

# UNLOCKING GREECE'S OFFSHORE WIND

GREECE'S ATTEMPTS TO DEVELOP ITS UNTAPPED OFFSHORE WIND POTENTIAL HAVE STALLED IN THE PAST, BUT RENEWED INVESTOR INTEREST AND THE GOVERNMENT'S COMMITMENT TO SET UP A SOUND REGULATORY FRAMEWORK HAVE STRENGTHENED ITS PROSPECTS. BY **DIMITRIS ASSIMAKIS**, PARTNER, AND **MINAS KITSILIS**, SENIOR ASSOCIATE, **REED SMITH**.

Since 2006, Greece has taken several different approaches to the development of offshore wind projects, but so far these policy measures have had few concrete results. Given the present ambitious national energy and climate plan for the period up to 2030, dictating at least a twofold increase of the existing renewable energy capacity, the immediate necessity for new capacity due to the government's decision to cease the operation of all existing lignite-fired power plants by 2023, as well as the existence of certain impediments to the further development of onshore wind farms, such as the availability of land, the pressure from other activities, such as tourism, and the necessity for the considerable expansion or reinforcement of the grid, offshore wind is expected to start playing an important role in the country's pursuit of cost-effective and efficient renewable energy prospects.

For several years now other European Union (EU) coastal countries with significant sea fronts have developed offshore wind projects and so this could certainly be a successful approach for the country with the most extensive coastline among all Mediterranean countries and one of the highest offshore wind potentials in the region.

Therefore, aside from certain technical challenges, eg steep sea-bed drop-off around mainland Greece and around most of the Greek islands, and foreign affairs policy issues, eg territorial disputes in the Aegean Sea, a clear national regulatory framework that adequately addresses spatial planning, licensing, grid interconnection and economic support issues is also required in order for offshore wind technology to deliver its significant potentials in the country's power generation mix.

Ongoing structured public discussions with interested investors and stakeholders as well as recent policy statements from the Greek Ministry of Environment & Energy are expected to result in an offshore wind-specific framework within this year that will enable the exploitation of this valuable renewable energy source also in Greece.

Already, major market players such as Ocean Winds (EDPR and Engie) in cooperation with

Terna Energy, the largest renewable power producer in Greece, Iberdrola, PPC Renewables, the renewables arm of Public Power Corporation, Greece's largest power producer and supplier, Copenhagen Infrastructure Partners and Equinor are actively involved in these discussions, while reportedly other international investors such as Principle Power and Innogy are closely following the developments in the sector.

These deliberations are conducted within a very positive momentum for the offshore wind sector, following the recent release of the EU Strategy on Offshore Renewable Energy and the great technological developments in the sector, especially with respect to the imminent commercialisation of large-scale floating wind projects, which seem to be the most proper offshore wind technology for Greece given the depth of its territorial waters.

## Past approaches stalled

Until mid-2010 the generally applicable licensing scheme at the initiative of interested investors was also applicable for offshore wind projects' development, licensing, spatial planning and economic support against transparent and objective criteria and a regulated feed-in tariff through a standardised long-term, 20-year, power purchase agreement with the energy market operator as offtaker and dispatch priority for the power produced. In this context a large number of licence applications for offshore wind projects were filed with the competent Regulatory Authority for Energy in Greece (RAE).

However, only two fixed-bottom offshore projects were licensed by RAE in 2012, one of an approximately 500MW capacity offshore

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the island of Lemnos in the north Aegean Sea and another one of 216 MW capacity offshore the port of Alexandroupolis in the Thracian Sea. On the other hand, most of the licence applications filed within the period are still pending assessment from RAE with unclear further development options in anticipation of the new offshore wind-specific framework.

Subsequently, in mid-2010 Greece introduced a special centralised planning scheme for offshore wind projects to be rolled out at the initiative of the jointly competent ministers of finance and economy, maritime affairs, foreign affairs, national defence, culture, tourism, environment and energy by virtue of a new provision introduced into the Renewables Law 3468/2006, ie, Article 6A, which rendered the previous open licensing scheme inapplicable for offshore wind projects.

