The Development of Renewable Energy Governance in Greece. Examples of a Failed (?) Policy

Antonis Metaxas and Michael Tsinisizelis

Abstract Renewable energy sources (RES) implementation has been crucial for countries throughout Europe, and this led to several legislative efforts to enhance RES development. However, the persisting financial crisis frequently proved to constitute an obstacle in taking correct and efficient measures. The need to reduce fiscal market specific deficits seemed to overshadow RES policies' efficient implementation, leading to situations that drive away investments rather than facilitate them. In some cases, the governments, in their effort to mitigate the existing fiscal deficits and adapt to the financial crisis persisting in Europe, often seem to take a wrong turn. The measures they have adopted seem to be in the opposite direction, since they only consider short-term financial results, ignoring the medium- and long-term negative effects in the overall economy. Moreover, regulatory issues that remain unsolved (i.e., unforeseen delays in the licensing procedure) also discourage investments in the renewable energy sector, leading to a recession rather than economic growth. This deficient national governance fails to get the "broader picture" and assess correctly the many advantages of an increased, but also well-structured, RES penetration.

A. Metaxas (🖂)

For the purpose of drafting this chapter, legislative developments until the 31st December 2012 have been taken into account.

School of Law, Economics and Political Science, University of Athens, 154 Asklipiou Street 114 71 Athens, Greece e-mail: ametaxas@pspa.uoa.gr

<sup>M. Tsinisizelis
School of Law, Economics and Political Science, University of Athens,
57 Solonos Street 106 79 Athens, Greece
e-mail: deannope@uoa.gr</sup>

E. Michalena and J. M. Hills (eds.), *Renewable Energy Governance*, Lecture Notes in Energy 23, DOI: 10.1007/978-1-4471-5595-9_9, © Springer-Verlag London 2013

1 Importance of the RES Expansion in Today's Financial and Social Environment

Fiscal austerity and economic growth seem to be the most significant challenges which Europe faces today. Many European governments aim at reducing spending, following their extensive bailouts, and stimulus packages, but at the same time they need to be aware of the impact their policies will have on prospects for growth and social cohesion. As the trend shows a clear shift to a resource-efficient and lowcarbon economy to address the rising consumption of energy, most European governments are keen on adopting national renewable and low carbon strategies enhancing their competitiveness and growth, since such policies ensure jobs creation, enable achieving energy security, and at the same time combat environmental degradation. While each country is following a different path to renewable energy deployment, governments' strategies and their impact on business investment will play central roles in both the energy sector and the broader economic development. But is it always easy for a government to impose/introduce the appropriate measures that balance rightfully between the need to mitigate the existing fiscal deficits or structural deficiencies and economic growth especially in the energy sector? Do short-term positive financial results also go hand in hand with long-term development and energy efficiency? What are the consequences of inconsistencies observed in such policies, especially in countries facing the most severe fiscal problems, such as Greece, which are gifted with an abundance of renewable resources?

In order to detect the possible inefficiencies of policies adopted by the Greek State, it is necessary to first get acquainted with the basic cornerstones of the existing relevant legal framework in the renewable energy sector.

2 The European Legislative Framework¹

In Europe, renewable energies are continuing to expand both in terms of investment and geographical spread. In doing so, they increasingly contribute to combating climate change, countering energy poverty, and energy insecurity. The Directive 2009/28/EC on the promotion of the use of renewable energy sources (RES) sets the overall target to reach 20 % of renewable energy in gross final energy consumption in 2020. Reaching this target will require a huge mobilization of investments in renewable energies in the coming decade.

