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Follow-up | Overview of Renewable Energy Spatial Planning and Designation of Acceleration Areas in Selected EU Member States

Study by Oeko-Institut e.V.
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I. List of Abbreviations

AFCs	Areas of First Choice (Greece)
APER	Law on the Acceleration of Renewable Energy Production (France) *LOI n° 2023-175 du 10 mars 2023 relative à l'accélération de la production d'énergies renouvelables*
CEREMA	Centre for Studies and Expertise on Risks, the Environment, Mobility and Urban Planning (France) *Centre d'études et d'expertise sur les risques, l'environnement, la mobilité et l'aménagement*
CLC	Corine Land Cover
CRE	Regional Energy Committee (France) *Commission de régulation de l'énergie*
DGEC	Directorate General for Energy and Climate (France) *Direction générale de l'énergie et du climat*
DGRM	Directorate for Natural Resources, Safety and Maritime Services (Portugal) *Direção-Geral de Recursos Naturais, Segurança e Serviços Marítimos*
DSF	Strategic Coastal Document (France) *Document stratégique de façade*
DSO	Distribution System Operator
EC	European Commission
EIA	Environmental Impact Assessment
EIGL	Energy and Industry Geography Lab
EU	European Union
GSE	Public energy services manager (Italy) *Gestore dei Servizi Energetici*
GTAER	Working Group for the definition of Renewable Energy Acceleration Areas (Portugal)

	Grupo de Trabalho para a definição das Áreas de Aceleração de Energias Renováveis
IBA	Important Bird Area
ISPRA	Institute for Environmental Protection and Research (Italy) *Istituto Superiore per la Protezione e la Ricerca Ambientale*
LNEG	*Laboratório Nacional de Energia e Geologia* (Portugal)
LIPU	Environmental non-governmental Organisation focused on birds (Italy) *Lega Italiana Protezione Uccelli*
MOEE	Ministry of Environment and Energy (Greece)
MPZP	Local Spatial Development Plan (Poland) *Miejscowy Plan Zagospodarowania Przestrzennego*
MIT	Ministry of Infrastructure and Transport (Italy) *Ministero delle Infrastrutture e dei Trasporti*
MITECO	Ministry for the Ecological Transition and the Demographic Challenge (Spain) *Ministerio para la Transición Ecológica y el Reto Demográfico*
MS	Member State
NPDOWP	National Programme for the Development of Offshore Wind Parks (Greece)
NECP	National Energy and Climate Plan
NGO	Non-governmental organisation
NRR	Nature Restoration Regulation
PAER	National Maritime Space (Portugal) *Plano de Afetação para as Energias Renováveis Offshore*
PAI	Platform of Eligible Areas (Italy) *Piattaforma Aree Idonee*
POEM	Maritime spatial plan (Spain) *Plan de Ordenación del Espacio Marítimo*

PPE 3	Multi-year programme planning for energy (France) *Programmation pluriannuelle de l'énergie*
PSOEM	Maritime spatial plan (Portugal) *Plano de Situação do Ordenamento do Espaço Marítimo*
RAA	Renewable Acceleration Areas
REN	National Ecological Reserve (Portugal) *Reserva Ecológica Nacional*
RRF	EU Recovery and Resilience Facility
SEA	Strategic Environmental Assessment
SSPRES	Special Spatial Plan for Renewable Energy Sources (Greece)
TSO	Transmission System Operator
WindBG	Wind Energy Area Requirements Act (Germany) *Windenergieflächenbedarfsgesetz*
WindSeeG	Offshore Wind Energy Act (Germany) *Wind-auf-See-Gesetz*
ZAERs	Renewable Energy Acceleration Zones (France) *Zones d'accélération des énergies renouvelables*
ZAPER	Offshore Wind Energy Priority Use Zones (Spain) *Zonas de Alto Potencial para Energías Renovables*

II. Executive summary
RED-y? Stock-take of Member States' progress in implementing the Renewable Energy Directive's mapping for renewables

This study presents an **updated overview of the efforts made by 10 selected European Member States (MSs) to implement the amended Renewable Energy Directive (RED III) concerning mapping for renewables.** Specifically, it examines **Art. 15b**, which mandates MSs to conduct a coordinated spatial mapping for renewable energy (RE) areas by 21st May 2025, necessary to meet their country-specific renewable energy targets under National Energy and Climate Plans (NECPs), contributing to the overall EU binding RE target for 2030. It also gives a glimpse into **Art. 15c**, which requires the designation of RAAs within these mapped areas by 21st February 2026, if the MSs are proceeding on time. The report presents the findings of 10 MSs: Croatia, Czechia, Estonia, France, Germany, Greece, Italy, Poland, Portugal, and Spain.

The analysis indicates that **RED III serves as a valuable, overarching framework for long-term RE expansion pathways, particularly in times of political instability,** as MSs are increasingly experiencing throughout the EU. Its stipulations provide a firm underpinning for national climate targets and ensure **consistency and planning security** even amidst changes in national politics.

This follow-up study reveals that **RED III has acted as a significant political stimulus for spatial mapping in most of the analysed MSs.** Compared to the initial stock-take in our previous report, Overview of Renewable Energy Spatial Planning and Designation of Acceleration Areas in Selected EU Member States (Oeko-Institut 2024), mapping **processes have been initiated in almost all countries**, or RED III stipulations have been integrated into existing spatial planning processes for RE areas. It seems in countries that had not previously implemented similar processes, RED III resonated particularly strongly and created a firm incentive to implement coordinating spatial mapping and planning. In contrast, countries with existing processes, such as Germany, France, and Italy, experience a more complex implementation of the RED III, often slower due to difficulties in integrating with existing processes and laws.

Midway through the RED III timeline, it is clear that **fast-tracking permitting alone cannot deliver the intended acceleration**. Beyond environmental assessments, structural weaknesses, grid access, fragmented planning, and data gaps remain key barriers. Effective acceleration requires addressing these systemic issues while safeguarding nature. Drawing on interviews with over 50 country experts, this report highlights the approaches most relevant for RED III implementation.

Key overarching recommendations include:

- Ensure sustained political commitment to RED III implementation
- Ensure a robust and meaningful assessments of RAAs
- Increase data availability, accessibility, and quality
- Integrate further relevant data into existing mapping tools
- Strengthen dialogue between relevant stakeholders
- Strengthen country-specific administrative capacities
- Prioritize RE development on low-conflict areas
- Maintain the momentum

1 Introduction

To translate abstract targets in their energy and climate plans onto their maps – this is one of the main objectives that the 2023 amendments to the RED impose on EU MSs, among others. They must balance competing demands for energy, food, transport, and nature conservation, while also reflecting societal values. As space has become a contested resource, proactive planning is essential to manage land-use pressures and enable accelerated RE deployment.

The **revised RED** (Directive (EU) 2023/2413, hereinafter referred to as RED III) came into force in November 2023, and streamlined permitting procedures for RE projects and introduced the concept of Renewable Acceleration Areas (RAA). Thereby, the European Commission (EC) pushes for significantly higher RE shares across the EU. Regarding spatial planning, RED III mandates MSs to transpose the following steps in a three-step timeline (see also Figure 1):

- Transpose permit-granting procedures of the RED III into national law by July 2024[1].
- **Art. 15b |** Conduct a coordinated spatial mapping for RE areas needed to meet their country-specific climate targets as set out in the respective National Energy and Climate Plans (NECP). The coordinated mapping was due to occur by 21st May 2025[2].
- **Art. 15c |** Enable the designation of RAAs within the mapped areas of Art. 15b RED III by 21st February 2026[3].

With two deadlines already passed, the final step of designating RAAs is approaching. Most MSs have faced delays in the transposition steps, risking knock-on effects for the overall RED III timeline and targets (see EC 26 Sep 2024; 17 Jul 2025). A timely review of progress is therefore essential to identify MSs' effective approaches, to identify implementation barriers, and to derive actionable recommendations for improvement.

For this purpose, Oeko-Institut, together with Climate Action Network (CAN) Europe, European Environmental Bureau (EEB), BirdLife Europe & Central Asia, The Nature Conservancy (TNC), and Worldwide Fund for Nature (WWF) European Policy Office, set out to provide an updated analysis of MSs' progress in implementing the RED III requirements. **The objective of this study is to provide an updated overview of selected EU MSs' efforts towards implementing the RED requirements**. It focuses on obligations with deadlines that have already expired or have fallen within the timeframe of this project. Building on our previous report, Overview of Renewable Energy Spatial Planning and Designation of Acceleration Areas in Selected EU Member States (May 2024), which analysed spatial planning practices in six MSs following the RED III amendment, this report reviews subsequent developments in those six countries and extends the analysis by four MSs. This analysis reflects the state as of **12 September 2025**.

The following 10 countries are in the focus of this report: Croatia // Czechia // Estonia // France // Germany // Greece // Italy // Poland // Spain // Portugal.

The reports' insights are based on comprehensive desk research as well as information retrieved *via* questionnaires and interviews with over 50 country experts. These include representatives of national branches of NGOs, governmental officials, and legal experts (see Acknowledgements).

[1] https://www.eumonitor.eu/9353000/1/j4nvhdlglbmvdzx_j9vvik7m1c3gyxp/vm8kgna29aye
[2] https://eur-lex.europa.eu/eli/dir/2023/2413/oj/eng
[3] https://eur-lex.europa.eu/eli/dir/2023/2413/oj/eng

Covering a total of ten countries, the report will:

- Review the status quo of current spatial planning activities in the selected MSs;
- discuss identified barriers and challenges surrounding the transposition and mapping process in MSs, focusing on areas for RE required by 21st May 2025;
- highlight promising national approaches for implementation and best practices;
- develop actionable policy recommendations that are tailored to each individual MS as well as overarching aspects to be tackled in the continuous implementation process.

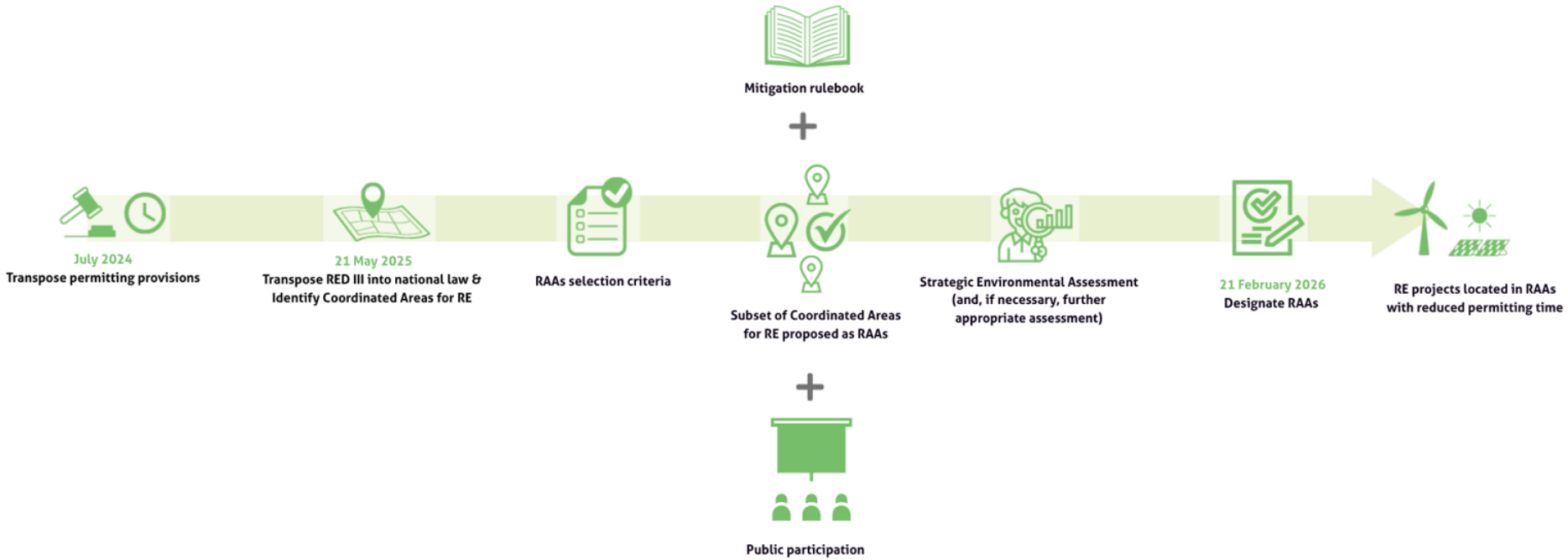

Figure 1: Timeline and steps of implementing RED III spatial planning stipulations. Source: Own illustration

2 Key terms and RED III proceedings in Spatial planning

To address the research questions of this project, it is important to have **a sound understanding of key terms**. We therefore distinguish between the following terms:

- **Renewable Energy (RE)** // RE, as used in Art. 2a RED III encompasses non-fossil sources such as wind, solar (thermal and photovoltaic (PV)), geothermal, ambient, osmotic, tidal, wave, and other ocean energy, hydropower, and various forms of biomass and biogas. In practice, however, most of the studied MSs have prioritised wind and solar in their RED III, and the conception of RE in the report is focused accordingly.
- **Coordinated Areas for RE** // The term refers to areas that EU MSs must identify by 21st May 2025 through a coordinated mapping process to support RE deployment and related infrastructure needed to meet their 2030 NECP targets (Art. 15b, RED III). These areas are therefore a central focus of our study. Their identification is guided by energy-related criteria: (a) availability and potential of RE resources, (b) projected energy demand, considering efficiency and flexibility, and (c) availability or development potential of infrastructure such as grid or storage. MSs are encouraged to consider multiple land uses and may build on existing spatial plans. A strategic environmental assessment (SEA) and public participation are not mandatory in this step.
- **Renewable acceleration areas (RAAs)** // RAAs are a subset of the *Coordinated areas for RE* identified under RED III. They must be designated by 21st February 2026 as particularly suitable areas for the rapid deployment of specific RE technologies (RED III Art. 15c). RAAs are intended to screen for areas with a low likelihood of significant environmental impact, prioritise artificial or degraded sites while excluding highly sensitive zones such as Natura 2000 and other protected areas. Within RAAs, permitting procedures are simplified and accelerated, supported by predefined mitigation rules. RAAs are subject to an SEA, which must include public participation, mitigation measures, and must contribute meaningfully to national and EU RE targets.
- **(Coordinated) Spatial mapping** // Our understanding of *(coordinated) spatial mapping* refers to a structured process in which MSs identify suitable areas for RE deployment, as in Coordinated areas for RE. It may involve tools like sensitivity mapping or energy yield assessments. Spatial mapping provides the analytical basis for subsequent planning and zoning decisions, with the aim of minimizing land-use conflicts and enabling efficient, sustainable RE expansion.
- **Spatial planning (of RAAs)** // Refers to the formal designation of specific sub-areas within the previously identified *Coordinated Areas for RE.* To do so, MSs must adopt spatial plans that are subject to an SEA. Spatial planning builds on spatial mapping and provides the foundation for project implementation and permitting procedures.
- **Sensitivity mapping** // Refers to the identification of ecologically sensitive areas and selected species groups, with weighing according to their vulnerability to specific RE technologies. It helps planners detect areas or species at risk from RE deployment and thus supports the mitigation of environmental and social impacts. In designating RAAs, MSs are required to apply suitable datasets and tools such as sensitivity mapping (RED III, Art. 15c).
- **Low-conflict areas** // Refers to areas suitable for RE deployment with comparatively limited risk of significant ecological and social conflict. As of Art. 15c RED III, these areas include artificial and built surfaces (e.g. rooftops and facades of buildings, transport infrastructure, parking areas, waste and industrial sites, mines, artificial inland water bodies, or, urban wastewater treatment plants) as well as degraded land not usable for agriculture. While some may still hold biodiversity value, they are generally characterised by low sensitivity and thus lower ecological risk.