That rather unclear approach entailed the strategic environmental assessment (SEA) of potential offshore project sites before the respective projects were licensed by the Minister of Environment and Energy, instead of RAE, and before they were auctioned off for construction through an open public tender process (public works procurement process) against economic exploitation by the successful bidder during the concession period; presumably through some long-term power purchase agreement with the energy market operator as offtaker against an agreed feed-in tariff and dispatch priority.

Environmental impact assessment (EIA) and further site planning, installation and construction works licensing until the operation period (inclusive) would follow the generally applicable legislation for renewables, except for some special provisions of law for the concession of sea areas in favour of renewable energy projects that would anyway be addressed as above.

This framework also entailed a number of implementing ministerial decisions and presidential decrees that were never adopted, as this approach was never actually pursued in spite of a SEA study commissioned to this end by the Centre for Renewable Energy Sources in Greece (CRES) and presented in September 2015.

#### **New approach required**

- *Licensing framework, recent developments and challenges ahead* – The recent review of the Environmental Licensing Law 4014/2011 in May 2020, ie, by virtue of Law 4685/2020, raised certain hopes at it was aimed at simplifying and expediting the environmental licensing of projects of any type, including renewable energy projects, as well as at simplifying the first licensing milestone for renewable energy projects before RAE.

Offshore wind projects are qualified as “special renewable energy projects” and may benefit from the above simplified licensing

framework as soon as an offshore wind-specific framework is adopted. In effect, this licensing framework reinstates the previous licensing scheme at the initiative of interested investors, but ultimately fails to provide any coherent legal certainty as it does not explicitly repeal the rather problematic provision of Article 6A of Renewables Law 3468/2006 mentioned above.

So although the general environmental licensing and the RES-specific licensing framework were improved through the adoption of Law 4685/2020, there was not actually any real value for the offshore wind sector from this legislative process, since two parallel and apparently, inconsistent licensing regimes are currently in place, although neither in full force nor effect until Greece finally decides whether it will go on with a centralised or a develop-led planning system. Moreover, the licensing framework in place does not really address what will happen with the existing two electricity production licences granted as well as the various licence applications that are still pending assessment under the past licensing scheme.

Apparently, the envisaged new framework should provide for a consistent, coherent and well-structured licensing regime enabling as well the performance of any early development actions from the investors, in the sense that they should be allowed, on the basis of an exclusive right, to enter into a specific sea area in order to perform wind measurement campaigns and preliminary field surveys.

- *Spatial planning issues* – The Special Spatial Planning Framework for Renewables of December 2008 provides for wind power in general, and onshore and offshore wind power in particular. Such provisions include generally applicable criteria, limitations and exclusion zones for wind energy and special ones for onshore and offshore wind projects. However, it is commonly admitted that the said framework needs to be reviewed to account for technological developments and acquired experience in spatial planning and deployment of renewables not only in Greece but also in the EU, including current best practices.

The Ministry of Environment & Energy is already working on updating the framework but it will take some time to achieve concrete results due to the technical and SEA studies involved. In addition, it must also be compatible with the regional and other special frameworks for spatial planning that are also under review pursuant to Part A of Law 4417/2016 and most importantly, with the still pending maritime spatial planning for marine areas in Greece according to Part A of Law 4546/2018 (as per the relevant EU Directive 2014/89) for the avoidance of conflicts. An interim solution may have to be sought in this connection as otherwise neither central nor individual planning will be feasible and legally



sound against a reasonable time schedule and certain target capacity for offshore wind development by 2030 and beyond.