More specifically, Directive 2009/28/EC, adopted on April 23, 2009 (repealing Directives 2001/77/EC and 2003/30/EC), establishes a common framework for the promotion of energy from RES and sets mandatory national targets for the overall share of energy from RES in gross final consumption of energy. It also lays down rules relating to statistical transfers between Member States, to joint projects between Member States and with third countries, as well as to joint support

¹ Metaxas (2010)

schemes and their effects. Additionally, it regulates issues regarding guarantees of origin, administrative procedures, information and training, and access to the electricity grid for energy from RES. The Directive also provides for the adoption of national renewable energy action plans, whereas it also includes sustainability criteria for biofuels and bioliquids. Moreover, it provides for the obligation of the Member States to report on the progress made in the promotion and use of energy from RES and for the formation of a transparency platform. It also includes provisions relating to energy from RES in the transport sector. Member States were obliged to bring into force the laws, regulations, and administrative provisions necessary to comply with this Directive by 5 December 2010.

Other basic European regulation regarding the energy market includes Directive 2009/72/EC of 13 July 2009 concerning common rules for the internal market in electricity and repealing Directive 2003/54/EC. This Directive establishes the common rules for the generation, transmission, distribution, and supply of electricity markets in the European Union. It also lays down the rules relating to the organization and functioning of the electricity sector, open access to the market, the criteria and procedures applicable to calls for tenders, and the granting of authorizations and the operation of systems. Last, it also stipulates universal service obligations and rights of electricity consumers and clarifies competition requirements.

3 Basic Pillars of the Greek Legislative Framework on RES

Although, as already mentioned, Greece is gifted with an abundance of renewable resources, it lies far from fully exploiting them. The liberalization of the Greek energy market is still an ongoing process, which commenced with the implementation of Directive 96/92/EC through law 2773/1999. Since then, there has been considerable regulatory activity aiming at the improvement of the legal framework, the elimination of existing obstacles and the provision of investment incentives mainly through subsidies. Even though many unresolved issues still exist, the opening up of the Greek energy market intended to create significant new investment chances for enterprises, especially those active in the field of RES. Despite the attractiveness of the sector, foreign companies are reluctant to enter the Greek energy market due to the complexity of the pertinent legal framework, the long duration of the procedure for the issuance of the necessary licenses as well as the inconsistency of RES policy, as described in detail below.

3.1 RES: Licensing Procedure (Laws No. 3851/2010 and 4001/2011)

Due to the fact that, under the previous licensing regime (provided for in Law No. 3468/2006), the market uptake of RES in Greece was lower than expected, mainly

due to long licensing and administrative procedures and grid-related issues, the Greek Government revised the RES policy framework partly to reduce administrative burdens on the renewable energy sector. The legislation currently in force on Renewable Energy Sources adopted by the Greek Parliament in May 2010 (L. 3851/2010, Φ EK. 85A, 4-6-2010, partially transposing Directive 2009/28/EC), simplifies some of the procedures of the previously existing licensing regime. The law aspires to enable Greece to be provided nation-wide with electricity stemming from RES (up to 2020) up to a percentage of 40 %.

Certain provisions of the abovementioned law regarding the licensing procedure were amended by L. 4001/2011, in force as of 22nd August 2011 (transposing Directives 2009/72/EC and 2009/73/EC). This law also provides for, among others, specific extensive competences of the Regulatory Authority for Energy (RAE) and the complete unbundling of the electricity transmission and distribution systems.

Additionally, provisions included in Law No. 3851/2010 were also supplemented or amended by Article 39 of Law No. 4062/2012 (in force as of 30th March 2012) which fully transposed Directive 2009/28/EC). This Law also provided for an additional bonus of up to 10 % in the Feed-in-Tariff (FIT), based on a Local Content Requirement clause for PV plants using equipment of EU origin.

Apart from these, more general provisions, specific procedures are provided for in the Licensing Regulation by the National Regulatory Authority (RAE) and also in certain Ministerial Decisions (such as Ministerial Decision No. 9154/14.04.2011 on the prerequisites to implement a photovoltaic station on land and buildings) as well as important internal circulars (such as Y.A. Π .E./ Φ 1/oi κ . 26928).