3 Country Profiles

The following sections present each analysed MS and take stock of key aspects of RED III implementation such as national transposition, mapping Coordinated Areas for RE, and the designation of RAAs. Further, for each MS, we identify country-specific barriers and derive targeted recommendations. **Figure 2 illustrates the progress stock-take across all MSs.** Most have finalized or are advancing RED III transposition and mapping activities are well advanced in most MSs, except Greece and Spain where processes are still pending. In France, mapping activities are not (yet) aligned with RED III stipulations but are ongoing. Please note that the symbols are a simplification of complex, country-specific processes. For more detail, please refer the extended country profiles in this section. The cut-off date for research was 12 September 2025.

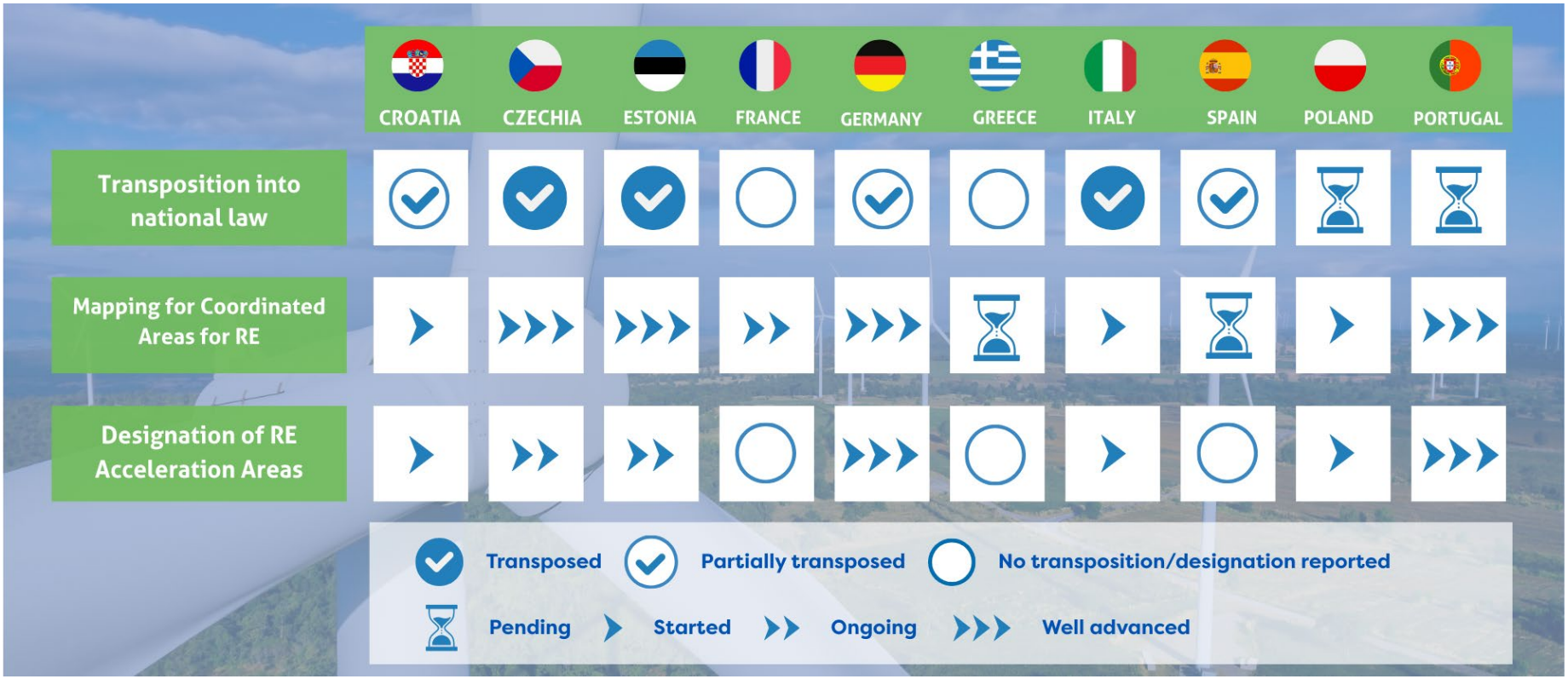

Figure 2: Activities regarding mapping for Coordinated Areas for RE and designation of RAAs. Source: CAN Europe

3.1 Croatia

National transposition of Article 15b and c

On 9 May 2025, an amendment to the law on RE entered into force, partially transposing RED III. (Interreg Central Europe 2025). Implementation has been delayed due to governmental elections in mid-2024, the subsequent split of responsible ministries, as well as key staff leaving the ministries, all of which have led to setbacks in the legislative process (DOOR 2 May 2025; BIOM 23 Jun 2025). However, a new law is in preparation that will ensure full transposition, with the draft expected by the end of 2025. Also, the amendment already implemented in May introduced an important provision requiring the Ministry of Energy, together with the ministries responsible for spatial planning and environmental protection, as well as the Distribution System Operators (DSO) and Transmission System Operators (TSO), to adopt a plan for designated areas for network and storage infrastructure. This plan, which must be completed by 9 November 2025, will serve as a basis for spatial planning and excludes Natura 2000 and protected areas, except where no alternatives exist for network projects (BIOM 23 Jun 2025).

Coordinated mapping for RE areas onshore

To map Coordinated areas for RE, Croatia first conducted a technical background assessment for onshore wind and solar. The latter provides guidelines and criteria for the siting of solar and wind power, as well as an environmental sensitivity mapping to support the identification of RAAs (EIHP 25 Aug 2025; 12 May 2025). This work, carried out by the Energy Institute Hrvoje Pozar (EIHP) and TNC on behalf of the Ministry of Environment and Green Transition, applied a wide range of ecological, spatial, and infrastructural criteria, including biodiversity data, habitat maps, Natura 2000 sites, county spatial plans, existing infrastructure, and proximity to the power grid (TNC; EIHP 2025; EIHP; TNC 2025). Multiple area use, such as RE deployment in economic zones, brownfields, and mineral sites, was also partially mapped (mzozt 2024; EIHP 12 May 2025). However, the mapping did not include storage and grid capacity, and not all multiple-use options (e.g., Agri-PV) could be assessed due to legislative gaps (EIHP 12 May 2025).

While the sensitivity maps provide an important technical basis for future RAA designation, the process remains only partially coordinated across ministries. Moreover, the mapping of Coordinated areas for RE has not yet begun (EIHP 25 Aug 2025; BIOM 23 Jun 2025).

Public participation in the mapping for Coordinated Areas for RE has not yet occurred, as it is still pending. The sensitivity mapping was presented to a wider audience and included structured input from expert stakeholders such as ministries, national agencies, county spatial planners, and experts in nature protection, including NGOs and academia. Formal public participation will take place once draft RAAs are designated, as stipulated in Art. 15d RED III (EIHP 12 May 2025; BIOM 23 Jun 2025).

Designation of RAAs

The designation of RAAs within the required timeframe remains uncertain. While the technical assessment and the production of sensitivity maps were completed in December 2024, no further action has been taken by the authorities since then. Some legal amendments have been introduced, but a comprehensive new RE law, expected by the end of 2025 (see above), will be necessary to fully align national legislation with the RED III and enable formal designation (EIHP 25 Aug 2025).

National-specific barriers and resulting recommendations

- **Coordinated spatial mapping required (Art. 15b) has not yet begun**, although a technical background assessment and sensitivity mapping for the siting of PV and onshore wind projects have been completed. This delay creates a significant risk that the designation of RAAs will not be achieved within the prospective timeframe (EIHP 25 Aug 2025). Without a timely progression from technical assessment to formal mapping, the planning and permitting process for new projects remains uncertain and misaligned with RED III objectives.

  // **Our recommendation:** To meet the RAA designation timeline, spatial mapping should be implemented promptly following the technical assessment. Within this process, identified artificial and multiple-use areas (e.g., brownfields, mineral sites, economic zones) should be prioritized, e.g., by using weighing factors. This helps to prevent potential land use conflicts. In addition, the integration of comprehensive grid-related data, which reaches beyond proximity to existing or planned infrastructure, including storage options and grid capacity, is essential to ensure that designated areas are not only environmentally suitable but also technically feasible for rapid RE deployment.

- **Implementation of RED III has been slow due to political developments**. Governmental elections in mid-2024 led to a restructuring of responsibilities across ministries and changes among key staff (DOOR 2 May 2025). These changes created administrative setbacks and delayed progress in the legislative process, in turn postponing the mapping and designation of RAAs.

  // **Our recommendation:** Prioritize the timely implementation of RED III into national law by the end of 2025. This is essential to provide the legal foundation and legitimacy required for the mapping of Coordinated area for RE and the formal designation of RAAs.

- **Limited availability, inconsistent quality, and difficult access to relevant datasets** challenged the technical background assessment for RAAs. And reduced the precision and reliability of the assessment results (EIHP; TNC 2025; TNC; EIHP 2025). While the assessment provided an important foundation, these data gaps risk reducing the robustness of future RAA designations if not addressed in the subsequent spatial mapping.

  // **Our recommendation:** Address data limitations directly in the upcoming spatial mapping phase to ensure the designation of high-quality areas. This requires regular updates of spatial datasets, improved accessibility and compatibility of databases, and the integration of comprehensive grid-related information. Strengthening the data basis at this stage will enhance the reliability and acceptance of the final RAA designation.

- **The preparation of the technical background assessment of RAAs' designation revealed shortcomings in cross-sectoral collaboration.** Relevant ministries and sectors, including energy, spatial planning, and environmental protection, did not fully coordinate their efforts, partly due to fragmented responsibilities and gaps in the legal framework (TNC; EIHP 2025; EIHP; TNC 2025). Although expert consultations were carried out and rated as helpful, this exchange was limited to the assessment phase and has not yet been institutionalized for the subsequent spatial mapping process.

  // **Our recommendation:** Ensure continuous expert consultation beyond the technical background assessment and into the spatial mapping process. Building on the successful involvement of experts in the assessment phase, systematic integration of ecological, technical, and planning expertise will strengthen cross-sectoral collaboration and improve the quality and legitimacy of RAA designation.

3.2 Czechia

National transposition of Article 15b and c

Czechia adopted the Act on Accelerating the Use of Renewable Energy Sources on 25 July 2025, completing the legislative process. The law entered into force on 1 August 2025 and introduces significant simplifications to permitting procedures for solar and wind power plants, particularly through the designation of RAAs. With this step, the transposition of RED III provisions on mapping and fast permitting has been completed (Frank Bold 31 Jul 2025; CDE 2025).

Coordinated mapping for RE areas onshore

The mapping of Coordinated areas for RE began in spring 2023. The process is overseen by the *Research Institute for Landscape under the Ministry of Environment* and supported by *EU Recovery and Resilience Facility* (RRF) funding (Research Institute for Landscape 31 Jul 2025).

The mapping differentiates between onshore wind and solar PV. Data is sourced from the Czech geodata portal ZABAGED (Frank Bold 31 Jul 2025). Mapping criteria include technical potential (wind speeds > 5.5 m/s, solar radiation), proximity to the grid (< 20 km), and limiting factors such as unsuitable terrain, biodiversity sensitivities for birds, bats, species distribution, and cultural heritage sites. For wind energy, additional requirements apply, such as minimum distances from state borders (> 3 km) and settlements (≥ 500 m), and ensuring at least two designated sites per region. A multi-criteria analysis was conducted to assess how variations in input variables impact the output of the model or system. (Research Institute for Landscape 2025). For PV, RAAs were effectively limited to large brownfield sites (typically abandoned industrial land), excluding most other land-use options. The minimum size requirement of > 50 ha further restricted eligibility. However, regions and municipalities retain the option to designate smaller PV RAAs outside of brownfields (Research Institute for Landscape 31 Jul 2025).

