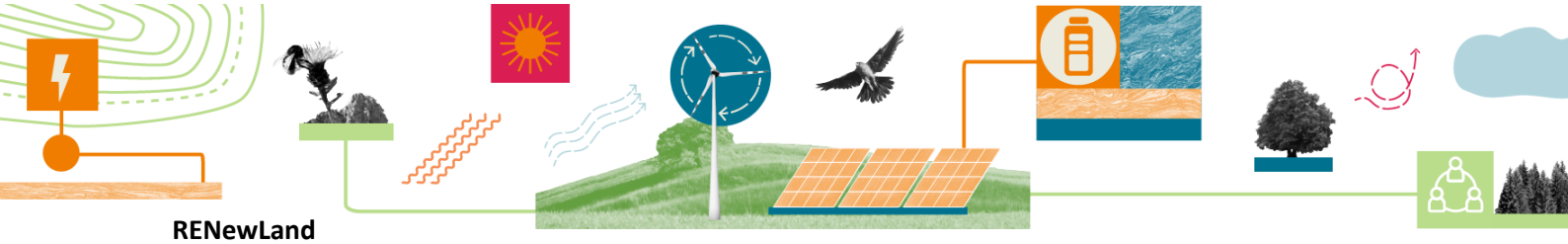
Accelerating the Energy Transition in Bulgaria, Hungary, and Romania through Renewable Acceleration Areas

Policy position

October 2025



Introduction

Given Europe's mounting climate ambitions and in the wake of the energy security crisis caused by Russia's war on Ukraine, the European Union has adopted a new wave of legislative instruments, most notably the REPowerEU Plan and the revised Renewable Energy Directive (RED III). These frameworks task Member States with facilitating a swift deployment of renewable energy through spatial planning and the creation of Renewable Energy Acceleration Areas (RAAs). This policy position provides a strategic analysis of progress, barriers, and recommendations for Bulgaria, Hungary, and Romania. It explains the challenges and makes recommendations for faster development of renewable energy in these countries.

The RENewLand project, launched in 2023, supports this assessment. By providing a science-based and stakeholder-driven methodology for spatial planning of renewables, RENewLand aims to bring support to these countries in fulfilling RED III requirements. However, despite technical tools and regional cooperation, implementation remains hindered by institutional fragmentation, data gaps, regulatory delays, and limited local engagement. This paper offers a comparative diagnosis and targeted policy guidance to address these shortcomings and accelerate progress toward the 2030 climate and energy goals.

Legislative Context and Methodological Foundations

The Renewable Energy Directive (RED III), adopted in October 2023, introduced two critical obligations for Member States. First, under Article 15b, member states must map areas with potential for renewable energy development by May 2025. Second, under Article 15c, they must formally designate RAAs by February 2026. RAAs are intended to concentrate renewable energy deployment in areas of low environmental sensitivity, where permitting can be significantly expedited.

In support of this process, RENewLand has developed a harmonized methodology based on Geographic Information Systems (GIS) and multi-criteria decision-making (MCDM), including the Analytic Hierarchy Process (AHP). This methodology integrates environmental, technical, and socio-economic criteria to ensure that renewable projects are sustainable and spatially coherent. It also incorporates an assessment of best practices in mapping and designating RAAs from other EU countries that are more advanced in this respect. It is designed to be adaptable to national contexts, and it is under pilot testing in counties and municipalities across the three target countries.

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National Progress and Challenges

Bulgaria

Despite adopting legal amendments to its Renewable Energy Sources Act in 2023 and 2025, Bulgaria remains behind schedule in implementing Article 15b. As of July 2025, the country has neither completed its territorial mapping nor officially designated acceleration areas, prompting a notice of non-compliance from the European Commission. Responsibility for this process, according to the national Renewable Energy Sources Act, lies with five ministries (the Ministry of Environment and Water, the Ministry of Energy, the Ministry of Regional Development and Public Works, the Ministry of Transport and Communications, and the Ministry of Agriculture and Food) and a working interministerial group has been established.

Stakeholder consultations carried out under RENewLand in 2024 revealed a troubling lack of integrated strategic planning and unclear institutional mandates. Although the legal framework (national Renewable Energy Sources Act) mandates acceleration zones for wind energy, it neglects solar power, thereby risking further biodiversity degradation. There are persistent data-related challenges, particularly concerning the lack of a complete or unified register of disturbed lands and weak digitisation of cadastral information. Moreover, urban and industrial lands remain underutilized, and grid constraints present formidable barriers to integration. Finally, the capacities of municipalities for speeding up the permitting process remains underdeveloped, with limited technical know-how and scarce mechanisms for citizen participation in planning processes.

Hungary

Hungary's efforts are similarly delayed, with no RAAs formally designated as of mid-2025. The country remains in the preliminary mapping phase described under Article 15b, and key legislative elements, such as the obligation to conduct Strategic Environmental Assessments (SEA), have been excluded from transposition drafts. This omission not only threatens legal compliance with EU directives but also increases the risk of future court challenges and public backlash.

