultural lands with data on degraded lands to exclude such areas from environmentally vulnerable and provide possibility for planning RAAs on such lands
- analysis of the possibility of designation of RAAs along sea coasts and on shelf areas to define special RAA criteria regarding waterside protection zones along sea coasts
- *additional research*
 - to determine exact areas necessary for supporting birds' migration to be included to the spatial analysis for the purposes of RAAs designation
 - to consider in the assessment appropriately sensitive areas (such as areas of high concentration of endangered species observations, and locations of peatlands)
 - to consider other species migratory routes (bats, insects etc.)



THANK YOU FOR YOUR KIND ATTENTION!



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