Chambers AND PARTNERS

CHAMBERS GLOBAL PRACTICE GUIDES

Renewable Energy 2024

Definitive global law guides offering comparative analysis from top-ranked lawyers

Greece: Law and Practice & Trends and Developments

Gus J Papamichalopoulos, Antonis N Koumpias, Iakovos Koulouris and Melina Kolovetsiou
Kyriakides Georgopoulos Law Firm

GREECE

Law and Practice

Contributed by:
Gus J Papamichalopoulos, Antonis N Koumpias, Iakovos Koulouris and Melina Kolovetsiou
Kyriakides Georgopoulos Law Firm

Contents

Kyriakides Georgopoulos Law Firm (KG) dates back to the 1930s and is recognised as one of the most prestigious law firms in Greece. With over 120 highly skilled lawyers in offices in Athens and Thessaloniki, it is actively involved in the provision of legal services to high-profile Greek and international clients. The firm offers a broad range of commercially aware legal services that are precisely aligned with the business needs and objectives of its clients. Its lawyers are experts in specific practice areas, which enables them to understand their clients' objectives better and to deliver legal solutions to achieve those objectives, even in the largest and most complex transactions. KG was a pioneer in the Greek market by becoming ISO certified since 2006 and still remains one of a handful of ISO 9001 certified law firms in Greece.

Authors

Gus J Papamichalopoulos is a senior partner at Kyriakides Georgopoulos Law Firm and head of the energy infrastructure department, specialising in corporate and regulatory matters within the energy sector. He advises multinational clients on complex regulatory issues in electricity, gas, oil, and infrastructure projects, including investments in pipelines, power plants, and wind parks. Gus frequently represents key international energy companies in Greece and has a strong track record in public sector privatisation projects. His team is also highly active in energy financing, advising leading financial institutions, local banks, and private equity funds on lending, credit arrangements, and investments in major energy projects.

Antonis N Koumpias is a senior associate in the energy infrastructure department at Kyriakides Georgopoulos Law Firm, specialising in regulatory issues pertaining to the applicable framework of energy activities and, especially, renewable energy sources (RES) projects. Antonis is heavily engaged in legal due diligence assignments in the context of M&A transactions in the energy sector (domestic and cross-border) as well as in contractual work, including development services agreements (DSAs), power purchase agreements (PPAs) and contracts for securing land usage rights for the installation of RES projects.

Contributed by: Gus J Papamichalopoulos, Antonis N Koumpias, Iakovos Koulouris and Melina Kolovetsiou,
Kyriakides Georgopoulos Law Firm

Iakovos Koulouris is a senior associate in the energy infrastructure department at Kyriakides Georgopoulos Law Firm. He advises on the legal and regulatory framework governing tender procedures, as well as on the development, licensing and construction of RES projects (PVs, BESS, W/Ps, OWPs, ECs, hydropower, biogas/biomass, etc), as well as natural gas fired projects (CCGTs). Iakovos is heavily engaged in legal due diligence assignments in the context of M&A transactions in the energy sector (domestic and cross-border). His practice also focuses on the legal and regulatory framework governing the electricity markets, supply and trading of electricity and the reference tariffs of RES projects (CfDs, PPAs, etc).

Melina Kolovetsiou is an associate in the energy infrastructure department at Kyriakides Georgopoulos Law Firm. Her practice focuses on regulatory issues pertaining to the applicable framework of energy activities with special focus on licensing/permitting issues related to electricity generation from renewable energy sources (RES) projects. Melina has been engaged with numerous mandates on energy issues and in legal due diligence assignments in the context of M&A transactions in the energy sector.

KYRIAKIDES GEORGOPOULOS
Law Firm

28, Dimitriou Soutsou
GR 115 21
Athens
Greece

Tel: +30 210 817 1500
Fax: +30 210 685 6657-8
Email: info@kglawfirm.gr
Web: www.kglawfirm.gr

KYRIAKIDES GEORGOPOULOS
Law Firm

Contributed by: Gus J Papamichalopoulos, Antonis N Koumpias, Iakovos Koulouris and Melina Kolovetsiou,
Kyriakides Georgopoulos Law Firm

1. Overview

1.1 Energy Transition

The energy transition in Greece is progressing rapidly, with ambitious targets set for 2030 in the National Energy and Climate Plan (NECP), which is currently under public consultation. The country aims to increase the share of renewable energy sources (RES) in its final energy consumption to 45% and achieve an 80% share of RES in electricity generation by 2030. This goal will be achieved by further investing in solar, wind (including offshore wind parks), and hydropower projects, with over 12 GW of additional capacity planned by 2030. Greece is heavily promoting standalone battery storage systems (BESS) through state aid mechanisms to address grid congestion issues and the intermittency of RES production, aiming to support the deployment of green hydrogen for sectors like heavy transport, shipping, and industry. New natural gas pipelines are already hydrogen-ready. Lastly, lignite power plants are currently in a phase-out process so as to be completely decommissioned by 2028.

Energy efficiency is a key objective according to the NECP, while the share of renewables in heating and cooling is targeted to reach 47%. The participation of RES in the transportation sector is also expected to increase to 32% (from 19%). In addition, there is a strong focus on the shift toward electric vehicles and infrastructure in order to achieve the goal of 100% electric mobility for passenger cars by 2030.

1.2 Renewable Energy Technologies

In Greece, the most dominant renewable energy technologies are wind and solar power, which together dominate the country's renewable energy landscape. By 2022, wind energy accounted for 43.9% of the installed capacity in the interconnected system, while solar PV grew to 51.3%. This marks a significant increase from previous years, driven by the rapid expansion of solar installations and the country's favourable climate conditions.

Other renewable sources play smaller but notable roles, providing diversity to the country's renewable energy mix. Small hydropower contributed 679 GWh in 2021, while biogas and biomass facilities produced 448 GWh. Combined heat and power (CHP) units also produced 215 GWh in 2021, based on data published by the Operator of RES and Guarantees of Origin (DAPEEP).

Greece is also exploring emerging technologies like green hydrogen, which is expected to become a significant part of the energy mix in the coming years.

1.3 Renewable Energy Market and Recent Developments

Over the past 12 months, investment in RES has continued to rise, driven by the ambitious goals set by the NECP. Greece's appeal for renewable energy investments has seen a significant boost, reaching a historic high by ranking 19th in the Renewable Energy Country Attractiveness Index (RECAI). More specifically:

- developments have occurred in the establishment of the regulatory framework for the installation of offshore wind parks (OWPs) in specifically set seabeds, with the issuance of the Strategic Environmental Impact Assessment Study for OWPs, in September 2023, even though the process has been delayed due to the bureaucratic (but necessary) public consultation process; and
- the issue of grid access is a key factor considered by investors due to the limited electri-

cal space in the transmission system. The framework governing the priority rules for grid connection underwent significant changes in March 2024, through the introduction of "absolute priority" project groups.

2. Legal and Regulatory Regime

2.1 Governing Law and Upcoming Changes

Under the applicable framework, there are numerous administrative regulations governing the development, construction, commissioning and operation of power plants with the use of renewable energy sources (eg, wind, photovoltaic, hydro, biomass, etc). What follows are the major acts of the legal framework which governs the licensing and operation of RES projects.

- RES Law (Law 3468/2006), as amended and in force, which continues to provide the broad procedural framework for the licensing of RES power plants.
- Energy Law (Law 4001/2011), which implemented EU's Third Energy Package.
- New RES Support Law (Law 4414/2016), which introduced a new support scheme which promotes the gradual integration and participation of the RES/CHP Projects in the mechanisms of the wholesale electricity market.
- Target Model Law (Law 4425/2016), which introduced the general framework of the new operating model of the wholesale electricity market.
- Phase A RES Licensing Framework (Law 4685/2020), which introduced important amendments for the simplification of the process for the issuance, renewal and amendment of an Environmental Licence and updated Phase A of the licensing process for RES projects.
- Phase B RES Licensing Framework (Law 4951/2022), which simplified the licensing process for RES projects, which includes the administrative streamlines to be observed by RES producers after they submit an application to the competent Grid Operator for securing grid connection.