Hungary's institutional structure complicates the energy transition. The absence of a dedicated Ministry of Environment contributes to fragmented decision-making and hinders access to critical environmental data. Meanwhile, over-regulation in certain areas, such as an overly strict wind power density threshold (500 W/m²) and expansive buffer zones for military radars

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(40 km), has rendered many otherwise viable sites ineligible for development. This comes in the context in which a significant renewable potential was identified through geospatial analyses conducted under RENewLand, estimated at up to 119 GW for wind alone. It is also important to consider that municipalities outside the RAA boundaries, which are deprived of investment opportunities, will likely lose business income and therefore many of the already poor municipalities may be economically marginalised unless a fair distribution mechanism is created – at least for those municipalities that will be adversely affected in some way by the wind farms to be installed. A reduction of the above mentioned 500 W/m² limit would have the significant benefit of increasing the number of municipalities that could gain from the income generated by wind farms.

Romania

On paper, of the three countries, Romania has made the most visible policy strides, yet implementation is stalling. The government began the process of transposing RED III (which includes the provisions regarding the RAAs) in October 2024, and the most recent draft of a Government Emergency Ordinance outlines a framework for RAA mapping and designation. However, as of September 2025, the final version has not been adopted, on account of political uncertainty, a change of government, financial constraints, and administrative capacity gaps.

Additionally, Romania's obsolete electricity grid is a critical bottleneck (due to limited flexibility, geographic mismatch etc.), and fragmented institutional responsibility persists at the operational level, especially when it comes to data sharing and spatial planning integration.

Common Policy Recommendations

A. Establish Permanent Multi-Stakeholder Coordination Platforms

To overcome persistent fragmentation in decision-making, each country should institutionalize a permanent multi-stakeholder platform to guide the planning and implementation of RAAs. These platforms must bring together representatives from central ministries, grid operators, environmental NGOs, the renewables industry, research, and municipal authorities. Their role would be to ensure cross-sectoral alignment (key ministries, transmission and distribution system operators, environmental NGOs etc.), data exchange, closing data gaps and methodological coherence. Such platforms should function as the coordinating bodies responsible for managing spatial planning processes, harmonizing legal interpretations, and ensuring that RAAs designation proceeds in a transparent, inclusive, and technically sound manner.

B. Adopt GIS-Based Multi-Criteria Methodologies

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A standardized, transparent approach to site selection is critical to both the legitimacy and efficiency of RAAs planning. Countries should adopt a Geographic Information System (GIS)-based multi-criteria methodology, such as that developed under the RENewLand project. This approach combines environmental, technical, and socio-economic considerations into a unified analytical framework. Tools like the Analytic Hierarchy Process (AHP) enable decision-makers to weigh competing criteria, such as renewable resource potential, proximity to infrastructure, land-use compatibility, and environmental sensitivity, according to context-specific priorities. This methodology provides a rigorous, replicable process for spatial analysis and ensures that site selection reflects a balanced integration of national energy needs and environmental obligations

C. Prioritize Disturbed, Degraded, and Non-Agricultural Lands

To reduce environmental conflicts and land-use tensions, RAAs designation must prioritize disturbed, degraded, and non-agricultural lands. Former industrial zones, abandoned and degraded farmland, contaminated sites, and underused urban areas offer significant potential for low-impact renewable energy development. A national inventory of such sites, regularly updated and linked to grid and planning data, should guide investment and permit prioritization. Where appropriate, financial incentives such as streamlined permitting, reduced grid connection fees, tax benefits or non-price criteria included in renewable energy public auctions as mandated by the Net-Zero Industry Act (NZIA) from 2026 onwards can further encourage development in these low-conflict zones. In parallel, sensitive areas (including Natura 2000 sites, ecological corridors, and high-value farmland) should be explicitly avoided in the early planning stages to ensure regulatory compliance and maintain biodiversity integrity.

D. Implement Strategic Environmental Assessments and Biodiversity Safeguards

Environmental protection must be fully embedded in the RAAs designation process through robust Strategic Environmental Assessments (SEAs). These assessments should be mandatory for all spatial planning documents, including those at the municipal level. Biodiversity data must be systematically integrated into SEA processes, with site-specific mitigation measures required for each RAA. These could include construction restrictions during breeding seasons, habitat restoration obligations, and ongoing monitoring protocols. By incorporating biodiversity safeguards early in the planning process, Member States can reduce legal risks, increase project durability, and support alignment with the EU's Biodiversity Strategy 2030.