Designation of RAAs

The Czech government has positioned RAAs as a key tool to accelerate RE deployment. The overall progress has been notably swift, driven by an early start to the mapping process, clear criteria, strong political support, available RRF funding, rich spatial data, and the commitment of key actors. These factors have enabled Czechia to advance RAAs preparation in line with RED III stipulations, despite the complexity of its national context (Research Institute for Landscape 31 Jul 2025). While RAAs have not yet been designated, their adoption is foreseen by 2026 and will be integrated into municipal, regional, and national planning frameworks, followed by an SEA. Mapping is ongoing and coordinated with broader spatial planning. Stakeholder involvement has taken place, including two rounds of consultations with regional authorities, though the quality and inclusiveness of participation remain debated (Research Institute for Landscape 31 Jul 2025; 2025). Public participation has not yet occurred during mapping of Coordinated areas for RE and will only take place in the formal designation phase, raising questions about the extent of future engagement.

Experts caution that RAAs' designation alone may not be enough to persuade municipalities and local resistance against RE. Complementary interventions, particularly financial incentives, will be needed to secure local acceptance (Frank Bold 31 Jul 2025).

National-specific barriers and resulting recommendations

- **The expansion of RE in the Czechia is shaped by a complex political landscape**. While the national level seeks to accelerate the designation of RE and also RAAs, these efforts are often met with resistance at the regional and local levels, thus slowing any progress (Frank Bold 31 Jul 2025). This discrepancy in priorities across governance levels arguably stems from the historical reliance on fossil-based infrastructure and established energy interests (Moravanský 2024).

  // **Our recommendation:** Foster transparent and democratic planning processes to strengthen trust and reduce opposition to RE more generally and consequently RAAs. Beyond mandatory procedures for public participation, developers should also actively initiate voluntary public participation formats that engage communities early and inclusively. This would address the current lack of developer-led consultation and help build trust in wind projects. At the same time, stronger communication strategies and accessible tools for public engagement are needed to counter misinformation, mitigate community resistance, and highlight the benefits of RE for both local communities and the wider society.

- **Administrative overload** at both national and local levels slows down planning and permitting processes, creating delays in the rollout of RE projects.

  // **Our recommendation:** Address administrative shortcomings by providing targeted technical and financial support for authorities, including additional funding and specialised training for staff. Additional coordination between planning institutions and network developers across institutions to strengthen and streamline procedures.

- **Insufficient mechanisms to manage grid capacity and congestion, coupled with inadequate coordination between the TSO and DSOs and low investment in storage and flexibility**, limit the integration of RE (Interreg Danube Region 2025; Frank Bold 31 Jul 2025).

  // **Our recommendation:** Enhance grid infrastructure and system flexibility by strengthening TSO and DSO coordination. This can happen through joint planning, integrating RE capacities into network development, and accelerating investments in storage and demand-side flexibility. These measures may be complemented with regulatory tools such as dynamic tariffs to optimise existing grid use and reduce congestion.

3.3 Estonia

National transposition of Article 15b and c

The transposition of the RED III into Estonian law is still ongoing. The EC issued an infringement procedure (see EC 17 Jul 2025). Due to delays, progress has since accelerated. The first draft of the legislative package was approved by the government in July 2025 and is scheduled for parliamentary voting by October 2025, meaning its entry into force is imminent (Estonian Environment Agency 30 Jul 2025; 14 Aug 2025).

Coordinated mapping for RE areas onshore

To meet the RED III stipulations, Estonia carried out a mapping of Coordinated Areas for RE and structured spatial analysis, which began shortly after the RED III amendments (Estonian Environment Agency 2025). The process relied on activities that had already started in 2022 (Estonian Environment Agency 2025; Oeko-Institut 2024). Estonia conducted a mapping for Coordinated areas for RE solely for onshore wind. The rationale was that, given the ongoing Maritime Spatial Planning (MSP) process, the framework for offshore wind development remained uncertain, while the expansion of PV was considered sufficient by ongoing activities and did not require additional acceleration measures (Estonian Environment Agency 30 Jul 2025).

Well-structured, coordinated spatial mapping in Estonia

Estonia applied a structured two-phase approach to identify suitable areas for wind energy. First, a nationwide spatial analysis classified the territory into four zones based on land-use constraints and suitability for wind development. The subsequent phase focused on prioritizing state-owned land to secure significant capacity, supported by a detailed methodology to further narrow site selection. The process was led by the Ministry of Climate and involved extensive stakeholder and political engagement across land-use planning, conservation, defence, and climate. Estonia's well-structured process was facilitated by using high-quality data sets and data collection processes that were in motion prior to the RED amendments.

In the first phase, spatial analysis applied a layer-by-layer exclusion mapping, overlapping over 100 datasets. This ruled out a large number of areas due to ecological restrictions (e.g., Natura 2000, water protection zones, and sensitive ecosystems) or human activities (e.g., residential buffers, infrastructure, heritage sites) (Estonian Environment Agency 2025; 30 Jul 2025). Estonia also integrated comprehensive environmental sensitivity mapping based on the project's ELME and IRENES (Oeko-Institut 2024), implemented in 2020. The projects assed the condition of natural areas using environmental metrics and socio-economic factors. Additionally, large-scale bird and mammal studies completed by 2024 complemented the mapping (Estonian Environment Agency 2025).

In the second phase, the initial objective was to identify around 500 km² of potential areas for in-depth biodiversity surveys. Pre-selected areas from Phase 1 were expanded to include zones with widened height restrictions as well as negotiable areas such as agricultural land, former mining sites, and locations with specific ecosystem conditions. These pre-selected areas were then refined according to additional criteria, including minimum site size (≥ 10 km²), distance to settlements (≥ 750 m), land ownership patterns, birdlife restrictions, ecological value, proximity to the power grid (< 10 km), and existing project developments in the area. The result: a delineation of specific patches within these sites, up for field surveys (biological surveys, habitat and species inventories) to further narrow down the areas considered suitable. Finally, the selected patches were assessed for their energy production potential through wind data analysis, development of a regional wind climate dataset, turbine siting, and energy yield calculations (Estonian Environment Agency 2025).

Applying this comprehensive process, Estonia mostly fulfilled the criteria as outlined in RED III, e.g., considering grid proximity and conducting energy yield assessment to analyze the contribution to its RE targets for 2030 (Estonian Environment Agency 2025; 30 Jul 2025). However, analyses show that mapped RE capacity is not enough (Estonian Environment Agency 30 Jul 2025). Further, Estonia chose not to include multiple-use of areas as one of the mapping criteria. The overall area mapped is primarily on state-owned land, which was a main objective in the mapping process. Yet a small fraction must be mapped on private land to reach an area of sufficient size (Estonian Environment Agency 2025).

Designation of RAAs

With the first step of the RAAs designation finalised, Estonia issued its areas for auctions (Estonian Environment Agency 30 Jul 2025). Once the areas are passed to project developers, a SEA will be conducted. The overall process of the SEA is expected to be efficient, as, for example, biodiversity surveys and other environmental considerations provide sufficient information for a quick decision-making process. As a result, the RAAs' designation is expected to be on time (Estonian Environment Agency 14 Aug 2025).

National-specific barriers and resulting recommendations

- Estonia has a strong track record of public involvement in planning and policy processes. However, in practice, **the appropriate formats for meaningful public participation are not always guaranteed.** Limited financial and human resources within municipalities and planning authorities often affect the scope and quality of engagement processes. This can result in insufficient outreach, constrained opportunities for dialogue, and reduced capacity to process and incorporate stakeholder feedback. In some cases, decision-making within consultations has been perceived as biased, which undermines trust in the process (Oeko-Institut 2024). Furthermore, digital participation formats, which are crucial for accessibility and broad inclusion, are not consistently offered, leading to uneven opportunities for citizens to take part.

  // **Our recommendation:** Ensure that local municipalities and planning authorities are equipped with sufficient financial and human resources to carry out high-quality public participation in both in-situ and digital formats. National-level funding programs and capacity-building measures would help to address these administrative challenges consistently across the country, ensuring inclusive, transparent, and trusted consultation processes.

- **Estonia benefits from comparatively strong environmental and spatial data availability, particularly when viewed against the EU average. Still, some limitations remain**: much biodiversity information builds on the 2020 ELME survey and may not reflect recent developments (Oeko-Institut 2024; Estonian Environment Agency 30 Jul 2025). Also, not all spatial datasets are fully digitized, regularly updated, or technically compatible with the emerging national database (Estonian Environment Agency 14 Aug 2025). While these shortcomings are relatively minor, they highlight the need for continuous data updates and integration to maintain the robustness of RE planning.

  // **Our recommendation:** To ensure reliable and efficient RE planning, spatial and ecological datasets should be updated regularly and complemented by high-quality field studies. Newly collected data must be produced in formats compatible with emerging national databases to enable seamless integration and use. In addition, adequate financial and personnel resources should be secured to support continuous data collection, monitoring, and database maintenance.

3.4 France

National transposition of Article 15b and c

Despite France having made considerable progress in transposing certain elements of RED III, the latter do not include specific provisions for implementing Art. 15b and Art. 15c.

There is a parallel process for spatial mapping of RE in France, which is anchored in the so-called *APER* law of March 2023 (LOI n° 2023-175), amending Art. L141-5-3 of the French Energy Code (OFATE 2023). In conjunction with the French law on climate and resilience (LOI n° 2021-1104), it requires municipalities to designate so-called acceleration zones (*Zones d'accélération des énergies renouvelables, ZAER*s). Projects located in ZAERs will benefit from shorter application times as well as financial advantages. Yet, this process was initiated before the amendments to the RED III and differs in many respects from its requirements for the designation of RAAs (WWF France August 2025; OFATE 2025), which complicates the easy integration of both frameworks.

Coordinated mapping for RE areas onshore

The mapping of acceleration zones (ZAER) started before the RED III was amended and is ongoing. As it currently stands, the activities do not align with the RED III stipulations. According to the Directorate General for Energy and Climate (DGEC)[4], RAAs, as defined in RED III, would be a sub-layer of the ZAERs (FNE July 2025). Detailed information on this is not available.

[4] Operating under the supervision of ministries, as of August 2025 under the Ministry of Ecological Transition and the Ministry of Spatial Planning.

ZAER covers all RE, including PV, solar thermal, wind onshore, hydroelectric, biogas, and geothermal. They are mapped and designated in decentralized processes at the communal level (OFATE 2025). Thus, no coordinated mapping process is taking place, and mapping differs between municipalities. Defining ZAERs is not mandatory, but each municipality may decide if they embark on the process or not. As of now, (rooftop) PV represents the vast majority of ZAER designated, mainly since this technology is far less disputed in France than wind energy, for instance (WWF France 2024; August 2025). Public institutions, including the Centre for Studies and Expertise on Risks, the Environment, Mobility and Urban Planning (CEREMA), provide a national mapping geoportal for RE, which gives technical support and integrates all mapped ZAERs in a centralized format.

The mapping and designation of ZAERs follows a multi-level process (OFATE 2025). The state provides decision-making tools, e.g., country-wide geospatial data (see above), while the municipalities[5] identify and designate potential areas for ZAERs. This includes public consultation. Mapping criteria are largely determined locally, with the French Energy Code only providing a broad framework for ZAERs (e.g., considering regional RE potentials or excluding national parks) Municipal designation of ZAERs is validated by the regional prefecture, including the evaluation of the ZAERs by the Regional Energy Committee (CRE). If the planned ZAERs are sufficient to meet the regional energy targets, CRE confirms them; if not, they must be adapted and will be re-evaluated. Once regional targets are achieved, territories may define exclusion zones where RE projects are no longer permitted.[6]

The regional targets are to be defined after the publication of the *Multi-year programme planning for energy* (PPE 3) and re-evaluated every five years. According to the French government, PPE 3 was due to be published at the end of summer 2025, but this has not yet happened. Meanwhile, the National Assembly debated the *Proposition de Loi* (PPL) Grémillet with the aim to provide a legislative backbone before the PPE 3 is finalised. Yet, also this process is still ongoing (WWF France August 2025).

Coordinated mapping for RE areas offshore

A coordinated mapping is taking place for offshore wind. Zones dedicated to offshore wind energy are defined through the MSP process, coordinated by the State. However, it is not clear if or how these areas will be used as RAAs (réseau Cler August 2025). The *National Strategy for the Sea and the Coast (SNML)* defines the national framework for marine and coastal policies. Its second version (2024–2030) was adopted in late 2023 and published by decree on June 10, 2024, following broad public consultations between autumn 2023 and spring 2024. The strategy defines priority zones for offshore wind up to 2050 in maps, focusing on sites more than 20km offshore. These zones are integrated into the *Strategic Coastal Documents* (*DSF*), developed by the coordinating prefects of the maritime façades, in consultation with local actors and state services. Mapping criteria include Natura 2000 and other protected areas, as well as fishing grounds and shipping routes (Commission nationale du débat public (CNDP) France 2024).

[5] Some smaller municipalities are not able to define ZAERs on their own. In practice, many intermunicipal bodies provided support in identifying these zones along with regional natural parks.
[6] Up to this day, none of the territories has achieved this stage.

National-specific barriers and resulting recommendations

- **It is unclear how RED III mapping will be coordinated with the ongoing process to designate ZAERs:** spatial mapping activities only focus on ZAERs, and hardly any information on RED III mapping is shared. One major difference is that the mapping of ZAERs is not coordinated and does not follow a uniform mapping method and criteria (réseau Cler August 2025; WWF France August 2025). This lack of coordination has led to significant discrepancies in the way municipalities designate ZAERs (WWF France August 2025). It is worth noting that there have been attempts to harmonize the mapping approach, e.g. in a national geoportal.

  // **Our recommendation:** Evaluate (legislative) options, how the RAA designation according to RED III, can be integrated with the mapping for ZAERs.