A number of secondary legislative acts have been issued by virtue of the above-mentioned legislation in order to regulate all aspects relating to the licensing of power plants, as well as the technical and commercial details relating to the structure and operation of the domestic electricity market.

As far as imminent new legislation is concerned, a new draft bill has been put into public consultation regarding the establishment of new provisions which concern:

- the licensing process of floating PVs;
- the addition of storage systems to existing RES projects;
- the increase in the capacity limit for projects applying to IPTO for the issuance of a Connection Terms Offer, raising it from 8 MW to 10 MW;
- an increase in the power absorption margin by 10 MW per substation, in addition to the existing margin; and
- priority of certain applications for the issuance of Connection Terms Offers for the installation of BESS.

2.2 Regulating Authorities

The agencies, government bodies and institutions which regulate the Greek RES market are the following.

- The Ministry of Environment and Energy (MEE), which is principally responsible for the formulation and implementation of Greece's energy policy vis-à-vis its international and community obligations.
- The Regulatory Authority for Waste, Energy and Water (RAWEW), which is the independent authority that promotes and safeguards the liberalisation of the Greek electricity and natural gas markets, supervises and monitors the operation of all sectors of the energy market and advises the competent authorities on the necessary changes to be made to secure compliance with competition rules and consumer protection. RAWEW acts also as the primary authority responsible for ensuring energy supply security, as well as for issuing, modifying, and revoking licences awarded for the exercise of all energy activities. RAWEW's responsibilities also extend to:
  (a) the approval of reference tariffs;
  (b) third-party access exemptions; and
  (c) certification of TSO and DSO.
- The Hellenic Hydrocarbons and Energy Resources Management Company (HEREMA), established by virtue of Article 145 of the Energy Law, which is the competent licensing authority and the main stakeholder with regards to the development of Offshore Wind Parks (OWPs). HEREMA is the authority mandated to issue Exploration Licences for OWPs; on such basis, it is entitled to request clarifications or additional documentation during the application process and has the right to reject an application in case it considers that the applicant does not satisfy the criteria set out in the applicable framework. In addition, HEREMA is entitled to rescind an Exploration Licence if it considers that its holder does not satisfy the requirements set by the applicable law.

2.3 Regulated Activities

Under Greek law, renewable energy is defined as energy derived from non-fossil, renewable sources, namely:

- wind energy and solar energy;
- geothermal energy;
- environmental energy, which refers to the natural thermal energy stored in the air, surface water, or underwater;
- tidal energy and wave energy;
- hydroelectric energy;
- biomass energy; and
- energy from gas, such as biogas.

The key licences applicable to all types of RES projects are listed below.

- Producer's Certificate or Special Projects' Certificate. A Special Project's Certificate is issued for specific categories of projects including, inter alia:
  (a) combined heat and power (CHP) stations, with an installed capacity or maximum production capacity exceeding 35 MW;
  (b) geothermal energy stations;
  (c) OWPs;
  (d) wind park clusters of a total capacity greater than 150 MW;
  (e) RES and CHP plants with the ability to store electricity absorbed from the grid.
- Environmental Licence – ie, Environmental Terms Approval or Standard Environmental Commitments.
- Installation Licence, which authorises the beneficiary to proceed with the installation of the RES project.
- Operation Licence, issued following completion of a RES project's works (including interconnection infrastructure) and its energisation, authorising the RES project to begin

generating and injecting electricity into the grid.

2.4 Ownership and Transfer of Control

According to the applicable law, any natural or legal person, through their participation in management, directly or indirectly or as a shareholder, partner, or member of a legal entity with any percentage of ownership, is not allowed to conclude an operating aid agreement without participating in RES Tenders, provided that the natural or legal person owns two projects of the same technology with an operating agreement without participating in RES Tenders, and these RES technologies are eligible to participate in RES Tenders.

As regards restrictions on transfer of RES assets, in principle, the applicable legislation allows the transfer of RES projects, subject to certain limitations governing the transfer of small-scale/exempted projects, which cannot be transferred prior to the execution of the Grid Connection Agreement.

2.5 Market Access and Foreign Investment

In principle, the applicable legislation does not restrict the access to foreign investment in the renewable energy market, provided that the interested party:

- has been legally incorporated based in a member state of the European Union (EU), the European Economic Area (EEA), the Energy Community, or a third country which has executed a bilateral agreement with Greece or the EU; or
- has established a branch in Greece.

In addition, certain limitations apply for the purchase of real estate by foreigners in border or non-border areas of Greece. In particular, any transaction concerning the establishment of any real or contractual right on real estate located in border areas, by individuals or legal entities with nationality or registered office outside the member states of the EU, is prohibited. This prohibition also applies to the transfer of shares or the change in the partners of companies of any form that own real estate in these areas.

Even though the law imposes restrictions, an exemption from these restrictions is possible through a special procedure, provided that the applicant specifies the intended use of the property, and the application is approved by the relevant authorities.

3. Production/Generation

3.1 Electricity

Further to the streamlining of the licensing procedures for RES projects by virtue of the New RES Law, Laws No 4685/2020 and 4951/2022 introduced additional measures to further expedite and simplify the licensing workstreams for RES projects, the latter being the first initiative of the state in its recent endeavour to simplify the applicable licensing process and ensure that the ambitious RES penetration targets are met. Phase B Licensing Framework also introduced the possibility of integrating storage solutions to RES technologies.

Regarding the licences required by the framework, please refer to **2.3 Regulated Activities**.

In order to achieve greater cost-effectiveness and to incentivise better market integration of RES production, the state replaced the previous guaranteed feed-in-tariff (FiT) scheme, which provided electricity producers from RES a guar-

anteed sale price for the produced electricity, with a sliding Feed-in Premium (FiP) scheme, in compliance with the recent European directives and principles relating to state aid in the energy sector for the period 2014 to 2020 and, consequently, 2021 to 2025 (EEAG). The full implementation of the Target Model will entail operating costs to RES producers such as clearance and balancing and non-compliance charges, hence the state endeavours to promote green PPAs for commercial and industrial participants.

Key market players:

- the Public Power Corporation (PPC) is the main electricity producer and supplier in Greece;
- the Hellenic Distribution Network Operator (DSO or HEDNO) (ie, DEDDIE). The DSO is responsible for all activities relating to the maintenance and development of the electricity distribution network, as well as for ensuring transparent and impartial network access to consumers and all users in general;
- the Independent Transmission Operator (IPTO) (ie, ADMIE), and Transmission System Operator (TSO) is the owner and operator of the High-Voltage Transmission System (the "System") and accordingly is responsible for its operation, exploitation, development and maintenance, as well as for the operation of the balancing market;
- the Operator of Renewable Energy Sources and Guarantees of Origin SA (DAPEEP) is the RES operator. The RES operator is responsible for the operation of RES and Guarantees of Origin (GOs); and
- the Hellenic Energy Exchange SA (HEnEx) was established in the context of the reform of the Greek energy market. HEnEx is responsible for the administration and operation of the day-ahead market, the intraday market, and the energy financial derivatives market.

With regards to the competent regulatory authorities, please refer to **2.2 Regulating Authorities**.

3.2 Gas

The currently applicable legal framework in Greece provides for electricity production from biogas power plants. The applicable technology is based on the anaerobic decomposition of organic matter and the production of biogas, which is then utilised for the generation of electricity. The licensing process and the interconnection of the biogas projects with the Grid (Network or System) is governed by the legal and regulatory framework for RES projects.

Currently, approximately 80 biogas power plants are in the operation phase with an aggregate capacity of 120 MWe and biogas fuel production of 1,4 TWh/year. However, there is no production of biogas and/or biomethane in Greece yet.

There has been no legal and regulatory framework governing the production, trade and supply of biogas and biomethane in Greece. Currently, biogas production is exclusively utilised for electricity generation. Approximately 38 biogas power plants in the operation phase are located in close proximity to the natural gas pipelines of the National Natural Gas Transmission System (NNGTS), meaning that following the introduction of the relevant framework, the conversion to power plants producing biomethane will be feasible, with a production of approximately 0,9 TWh/year.

