



Wind power generation in Bulgaria
Assessment of the Black Sea Offshore Potential

PRESS RELEASE

The Bulgarian territorial waters of the Black Sea are characterized by 116 GW of technical wind potential, 26 GW of which can be utilized in accessible territories with the currently available technological solutions. This is revealed by a new report by the Center for the Study of Democracy (CSD), which makes a technical and economic assessment of Bulgaria's potential for offshore wind energy development, while also identifying favorable areas and setting concrete steps to unlock it. The study confirms the results of the World Bank, the European Commission's Joint Research Center and other energy models in recent years, as well as building on them by using national data and taking into account current trends in the development of wind energy technologies in maritime areas.

CSD analysts considered four potential areas for offshore wind farm development where capacity factors in the range of 40-48% could be achieved. The average cost per megawatt-hour of electricity generated by fixed wind installations near the coastline is estimated to be between €62 and €90 per MWh. Due to the considerably higher intensity of capital investments in floating installations in depths of more than 60m, the average cost per unit of energy produced is estimated in the range of €120-158 per MWh.

The offshore energy industry could have a significant contribution for local communities in terms of highly-skilled job creation as well as for the formation of new technological clusters and the development of local equipment supply chains. The transformation of the two largest Bulgarian ports (Varna and Burgas) to decarbonization hubs and green innovations would support offshore wind industry formation across the Black sea. Nevertheless, current national strategic document roadmaps fail to recognize the potential of Bulgarian maritime territories for the decarbonization of the energy sector. As a consequence, the lack of strategic orientation towards offshore wind energy development reflects on maritime spatial planning and energy grid development roadmaps.

The report outlines the necessary administrative and regulatory changes, infrastructure improvements and incentives to attract long-term high-tech investment in this increasingly important EU sector. The European Offshore Wind Strategy not only recognizes all of these untapped opportunities in the Black Sea area as well as the financial mechanisms of the European Green Deal, which offers timely opportunity for financing the pre-conditions of the formation of a regional offshore wind energy industry in Bulgaria.

The findings of the study were be presented during an international policy conference on Thursday, 16 September, at 17.00 local time, in cooperation with the British embassy in Bulgaria.