  // **Our recommendation:** Build on existing resources for coordinating RED III mapping with the mapping of the ZAER process. CEREMA's mapping tool already integrates relevant geodata in a harmonized format. Yet the tool would need to be extended by adding data as exclusion or weighing factors, e.g., on biodiversity (sensitivity maps), artificial areas, and regional data sets. For gathering those data sets, collaboration with relevant stakeholders and between ministries, e.g., the *Ministry of the Ecological Transition, Biodiversity, Forestry, Sea and Fisheries,* is key (réseau Cler August 2025).

  // **Our recommendation:** Harmonize mapping criteria for ZAERs, e.g., by providing detailed national guidance documents or fostering standardization *via* dialogues at the intercommunal level (see below).

- Ongoing **delays in central political documents for spatial planning create considerable ambiguity** around the conditions for RE development: namely, delays in publishing the *Multi-year programme planning for energy,* PPE 3, which will trigger the calculation of regional RE targets for ZAER designation.

  // **Our recommendation:** Publish the PPE 3 without delay. This is needed to reaffirm national ambitions in terms of RE.

- **The acceleration of RE deployment is a politically contested issue**; in particular, right-wing parties are mobilizing against RE, especially onshore wind, leading to political stands against RE deployment and incentives (Bruno Retailleau et al. 2025).

  // **Recent example:** In June 2025, conservative and far-right MPs nearly succeeded in passing a moratorium on new wind and PV projects, arguing that there was a need for an independent review of the national energy mix. Although this moratorium did not materialize, the initiative creates a barrier for spatial planning by creating investor uncertainty and delaying the clear policy framework needed to guide where and how RE capacity can be built (Assemblé Nationale 2025).

- **Lack of adequate human resources and technological skill for mapping on the local level**: as a result, the quality of mapping varies largely with available personnel.

  // **Our recommendation:** Integrate overarching resources at the intercommunal level. Although *Intercommunalités* are not assigned a prominent role in the ZAER designation process by law, they provide valuable, overarching resources, e.g., cartographic skills. Also, they serve as intermediaries between municipalities and may act as a platform to create dialogue forums (WWF France August 2025).

  // **Our recommendation:** Create support structures, e.g., financial, *via* national funds, dedicated to small municipalities with restricted resources. Also, technical and organizational support is needed to enhance the quality of the ZAER designation.

Technical support for municipalities by CEREMA

CEREMA offered exemplary support for 11 municipalities in the department of *Yvelines via* training for staff responsible for working with geodata and tools, as well as facilitating participatory roundtables (CEREMA 2024). This practical support was followed up online with the creation of a dedicated community on the platform *Expertises.Territoires* – to provide continued workshop materials and a forum for mutual exchange.

- **Relevant aspects (environmental, technical) are insufficiently considered in the mapping of ZAERs:** Natura 2000 areas should be excluded for ZAERs, as per the mapping criteria outlined in the French Energy Code. Reports show that 4% of wind ZAER and 10% of solar ZAER fall within such sensitive areas (WWF France May 2025). Also, limited consideration of technical and economic feasibility in mapping poses the risk that ZAERs are not attractive or accessible for project development. Often, for example, constraints associated with military activity are not known to local authorities and therefore not included in mapping considerations.

  // **Our recommendation:** Integrate relevant data sets on protected areas and other spatial constraints into existing mapping tools. Improve data availability on biodiversity at the regional level, e.g., through cooperation with local NGOs. Retrieved data sets should be made publicly available and fed into expert dialogues, e.g., *via* the Observatoire des Energies Rénouvelables et de la Biodiversité.

3.5 Germany

National transposition of Article 15b and c

Already before the RED III amendments, Germany had an elaborate planning system in place, which required certain adjustments to conform to RED III (SUER 2024). Transposition has focused on wind energy acceleration, as established onshore and offshore frameworks allowed comparatively straightforward integration of RED III requirements through existing legal concepts.

However, the national transposition has been delayed. As of 2024, the proposed and extensively discussed draft laws for onshore and offshore implementation of May 2024 had not been adopted due to the collapse of the governing coalition in November 2024 (SUER 2025). Yet, adopted before the collapse, the Solar Package I had already implemented some urgent provisions, entering into force on 16 May 2024, by the previous government. This package includes, among other things, the transfer of existing designated wind energy areas for both onshore and offshore into RAAs (Deutscher Bundestag 2024).

The newly inaugurated federal government prioritized RED III transposition. Consequently, a draft law for onshore wind was adopted on 10 July 2025, while a complementary law on offshore wind and grid expansion and connection is scheduled by the end of 2025 (WWF Deutschland 15 May 2025; NABU 11 Aug 2025). These rely on established instruments in wind energy planning, namely the *Windenergieflächenbedarfsgesetz* (WindBG) for onshore and the *Wind-auf-See-Gesetz* (WindSeeG) for offshore spatial designation. In addition, there are far-reaching changes to accelerate grid expansion in infrastructure areas with amendments to the Energy Industry Act.

Coordinated mapping of RE areas onshore

Germany chooses to build its RED III transposition on pre-existing onshore wind planning regimes organized on a federal level (§3 WindBG). Thereby, no new coordinated mapping process was initiated on the national level. Germany currently focuses RED III coordinated mapping on onshore wind, as PV deployment is already progressing well under decentralized, municipal planning frameworks. Introducing a nationwide PV mapping process would have required extensive legal restructuring and delayed transposition (SUER 27 Aug 2025; 2024; BfN 2024).

Introduced in 2022, the WindBG established a binding framework to accelerate onshore wind expansion. It requires each federal state to designate an average of 1.4% of its land for onshore wind by 2026 and 2% by 2032 (§3 (1) WindBG[7]). These targets were derived from an initial mapping exercise for techno-economic wind potentials, which determined state-specific area contribution values (Guidehouse; Fraunhofer IEE; SUER; Bosch & Partner 2022). Subsequently, the federal states initiated regional planning processes to identify onshore wind energy areas based on regional mapping processes. These may exclude unsuitable areas (e.g., Natura 2000 sites, national parks, biosphere core zones, or other locally defined exclusion zones) and apply additional local criteria. Public participation is mandatory in the mapping and ensured by the local authority through multiple rounds of public display during the mapping process. Whether factors such as the availability of grid connection, the distance to the next connection point, or its capacity are considered depends on the respective regional planning association in charge (Oeko-Institut 2024).

Despite regional variation, the WindBG constitutes a coordinated planning process. For RED III transposition, Germany extended the existing scheme, using WindBG mapping to designate Coordinated Areas for RE, and fulfil the stipulations (Deutscher Bundestag 2024).

Coordinated mapping of RE areas offshore

Germany's offshore mapping approach for Coordinated Areas for RE builds on its centralized planning system, relying on the 2021 spatial plan and the 2023 subsequent site development plan, both subject to SEA and used to designate wind energy areas (BWO 2025). Once auctioned for development, the grid connection is initiated (NABU 24 Jul 2025).

However, the current draft amendment of the WindSeeG has raised serious concerns among NGOs, in particular the abolition of EIA and further species protection assessments (NABU 24 Jul 2025; WWF Deutschland 2025). Also, industry stakeholders emphasized that removing EIA obligations would not accelerate offshore deployment and project developers underscored that maintaining the EIA ensures legal and planning certainty, which is indispensable for investment stability (WWF Deutschland 2025; NABU 2025).

[7] For Federal State specific area contribution values, see Annex to § 3(1) WindBG.

Designation of RAAs

Germany follows parallel processes to designate wind energy areas as RAAs.

// Onshore wind RAAs

- Existing wind areas that were designated under 6a WindBG before 19 May 2024 automatically qualify as RAAs, if they were subject to SEA (BBH 2025).
- In addition, areas identified in regional or municipal land-use plans are, in principle, to be designated as RAAs – except when located in particularly sensitive areas such as nature reserves, Habitats Directive or bird protection sites, or in regions hosting significant populations of vulnerable bird species. In these cases, appropriate mitigation measures must be included to avoid or substantially reduce environmental impacts (BBH 2025).
- Finally, wind energy areas, as mapped in the framework of the WindBG and designated after 19 May 2024 must also be declared RAAs if the same conditions are fulfilled. Where already ongoing regional or municipal planning procedures have not yet included such a designation process, a separate planning process must be initiated (BBH 2025).

// Offshore wind RAAs

- Existing wind areas that were designated under §8a WindSeeG before 19 May 2024 automatically qualify as RAAs.
- Regarding the designation of further offshore RAAs, the adoption of the offshore transposition law is still pending. Nevertheless, it is foreseen that all offshore wind energy areas already scheduled in the site development plan will be designated as RAAs. Consequently, RAAs are becoming the planning standard for offshore wind development (WWF Deutschland 2025; NABU 2025).

National-specific barriers and resulting recommendations

- **Germany faces persistent challenges with (ecological) data quality**. There is no unified geodata portal, and key onshore datasets, e.g., bird breeding sites, remain incomplete, outdated, or confidential, undermining planning reliability (NABU 7 May 2025). Offshore, SEAs often rely on existing data collected at least five years before site designation, leaving projects to proceed on the basis of information that may already be outdated, limiting relevance and reliability (NABU 24 Jul 2025). In both cases, this creates a black box for environmental impacts and heightens legal risks if e.g., protected species are adversely affected. Additionally, as Germany did not conduct a nation-wide coordinated mapping approach for onshore RE areas, some key factors, such as grid proximity or ownership structures of mapped areas are not consistently considered because such information is fragmented across different institutions.

  // **Our recommendation:** Establish a centralized geodata portal that prioritizes the collection and provision of up-to-date, high resolution environmental and species data. This portal should ensure systematic data sharing with all relevant planning stakeholders, enabling transparent, science-based spatial decisions and reducing legal risks. In-field data studies are required to collect up-to-date species-relevant data. Wind priority zones and planning criteria could be integrated subsequently to strengthen coordination.

  // **Our recommendation:** Integrate key factors such as grid proximity and land ownership into a centralized geodata portal and ongoing regional mapping activities, if possible. Consolidating such fragmented information ensures that planning authorities can consistently consider technical and legal constraints.

- **All offshore areas scheduled by the site development plan are planned to become RAAs by default. However, this risks the erosion of environmental safeguards**. The current draft on offshore wind acceleration foresees solely relying on SEAs, exempting them from baseline surveys and pre-investigation studies. SEAs lack the necessary granularity to evaluate cumulative impacts, their data is often outdated by the time construction begins, and the dynamic nature of marine ecosystems requires more adaptive and robust assessments (NABU 24 Jul 2025; WWF Deutschland 2025; NABU 2025). Although comprehensive sensitivity mapping is conducted, its preliminary outcomes are not used in site designation and ecological sensitivity has been removed as exclusion criteria in the legal draft which is not in line with the RED III (NABU 24 Jul 2025; 11 Aug 2025; 2025; WWF Deutschland 2025). Scientific analyses show significant overlap with highly sensitive seabird habitats, while mitigation measures may prove insufficient to protect the species present in these areas. Transferring these areas to RAAs would intensify conflicts between climate and biodiversity protection offshore (NABU 2025; 11 Aug 2025).

  // **Our recommendation:** Review draft legislative acts for offshore wind to ensure environmental safeguards. RAAs should not be established as the default procedure, as this risks weakening protection standards. If RAAs are introduced offshore, they must be combined with thorough pre-investigations and with the possibility of voluntary continuation of EIAs. Sensitive marine areas should be excluded from designation to prevent significant ecological conflicts.

  // **Our recommendation:** Strengthen coordination between central authorities, in particular the Federal Maritime and Hydrographic Agency (BSH) and the Federal Agency for Nature Conservation (BfN). Both institutions should be directly involved in decision-making processes on RAA designation, ensuring that robust mitigation measures such as collision prevention, noise reduction, and effective ecological compensation, are integrated from the outset.

- **Offshore wind development may not benefit from the introduction of acceleration procedures.** Grid expansion and converter platform availability remain the main bottlenecks for offshore wind deployment, with delays of more than two years expected for grid connections (NABU 24 Jul 2025; 11 Aug 2025). These infrastructural constraints make the intended acceleration of offshore wind deployment unlikely, regardless of planning and permitting reforms.

  // **Our recommendation:** Remain focussed on onshore wind RAA designation, where RED III requirements can be more easily integrated into well-established, participatory regional planning processes and unlock accelerative effects.

- **The legal treatment of SEAs for onshore RAAs remains ambiguous**. While the designation of wind energy areas already undergoes SEA, including public participation and, where necessary, Natura 2000 assessments, it is unclear whether an additional SEA is required again once these areas are classified as RAAs (SUER 27 Aug 2025). On the one hand, avoiding duplicate procedures is essential to achieve acceleration; on the other, RAAs involve specific mitigation measures that may not be sufficiently addressed by SEA for wind energy areas. This regulatory uncertainty risks delays and legal disputes.

  // **Our recommendation:** Avoid legal uncertainty and maintain democratic legitimacy and trust in the expansion of RE through meaningful public participation. As the SEA is the only formal entry point, it is essential to clarify how to handle potential additional SEA requirements for RAAs. A clear framework is necessary to ensure that site-specific mitigation measures can be addressed and local acceptance strengthened, without creating procedural duplication.

3.6 Greece

National transposition of Article 15b and c

In general, there is a lack of clarity and transparency surrounding the transposition of RED III in Greece. To date, RED III has been partially transposed, but it is unclear if and when further steps will be taken to advance the transposition. The following articles have already been transposed: Art. 16, 16b, 16c, 16d, 16e, and 16f via Law 5151/2024 (OGG 173/A/0.4.11.2024) (WWF Greece 16 May, 2025). Although RAAs have been defined as a legal term, they have not yet been designated. Moreover, it is unclear if RAAs for onshore wind and PV, and eventually small-scale hydropower, are planned to be mapped and designated in the context of the new Special Spatial Plan for RES (SSPRES)[8] – which has been long delayed, or if this will be done under RED III transposition (Greentank Greece 14 May, 2025).