3.3 Heat

The Law on Geothermal Energy (4602/2019) governs the terms and conditions for granting exploration, production and/or management

licences of geothermal potential. Furthermore, the applicable framework provides a coherent terminology and determines the temperature cutoffs by virtue of which the classification of geothermal fields is performed.

The main geothermal fields are located in the following areas:

- Milos – Kimolos;
- the island of Nisiros;
- the island of Lesvos;
- the peninsula of Methana; and
- Areas of Geothermal Interest in the Regional Unit of Serres, Region of Eastern Macedonia and Thrace.

The main provisions of the legal framework are the following:

- the granting of exploration, exploitation and management rights shall be realised through a tendering procedure;
- geothermal fields are classified as of Local Interest (temperature 30° < T < 90°C) and National Interest (temperature T > 90°C), following the formal acceptance of exploration results;
- the MEE is the competent authority for the exploration, exploitation and management rights in geothermal fields of National Interest while the Decentralised Administration in those of Local Interest (temperature 30–90°C) and Areas of Geothermal Interest;
- the duration of the lease of the exploration right in unexplored areas is set to five years with a possible extension period of two additional years;
- the duration of the lease of the exploration right in geothermal fields of Local Interest and Areas of Geothermal Interest is up to three years with a possible extension period of one additional year;
- the lease period for the management and exploitation (production) right of the geothermal fields of both National and Local Interest is up to 30 years, which can be extended to 20 additional years;
- exploration and exploitation may co-exist. If geothermal potential has been identified, a pilot exploitation can take place during the exploration stage (with the payment of the relevant lease);
- the new term “Areas of Geothermal Interest” relates to wider areas with indications of geothermal potential of temperatures up to 90°C; and
- the right of exploitation (production) is disassociated from the sustainability management right.

The secondary legislation has been regulated by virtue of:

- the Geothermal Works Rulebook, which governs the works related to exploration and exploitation of geothermal fields;
- the Ministerial Decision YPEN/DAP/25257/126/2022 governing the terms and conditions related to the tendering process for the lease of exploration, exploitation and management of Geothermal Fields of National Interest and the non-classified areas; and
- the Ministerial Decision YPEN/DAP/93462/979/2023.

No geothermal projects are currently in the operation phase. A geothermal field located on Milos island is currently in the exploration phase by PPCR and is expected to host a 5MW RES station by late 2025, provided that the relevant preliminary studies are confirmed.

3.4 Hydrogen and Other Biofuels and Renewables

Greece has set an ambitious target for 2030 and beyond, within the framework of the new National Energy and Climate Plan (NECP), while many Greek and foreign companies are considering their options in relation to potential investment opportunities. The NECP aims at the installation of 1.7 GW of electrolysers by 2030, which translates to 135,000 tons of green hydrogen production. The production of green hydrogen will be utilised for the production of biofuels, mainly synthetic kerosene and synthetic methanol.

According to the updated version of the NECP, which was published by the MEE in August 2024, and will be soon released to public consultation phase, the goal for the production of green hydrogen is set to 1 TWh annually by 2030. The above production model has been structured on the assumption that the production of 1 TWh of green hydrogen requires 1,5 TWh of RES generation.

On the infrastructure front, the MEE and the National Natural Gas System Operator (DESFA) state that the existing gas infrastructure will undergo only minor upgrades to become "hydrogen-ready", while all new pipelines constructed by DESFA are capable of supporting hydrogen transmission. Furthermore, major international pipelines, such as the Trans Adriatic Pipeline (TAP) and the Greece-Bulgaria Interconnector (IGB) are already capable of handling hydrogen quantities.

A comprehensive regulatory roadmap for the licensing of green hydrogen projects as well as of a set of policies for the financial support of these projects is yet to be established, even though the ongoing normative debate on the pertinent framework between government officials, regulators, grid operators and market players is very dynamic. Greece is following the green hydrogen trend, however without any tangible legislative proposals so far for regulating and promoting the industry.

With respect to biofuels, initiatives and development of the biofuel market began in Greece in 2005 with biodiesel being the only biofuel produced in the country. Greece has also ratified relevant EU legislation (Biofuel Directive, recast by virtue of RED II Directive) into national law, requiring the issuance of a licence in order to perform certain activities, such as biofuel distribution. Biofuel distributors must first obtain a biofuel production licence or execute a biofuel purchase agreement.

3.5 Local and Domestic Production

The currently applicable framework defines net-billing, virtual net-billing, net-metering and virtual net-metering solutions as mechanisms where the energy generated is offset with the energy consumed.

Net-metering is an electricity billing mechanism that allows consumers to offset the cost of electricity consumption with the electricity generated by a power plant. Self-consumers, both on an individual basis and through RES Aggregation, are eligible to:

- auto-produce energy, develop storage solutions and sell the surplus of energy;
- establish and operate storage systems integrated within RES projects;
- be awarded with a reference tariff for the energy produced and injected into the grid (System or Network); and
- install a power plant being solely intended for its own consumption, without a requirement to inject energy into the grid.

With regards to individual or collective self-consumers developing net-metering solutions, the maximum capacity is set to:

- 10,8 kW per consumption unit for household use; and
- 100 kW for legal entities of private or public law per consumption unit. It shall be noted that under the previously applicable legal framework, the maximum capacity for net-metering solutions was set to 3 MW.

The RES projects can be developed and be installed by individuals or legal entities of public or private law which possess ownership or lawful utilisation rights over the premises in which the generating plant is installed, including but not limited to ownership, leasing, or other forms of concession, having obtained written consent from the property owner.

The right to proceed with the development of virtual net-metering solutions is extended to legal entities of public or private law that pursue objectives of public interest or other purposes that serve the general or local welfare. Holders of virtual net-metering solutions must either possess ownership or lawful utilisation rights over the premises where the generating station is installed, including but not limited to ownership, leasing, or other forms of authorised concession, and have obtained written consent from the property owner.

Regarding net-billing solutions, the holder of the power plant may have ownership rights, or the power plant may be held by a third-party or managed by a third-party.

The framework for self-consumption units installed on rooftops provides for the award of subsidies to developers of self-consumption projects under the Ministerial Decision YPEN/DAPEEK/36988/970. It provides that RES projects are eligible to receive investment support, provided that the holder of same has secured ownership rights or lawful use of the installation site. Rooftop self-consumption units can be installed in shared spaces, provided that a consent is granted by the assembly of the building's owners in accordance with the apartment building regulation.

4. Infrastructure: Transportation and Storage

4.1 Electricity

Based on the currently applicable legal framework and infrastructure, electricity generated from RES is exclusively injected into the Distribution Network or the System. With regards to grid connection of RES projects, the rule of thumb is that:

- RES projects up to a capacity of 8 MW submit an application for the issuance of a Connection Terms Offer (CTO) to DSO; and
- RES projects with a capacity greater than 8 MW are required to submit a CTO application to IPTO.

Key parties:

- based on the provisions of the Energy Law and the Distribution Network Management and Operation Code, DSO is responsible for all activities relating to the maintenance and development of the electricity distribution network, as well as for ensuring transparent and impartial network access to consumers and all users in general; and
- based on the provisions of the Energy Law and the System Management and Operation

Code, IPTO is the owner and operator of the System and is responsible for its operation, exploitation, development and maintenance.

The ownership, and the transmission and distribution activities of the electricity sector, can only be performed with the granting of a relevant licence and certification process, as per the Energy Law.

Battery Storage

Currently in Greece, approximately 699 MW of pumped hydro storage is in the operation phase. With regards to BESS, the framework reflects the licensing process for BESS, including the issuance of:

- a Storage Licence;
- an Environmental Licence;
- a Connection Terms Offer (CTO);
- a Grid Connection Agreement;
- an Operating Aid Agreement (following participation in the BESS Tenders or direct participation in the Electricity Markets);
- an Installation Licence; and
- an Operation Licence.