- *Sovereign rights and public international law* – Greece has reserved the right to exercise all its sovereign rights under Article 3 of the 1982 United Nations Convention on the Law of the Sea (UNCLOS) to expand its territorial sea beyond six (6) nautical miles, which is the current breadth thereof, up to twelve (12) nautical miles measured from baselines determined in accordance with the UNCLOS. Greece has signed and ratified the UNCLOS by virtue of Law 2321/1995. Recently, by virtue of Law 4767/2021, Greece has expanded its territorial sea to twelve (12) nautical miles in the whole of the Ionian Sea area up to the Cape Tainaron in south Peloponnese, while it is reiterated therein Greece's sovereign rights to do the same with all other sea areas, including the Aegean Sea, being the area with the highest offshore wind potential.

However, given the historical tension between Greece and Turkey concerning the Aegean Sea, it is rather questionable whether Greece will finally decide to exercise such sovereign rights and expand its territorial sea to twelve (12) nautical miles also in the Aegean Sea, according to the UNCLOS, in the years to come. In this respect, it is reasonably expected that any development of offshore wind projects in the Aegean Sea will need to be limited within the six (6) nautical miles zone. Further, the establishment and delimitation of the Greek exclusive economic zone by means of valid and legally binding agreements with neighbouring states pursuant to the UNCLOS is still pending too, save for the recent agreements with Italy in the Ionian Sea and Egypt in part of the Mediterranean Sea south-east of the island of Crete.

- *Proper support scheme for offshore wind* – The new support scheme for renewables in Greece introduced by virtue of Law 4414/2016 in line with the European Commission's Guidelines on State aid for environmental protection and energy for the period 2014–2020 provides for operating aid to renewables through a technology-specific sliding feed-in premium (FiP) scheme for the vast majority of new projects, which is added as a premium to wholesale market revenues and thus tops up their market revenues in order for the operating aid to reach an acceptable level of support measured against a technology-specific reference tariff (RT).

Aside from small-scale and experimental projects, since 2017 the RTs are set through competitive bidding processes (auctions) on a project basis for the two mature technologies, ie onshore wind and solar photovoltaic, in technology-specific and technology-neutral auctions run by RAE. In the event that the wholesale market price of a renewable technology exceeds the applicable RT, the excess is rebated to a special account for renewables

kept by the RES operator and aggregator of last resort (DAPEEP) and hence the operating aid contract is a standardised two-way contract for differences (CfD) between the applicable RT, as strike price, and the producer's revenues from the wholesale electricity market.

The auctions scheme is expected to extend beyond 2020, likely up to 2024 and for a certain overall capacity threshold not in excess of 2.1GW, in accordance with the relevant statements made by the Minister of Environment & Energy in mid-November 2020. However, technology-specific auctions for offshore wind or technology-neutral auctions including offshore wind are not likely to be feasible for Greece in this time schedule.

In the meantime, previous auctions for renewable electricity have resulted in applicable RTs for onshore wind and solar photovoltaic projects below wholesale market prices for certain time periods. Therefore, alternative revenue structures involving corporate renewable power purchase agreements (PPAs) cannot be excluded for onshore wind and solar photovoltaic or offshore wind projects in Greece in common with other countries where such alternatives have already been pursued for some years now in the onshore wind and solar photovoltaic sectors, and recently also in the offshore wind sector. However, such structures are hardly suitable or bankable during the early days of a new sector development such as offshore wind.

Optionally, individual aid without an auction process is also possible for renewable energy projects including offshore wind exceeding 250MW or clusters of projects exceeding 250MW and sharing common interconnection with the transmission system, according to the said guidelines on State aid and Article 4 para 12 of Law 4414/2016. Individual aid requires prior notification to and approval from the European Commission. An implementing ministerial decision is still pending – para 12 was added to Article 4 of Law 4414/2016 in end-2019 – for all renewable energy projects or clusters of such scale and importance for national and EU renewable energy targets, but it is reasonably expected soon. This option is reasonably considered more suitable, especially for floating offshore wind projects, and certainly more bankable at the early stages of any new renewable technology.

Moreover, Greece could consider when developing its national recovery and resilience plan in the context of the EU Recovery and

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Resilience Facility possible priority actions in order to facilitate the development of offshore wind projects in the country.