Designation of RAAs

Aside from the transposition of Art. 16, 16b, 16c, 16d, 16e, and 16f, the pertinent national authority (Ministry of Environment and Energy (MOEE)) has not taken any legislative initiative to advance the transpositions of RED III, as well as mapping and designation of RAAs. Nor has there been any response to enquiries about when this will occur (WWF Greece 16 May, 2025).

Coordinated mapping of RE areas onshore

So-called *Areas of first choice* (AFC) are foreseen under Law 5037/2023 (OGG 78/A/28.03.2024), Art. 164, by amending Law 3468/2006, as land or sea areas that are suitable for the deployment of RE installations (excluding biomass installations). These provisions for AFCs were developed prior to RED III entering into force. According to the current provisions, AFCs serve NECP targets and avoid Natura 2000 sites. Yet, no planning tool is foreseen for the designation of such areas (WWF Greece 16 May, 2025). It is unclear whether or not these areas will be considered as Coordinated Areas for RE, as per Art. 15b of RED III.

In the context of the existing Special Spatial Plan for RES (SSPRES – 2008), mapping criteria are limited to a 2-group hierarchy of local administrative units (municipalities – LAU 1) in terms of wind park density and based on the sole criterion of wind power availability, designating suitability and priority areas for wind. This mapping, as well as the new mapping in the long-delayed revision of SSPRES, does not designate Coordinated areas for RE areas according to the RED III provisions, and completely ignores the mitigation hierarchy approach that is recognised as international best-practice and that is the basis of the RED III approach (WWF Greece 16 May, 2025).The new SSPRES is believed to focus on onshore wind and solar (Oeko-Institut 2024).

[8] The new RES spatial plan is believed to focus on suitability and priority areas with exclusion zones and distance rules.

Coordinated mapping of RE areas offshore

The mapping for offshore RE areas is included in the study and SEA of the National Programme for the Development of Offshore Wind Parks (NPDOWP – draft finalised late 2023), which covers all Greek seas. The programme is not yet finalised or legally approved (WWF Greece 16 May, 2025) and it is unclear whether or not this offshore mapping will conform to the Coordinated Areas for RE.

National-specific barriers and resulting recommendations

- **Unclear spatial planning process:** There is a lack of existing spatial plans in Greece. Parallel processes, such as updating the national spatial plan for RE (SSPRES), are long delayed. Moreover, it is thought that this mapping does not designate areas for RAAs in line with RED III and ignores the mitigation hierarchy approach (WWF Greece 16 May, 2025). Additionally, there is a lack of concrete RE provisions in regional and local spatial plans (Oeko-Institut 2024).

  // **Our recommendation:** The government must deliver on a RE Special Spatial Framework as soon as possible, including the designation of RAAs. It is crucial that the new framework makes clear how these priorities should be adopted in other types of plans at the regional and local levels (Oeko-Institut 2024).

- **A lack of data availability** presents a severe challenge in Greek RE deployment. As it currently stands, modern land cadastres are incomplete, and a MSP is still in development (the National Spatial Strategy for the Marine was presented in April 2025 (The Green Tank 16 Sep 2025)) (Oeko-Institut 2024).These factors make it difficult to integrate RE into spatial planning.

  // **Our recommendation:** Clear instructions are required on how RE can be integrated into urban, spatial, and marine planning. Furthermore, local and regional plans ought to be prepared so that energy transition priorities can be integrated into the preparation of spatial plans (Oeko-Institut 2024).

- **Reportedly, there is no ambition to update and reform the ineffective Greek planning system** (25 different types of spatial plan applied over 3 decades), or to take administrative initiative to advance RED III transposition. Moreover, there is poor coordination between levels of government, i.e., there is little incentive for municipalities to align their policies with the national government, beyond what is legally required of them (Oeko-Institut 2024).

  // **Our recommendation:** Local and regional plans should be equipped with the resources needed to integrate energy transition priorities into spatial planning.

- Regarding offshore wind farms, the NPDOWP is currently in progress, including the designation of suitable areas. In parallel, Greece MSP is still in development. In this way, the development of offshore wind will be set *via* this special and fragmented kind of planning *vis-à-vis* the integrated MSP (Oeko-Institut 2024).

  // **Our recommendation:** Greece must advance MSP in order to secure an integrated and ecosystem-based approach for the development of offshore wind.

- **Lack of public participation opportunities:** Public participation typically occurs when the final draft is ready, i.e., at the very late stages of the development of plans (WWF Greece 16 May, 2025). It is unclear how and if feedback is taken into account. Feedback is typically ineffective due to it being provided in the last stage of the planning process, after key decisions have been made (Oeko-Institut 2024).

  // **Our recommendation:** Opportunities for public participation should occur in the earlier stages of planning. This would enable local actors to receive and respond to feedback in a timely manner.

3.7 Italy

National transposition of Article 15b and c

Italy transposed Art. 15b of RED III into national law in the Legislative Decree 190/2024 of 25 November. Art. 12 of this decree stipulates both a coordinated mapping for RE areas, as well as a mapping and designation of RAAs. The law stipulates that the *Gestore dei Servizi Energetici* (GSE) shall carry out a mapping (on a national level) to identify potentially suitable areas for RE as well as RAAs. The latter feed automatically in regional plans as minimum binding content for RAAs. The mapping results are to be openly published on its website. At the same time, Legislative Decree 199/2021 holds provisions for the regions and provinces to identify 'suitable areas' for RE deployment, which were in place before RED III was amended.

Coordinated mapping of RE areas onshore

Since May 21st, 2025, the GSE provides a public, digital tool on the Platform of Eligible Areas (PAI) to support the regional and provincial in planning for RE development. Pursuant to Art. 12 of Legislative Decree 190/2024, it illustrates an initial mapping of land use patterns relevant for RE site selection. It draws on Corine Land Cover (CLC) and other datasets available to GSE (remaining unclear, however, which datasets exactly). Contents are to be updated constantly according to GSE. The tool mainly identifies areas suitable for PV deployment (ground-mounted and rooftop. Further identified area types include: areas suitable for other RE sources (including wind onshore); industrial, commercial, public, and private service areas; landscape (e.g., coastal and water body buffer areas or forests), and environmental constraints (e.g., natural parks or IBAs (Important Bird Areas)).

Also available on the GSE portal since May 21st, 2025, is the Map of RAAs. According to the website, 5.842 RAAs have been identified, covering a total area of 294.772 ha. As of now, the areas shown are a subset of the areas mapped in the more general mapping tool and only include sites identified as *industrial, commercial, public, and private service areas.*

Italy's methodological approach – attempting to prioritize artificial areas

Italy's RAA maps, provided by GSE, focus exclusively on artificial surfaces and are thus one of the few methodological approximations of this analysis. The tool only includes areas of the categories *industrial, commercial, public, and private service areas.* These areas can be combined primarily with PV, both ground-mounted, integrated with large-scale car parks or rooftop, industrial buildings, for instance. Whilst such an approach is a good way to avoid land-use conflicts, its methodology is unfortunately not well documented (Italia Clima 29 Jul 2025). This could be valuable input for further understanding of the challenges of such and similar approaches towards prioritizing artificial and built areas.

Coordinated mapping of RE areas offshore

On 25 September 2024, Italy officially adopted its MSP via Ministerial Decree No. 237. The plans were drafted by a technical committee under the Ministry of Infrastructure and Transport (MIT), supported by scientific partners and involving coordination across various ministries and maritime regions (MIT 2025). The plans' drafts underwent public consultation from September to October 2022 (LIPU 2022), as well as SEA. The adopted MSP documents are publicly available on the SID – Il Portale del Mare, the MSP geoportal managed by the MIT. They feature a sublayer showing areas prioritized for offshore energy development, some of which are however overlapping with other land use, e.g., fishing. NGOs are therefore calling for ongoing cooperation with relevant stakeholders in order to optimise the identification of suitable areas for offshore RE (WWF Italy; LIPU; Greepeace Italy; Marevivo 2025)

Regarding environmental issues, initially offshore sensitivity maps were developed by the scientific body ISPRA. Over the last years, these maps were updated (data, methodological approach, etc.) in collaboration with LIPU and other NGOs (LIPU 29 Jul 2025; WWF Italy 23 Jul 2025). It appears, this data was considered in the MSP mapping where ISPRA provided data on protected areas and water contamination (Alessandro Sarretta et al. 2021).

Designation of RAAs

Final RAA selection and designation is based on two main mapping processes: the mapping provided by GSE and regional mapping for 'suitable areas' (WWF Italy 25 Aug 2025).

- **Onshore** // By 31 August 2025 each region and autonomous province was expected to submit its draft Plan for the identification of terrestrial RAAs to the SEA process. At this stage, no region has submitted their RAAs plans for SEA, nor is there evidence that they are working on this (ibid.).
- **Offshore** // The responsible authority for drafting plans for the identification of RAAs, based on the MSP, are the Ministry for the Environment and Energy Security in agreement with the MIT.

By 21 February 2026 (in line with RED III), the Regions and Autonomous Provinces must then formally adopt the plans for terrestrial RAAs. The same deadline applies to the adoption of plans for marine RAAs (see Legislative Decree 190/2024 of 25 November).

National-specific barriers and resulting recommendations

- It is unclear how RED III mapping, implemented in Legislative Decree 190/2024, is coordinated or interferes with the mapping of 'suitable areas' under Legislative Decree 199/2021, whose fate remains uncertain due to ongoing litigation before the administrative court.

  // **Our recommendation:** Coordinate the mapping and designation process of RAAs with the identifying 'suitable areas' under Legislative Decree 199/2021. This includes providing a clear and binding legal clarification on what 'suitable areas' are, and how they relate to RAAs and their designation process. From a practical perspective, a focus on RAAs seem faster and easier to implement as RAAs would 'only' need to be defined in regional plans and not by regional laws, as is the case with 'suitable areas' (WWF Italy 25 Aug 2025).

  // **Our recommendation:** Ensure an early start of SEA procedures for the regional RAA plans.

- **The methodology applied in current mapping tools is intransparent:** No detailed information on the mapping approach or criteria is being shared, neither online nor among stakeholders.

  // **Our recommendation:** Increase transparency on the mapping process, e.g. by providing detailed information on the mapping methodology publicly and targeted stakeholder involvement.

- **The tools provided by GSE lack both relevant aspects in the mapping methodology and up-to-date data on environmental issues:** The PAI and the map of RAAs are generally useful to support better planning. However, they primarily appear designated to meet deadlines rather than to serve as a detailed, transparent planning instrument (Italia Clima 18 Jul 2025). Key aspects are missing, such as RE resource availability differentiated by RE technology grid proximity. Also, the tool mainly focuses on PV with onshore wind hidden under '*Other RE'*, risking leaving wind potentials unleveraged. Moreover, environmental layers use 25-year-old IBA data, while a more current version of the latter already exists (e.g., as provided by LIPU).

  // **Our recommendation:** Update the GSE mapping tools with additional data to increase the accuracy of spatial analysis. This includes areas suitable for wind deployment, grid infrastructure, regional data, economic potentials (e.g., wind speed, solar radiation), and updated IBAs (LIPU 29 Jul 2025). Integrating areas identified under Legislative Decree 199/2021 would further enhance consistency. Finally, both tools should be reviewed in terms of their user experience (Italia Clima 29 Jul 2025).

- **A lack of coordination between the national and regional levels impedes a harmonized spatial planning approach:** national law, including the RED III transposition in Legislative Decree 190/2024, leaves significant leeway for the regional level to intervene. Yet, different levels of national law and regional law are often in conflict with each other, resulting in legal litigations between the public levels. Ultimately, this often delays RE deployment (WWF Italy 25 Aug 2025). Also, since RAA mapping and designation happen mainly at the regional level, there is no uniform mapping criteria.

  // **Our recommendation:** Ensure a harmonized mapping approach by fostering dialogue between both the national and regional levels, as well as among the regional levels. It is furthermore advisable to anchor minimum baseline criteria, e.g., ecological exclusion areas, in a national framework, such as overarching mapping guidelines, for instance (Italia Clima 29 Jul 2025).

3.8 Poland

National transposition of Article 15b and c

The legal framework has not been published yet for RAAs. The national transposition of RED III was included in the revised draft for Offshore Wind Act-UD162 (Chapter 7b). Although the President vetoed the Onshore Wind Act UD89, work on the UD162 is still ongoing (Reform Institute Poland 19 Sep 2025). Notably, regarding permitting times, a new draft of the Act was introduced at the end of August.

It is not a direct transposition of Article 16a of RED III, but it does take the form of a procedure intended to shorten proceedings (Reform Institute Poland 19 Sep 2025). In addition, the President recently vetoed a law on onshore wind energy-UD89, which, among other things, aimed to reduce the distance from residential buildings and enable parallel planning and environmental procedures (Reform Institute Poland 19 Sep 2025). Therefore, currently, the government plans to introduce measures to speed up the development of onshore wind farms without the need to amend the law (through so-called repowering, i.e., upgrading existing wind turbines and increasing their capacity) (Climate KIC 28 Aug 2025).

Mapping of potential areas has been contracted and is underway, but is unlikely to meet the RED III deadline for designating RAAs (Climate KIC 2025). Onshore wind and solar are being prioritized in line with the National Recovery and Resilience Plan targets. However, the mapping for Coordinated areas for RE is planned for six technologies: PV, onshore wind, biogas and biomethane, offshore wind, geothermal, and hydropower (Reform Institute Poland 13 June, 2025) . Yet, it is unlikely that all six technologies will be mapped and finally designated on time (Climate KIC 2025).

Coordinated mapping of RE areas onshore

Poland outsourced the mapping for Coordinated Areas for RE to a contractor managed at the national level (Reform Institute Poland 13 June, 2025). The mapping process itself is underway but has been subject to several delays. Phase I, which concerns onshore wind and solar, is expected to be completed in Q3 2025. Phase II for the remaining technologies will be completed in Q4 2025 or Q1 2026 (Climate KIC 2025). BirdLife, together with OTOP, prepared sensitivity maps for Poland, and their “usage” has been included in the contract for mapping the potential for onshore wind (OTOP Poland 8 May, 2025). Notably, another new element of UD162 is the obligation placed on the RDEP to prepare nature sensitivity maps (Reform Institute Poland 19 Sep 2025).