By virtue of Law 4920/2022, the legal basis has been set for the award of investment grants and Operating Aid support to BESS, subject to the European Commission's prior approval of such aid and for the adoption of any further implementing measures.

Greece notified to the European Commission in June 2022 its intention to establish a scheme in order to provide support for the development of BESS in Greece. Following the approval of the European Commission in September 2022 (Reference: State Aid SA.64736), the Ministerial Decision governing the BESS Tenders was finally issued in May 2023 and was amended in November 2023.

The selection of BESS will be made through three successive BESS Tenders, which will be conducted for an aggregate capacity of 1,000 MW projects. BESS selected will receive CTOs with priority and will be awarded operating aid and investment grant support.

The first (411,79 MW tendered) and second (299,77 MW tendered) BESS Tenders were conducted for BESS developed throughout the country, without location-specific requirements, while the third Tender will be conducted on the grounds of a location-specific criterion – ie, for BESS intended to be installed exclusively in the lignite phase-out zones (Regional Units of Kozani and Florina, Region of West Macedonia, as well as in the Municipality of Megalopolis, Region of Peloponnese).

BESS projects selected have received CTOs with priority, while the holders of the projects have undertaken the obligation to set their projects into commercial operation by 31 December 2025.

The Ministerial Decision governing the third Tender has been amended by virtue of a new Ministerial Decision dated 18 September 2024, providing for the specifics of the tender process for BESS projects of an aggregate capacity of 200 MW with a location specific area – ie, to be installed within the lignite phase-out areas of West Macedonia and Megalopolis in Peloponnese, which will be required to enter into commercial operation at the latest by 30 April 2026.

4.2 Intermittency, Grid Congestion and Flexibility

Extensive curtailments first appeared in 2023 in an effort to counter grid congestion and safeguard the stability and fail-safe operation of the System. Since spring 2024, curtailments are part of system management on low demand, where there have been situations of even complete curtailment of controlled RES production.

There is no rational way to completely avoid curtailments as the move is made to increasingly higher levels of RES penetration, and the existence of curtailments is part of the optimal long-term development of a renewables-based production system and should be taken into account in the planning and business plans of new investments.

In principle, there is a distinction between the following categories of curtailments, depending on the reasons for them.

- Curtailments due to supply-demand imbalance, which take place in the context of the day-to-day market at the level of the bidding zone and, secondarily, in the context of the balancing market. The supply-demand imbalance will be, by far, the dominant cause of curtailments in the conditions of high RES penetration.
- Operational curtailments on RES and storage projects.

The problem of insufficient electrical space was addressed by two main categories of curtailments:

- static curtailments, which permanently limit the power that can be injected into the grid; and
- dynamic curtailments, which are more complex because their enforcement depends on the prevailing congestion conditions at each point in the grid, which in turn are determined by the available RES production.

It is also worth bearing in mind that in the spirit of EU Regulation 943/2019, RES curtailments in the context of re-dispatch are allowed, instead of infrastructure investments, if proven to be the best option and under strict regulatory control, while at the same time there must be grid development planning to remove congestion.

- Curtailments due to congestion on local networks, due to the exhaustion of their transmission capacity, but also for other technical reasons, these modify the production of projects planned by the markets and constitute a redistribution.

Based on the above, the state is called upon to take careful steps to formulate the framework for permanently and effectively addressing the above challenges, for which there are no obvious and established solutions. Successfully addressing issues such as curtailment imposition and the allocation of electricity space will largely affect the successful implementation of national targets regarding the development of the energy mix in the direction set out in the NECP.

With regards to alternative off-grid solutions that could mitigate the risk of imposition of curtailments on RES production, Wired Power Purchase Agreements (“Wired PPAs”) (also called physical on-site PPAs) could propose a solution, provided that the framework and the grid infrastructure allow the execution of such agreement.

This is in essence a behind-the-meter power purchase agreement. The generator/seller delivers energy directly to the off-taker via the consumer's site network and as such there is no use of the distribution or transmission system. Note that this type of PPA has not been implemented in Greece yet and its implementation in the future is complex and as such highly remote.

4.3 Gas

The transportation and storage of biofuels from renewable sources is governed by Laws 3054/2002, 3423/2005 and 3769/2009.

The holder of a Biofuel Supply Licence (see **5.2 Gas**) is required to develop infrastructure for the storage of biofuels and proceed with the licensing thereof – ie, the issuance of an Installation and Operation Licence.

As per the currently applicable framework, the transportation and distribution of biofuels is exclusively performed through road transportation.

Following the introduction of the new legal framework governing the production of biogas and biomethane, the currently applicable legal and regulatory framework governing the transportation and supply of biofuels is expected to be amended.

4.4 Heat

The currently applicable framework in Greece does not provide for the transportation and storage of heat from renewable sources yet. The same applies to the heat grid infrastructure, which has not been developed in Greece.

4.5 Hydrogen and Other Biofuels and Renewables

The introduction of the legal framework governing the production of hydrogen is currently pending, as is the secondary legislation governing the transportation and storage of hydrogen.

With regards to the "hydrogen-ready" infrastructure, please refer to **3.4 Hydrogen and Other Biofuels and Renewables**.

DESFA (the National Natural Gas System Operator) has already established partnerships with various hydrogen projects, both on hydrogen production in the country and hydrogen infrastructure development by other EU TSOs, TAP, Bulgatransgaz, Snam and North Macedonia NER amongst the more relevant.

With regards to biofuels, which are not produced from RES, such as biodiesel, transportation and storage is governed by Laws 3054/2002 and 3423/2005. The Technical Regulation introduced in 2013 provides for the technical specifications for the distribution and storage of biodiesel.

5. Trade and Supply

5.1 Electricity

Within the framework of the Target Model Law, the restructuring of the wholesale electricity market sets out the basic rules and principles for the transition from the mandatory pool model to the European Target Model.

As a result of the above legislative initiatives, the Electricity Markets consist of the following pillars.

- The Day-Ahead Market, in which the participants submit electricity transaction orders,

with the obligation of a next day physical delivery. The operation of the Day-Ahead Market is administered by HEnEx.
- The Intra-Day Market, in which the participants submit Electricity Transaction Orders, for physical delivery on the Fulfilment Day, after the expiration of the deadline for Transactions Orders in the Day-Ahead market. The operation of the Day-Ahead and the Intra-Day Market is administered by HEnEx, pursuant to the provisions of the HEnEx Spot Trading Rulebook, while the clearing and cash settlement of the positions that arise in this market is monitored by EnExClear in accordance with the Clearing Rulebook for Transactions on DAM & IDM.
- The Balancing Market, which consists of (i) the Capacity Balancing Market; (ii) the Energy Balancing Market; and (iii) the procedures for the clearing of imbalances (Imbalance Settlement). The Balancing Market is administered by the IPTO, as the sole responsible body for the balancing of the system, whereas the clearing is under the responsibility of the EnExClear. The operation of the Balancing Market is monitored in accordance with the Balancing Market Rulebook, while the clearing and settlement of the positions that arise in this market is regulated by the Clearing Rulebook for Positions on Balancing Market.

The above-mentioned Day-Ahead, Intra-Day and Balancing Markets (the "Wholesale Electricity Markets") entered into operation on 1 November 2020.

- The Financial Energy Markets in which energy financial instruments are traded, as these are defined in Law 4514/2018 transposing the MiFID II Directive in the Greek national law. This market is administered by HEnEx, whereas the clearing is under the responsibility of ATHEXClear, which is a company member of the Hellenic Exchanges Group (HELEX) assuming the role of the Central Counterparty. The HEnEx's Derivatives Market entered into operation on 23 March 2020 and is regulated in accordance with the Rulebook for Clearing Derivatives Transactions.

With regards to electricity trading and supply activities, the issuance of an Electricity Trading and/or Supply Licence is regulated by the Energy Law and the provisions of the Electricity Licensing Regulation dated 2012. The Energy Law and the Electricity Licensing Regulation differentiate the criteria for the issuance of the above licences, inter alia, on the basis of the type of licence requested and the legal form of the applicant entity.