E. Align RAAs Planning with Grid Expansion Strategies

The viability of RAAs depends not only on land availability but also on the capacity of the electricity grid to absorb and transmit renewable power. Therefore, spatial planning must be closely aligned with national grid development strategies. Ministries of Energy should work in tandem with transmission and distribution system operators to identify areas where connection

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capacity exists or can be cost-effectively expanded. Grid readiness should be factored into site selection criteria and influence the sequencing of RAAs implementation. Publicly available maps showing connection capacity, network constraints, and load forecasts will facilitate informed decision-making for investors and planners alike.

F. Enhance Public Participation and Local Benefits

Social acceptance of renewable energy projects is greatly enhanced when communities are informed, involved, and benefit directly. Countries should embed meaningful public participation into every stage of the RAAs planning process, from methodology development to project implementation. This includes early consultations, transparent data-sharing, and digital platforms that allow for interactive mapping and public feedback. At the same time, benefit-sharing mechanisms (such as discounted electricity rates, community ownership schemes, local employment requirements, or development funds) should be introduced to ensure that communities hosting renewable infrastructure also enjoy tangible gains. These efforts will build public trust, reduce conflict, and promote long-term support for the energy transition.

G. Strengthen Institutional Capacity

Effective RAAs implementation depends on the administrative and technical capacity of national and local institutions. Investments in human resources, digital tools, and technical training are urgently needed, particularly for municipalities and regional authorities who often lack the expertise to support spatial planning, permitting, and project oversight. Staff must be equipped to evaluate geospatial data, coordinate with stakeholders, and enforce environmental standards. The establishment of “one-stop-shop” services for permitting and investment can simplify procedures and enhance investor confidence. Strengthening institutional capacity is not merely a supporting measure, it is a foundational requirement for delivering the REPowerEU and RED III objectives within the EU deadlines.

H. Multiple Land Use

Renewable energy planning should promote multiple land use solutions, with agrivoltaics as an example. Agrivoltaics allow agricultural production and solar energy generation on the same land, improving efficiency and reducing pressure on farmland. At the same time, many areas suitable for solar also have good potential for wind energy. Encouraging combined or sequential use of these areas can save land, limit biodiversity loss, and prevent conflicts between wind and solar developers. Clear guidelines and supportive regulation are needed to promote co-location of technologies, ensure fair competition, and integrate ecological safeguards such as biodiversity-friendly ground cover and limits on agrochemicals.

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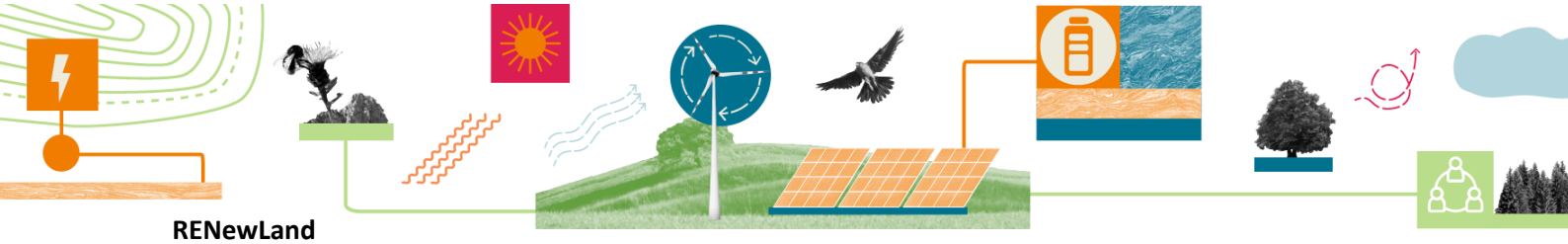

Country-Specific Policy Roadmaps

For **Bulgaria**, the most immediate task is to complete the mapping and designation of RAAs by the end of 2025, based on a thorough sensitivity mapping process for the whole country, incorporating bird migratory data. The country must publish its acceleration zone maps on a publicly accessible platform and integrate these zones into regional and municipal development plans. Equally important is the creation of a national register of disturbed lands and a legislative update to expand RAAs coverage to solar energy.

Hungary should prioritize the revision of its SEA legislation and align its technical standards, such as radar buffer distances and wind density thresholds, with European norms. A landscape-based siting guide and a financial compensation mechanism for non-hosting municipalities would also improve spatial equity and public acceptance.

Romania must urgently adopt its draft Emergency Ordinance and launch a centralized geospatial data platform to support national-scale implementation. RAAs designation should be coordinated with the National Grid Development Plan, and project-specific biodiversity provisions should be embedded within each Government Decision that designates a new acceleration zone.

Conclusion

The transition to renewable energy in Bulgaria, Hungary, and Romania is both an environmental imperative and a strategic opportunity. The RENewLand project has equipped these countries with tested methodologies, stakeholder networks, and clear policy frameworks. What remains is the political will and administrative coordination to put these tools into action. By embracing transparent, science-based planning and prioritizing low-impact areas, the three countries can not only meet their EU obligations but also forge a more resilient, inclusive, and sustainable energy future.

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