Designation of RAAs

Regional authorities need to designate RAAs based on the mapping of Coordinated areas for RE identified by the external contractor at the national level. According to the draft legal process, regions can only propose where to place RAAs, but the feasibility is dependent on spatial planning documentation. RAAs will be prioritised in areas with a municipal spatial plan in place, and the plan needs to include RE investments (Reform Institute Poland 13 June, 2025). Due to delays related to the development of the potential maps, the designation of RAAs by 21 February 2026 will most likely not happen in time (Climate KIC 2025).

National-specific barriers and resulting recommendations

- **In Poland, there is limited grid capacity to accommodate accelerated RE deployment,** and the permitting procedure for grid development is slow. Furthermore, there is limited consideration given to the grid in the spatial planning process (Oeko-Institut 2024). In addition, there is reportedly a lack of information about energy system shortages to connect RES to the grid, thus causing a lot of uncertainty among investors and local authorities (if they would like to invest or guide investors to the proper places) (Institute for Sustainable Development Foundation, Poland May, 2025).

  // **Our recommendation:** The designation of RAAs could be used as a stimulus for grid development. Operators may align their grid development plans with the maps for RAAs (Climate KIC 2025). Furthermore, information on grid capacity should be made readily available.

- **Administrative bottlenecks have been identified as a barrier, especially at the regional level.** It is doubtful that regional authorities will have the required personnel capacity to accommodate the RAAs designation process to ensure that meaningful public participation takes place at the regional level (Reform Institute Poland 13 June, 2025).

  // **Our recommendation:** Increase administrative resources among regional authorities to ensure RAAs are designated in a timely manner and to ensure public participation standards are upheld. In addition, personnel reinforcement is also recommended for municipalities (Reform Institute Poland 19 Sep 2025).

- **Delays in the mapping process:** At present, Poland has already missed the first deadline for providing the coordinated mapping for RE areas, which was due in May 2025, and is unlikely to meet the deadline for designating RAAs by 21 February 2026. Despite the work on the mapping of Coordinated areas of RE already being initiated by the ministry, the designation of RAAs will require amendments to the law, since the responsibility for such designation is expected to lie with the regional authorities (Climate KIC 28 Aug 2025).

  // **Our recommendation:** It is important that steps are taken to stay on track with the current process planned for the coordinated mapping of RAAs in order to avoid any further delays to the process.

- **Ensuring RAAs are up to date with Local Spatial Development Plans (MPZP):** As is currently planned, the designation of RAAs will be based on local spatial plans for RE. Therefore, RAAs will need to be periodically updated to reflect any changes to local spatial plans (Climate KIC 2025). At present, many local spatial plans do not designate areas for renewable energy (Institute for Sustainable Development Foundation, Poland May, 2025).

  // **Our recommendation:** RAAs need to be periodically updated when municipalities adopt or update local plans for RE to ensure coordination between planning levels and that the data being used is both up to date and relevant.

- **Long permitting procedures:** Concerns have been raised over the duration of the permitting process and how this could potentially deter investors (Reform Institute Poland 13 June, 2025). However, it is worth noting that the Ministry of Environment and Climate is working on launching a digital platform for RE permitting. This initiative is part of the broader digitalisation of administrative procedures for RES and is also linked to milestones under the Polish Recovery Plan (Climate KIC 28 Aug 2025; Oeko-Institut 2024)

  // **Our recommendation:** The regional authorities and the Regional Directors for Environmental Protection (RDEP) should cooperate on the designation of RAAs. The RDEP is responsible for issuing environmental permits for large-scale investment. Coordination between the two authorities on the designation of RAAs could help to support a faster permitting process (Climate KIC 2025).

3.9 Portugal

National transposition of Article 15b and c

In June 2024, the Portuguese government implemented Order No. 6757-A/2024, of June 17, which created a Working Group to transpose the RED III in two phases. Accordingly, RED III stipulations are partially already transposed in Decree-Law No. 99/2024, of December 3, which tackles various relevant aspects such as simplification and acceleration of permitting by establishing maximum deadlines for permitting RE projects. The full transposition of the RED III is in the process of being finalized and will be subject to consultation until the end of 2025 (SPEA August 2025).

Coordinated mapping of RE areas onshore

A mapping for Coordinated areas for RE and RAAs has started and is an ongoing process:

- Already before RED III amendments came into force, an interinstitutional group, coordinated by *Laboratório Nacional de Energie e Geologia* (LNEG), had started mapping for so-called *Go-To Areas* in 2022. Outcomes of this mapping were the first and second map versions of potential areas, integrating feedback from municipalities, experts, and NGOs (LNEG 2023; LNEG-GTAER 2023; SPEA 27 May 2025; Pilar Díaz-Cuevas et al. 2025).
- After RED III amendments came into force, the government created a formal Working group LNEG-GTAER, coordinated by the LNEG, in December 2023, which immediately started work on the third version map (LNEG-GTAER 2024). The latter was published in March 2024 and displays the latest version of suitable sites for onshore RE.
- The areas identified in the third version map will be assessed in an SEA, which will supposedly run from August until October/November 2025 (SPEA 27 May 2025).

The latest map presents five scenarios excluding spatial factors such as protected areas, areas with high risk of flooding, and cultural heritage sites. A comprehensive overview of exclusion factors is detailed in LNEG-GTAER's report, Section 3 (LNEG-GTAER 2024). The report's Section 4.3 adds a complementary analysis, overlapping one scenario, i.e., with artificial/industrial areas for PV and grid proximity, defined as 10 km from substations and 20 km from transmission lines. The result shows that only 62-77% of identified RAAs (Scenario E) are in proximity to these buffers. Other relevant factors, such as grid capacity and access, are not included (TNC August 2025; SPEA August 2025).

Complementary to the official mapping process, TNC, coordinated with LNEG and the Portuguese RE Association APREN, started working on a study to expand renewable energy zones beyond RAAs employing the TNC's smart siting methodology (LNEG 2024; TNC August 2025). The process integrates universal geospatial datasets with regional and innovative data, e.g., viewshed analysis for cultural factors based on social media data, following the mitigation hierarchy framework (SPEA August 2025; TNC August 2025).

Coordinated mapping for RE areas offshore

The mapping process for RE areas offshore was initiated with Despacho n.° 4760/2023, of 20 April 2023, which determines that the *Direção-Geral de Recursos Naturais, Segurança e Serviços Marítimos* (DGRM) draws up a plan for the allocation of areas and volumes of national maritime space (PAER), including the allocation of sites for RE offshore. This plan would automatically update Portugal's Maritime Spatial Plan (PSOEM) regarding potential areas for commercial offshore RE. The PAER was approved at the beginning of 2025 by Council of Ministers Resolution n.° 19/2025 on 7 February 2025, after SEA. The process lasted around two years and included two public consultations, both taking place in 2023 (ZERO Portugal July 2025; WWF Portugal July 2025). Documents of the SEA and the consultation process are made publicly available online.

Two allocation scenarios were up for evaluation, both identifying approximately 3100-3400 km² as suitable sites for offshore RE (depending on the production yield assumed). Applied mapping criteria were mainly techno-economic and included aspects such as horizontal wind speed, slope, and incident wind power flux (W/m²) (DGRM 2023b; 2023a). Following the consultations, adjustments were made to the evaluated scenarios (SPEA August 2025). Despite the consultation process, NGOs still report issues in terms of low stakeholder involvement (fisheries, NGOs, research institutions, and universities) and a general lack of consideration for protected areas and biodiversity distribution in the mapping (ZERO Portugal July 2025; RRPlanning 2023).

Designation of RAAs

Potential RAAs (onshore) are mapped and supposedly soon up for SEA. Priority areas for offshore RE deployment are available and implemented in the PSOEM. However, it is unclear if these areas will be transferred to RAAs (SPEA August 2025).

National-specific barriers and resulting recommendations

- **Lack of qualitative data (e.g., sensitivity maps) and limited stakeholder involvement in data sourcing**: the formal working group LNEG-GTAER itself points to data gaps in the mapping, as some maps used (e.g., on species and land-use) might be outdated and have insufficient spatial resolution (LNEG-GTAER 2023). This reflects the bigger picture in Portugal, which displays a limited availability and accessibility of relevant data, especially on environmental issues (TNC August 2025; SPEA August 2025). This is due to several reasons:
  - Relevant data is very dispersed between different groups, research institutions, and NGOs;
  - No nature and species sensitivity mapping exists as of now for the Portugal mainland;
  - It is unlikely that new high-quality species and nature sensitivity maps will be developed 'in time' for RAA mapping and SEA, considering the tight timeline of RED III.

  // **Our recommendation:** Responsible authorities should actively reach out to relevant stakeholders, e.g., NGOs (also on the regional level), who are able to provide data. To enable robust national-level sensitivity mapping, relevant biodiversity data available at local and regional levels should be centralized and converted into interoperable digital formats (e.g., vector or raster format). Ideally, this would include species occurrence data with precise geographic coordinates (TNC August 2025).

// **Our recommendation:** If such engagement can no longer take place in the mapping process itself, as this is well advanced, it is particularly important to ensure a robust and participatory SEA process (ZERO Portugal July 2025). This includes ensuring that up-to-date and high-quality data sets on environmental issues are being considered. Also, in light of the limited database on environmental conditions, it is advisable to give preference to conservative assumptions for the identification of RAAs to ensure sufficient nature conservation.

- **Gaps in the mapping methodology:** Although LNEG-GTAER's mapping approach for onshore RE areas is quite comprehensive, it analyses relevant aspects only as additional information (See Chapter 4.3 of the official mapping report (LNEG-GTAER 2024)) and not as exclusion or weighted factors. This applies to the following aspects: RE resource availability, such as solar radiation or wind speed, distance to grid infrastructure, and artificial areas (for PV). Also, there is neither consideration of other relevant grid-related issues, such as risk of congestion or grid capacity, nor of land ownership structures. A high proportion of land in Portugal is privately owned and subject to potential speculation (SPEA 27 May 2025). As these factors are not spatially overlapped or integrated into the mapping, some identified areas might not be technically and economically viable for RE deployment or not accessible.

  // **Our recommendation:** Include further relevant factors as exclusion or weighing factors in the mapping, namely RE resource availability, proximity to and capacity of the grid, as well as the type of area (artificial area) (ZERO Portugal July 2025; TNC August 2025; SPEA August 2025). Additionally, it is recommended to reflect patterns of land ownership and land speculation (eventually limiting access to land) in the mapping process and target setting. If this can no longer be incorporated into the methodology itself, the results of the analyses looking at these factors should be given sufficient weight in the assessment of suitable areas.

- **Political instability may take a toll on the current decisions and processes:** Since 2023, Portugal has faced a prolonged period of political turmoil, including early elections in 2024, a collapse of the new government in 2025, and re-elections. Portugal will have municipal elections in October 2025 and presidential elections in January 2026, which will contribute even more to the political instability.

  // **Our recommendation:** Portugal displays ambitious steps in the mapping process. To pursue this line, it is important to uphold a consistent, clear political line that promotes the mapping and designation process of RAAs in a timely manner, despite eventual political instabilities.

- **Power grid access is a major bottleneck:** According to LNEG-GTAER (2024), if immediate or soon access to the grid were a constraint, no areas would be available as grid substations are not necessarily available for connection.

  // **Our recommendation:** Consider not only the proximity to the grid but also grid capacity and access in the mapping and assessment of identified areas. For this, collaboration with TSO/DSOs, e.g., throughout the SEA process, is key.

3.10 Spain

National transposition of Article 15b and c

Up to now, Spain displays a partial transposition of RED III provisions, as it seems the government is not going to transpose it through one single law, but through Royal Decrees on specific topics.[9] It remains unclear how effective the decrees are in achieving a full transposition. Also, none of the decrees addresses the specific requirements of Art. 15b and c, which are the focus of this report.

A Royal Decree is secondary legislation based on a norm (generally an existing law) and is mandatory. Without a supporting framework law, however, it may not constitute an effective transposition. Yet, unlike laws, which require parliamentary approval, Royal Decrees only need the Council of Ministers' consensus and are therefore easier to adopt. Spain has relevant framework laws in place, such as the Climate Change and Energy Transition Law (Ley 7/2021) and the Energy Sector Law (Ley 24/2013), but it remains unclear whether they provide sufficient legal basis for transposition *via* Royal Decrees.

Coordinated mapping for RE areas onshore

No official mapping process is reported to identify Coordinated RE areas or RAAs (SEO/Birdlife 23 Jul 2025; Greenpeace Spain May 2025). However, there are various initiatives (non-governmental, non-binding, or on the regional level) which are concerned with spatial mapping of areas for RE onshore or sensitivity mapping. If, or how, these data sources will be incorporated in an official, coordinated mapping exercise remains unclear (SEO/Birdlife 31 Jul 2025).

- MITECO provides a spatial zoning tool in an online geoportal. The tool identifies areas where the deployment of RE (wind onshore, ground-mounted PV) seems least impactful on biodiversity and ecosystems. The mapping process layered various indicators, differentiated into exclusion (e.g., Natura 2000 sites, Protected Natural Areas) and weighted indicators (e.g., IBAs). There is clear information on the weighing factor of each indicator and the overall methodological approach (MITECO 2020). Also, the analysis integrated feedback from NGOs that were able to review the maps and contribute with (regional) datasets (SEO/Birdlife 23 Jul 2025). Despite providing a valuable database, the maps are not reported to be integrated into official planning spatial planning processes, which are mainly assigned to the regional and local level (Oeko-Institut 2024).
- Diverse spatial planning instruments exist on the regional level of Spain's Autonomous *Communidades*, aiming to identify zones apt for the development of RE. Instruments include, e.g., specific regulations or Regional Spatial Plans. Some of these instruments stipulate specific mapping criteria. SEO/Birdlife provides a comprehensive overview.

