Offshore Wind Energy: Europe Plans for Coexistence - Why Does Greece Still Rely on Exclusion Zones?

Stella Kyvelou-Chiotini

(Professor in MSP and Sustainable Blue Economy at Panteion University (GR), advisor to the European Economic and Social Committee on policies concerning European islands)

The revision of the Special Spatial Planning Framework for Renewable Energy Sources (RES), recently released for public consultation in Greece, undoubtedly represents an important step toward modernizing the country's spatial policy. For the first time, among other developments, it clearly recognizes the need for offshore wind farm development, the importance of marine and island areas for the energy transition, and the connection between energy planning and Maritime Spatial Planning (MSP). However, behind this development lies a deeper strategic issue: Greece continues to approach marine space through the lens of *separation* and *exclusion of uses*, at a time when Europe is moving rapidly—and after investing substantial resources in research and innovation—in the opposite direction, namely toward the harmonious co-existence of maritime activities and the promotion of multi-use of marine space.

The paradox is that the Special Spatial Planning Framework itself adopts contemporary European approaches by recognizing MSP as a key tool for preventing conflicts and fostering synergies among maritime activities. At the same time, it highlights the need for coexistence between offshore renewable energy installations and fisheries, aquaculture, shipping, and tourism.Yet, when translating these principles into spatial regulations, it follows a different logic. The framework currently under consultation continues to rely on **exclusion zones and spatial segregation**, treating underwater archaeological sites, protected shipwrecks, marine parks, cables, and shipping routes primarily as areas to be avoided by offshore energy installations. While this approach dominated in the past, it is increasingly regarded as outdated at the European level.

In the North Sea, the Baltic Sea, and several areas of the Western Mediterranean, offshore renewable energy is increasingly viewed as part of multifunctional marine systems. The discussion is no longer limited to where offshore wind turbines may or may not be installed. Rather, it concerns how wind turbines can coexist harmoniously with other maritime activities while generating additional environmental, social, and economic value. Models are already being developed that combine offshore wind farms with aquaculture, marine ecosystem restoration areas, protected areas, and fish stock recovery initiatives. In some cases, offshore wind installations themselves function as zones of reduced fishing pressure, creating new environmental opportunities.

In other contexts, such as Japan, fisheries coexist successfully with offshore wind farms through cooperation agreements with fishing cooperatives, which participate in the licensing and governance processes of these projects. The international literature refers to this approach as the *fishery cooperation model*.

Another notable example of this emerging philosophy is the development of *Mariparks* in the Belgian sector of the North Sea. There, offshore wind farms are not treated as exclusive energy zones but as multifunctional marine ecosystems. Energy production is combined with marine ecosystem restoration, biodiversity enhancement, aquaculture development, scientific research, and marine innovation. This approach seeks to transform the same marine area into a generator of multiple public goods: environmental protection, economic opportunities, clean energy, and social benefits.

This discussion is particularly relevant for Greece today, as the first large-scale offshore wind development areas are already being planned in the Aegean and Southern Greece. **A characteristic example is Southern Rhodes, which is among the areas under consideration for offshore wind development and is expected to become one of the first real tests of the new planning framework.** This is a complex marine area where fisheries, tourism, shipping routes, sensitive ecosystems, and significant underwater cultural heritage resources coexist. The success of the project will not be measured solely by its production of green energy, but also by the extent to which a model of multiple uses and synergies can be implemented in practice. Southern Rhodes could either become a European example of integrated blue development or yet another case where conflicts between uses are addressed exclusively through prohibitions and spatial exclusion.

Even more intriguing is the international debate concerning the relationship between offshore renewable energy and underwater cultural heritage (UCH). Although Greece possesses an exceptionally rich inventory of underwater archaeological sites and historic shipwrecks, the new Special Spatial Planning Framework primarily treats cultural heritage as a constraint of the allocation of OWEs, emphasizing strict protection zones and safety distances. Meaningful references to marine cultural landscapes, underwater cultural routes, and potential synergies between offshore renewable energy and cultural heritage are largely absent.

At the same time, the European Blue Economy approach recognizes cultural heritage not only as an asset requiring protection but also as a development resource, increasingly integrating marine cultural landscapes into maritime spatial planning processes.

The most significant issue, however, is institutional. The new Special Spatial Planning Framework for Renewable Energy appears to have been drafted on the assumption that multiple-use arrangements will be addressed in future Maritime Spatial Plans rather than within the Framework itself. This inconsistency raises legitimate questions as to whether coexistence is genuinely considered an immediate priority or merely deferred to an uncertain future. The emerging European *Ocean Pact*—the next generation of European maritime policy—is expected to place multi-use of marine space at the center of the European strategy. Synergies among energy production, biodiversity conservation, fisheries, aquaculture, cultural heritage, and coastal development are no longer viewed as experimental initiatives but as fundamental tools for sustainability and resilience.

The question, therefore, is the following: Will offshore wind farms be developed according to a model of spatial exclusion, or will the opportunity be seized to transform marine space into **a field of synergies among energy, environment, culture, and the blue economy**? In other words, will Greece's legislation remain focused on defining "*where activities are not allowed*," or will it evolve toward determining "*how compatible maritime activities can coexist*"?

The answer is not only theoretical. **It will be tested very soon in offshore areas such as those of Southern Rhodes,** where decisions taken today will shape for decades the relationship between energy transition, marine biodiversity, cultural heritage, and local development. It is precisely there that it will become evident whether Greece chooses to follow contemporary European practices of coexistence or remains trapped in a logic of successive exclusions.

In conclusion, broad capacity-building is needed in maritime spatial planning, assessment and monitoring of cumulative impacts, shared governance, complex permitting systems, and cross-sectoral cooperation. Priority recipients of this effort should be the local, regional, and national authorities responsible for managing the country's unique maritime territory. As Europe invests increasingly in co-existence and the multi-use of marine space, Greece must decide whether it will remain attached to exclusion zones or seek a leading role in the new era of the Blue Economy.