Legal entities based within EU, member states of the EEA, members of the Energy Community and/or states that have executed bilateral treaties either with the EU or with Greece, are eligible to obtain an Electricity Trading and/or Supply Licence. Alternatively, an interested entity can establish a branch in Greece. An entity's engagement in the activities of electricity supply or trading in another EU member state entails the application of more favourable market entry rules.

5.2 Gas

The currently applicable framework provides for the issuance of a Biofuels Supply Licence. The requirements for the issuance of the above licence are the following:

- the issuance of an Operation Licence for a biofuel production unit; or
- the execution of a purchase agreement with a counterparty holding a Trading Licence for biofuels.

The competent licensing authority is the Directorate of Organisation and Supervision of the petroleum-related market of the Ministry of Environment and Energy.

The holder of the supply licence is required to develop infrastructure for the storage of biofuels and proceed with the licensing thereof – ie, the issuance of an Installation and Operation Licence.

5.3 Heat

The regulatory framework governing the trade and supply of heat from RES has not been developed in Greece yet.

5.4 Hydrogen and Other Biofuels and Renewables

The framework governing the market for the trade and supply of hydrogen has not been introduced yet. However, the recently issued joint Ministerial Decision No 118664/2023 of the Minister of Environment and Energy and the Minister of Transport and Infrastructure defines the terms and conditions as well as the technical specifications for the installation of hydrogen fuel stations for road transport. The Ministerial Decision governs the terms and conditions for the licensing process related to hydrogen fuel stations– ie, the issuance of the Installation Licence and the Operation Licence.

Regarding the trade and supply of biofuels not produced from RES, such as biodiesel, the requirements for the issuance of a Biofuel Supply and/or Trading Licence have been determined by virtue of Law 3054/2002.

5.5 Renewable Energy Certificates and (Corporate) Power Purchase Agreements

The issuance, supervision, minimum content, revocation and trading of GOs ("Guarantees of Origin") is regulated by the Phase B Licensing Framework. RAWEW has been authorised to issue the Regulation for GO Auctions, which has been issued by virtue of RAWEW's Decision E-79/2024.

Through the GO auction process, conducted by DAPEEP, additional cash flows will be generated in favour of the RES Special Account, which is the funding source for RES producers that receive operational aid. The rationale of the provision is to ensure that the market value of the GOs of RES producers that receive operational aid are appropriately taken into account in the relevant support scheme, in accordance with the provisions of Directive (EU) 2018/2001.

Power Purchase Agreements (PPAs) have been a standard market practice in Greece since the end of 2021, mostly as a mechanism introduced to provide grid connection priority to RES producers which have elected to proceed with the execution of a PPA instead of the participation in RES Tenders, as a prerequisite for the execution of Operating Aid Agreements.

Based on track record, the following types of PPAs have been executed in Greece.

- Physical Delivery PPAs – direct delivery of power generated from the seller/generator to the buyer at a fixed price for an estimated annual volume.
- Virtual PPAs – no physical delivery of power to the buyer, a "strike price" agreement in the form of a Contract for Differences (CfD).
- Merchant PPAs – the PPAs entered into between the generator/seller and a utility/energy trader acting as the corporate buyer. A merchant PPA can also be completed between a corporate entity and a utility/energy trader working as a supplier.

As a standard practice, the PPAs in Greece follow the pricing structure of pay-as-produced and have a minimum validity period of eight years, starting from the electrification/commercial operation of the RES project. Usually, for project financing purposes, PPAs in Greece have a term of ten to fifteen years. Overall, PPAs executed at EU level in 2023 correspond to 16,2 GW of RES projects; Greece ranked fifth as the PPAs executed in 2023 correspond to 0,95 GW of RES projects.

6. Renewable Energy Projects

6.1 Onshore Project Development

Overview of Onshore Project Development

In Greece, renewable energy production, particularly from wind and solar, has experienced significant growth over the past few years. Notably, in 2022, investments in PVs experienced growth of 72%. In 2022, total energy production from renewables grew to 19.22 TWh. Wind and solar dominated the energy mix, representing 55% and 36.9%, respectively, of total renewable capacity in 2022. RES projects that are currently in advanced development stages (ie, have received access to the grid) but were not energised until July 2024, amount to 14.4 GW of installed capacity. Integrating these projects in the energy system will require investment in grid infrastructure and deployment of utility scale BESS.

Key Stakeholders

The key agencies in the renewable energy market are listed below:

- Public Power Corporation (PPC);
- DAPEEP – manages the provision of operating aid to eligible projects and the Special RES Account; and
- IPTO.

Key Legal Workstreams

The key legal workstreams related to the development of RES projects in Greece involve three separate legal workstreams that need to be followed and particularly in parallel to one another or as a prerequisite to one another, as follows.

- Permitting Phase A, which includes two separate streams:
  (a) pre-environmental permitting – ie, the issuance of a Producer's Certificate from RAWEW; and
  (b) environmental permitting.
- Permitting Phase B, governed by the recently introduced Phase B RES Licensing Framework, which involves securing access to the grid and obtaining the permits relating to the installation and operation phases of a project. Please refer to **2.3 Regulated Activities** as regards the key licences to be obtained by project owners.
- Securing land rights and depending on the type of land used for the corresponding project and its interconnection works, securing public land rights or private land rights or both.

In particular:

- land rights over private land are secured by virtue of a private agreement or notarial deeds;
- land rights over state-owned (non-forest) land are obtained by virtue of a concession act issued by the competent agency;
- land rights on real estate owned by municipalities are secured through a notarial deed following the performance of a public land auction; and

- land rights over forest land are secured through the issuance of Intervention Permits, followed by the issuance of Installation Protocols.

EPC and O&M Contracting Standards

EPCs

The dominant structure for EPC contracting in Greece follows a traditional EPC approach with full wrap, though contracts involving free-issued equipment are also prevalent. Liquidated damages (LDs) are widely used to cover performance issues, including delays in commissioning, reliability, performance, and capacity. Typically, LD caps range from 10 to 15% of the contract price, and these amounts are calculated based on the overall contract price.

The defect liability period in Greece usually extends for two years from the Provisional Acceptance Certificate. Additionally, latent defect liability under Greek law lasts for ten years beyond the initial defect liability period. Contracts that provide a full wrap are favoured, with mechanisms such as the assignment of equipment warranties, such as inverter warranties, offering additional protections. Security packages typically include bank guarantees such as advance payment guarantees, performance guarantees (usually 10% of the contract price), and warranty guarantees (5%).

O&M

O&M agreements for renewable energy projects in Greece typically extend beyond the warranty period for up to ten years, often aligning with the loan duration or overall project lifecycle. Availability guarantees are the standard in O&M agreements, ensuring the project maintains a certain level of uptime. Bonding requirements usually include performance bonds, which are typically set at 50% of the contract price and renewed annually throughout the duration of the O&M contract.

6.2 Offshore Project Development

Greece is in the early stages of developing its offshore renewable energy market. In July 2022, the updated legal framework governing offshore PVs entered into force, while a few weeks later, the legal framework for offshore wind parks (OWPs) was established.

As offshore projects have not yet reached advanced development stages, the particularities of the relevant EPC, O&M and other contracts have not yet been formulated. However, it is anticipated that the principles mentioned in **6.1 Onshore Project Development** will also apply hereto.

Offshore PVs

The Phase B Licensing Framework introduced a simplified process for the fast-track development of up to ten "pilot" offshore PVs (OPVs) – ie, PV systems of an installed capacity of 0.5–1 MW consisting of:

- floating photovoltaic installations that are developed in marine areas and anchored to the seabed and/or to land;
- a building structure with the necessary electromechanical equipment, the substation and installation works, situated on land; or
- any accompanying infrastructure required to access the project and to ensure its safe operation.

OPVs are issued with a single licence/certificate permitting their installation and operation, upon prior application of the interested investor. The licensing streamlines pertaining to conventional PVs with an installed capacity greater than 1 MW

(see **6.1 Onshore Project Development**) are not applicable to OPVs.