- *Grid connection* – However, unlocking the great wind potential of the Greek seas and islands depends on the development of some critical interconnections, some of which are expected in the short to medium term. The expected completion of the interconnection of the island of Crete with the high-voltage system in the Athens metropolitan area by 2023 and of all Cycladic islands by 2024 will enable the significant development of new wind power capacity on these islands but also in the sea areas around them, covering a significant part of the south Aegean Sea.

Moreover, ADMIE, the Greek TSO, has included in its current ten-year development plan the progressive interconnection of all other major islands in the south-eastern and north Aegean Sea, such as the islands of Rhodes, Kos, Karpathos, Lemnos, Lesvos, Samos and Chios by 2029, covering therefore through such plan the remaining of the Aegean Sea.

ADMIE is actively participating in the discussions held for the formulation of the offshore-wind specific framework and clearly, one of the key issues that need to be addressed therein is the interlink of any offshore wind investment projects with ADMIE's development plan and its role in the design, construction and financing of the necessary grid expansion and reinforcement works.

- *Strategic investments programme and offshore wind* – Since 2011, Greece has had in place an investments facilitation programme whereby productive investments, private or public ones, foreign or domestic, which generate quantitative and qualitative results of major significance for the national economy – including other criteria on investment budget, employment creation, innovation and sustainability – are qualified by an inter-ministerial committee as strategic investments and are entitled to one-stop-shop and fast-track licensing and development procedures, including environmental and spatial planning ones as well as land expropriation related ones and dispute resolution provisions.

Part B of Law 4608/2019 on attracting strategic investments aims at modernising, improving and enhancing the scope of application and the fast-track licensing and development procedures in favour of strategic investments. These new provisions include special spatial plans on a project basis; tax benefits (as individual state aid subject to applicable EU regulations); one-stop-shop and fast-track licensing within 45 calendar days per licence, permit, opinion or approval, subject to special EU law provisions and procedures, eg public awareness on environmental matters, and overall within three years from the MoU between the strategic investor and the Minister of Finance & Development on the time

schedules and mutual obligations; cash grants for research and development (R&D) projects, and a UNCITRAL arbitration clause for disputes relating to the said MoU. On the other hand, applications for qualification under the new programme can be filed until the end of 2023.

Greece's strategic investments programme has facilitated to some extent the spatial planning and licensing of a number of investments, mainly in tourism and other commercial sectors, including some solar photovoltaic and solar thermal projects of scale and clusters of onshore wind projects. However, it has been limited to licensing aspects thereof and it does not address operating aid or other economic support aspects.

Furthermore, it captures urban or onshore (including seashore) spatial planning, but it does not capture offshore aspects and maritime spatial planning that is still pending as described above. Therefore, account taken of the end-2023 current deadline for applications under the new programme, it is yet to be considered in more detail how the new programme for strategic investments in Greece could facilitate offshore wind. A recent positive development, though, is the special benefit conferred now under the programme to innovative renewable projects, among which are offshore wind projects, in relation to their priority for grid connection over other projects using more typical renewable energy technologies, such as onshore wind and solar photovoltaic projects.

### The way forward

Experience from other jurisdictions has shown that formulating a comprehensive and appropriate legal framework for offshore wind in any given country is a challenging multi-disciplinary exercise. Structured public discussions with interested investors and stakeholders are ongoing in Greece, and have been for the last couple of years. Specific proposals are also being put forward for public consultation by stakeholders such as the Hellenic Wind Energy Association but also from major global offshore wind developers.

The Ministry of Environment and Energy has also announced that it will present a legislative proposal for offshore wind by mid-2021 taking into account the particularities of the Aegean Sea and international experience in offshore wind industry and technologies. We are confident that the ongoing process will result in a comprehensive legislative proposal for an offshore wind-specific framework. However, time and planning are of the essence for long-lead capital-intensive infrastructure investments such as offshore wind to materialise within a certain time schedule, eg by 2030, on legally sound and commercially sensible and therefore bankable conditions in order to pursue successfully the national and EU energy, climate and environmental policies. ■