[9] E.g. Royal Decree 962/2024, of September 24, that regulates the production of electrical energy from renewable sources in marine facilities and Royal Decree-Law 3/2025, of April 1, that establishes the electric mobility incentive program (MOVES III).

- NGOs like SEO/Birdlife developed up-to-date sensitivity maps for a variety of relevant bird species in the Spanish mainland, differentiated by RE technologies (wind onshore, PV). The maps are regularly used in EIAs for RE projects at both the national and regional levels.

Up-to-date sensitivity maps for Spain mainland

As part of the *Renovables Responsables* initiative, SEO/BirdLife and the Consejo Superior de Investigaciones Científicas (CSIC) developed sensitivity maps to identify areas of mainland Spain suitable for RE deployment with respect to biodiversity, especially birds (SEO/Birdlife 2023). The maps use multi-criteria spatial analysis, combining species distribution (across the seasons) and conservation status (e.g. IUCN Red List) with protected and high ecological value areas. Separate maps are available for onshore wind and solar PV, since impacts differ by technology. Areas are classified from *low* to *maximum sensitivity* depending on how much risk there is to biodiversity or how conflicting the impact is likely to be (2023). Published in 2024, the map layers are made available to the public, companies, and administrations as interactive GIS versions and downloadable layers, for instance. Such detailed species occurrence data with precise spatial coordinates is decisive for accurate mapping – without, planners must either adopt overly cautious approaches, which limits zoning options, or risk overseeing environmental sensitivities.

Coordinated mapping of RE areas offshore

Spain's MSPs *Plan de Ordenación del Espacio Marítimo* (POEM) identifies so-called *Offshore Wind Energy Priority Use Zones* (*ZAPER*) (MITECO 2022; 2023). Those areas, covering approximately 5000 km², were designated in February 2023 after a five-year participatory process with various stakeholders, including NGOs, the fishing sector, and the public. Cut-off criteria in the mapping include wind potentials, impacts on biodiversity, and impacts on other socioeconomic activities. (MITECO 2023). Before designation, the areas have been subject to SEA, and the environmental aspects identified were to be included in the final approval of the plans. However, NGOs remain concerned about the environmental impacts of RE deployment within those final ZAPERs (SEO/Birdlife 23 Jul 2025; Barrero 1 Mar 2023).

Designation of RAAs

It seems very likely that the government will use the ZAPERS as RAAs in the sea, but no official information has been shared (SEO/Birdlife 31 Jul 2025). Also, for onshore RE technologies, it seems quite evident that the government will identify RAAs based on geodata in MITECO's zoning tool – yet, again, no information on this process has been shared.

National-specific barriers and resulting recommendations

- **It seems that the spatial mapping for and designation of RAAs is not a priority for the relevant national authorities in Spain.** Although mapping tools (e.g., by MITECO) and updated sensitivity maps (e.g., by SEO/Birdlife) exist, no coordinated spatial mapping is being reported.

  // **Our recommendation: Build on and improve existing maps, e.g., in MITECO's zoning tool** with updated, relevant information and high-quality data. Relevant data to consider include sensitivity maps as provided by SEO/BirdLife, regionally specific data, and data on artificial areas or grid infrastructure. These aspects can be well reflected in the mapping's weighting methodology.

Further, it is important to check integrated data sets for their up-to-datedness. Also, for gathering relevant data sets, collaboration and active engagement with relevant stakeholders, e.g., NGOs, is key (SEO/Birdlife 23 Jul 2025).

- **Little to no information is shared about the implementation and mapping process**, at least with the experts involved in this report. There seems to be a substantial lack of transparency.

  // **Our recommendation:** Increase transparency on and participation in the mapping process. This may be done by sharing progress reports online and/or with relevant stakeholders and organizing feedback loops with, e.g., a Task Force, also integrating expertise from outside the ministries.

- **Spain's complex regulatory landscape, paired with a federally organized spatial planning system, is burdening a fast legal transposition**. The government's approach of implementing RED III through specific Royal Decrees may further increase the complexity of the regulatory landscape (SEO/Birdlife 31 Jul 2025). Also, Spain reports a lack of coordination between national and regional competencies in spatial planning. Regional spatial planning instruments, if implemented at all, do not seem coordinated, neither on the regional level nor with national processes.

  // **Our recommendation:** Ensure a firm legislative framework backing specific RED III-related Royal Decrees to ensure an effective implementation. Also, it is crucial to assign clear competencies and responsibilities.

4 What do MS have in common? Overarching insights and actionable recommendations

4.1 Overarching insights

RED III – supporting stability and driving spatial planning in times of political instabilities

Country-specific insights show that RED III functions as a valuable, overarching framework towards the long-term RE expansion pathway, **even or especially in times of political instability.** The latter comes in many different facets: Germany, Portugal, and France, for instance, have seen governments collapse and early national elections in the past year. The result has been an abrupt change in political structures and alignment, also with regard to RE expansion and, in concrete terms, legislative projects being interrupted and delayed. In other MSs, political instability appears more in the form of generally challenging political views regarding RE: strong historical fossil ties, like in Czechia, or growing right-wing populist forces mobilizing deliberately against RE, as reported in France. Ultimately, there are countries, like Italy, Greece, and Spain, where the government does not appear to be politically committed to implementing RED III in a timely manner. Irrespective of national approaches and attitudes towards RE policy, RED III, as overarching legislation, outlines the direction in which MS should be heading and the steps they should be taking towards this. This crucially ensures equity, consistency, and planning security towards RE acceleration and counters the various aspects of national political instability with a long-term commitment.

Compared to the first stock-take in the last report, almost all countries analyzed initiated mapping processes or took active efforts to integrate RED III requirements with existing spatial planning processes for RE areas. RED III provided a particularly strong push in countries that did not already implement similar processes. For example, countries such as Estonia, Czechia, Croatia, and Portugal have used the impetus from the EU level to set up a coordinated process from scratch for nationwide data collection, processing, and integration into well-elaborated and transparent mapping approaches. While their accuracy may still be improved (see Chapter .3), the RED III has led to the creation of valuable mapping tools and the initiation of dialogue on land use management. In countries with ongoing spatial planning processes, i.e., before RED III came into force, implementation is more complex as integration with existing processes and laws proves difficult. Here, greater efforts are needed to link the RED III requirements without this resulting in increased bureaucracy. If this fails, there is a risk that RED III's intended acceleration effect will not fully unfold or even be jeopardized. Putting priority on a streamlined transposition into the national legal framework seems key in these cases.

Going forward, what is important in the mapping process and RAA designation?

This report shows that the various countries have developed different mapping approaches to comply with RED III. Their challenge lies in finding the balance between harmonization on the one hand and specification on the other. RED III and national transpositions deliberately leave room for national and regional adaptations, e.g., in defining exact mapping criteria and thresholds. This is essential given the spatial diversity that Europe has to offer.

Overarching these details, **our analysis highlights the following points that appear important for the (further) mapping processes:**

- **Use high-quality data,** i.e., frequently updated data sets with high spatial resolution, provided in an easily integrable format and – at best – containing regional specific characteristics. Improved availability of high-quality data increases the accuracy and validity of mapping tools.
- **A focus on low-conflict areas**, in particular artificial, sealed areas such as industrial areas and car parks as well as degraded lands. This helps to reduce land use conflicts and may even generate synergies, e.g. with agricultural activities.
- **Leverage the full range of RE technologies,** ensuring that all RE potentials are considered. While RED III does not clearly require MSs to focus on a single technology, this legal ambiguity risks underutilising available resources. To foster RE acceleration, it is worth mapping additional potentials where technologies have been omitted as well as applying a technology-specific mapping approach, including adapted mapping criteria.
- **Integrate additional data that is relevant to ensure effective use and accessibility of identified areas**. This includes:
  - mapping RE resource availability, determining if areas are technically and economically viable;
  - factoring in both the localization and capacity of the grid to ensure effective grid access;
  - considering land ownership patterns, which may significantly impact how accessible areas are.

Mapping for Coordinated Areas for RE offshore

The EU's offshore RE strategy, as set in RED III, sets targets of 300 GW offshore wind and 40 GW ocean energy by 2050, requiring cross-border cooperation, transparent tendering, and robust MSP to balance uses of the sea and secure public acceptance. Several MSs, including France, Italy, and Germany, are mapping Coordinated Areas for offshore RE. Offshore planning is typically more centralized and linked to MSPs, which can make procedures appear faster, especially in federal systems. However, offshore mapping often relies on coarse data and makes environmental impacts harder to localize. NGOs in Spain, Portugal, and Germany therefore warn of high ecological risks, even where SEAs exist. Given these constraints, prioritizing RAAs onshore may be more appropriate, as shows the case of Germany, for instance (see 4.5).

- **Ensure transparency in the mapping process to foster mutual learning.** Transparency can be achieved by sharing mapping criteria, methodologies, data and strategic considerations on how to link RED III stipulations with existing spatial planning practices. This means providing open-access data, mapping documentation and methodological reports, as already practiced in MSs such as Estonia or Portugal. Their mapping approaches provide best-practices here, as do geoportals, provided both on country-specific and EU level.
  - One central platform here is the Energy and Industry Geography Lab (EIGL), curated by the EC's Joint Research Centre (JRC), which consolidates key geodata layers for energy development, amongst others. Such harmonised EU-wide databases are crucial for long-term knowledge sharing and streamlined mapping (BirdLife International 2025; EC 2024). By integrating data retrieved in the context of RED III mapping into platforms like EIGL, would also create synergies with future mapping exercises inlcuding those under the Nature Restoration Regulation (NRR), for instance (see also Infobox under 4.3).

- Most importantly, **transparency goes hand in hand with stakeholder involvement**. The inclusion of feedback and expertise throughout the mapping and designation process builds trust and increases the quality of results. Competent authorities should therefore ensure a continuous exchange with stakeholders such as NGOs, DSOs, and TSOs, and/or the public during the different phases of the mapping and planning process.

  In many countries, the mapping process, which functions as a valuable entry point for stakeholder involvement, is already well advanced. Next step up in these cases is the identification and designation of RAAs within the Coordinated areas for RE. This includes conducting a SEA, functioning as another valuable entry point for stakeholder integration.

  We therefore call on MSs to ensure robust, proactive stakeholder involvement in the SEA, as room for local specific EIAs is significantly reduced in RAAs (see recommendations).

4.2 Speed with quality – The need of a systemic perspective on barriers

To accelerate RE deployment across the EU, RED III focuses on fast-tracking permitting procedures in selected areas, where environmental assessments are shifted to the planning level, and thereby softened as they are carried out on a larger spatial scale. This approach assumes environmental assessments for permitting as main barrier of RE expansion – addressing only in part the overall picture. Analyses show, that project specific environmental assessments are just one bottleneck to RE acceleration besides many others, namely structural weaknesses in MSs' governance, as well lack of grid access and coordination in planning and the absence of high-quality data (see Chapter 3). These challenges also revealed in our previous report and remain relevant, as shows this reports' updated research (Oeko-Institut (2024); likewise been highlighted in other studies and policy contexts, such as COWI; Eclareon; Prognos (2025), DSO Entitiy (2025) or IEA (2024)). That effective RE acceleration requires a comprehensive view of the overall array of interrelated challenges is also echoed by NGOS in their letter to the EC this year (BirdLife International; Climate Action Network (CAN) Europe; Client Earth; EEB; Seas at Risk; TNC; WWF 2025).

Effective fast-tracking RE requires looking at the bigger picture and addressing systemic barriers, while maintaining strong safeguards for nature. Our actionable recommendations, aim to shed light on this bigger picture and focus on overcoming central barriers to sustainable acceleration.

4.3 The bigger picture – Actionable recommendations

// Political // Ensure sustained political commitment to RED III implementation

In several MSs, political dynamics have created significant uncertainty for RE expansion. Changes in national governments have stalled or delayed RE policies, as seen in France and Greece, with postponed central regulations for spatial planning and consequently central planning instruments missing. Further, in countries like Greece and Spain, a lack of political will seems to be hampering the timely transposition of RED III. Meanwhile in Poland, the legislative package for RAAs has been vetoed. Likewise, many other countries, like Germany and Croatia, are experiencing a challenging political landscape due to government breakdowns and fundamental political restructuring and growing right-wing populist campaigns against RE, as recently seen in France. These factors combine to weaken regulatory momentum, create investment uncertainty, and hinder progress towards RED III targets.

Hands-on recommendations

- The RED III acts as a powerful tool to ensure accelerated RE deployment irrespective of national political dynamics. Its stipulations need to be implemented swiftly and consistently by national authorities. This particularly applies to countries where RED III is not yet fully transposed.
- Ensure that planning instruments and key political documents, such as spatial plans and national energy roadmaps such as the PPE 3 in France, are designated and published without delay. This is the key to providing national and regional expansion targets a reliable basis and creating planning certainty for planners, project planners and investors.

Transposition despite political odds – the example of Germany

Germany managed a surprisingly fast transposition for RAAs onshore (wind) despite an early change of government at the beginning of 2025. RED III played a significant role in this being anchored as regulative overarching framework in both the former and new governments' political agenda, regardless of all political upheavals.

// Structural // Ensure robust and meaningful assessments of RAAs

In the context of RAAs, assessment obligations that traditionally took place at the permitting level are largely shifted to the planning level. Instead of detailed EIAs and species protection assessments, broader SEAs become the main instrument for environmental assessment. On the level of individual project permits within RAAs, accelerated permitting procedures are then based on a simplified screening of unforeseen environmental impacts. Yet, EIAs have long functioned as a valuable entry point for public participation. As a result of the shift between permitting and planning regime, mandatory entry points for stakeholder involvement are reduced to the planning level alone where SEAs become the main instrument for environmental assessment and public participation. It is therefore all the more important to stress the relevance of a sound design and implementation of SEA for RAAs on the planning level. Also, at the subsequent permitting stage of RAAs, it is worth pointing to (voluntary) entry points for public participation that can be offered at project-level.