Furthermore, the seabed and the seashore where the OPV and relevant infrastructure will be situated is secured via concession acts issued by the competent Minister for a period of 22 years.

Offshore WPs

While the market is still maturing, significant upcoming projects are expected, particularly with the establishment of the Pilot OWP Projects area in the sea region near Evros and Samothraki, with a capacity of up to 600 MW. Greece's offshore wind capacity is anticipated to expand significantly by 2030, with a focus on developing both fixed-bottom and floating OWP technologies.

Key Stakeholders

The key agencies involved in the development and licensing of OWPs are listed below:

- HEREMA plays a central role in planning and issuing licences for OWPs;
- MEE formulates and implements energy policy and oversees the process of issuing the relevant Strategic Environmental Studies and approving the appropriate seabeds for the installation of OWPs; and
- IPTO is responsible for granting project owners grid access.

Key Legal Workstreams

The regulatory framework includes several important steps:

- establishment of a National Development Programme – HEREMA prepares the OWP National Development Programme and the Strategic Environmental Impact Assessment study;
- determination of designated OWP zones – after site planning and technical studies, the designated OWP zones (ODAOWPs) are determined by a Presidential Decree. Developers can then apply for OWP Exploration Licences, valid for three years, which allow them to conduct research and technical studies;
- OWP Tenders – for projects within designated ODAOWP zones, public tenders are held to award operating aid (in the form of CfD). The lowest bidding price in euros/MWh determines the winning bid; and
- permitting – involves the issuance of the Special Projects' Certificate, Environmental Licence, CTO, Installation Licence and Operation Licence.

Community Participation

The government is highly involved in regulating and overseeing the development of OWPs, with multiple ministries and agencies playing a role in approving the national development plan, environmental studies, and licensing. Community participation is built into the process through public consultations, especially during the environmental impact assessment phases. This ensures that local communities are informed and can participate in decision-making processes regarding the location and development of OWPs.

Permits and Licensing

Developers must follow a structured process to obtain the necessary permits:

- initially, an OWP Exploration Licence is required, followed by participation in tenders; and
- successful bidders secure Operating Aid Agreements and proceed with the licensing process.

Construction and Operational Phases

Construction of OWPs in Greece involves significant preparatory work, including environmental and technical studies. The operational phase is supported by government-provided operating aid agreements, usually lasting 20 years. Special provisions apply to the development of OWPs, such as grid connection responsibilities and compliance with environmental regulations. A 2% Special OWP Fee is imposed on OWP producers, contributing to national renewable energy funding.

6.3 Project Finance

Based on Greek market precedents and subject to commercial agreement with the financiers, project financing is usually effected by financial institutions through the following two financing structures.

Corporate Finance

Corporate finance loans are structured either in a standard loan form or through the issuance of bonds subscribed by a banking institution.

In principle, the bank does not require equity injection by the shareholder, however the capital structure of the borrower is examined a priori for the purposes of loan sizing.

Regarding recourse, in case the borrower is a revenue-generating entity, the banks rely on having recourse to such revenues and the borrower's assets if a default occurs. In case the borrower is considered less creditworthy, banks seek to have recourse over the assets of the shareholders/group.

Depending on the borrower's creditworthiness, collaterals include corporate guarantees by the parent company or an "asset rich" group company or pledges of certain company assets and/or receivables. Corporate financing is flexible in terms of timing to closing and does not entail heavy transaction documentation.

Project Finance

A project finance structure without recourse (ie, without corporate guarantee) will require robust contracts securing a minimum level of revenue.

Project finance loans are structured as bond loans, disbursed gradually in accordance with the progress of the project's development.

The shareholder/sponsor of the borrower is required to inject part of the CAPEX (which may be lower than the bank's participation). Banks expect a ratio (equity/debt) within the range of 40/60, 30/70, or 20/80 depending on project cash flow profile.

Own equity is injected either in the form of capital or in the form of shareholder loans.

Project financing does not entail recourse to the shareholder and the corporate group, nevertheless limited recourse may be anticipated during the development stage in case of funding shortfalls – ie, any additional funding that may be required in order to complete the project development must be covered by own funds of the sponsor.

Project finance documentation includes separate agreements (loan agreement, accounts agreement, security agreements, etc), while it also requires due diligence on behalf of the bank.

6.4 Subsidies and Incentive Schemes

The mechanism through which state aid is granted to eligible projects is the operating aid scheme, whereby state aid is awarded to successful bidders through RES Tenders. The cur-

rent tendering cycle of 2021–2025 was approved by the EU in 2021. This scheme operates through competitive tendering processes, where various renewable energy technologies, such as wind and solar, participate in auctions to secure a reference tariff for the electricity that they inject into the grid, through FiP.

6.5 Decommissioning Requirements

After the end of a RES project's life cycle, or if for any reason it ceases to operate, the project owner must remove the installations it has placed and ensure the restoration of the installation site in accordance with the restoration plan that is drafted by the project owner. The usual timeline agreed in project agreements for decommissioning a RES power plant ranges between six and twelve months, depending on the technology and location of the project site. Greece has established a legal framework governing the recycling of PV modules since 2014, stipulating that PV panels are considered electrical equipment subject to recycling, a process managed by a certified management agency. Under this framework, a recycling fee is set by the pertinent management agency, which is incorporated in the sales invoices issued by importers of PV panels.

7. Outlook

7.1 Renewable Energy Policy Developments

Policy initiatives are expected to be undertaken by the Greek government in the following months regarding the below:

- framework for injection curtailments – a Ministerial Decision will be issued setting a framework regulating the imposition of curtailments to RES projects. An additional Ministerial Decision may be issued providing a remuneration mechanism for compensating projects that were subject to "inequitable" curtailments;
- BESS Licensing Regulation – it is anticipated that RAWEW will shortly issue the regulation for the issuance of Storage Licences; and
- ratification of OWP Programme – the OWP Programme's ratification via a Joint Ministerial Decision is anticipated within Q4 2024.

Trends and Developments

Contributed by:
Gus J Papamichalopoulos, Antonis N Koumpias, Iakovos Koulouris and Melina Kolovetsiou
Kyriakides Georgopoulos Law Firm

Kyriakides Georgopoulos Law Firm (KG) dates back to the 1930s and is recognised as one of the most prestigious law firms in Greece. With over 120 highly skilled lawyers in offices in Athens and Thessaloniki, it is actively involved in the provision of legal services to high-profile Greek and international clients. The firm offers a broad range of commercially aware legal services that are precisely aligned with the business needs and objectives of its clients. Its lawyers are experts in specific practice areas, which enables them to understand their clients' objectives better and to deliver legal solutions to achieve those objectives, even in the largest and most complex transactions. KG was a pioneer in the Greek market by becoming ISO certified since 2006 and still remains one of a handful of ISO 9001 certified law firms in Greece.

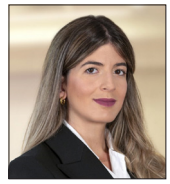
Authors

Gus J Papamichalopoulos is a senior partner at Kyriakides Georgopoulos Law Firm and head of the energy infrastructure department, specialising in corporate and regulatory matters within the energy sector. He advises multinational clients on complex regulatory issues in electricity, gas, oil, and infrastructure projects, including investments in pipelines, power plants, and wind parks. Gus frequently represents key international energy companies in Greece and has a strong track record in public sector privatisation projects. His team is also highly active in energy financing, advising leading financial institutions, local banks, and private equity funds on lending, credit arrangements, and investments in major energy projects.

Antonis N Koumpias is a senior associate in the energy infrastructure department at Kyriakides Georgopoulos Law Firm, specialising in regulatory issues pertaining to the applicable framework of energy activities and, especially, renewable energy sources (RES) projects. Antonis is heavily engaged in legal due diligence assignments in the context of M&A transactions in the energy sector (domestic and cross-border) as well as in contractual work, including development services agreements (DSAs), power purchase agreements (PPAs) and contracts for securing land usage rights for the installation of RES projects.

Contributed by: Gus J Papamichalopoulos, Antonis N Koumpias, Iakovos Koulouris and Melina Kolovetsiou,
Kyriakides Georgopoulos Law Firm

Iakovos Koulouris is a senior associate in the energy infrastructure department at Kyriakides Georgopoulos Law Firm. He advises on the legal and regulatory framework governing tender procedures, as well as on the development, licensing and construction of RES projects (PVs, BESS, W/Ps, OWPs, ECs, hydropower, biogas/biomass, etc), as well as natural gas fired projects (CCGTs). Iakovos is heavily engaged in legal due diligence assignments in the context of M&A transactions in the energy sector (domestic and cross-border). His practice also focuses on the legal and regulatory framework governing the electricity markets, supply and trading of electricity and the reference tariffs of RES projects (CfDs, PPAs, etc).



Melina Kolovetsiou is an associate in the energy infrastructure department at Kyriakides Georgopoulos Law Firm. Her practice focuses on regulatory issues pertaining to the applicable framework of energy activities with special focus on licensing/permitting issues related to electricity generation from renewable energy sources (RES) projects. Melina has been engaged with numerous mandates on energy issues and in legal due diligence assignments in the context of M&A transactions in the energy sector.

Kyriakides Georgopoulos Law Firm

28, Dimitriou Soutsou
GR 115 21
Athens
Greece

Tel: +30 210 817 1500
Fax: +30 210 685 6657-8
Email: info@kglawfirm.gr
Web: www.kglawfirm.gr

KYRIAKIDES GEORGOPOULOS
Law Firm

Contributed by: Gus J Papamichalopoulos, Antonis N Koumpias, Iakovos Koulouris and Melina Kolovetsiou,
Kyriakides Georgopoulos Law Firm

Introduction

Recent regulatory developments in Greece's renewable energy market have introduced significant institutional changes in the sector. Key initiatives include the absolute prioritisation of certain categories of renewable energy projects as regards grid access, the publication of secondary legislation for "net billing", the submission of the Draft National Development Programme for Offshore Wind Parks and considerable progress in the state aid mechanism for Battery Energy Storage System (BESS). In parallel, new environmental classification rules for wind and solar projects, measures to address congestion of the local grid through the imposition of injection curtailments by the competent operators and, lastly, the upcoming fast-track licensing incentives for the acceleration of BESS integration have contributed to the ongoing advancements in the Greek market.

Absolute Priority Groups

A legislative amendment designed to grant "absolute grid connection priority" to Renewable Energy Source (RES) projects supplying electricity to farmers and energy-intensive industries entered into force on 16 March 2024. Eligible projects will receive grid connection terms from the competent operator before any other group of RES power plants. This amendment constituted a significant shift to the rules of the game, given that as recently as August 2022, the Greek Ministry of Environment and Energy (MEE) had resolved upon the groups of RES projects which were given priority to connect to the grid, which was considered as a major policy initiative at the time (the "Grid Priority Framework"). Although the March 2024 amendment did not repeal the Grid Priority Framework, it introduced a significant exception by establishing two new categories of projects that take precedence over the previously defined priority groups.

In more detail:

- the first group of RES projects which is granted with absolute priority for the issuance of grid connection terms by the grid operator is the group of RES projects executing PPAs with suppliers that procure generated electricity to farmers (the "Agricultural PPAs"); and
- the second group of RES projects granted with absolute grid priority are RES projects with PPAs executed with electricity suppliers which procure electricity to energy-intensive industrial consumers of Annex I of the Temporary Crisis and Transition Framework (TCTF) (the "Industrial PPAs"). The procurement of the generated electricity shall be performed through a PPA signed between the supplier and the industrial customer. For both categories, the applicable law and secondary legislation provides specific eligibility criteria.

The Ministerial Decisions for the implementation of the absolute grid priority framework for eligible projects with Agricultural PPAs and Industrial PPAs were issued on 11 April 2024 and 27 August 2024 respectively.

Self-Consumption – Net Billing Framework

Since energy is a commodity sold at a fluctuating rate throughout each day under the EU Target Model, the EU has promoted the notion of the active consumer/producer (prosumer) to encourage efficient electricity consumption. In parallel, the significant drop in the cost of solar power technology, the limited grid capacity and the rising energy cost has driven a high demand for self-consumption models in recent months. On top of this momentum, the MEE published a Ministerial Decision dated 5 September 2024 (MD), establishing the regulatory framework for "net billing". Net billing introduces a compensation mechanism whereby the surplus electricity

generated by the RES project is injected into the grid and compensated at market rates.

Key features of the new framework

Any natural person or legal entity can develop a project operating under the net-billing mechanism. The project may be owned either by the prosumer, usually an energy intensive industry, or a third party authorised to manage, operate and maintain the facility. In the latter case, the third party is not classified as a self-consumer under the applicable law and the MD.

The installed capacity of each RES project can be up to 100% of the agreed capacity of the consumption facility.

The MD distinguishes between net billing and virtual net billing. In net billing, the RES project must be physically connected to the consumption facility of the beneficiary, whereas in virtual net billing at least one of the consumption facilities must not be physically interconnected with the RES project's generating units.

The self-consumer must hold ownership of the project site or secure use rights therein by virtue of a lease/concession of use agreement, in which the owner of the site must consent to the installation of the project.

In both net billing and virtual net billing, the surplus energy injected into the grid is compensated at the market rate. The self-consumer has the right to regulate the income deriving from the operation of the project's surplus generation by virtue of a bilateral power purchase agreement (PPA) signed with an off-taker or through securing operating aid (in principle via its participation in a tender).

The process of netting the generated electricity with the consumption of the beneficiary is regulated via a (virtual) net billing agreement, concluded by the self-consumer and the electricity supplier of their choice.

BESS Tenders

Under Greek law, BESS projects that satisfy specific criteria are eligible to receive investment and operating aid by participating in the pertinent tendering mechanism applicable in the Greek market ("BESS Tenders"). The framework for BESS Tenders was determined by virtue of a Ministerial Decision dated 20 May 2023 (the "BESS Tenders MD"), while the special terms and conditions of each BESS Tender are established by virtue of a call for tender issued by the Regulatory Authority for Waste, Energy and Water (RAWEW). Such call for tenders determines the conditions, requirements and the eligibility criteria for participation, the letters of guarantee to be submitted by participants and successful bidders, as well as the conditions precedent applicable to successful bidders for securing the awarded investment and operating aid.

Following the successful conduct of the first and second BESS Tenders, the framework for the performance of the third BESS Tender has just been released. More specifically, the Ministerial Decision governing the BESS Tenders has been amended, after which RAWEW will release the pertinent call for tender. The third BESS Tender will be location-specific, as only BESS projects intended to be installed exclusively in the lignite phase-out zones of Greece (Regional Units of Kozani and Florina, Region of West Macedonia, as well as in the Municipality of Megalopolis, Region of Peloponnese) will be eligible to participate. Eligible BESS projects will be required to have:

- discharge duration (battery capacity) of at least four hours;
- a full-cycle performance at least equal to 82% at the time of entry into operation;
- BESS technology utilised internationally in BESS projects set into commercial operation between 2018–2022, with an aggregate capacity of at least 250 MWh and maximum injection capacity up to 50 MW;
- entered into the commercial operation phase at the latest by 30 April 2026; and
- the investment grant that will be awarded to selected BESS will amount to EUR200,000/MW.

Issuance of the Offshore Wind Parks National Development Programme

The development of offshore wind parks (OWPs) is a national strategic priority under the National Energy and Climate Plan (NECP), expected to strengthen energy transition and contribute to energy security by offering clean and affordable energy to the Greek energy mix. The Greek marine area is characterised by very good wind potential with low variability throughout the year, making it particularly attractive to investors due to its high potential profitability.

The NECP provides for the energisation of 1.9 GW of offshore wind capacity until 2030. The Greek government has ratified the legal framework pertaining to the licensing and development of OWPs since 30 July 2022 which, inter alia, has appointed the Hellenic Hydrocarbons and Energy Resources Management Company (HEREMA) as the competent authority regarding the research, exploration, and identification of organised development areas for OWPs, in addition to the issuance of Exploration Licences.