Hands-on recommendations

- RAAs require more detailed and robust SEA than standard practices as projects within RAAs may be exempt from project-specific EIAs. Therefore, it must be ensured that relevant stakeholders are well integrated in the process. This includes that competent authorities approach a diverse range of relevant stakeholders proactively, such as NGOs, TSO/DSO and sector representatives, e.g. from agriculture.
- Transparency on and in participation in the mapping process is key. This is both the case for MSs, where mapping is still ongoing, as well as for MSs, where mapping is already well-advanced and SEA is the next step up front. In both cases, sharing progress reports and detailed documentation on data sources and methodology online or directly with relevant stakeholders helps to increase comprehensibility and obtain informed feedback. Where mapping is still ongoing, additional entry points for participation may be opened up by organizing feedback loops that also integrate expertise from outside the ministries, as did the LNEG-GTAER Taskforce in Portugal, for instance.
- To ensure that public acceptance of RE projects is maintained and strengthened, local authorities and project developers should expand existing mandatory participation by adding meaningful voluntary formats and benefit sharing-mechanisms (see Infobox below).

Beyond formality – a brief reflection on meaningful public participation

Art. 15d (1) of RED III requires public participation in the designation of RAAs. Therefore, the SEA remains the main entry point for public participation at the planning stage. However, participation alone does not ensure meaningful citizen-focused processes. If timing, format, or access to information are insufficient, stakeholders and the broad public cannot provide substantial input.

Meaningful participation must allow citizens to contribute while decisions are still flexible. This fosters transparency, builds trust, helps identify conflicts early in the state, and increases acceptance of outcomes. A robust and enriched SEA process is thus essential. At the permitting stage of RAAs, formal participation processes should be complemented by voluntary practices, e.g., early engagement of local communities, transparent decision-making, dialogue with local authorities on option for pooling of suitable sites, accessible digital tools, and tailored communication strategies to counter misinformation. In Germany, the wind project ForstBW puts such additional formats into practice. Additionally, procedural participation may be supported by financial participation practices such as benefit sharing, which should ensure that the economic benefits of RE projects are distributed fairly among affected communities (see Climate Action Network (CAN) Europe 2025).

A notable example is France, where offshore spatial planning for the *Strategic Coastal Documents* was supported by the *Atlas de la mer en débat*. This initiative combined interactive online platforms and social media with more than 300 in-person events and provided comprehensive mapping materials, including zoning proposals submitted by diverse stakeholders, e.g., fisheries.

// Data & Mapping // Increase data availability, accessibility, and quality

Accurate spatial planning depends on high-quality (geo-)data and maps. This requires datasets that are frequently updated, have high spatial resolution, are provided in easily integrable formats, and ideally include region-specific characteristics. Despite efforts to improve data quality and accessibility, via numerous geoportals, for instance, most of the countries analysed (e.g., Germany, Greece, Croatia, or Portugal) still report incomplete, outdated, or difficult-to-access data sources. The latter may be traced to various reasons, e.g., because data is only available in analogue maps, challenging data formats, or is very dispersed among stakeholders.

Hands-on recommendations

- Improve data availability and quality by fostering cooperation with relevant stakeholders at all levels and ensuring datasets are updated frequently. For data on environmental issues, cooperation with (local) NGOs is required, as well as securing financial support for field studies for sensitivity maps. Ideally, this includes species occurrence data with precise geographic coordinates, which is essential for deriving species distribution models and other spatial analyses. A good example here are the like the sensitivity maps provided in Spain by SEO/BirdLife (see Infobox in 3.10), which provide valuable resources for spatial planning. Also to be mentioned is the collaboration in Italy between the scientific governmental body ISPRA and the NGO LIPU to update offshore sensitivity maps.

- Convert existing data into usable, easily integrable formats (e.g., digitalization of analogue cartographic material) as intended to happen in Estonia, and make them available through publicly accessible (geo-)data portals
- Harmonize relevant spatial (geo-)data in overarching data portals, both on the national as well as EU-level, such as EIGL. This helps to streamline and optimise mapping processes and fosters transparency among MSs and towards the public.

// Data & Mapping // Integrate further relevant data into existing mapping tools

To ensure accuracy, all relevant data need to be systematically integrated into mapping methodologies. Key datasets often missing in mapping approaches include sensitivity maps, grid infrastructure (with location and capacity), artificial areas, RE potential, and land ownership structures. These factors are crucial because they directly affect whether areas identified are compatible with environmental protection, accessible, technically feasible, and economically viable. In countries where mapping is mainly conducted at the local or regional level, a lack of harmonized criteria further undermines coherence in the identification of Coordinated Areas for RE and RAAs.

Assessing RE resource availability and demand

Our report reveals that most national mapping approaches do not integrate data on RE resource availability. Without such assessment, it remains unclear whether identified Coordinated Areas for RE will be sufficient to meet NECP 2030 targets as is, however, required by Art. 15b RED III. Only a few MSs, such as Germany, Estonia, Czechia, or Portugal, consider energy yield potentials in their mapping, though most of them only as additional analyses (and not weighing or exclusion factors). Without broader integration of such techno-economic assessment, RED III risks falling short of its core objective of underpinning country-specific RE targets.

Hands-on recommendations

- Include key datasets, such as biodiversity value and sensitivity maps, grid infrastructure (location and capacity), artificial areas, RE resource availability, and land ownership structures systematically in mapping methodologies – at best, either as exclusion or weighing factor. This ensures that identified areas are environmentally, technically, and economically viable for RE development. Good practices include sensitivity mapping in Croatia and Estonia, the integration of energy yield potentials in Germany and Estonia (see Infobox above), and a focused mapping of artificial areas in Italy. If a systematic integration can no longer be incorporated into the mapping process itself, the results of the analyses looking at these factors should be given sufficient weight in the assessment of suitable areas (e.g., in SEA).
- Employ RE technology-specific mapping approaches as different aspects are relevant to site identification of different RE technologies. For example, there is potential for PV on car parks, degraded agricultural land, etc., but these are not suitable for the use of wind turbines. Additional RE potentials might thus be leveraged by specifically adapting mapping criteria to, e.g., ground-mounted PV or wind onshore parks.
- Harmonize mapping criteria across regions by providing detailed state-level guidance documents and fostering interregional dialogues. This is particularly important in countries where spatial planning is federally organized.

- Examples like Portugal and Poland show, the grid may be a major showstopper when it comes to RE acceleration. It is thus crucial to foster systemic collaboration with relevant authorities, such as TSO/DSOs or regulators, and to consider available data on grid infrastructure in the mapping right from the start. This includes not only the localization of the grid, which is crucial to assess the potential for grid connection, but also grid capacity and the likelihood of securing access.

Integration of grid-related infrastructure as mapping criteria

Grid planning remains poorly coordinated across the EU. In Poland, for instance, the current grid capacity is reported to be insufficient for the RE deployment planned. While RED III stipulates that energy infrastructure in the mapping and consequently designation of RAAs, its provisions on this point remain rather vague, and MSs seem to interpret them quite differently.

Estonia, Croatia, and Czechia included proximity to the grid as a mapping criterion (< 10 km, < 20 km, and “proximity to existing infrastructure”, respectively). By contrast, Germany has not systematically considered grid proximity or capacity in the mapping process, instead relying on an on-demand planning approach that often slows down RE deployment. As a result, there is a risk that RAAs may be designated in locations without sufficient network capacity, making the grid a bottleneck. This could also lead to greater environmental impacts if new transmission lines must be built.

While limited coordination between TSOs and DSOs and the absence of mechanisms to manage grid capacity can constrain efficiency, this does not necessarily imply that new power lines are always required. Complementary measures, like joint TSO–DSO planning, demand-side flexibility, storage, and dynamic tariffs, can optimise existing grids and help integrate RE from RAAs without major infrastructure expansion.

// Structural // Strengthen dialogue between relevant stakeholders

In several MSs, cooperation between national, regional, and municipal authorities and stakeholders such as NGOs and grid operators (DSOs and TSOs) remains weak. This misalignment leads to fragmented planning, especially in federal systems, and slows effective RE implementation. Limited dialogue further reduces the quality and accuracy of the site selection, as data and information held by stakeholders may be overlooked, despite being generally available.

Hands-on recommendations

- Foster structured exchange between cross-departmental governmental officials, planners, and key stakeholders such as environmental NGOs and project developers at all levels. This can be achieved through feedback loops, proactive outreach during the mapping, and joint roundtables. As already mentioned, also close cooperation in the upcoming steps of RAAs designation, notably SEA, is key. This ensures transparency, early conflict detection, and more accurate outcomes.
- Establish mechanisms for regular cooperation between ministries and key sectors, such as military and agriculture, to address and mediate conflicting land-use priorities.
- Set up systematic consultations between spatial planning authorities and grid operators (DSOs, TSOs) to ensure that site designation is consistent with grid expansion and capacity planning.
- Strengthen coordination between national, regional, and municipal planning levels, especially in federally organized countries, to streamline the implementation of RE projects.

Collaboration to provide input for offshore RE planning through OCEaN

OCEaN – Offshore Coalition for Energy & Nature is an example of an established dialogue format between relevant stakeholders advancing offshore RE deployment in maritime regions, such as the Mediterranean. It brings together experts from multiple sectors, including environmental NGOs, project developers, and grid operators, and works regionally across sea basins. Together they develop concrete recommendations, e.g., for ecological non-price criteria in auctions, mitigation and restoration measures, which can feed into policy and planning. In Italy, for instance, Mediterranean OCEaN guidance was integrated in the update of the country's MSP, which now provides the basis for the designation of offshore RAAs (WWF 2023; LIPU 29 Jul 2025).

// Administrative // Strengthen country-specific administrative capacities

Administrative shortcomings are an ongoing major barrier to the implementation of RED III, as was already identified in the last report. Administrative bottlenecks usually arise from a lack of financial resources or sufficient (skilled) personnel. Reported issues across the MSs range from not having the personnel capacity at the ministerial level to transpose RED III requirements, as is the case in Poland, to responsible authorities lacking essential technical and methodological skills, as, e.g., in France, where mapping currently takes place at the municipal level.

Hands-on recommendations

- Provide targeted technical and financial support for planning and permitting authorities, including increased funding and specialised training for civil service staff.
- Strengthen networks and coordination across authorities to reduce fragmentation and bureaucratic burdens. The Expertises.Territoires platform, as illustrated in the infobox in Country Profile 3.4 France shows, for example, how such a collaboration can be practically organised.
- Accelerate the digitalisation of permitting and mapping procedures to streamline workflows.

// Data & Mapping // Prioritize RE development on low-conflict areas

Low-conflict areas, including artificial and built surfaces or degraded lands, are rarely prioritized in the MSs' mapping approaches. This stands in contrast to Art. 15c RED III, which explicitly calls for RAAs to be designated on such sites. In practice, however, competing land-uses on these areas are often insufficiently integrated into the mapping for Coordinated areas for RE. Giving priority to low-conflict areas, can significantly reduce land-use conflicts in times of growing spatial scarcity and supports the objectives of RED III. Conversely, if low-conflict areas are not prioritized, expansion is likely to shift towards sensitive areas, thereby increasing environmental pressures and ecological deterioration.

Hands-on recommendations

- As RED III, Art. 15c stipulates, preferential areas for RE deployment should encompass artificialized areas such as degraded lands, former mining sites, rooftops, building facades, car parks, waste sites, and industrial areas. These areas should be identified, in the first place, and prioritized in the mapping process, e.g., by applying weighing factors. Italy's mapping approach for RAAs is one example of how this can be approached, even if the mapping methodology still leaves room for improvement (see Infobox in 3.7).
- It is worthwhile to note that RED III mapping stipulations do not apply in a vacuum, meaning that spatial mapping for RAAs takes place alongside other regulatory obligations. The latter includes mapping under the NRR, which requires the designation of restoration areas and ecological corridors. Coordinating both processes – RED III and NRR mapping – helps to reconcile RE deployment with ecosystem restoration and ensures compliance with the NRR's obligation to prevent further habitat deterioration.

The Nature Restoration Regulation (NRR) in the context of RED III

Around 80% of European habitats are in poor condition, prompting the EU to adopt the NRR in August 2024 as the first comprehensive law to restore ecosystems. MSs must submit National Restoration Plans by mid-2026, including timelines, financing, and monitoring, with the goal of restoring 20% of EU land and sea by 2030 and all degraded habitats by 2050.

While the NRR seeks to increase biodiversity and secure ecosystem services, RED III pushes for rapid RE expansion. To reconcile both, the NRR generally requires prevention of further habitat deterioration, yet Art. 6 classifies RE infrastructure as an overriding public interest, allowing exemptions where SEA is conducted. This creates a trade-off: RED III facilitates RE deployment, sometimes at the expense of nature, while the NRR offers a legal counterbalance – if MSs plan the two processes in parallel. To date, however, such coordination seems limited.

// Structural // Maintain the momentum

Maintaining momentum in coordinated spatial mapping is a challenge. Most MSs have made major progress in transposing RED III and implementing coordinated mapping practices to prepare for RAA designation. They have developed advanced mapping methodologies, and databases have been made publicly available on a large scale in numerous geodata portals. While the list of frontrunners is long and expanding, some MSs still seem to be lagging behind. Without continued commitment and knowledge transfer, the achievements of frontrunners may remain isolated examples rather than becoming a shared standard.

Hands-on recommendation

- MSs should sustain and build upon the progress already achieved. Advanced mapping methodologies and open databases developed by frontrunners should be discussed, promoted as best practices, and actively shared. This helps to enable all MSs to accelerate implementation and ensure consistent progress across the EU.

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