In October 2023, HEREMA submitted the draft of the OWP National Development Programme (the "Draft OWP Programme"), accompanied by the Strategic Environmental Impact Assessment study to the MEE for approval by virtue of a Joint Ministerial Decision. Inter alia, the Draft OWP Programme:

- indicates the timeline and process for the implementation of key development milestones for reaching the targets of OWP development;
- identifies the marine areas considered suitable for organised development of OWPs (the "Organised OWP Development Areas"); and
- establishes exclusion zones where OWP projects cannot be installed, such as zones of absolute environmental protection, national forests, monuments of nature and seabeds closer than one nautical mile to the shore.

According to the Draft OWP Programme, 25 marine areas of 2,712 km with an estimated OWP capacity of 12,4 GW, the majority of which expected to host floating OWPs, are proposed as Organised OWP Development Areas. The pertinent seabeds are located at:

- Eastern Crete, with an estimated total capacity of 800 MW;
- Southern Rhodes, with an estimated maximum installed capacity of at least 300 MW and up to 550 MW;
- central Aegean, with an estimated maximum installed capacity up to 450 MW;
- Evia – Chios, with an estimated maximum installed capacity of 300 MW; and
- Ionian Sea, with an estimated maximum installed capacity of 450 MW.

The approval of the Draft OWP Programme, which is still under consultation due to the participation of various stakeholders in the process of finalising the design and location of Organised

Contributed by: Gus J Papamichalopoulos, Antonis N Koumpias, Iakovos Koulouris and Melina Kolovetsiou,
Kyriakides Georgopoulos Law Firm

OWP Development Areas, is expected within Q4 2024.

Environmental Classification of PVs and WPs

A new Ministerial Decision was issued on 3 July 2024, amending the classification of RES projects in "environmental categories". These categories are determined based on the potential environmental impact of the projects, in accordance with the legislation governing environmental licensing. The Ministerial Decision modifies the classification of renewable energy projects, following the issuance of decision 1885/2023 of the Council of State, which reverted certain categories of RES projects to older requirements by way of annulment of prior Ministerial Decisions.

The key provisions of the new Ministerial Decision are the following.

- Wind parks (WPs) with a capacity greater than 50 MW shall be classified under subcategory A1, as it was determined that these projects should be considered as having a "significant environmental impact".
- WPs with a single wind turbine and installed capacity up to 8 MW or a total capacity of up to 5 MW, irrespective of the number of turbines, shall be classified under category B.
- WPs with an installed capacity greater than 8 MW (single turbine) or 5 MW and less than 50 MW shall be classified under subcategory A2.
- PVs with a capacity greater than 50 MW are classified under subcategory A1.
- PVs with a capacity between 1 MW and 5 MW fall into category B, while those of intermediate capacity are placed in subcategory A2.
- The new decision includes clearer provisions to prevent the fragmentation of large projects into smaller ones to avoid stricter environmental categories.

Injection Curtailments

The right of the grid operator to curtail the electricity generated by RES projects, reflecting the relevant EU framework, was introduced in Greek legislation in July 2022, authorising the grid operator to impose curtailments to the injection of electricity generated by RES projects to relieve grid congestion, ensure the maximum integration of renewable energy produced by RES stations as well as to promote security of supply. Whether the imposition of injection curtailments is necessary to promote the above objectives is determined by the grid operator at the time of issuance of the pertinent project's grid connection terms. Injection curtailments apply independently of any other type of limitations or rejections of injection offers that may occur due to the participation of a RES project in the wholesale electricity markets.

According to the applicable law, injection curtailments may be imposed in one of the following forms.

- Permanent Capacity Curtailments – a permanent limitation of the maximum injection capacity of the project expressed as a percentage of its installed capacity.
- Daily Scheduled Curtailments – restrictions of the maximum injection capacity for specific periods of time during the project's daily power generation schedule.
- Efficiency Curtailments – curtailments imposed to promote the efficient operation of the local grid.
- Security Curtailments – emergency restrictions activated in real time via automated security and control systems, which may even lead to the disconnection of a RES project for a specific time period.

The implementation of Permanent Capacity Curtailments and Daily Scheduled Curtailments should not cause a reduction of the Maximum Power Generation Capacity of the affected RES project which is greater than 5% of the annual energy generation capacity of RES projects of the same technology, while the imposition of Efficiency Curtailments and Security Curtailments should not cause a reduction of the estimated level of energy redistribution which is greater than 5% of the annual energy generation capacity thereof (the "Curtailment Cap"). According to the applicable law, the Curtailment Cap can be modified by virtue of a Ministerial Decision.

RES projects that managed to:

- submit a declaration to the competent grid operator that they completed the necessary construction works to reach electrification, in accordance with the applicable law; or
- secure operating aid via their participation in RES auctions; or
- sign a connection agreement or submit a complete application dossier to the competent grid operator for the execution of a grid connection agreement,

before 30 July 2022, are exempted from the imposition of the above category of injection curtailments.

However, by virtue of a legislative amendment introduced on 1 May 2024, the MEE is authorised to:

- establish a regulatory framework for the imposition of curtailments to the injection capacity of RES projects, other than the injection curtailments mentioned above, especially curtailments imposed due to congestion of the local grid or in case of excessive supply of electricity;
- set a curtailment cap as well as a priority framework for the imposition of the aforementioned curtailments to certain categories of stations;
- regulate the rights and obligations of counterparties to PPAs as regards the generated electricity which is curtailed;
- determine the obligations of RES producers, owners of BESS stations and self-consumers as regards the installation of the equipment necessary for the imposition of injection curtailments; and
- introduce the operational principles of BESS projects, especially when the imposition of injection curtailments is necessary due to congestion of the local grid or for safety reasons.

Further to the above, owners of RES power plants with an installed capacity greater than 1 MW are required to have the appropriate infrastructure to implement the aforementioned injection curtailments. Projects lacking such infrastructure must install it at the owner's expense by 31 October 2024. If this obligation is not fulfilled within the specified timeframe, the respective project owner shall be obliged to return 25% of the revenues collected via transacting in the electricity markets and shall not be entitled to any operating aid for the electricity generated.

Upcoming Initiatives – Licensing Incentives for BESS

According to the NECP, the integration of BESS will improve the efficiency of the market and smooth out the fluctuations in spot market prices, by enabling the maximum utilisation of electricity generation from RES at peak hours, when the green energy generated exceeds demand and export capabilities. Increased BESS par-

ticipation in the energy system will significantly reduce the need for injection curtailments.

With these objectives in mind, in September 2024, the MEE submitted a draft bill aiming to incentivise the integration of BESS into the Greek energy system. Considering that the revised NECP (National Energy and Climate Plan) provides for an ambitious target of 4.3 GW of operational BESS by 2030 (6 GW with hydro-pumped storage projects) in order to remedy the grid bottleneck issues leading to injection curtailments in RES production, the MEE is looking to accelerate the licensing process of BESS through introducing the following measures.

- Provide "absolute grid connection priority" to certain categories of eligible BESS projects which will satisfy specific eligibility criteria to be determined by virtue of a Ministerial Decision (issued by 31 October 2024).
- Owners of PVs which have become operational, have received or will receive a connection terms offer from the competent grid operator by 28 February 2025, and have secured operating, shall have the right to submit an application to RAWEW and any other competent licensing authority by 31 March 2025 for installing a battery storage system into the design of their projects. For the projects mentioned herein, all administrative licences or approvals are amended with absolute priority from the submission of a relevant application.
- The above-mentioned owners of PVs who share a common connection point with the grid may submit a joint application to the grid operator by 31 March 2025 for the installation of a single standalone BESS connected at the same common connection point.

CHAMBERS GLOBAL PRACTICE GUIDES

Chambers Global Practice Guides bring you up-to-date, expert legal commentary on the main practice areas from around the globe. Focusing on the practical legal issues affecting businesses, the guides enable readers to compare legislation and procedure and read trend forecasts from legal experts from across key jurisdictions.

To find out more information about how we select contributors, email Katie.Burrington@chambers.com