The licensing steps for a photovoltaic station of more than 1 MW include application to RAE for a Production License, application to the competent Department of the Region for an Installation License, permission to proceed to minor-scale-interventions by the Department of Urban Planning, application to the System Operator (SO) for grid connection, signing of a contract with the System Operator for selling electricity to the grid and, finally, after the PV system has been installed, application to the competent Department of the Region for an Operation License.

The Production License is issued by RAE, which examines if the criteria provided for in the Law (article 2 of L. 3851/2010) are met and decides whether to issue or not a Production License within 2 months from the application submission date, provided that the application file is complete, otherwise, from its completion. The Production License is valid for up to 25 years and can be renewed for another 25 years. If the Installation License is not issued within 30 months of the issuance of the Production License, the latter is being automatically revoked.

Exceptions can be granted for photovoltaic stations up to 100 KW meant to be operated by farmers, as well as for stations which are being expressly exempt from the obligation to possess a Production License. Moreover, according to the Law (L. 3851/2010), a Production License or any other declaratory decision (known as "exception") is no longer required for photovoltaic systems up to 1 MW and for wind farms of up to 100 KW.

Regarding the pricing of electric energy produced by RES stations, it is calculated based on the provisions of L. 3851/2010 and Art. 27A of L. 3734/2009. The new FITs are guaranteed for 20 years and are adjusted annually by 25 % of the previous year's consumer price index.

However, FITs, as provided for in the above laws, have significantly decreased, through the Ministerial Decision No. Y.A. Π .E./ Φ 1/ σ 1/ σ 1/ σ 262/31.1.2012, as amended by Ministerial Decision No. Y.A. Π .E./ Φ 1/2301/ σ 1/ σ 1/ σ 33/09.08.2012 concerning energy produced by Photovoltaics. Furthermore, apart from the significant decrease of the FITs a new tax measure has been imposed on all RES producers, the detailed description of which follows in the next paragraph.

3.2 Article I Par. I.2 of Law No. 4093/2012

The latest legislation regarding energy production from Renewable Energy Sources, adopted by the Greek Government on 12.11.2012 (L. 4093/2012), imposes a retroactive tax levy (so-called "solidarity contribution") on RES producers' turnover for the years 2012–2014. As provided for in the provisions of the aforementioned Law (Art. I para I.2) this special retroactive tax is imposed on electricity producers from RES and C.H.P. (Cogeneration of Heat and Power of High Efficiency), which is calculated upon the price of sale of electricity, during the period 1.7.2012 to 30.6.2014, and refers to both the operating RES stations, as well as to those which will be connected thereafter. This retroactive taxation has raised a series of substantiated doubts, whether the relevant provisions include elements that constitute infringements of EU Law provisions and principles. Not only that, the de facto retroactive character of this measure collides with a basic principle of any good RES governance: The need for predictability and legal safety of the investment environment. (see below, under 4.II.).

4 Legal "Angles" of the RES Legal Framework in Greece and Their Consequences

Despite the fact that the extension of the use of RES in electricity generation is both desirable and necessary and that the Greek Government has made certain efforts to reduce the licensing bureaucracy and eliminate obstacles, mainly by rendering the Grid Connection procedure less complicated, however, the novelties introduced by Law No. 3851/2010 and following amending legislative provisions created a "congestion" of applications, thus rendering the holding of binding timeframes questionable. This is the main drawback RES investors are facing along with other issues not directly related to the grid connection procedure itself but to inefficiencies of the Network Operator. Obligations of grid operators toward RES producers are binding only after the conclusion of a connection agreement contract. However, this can be signed only if the necessary grid infrastructure has been built, which in its turn can be fulfilled only if the relevant Grid Connection Quotation has been issued and approved, leading to a "chicken and egg" situation that does not enable RES producers to effectively pursue their rights.

4.1 Delay in Providing Grid Connection Quotation Within the Deadline of 4 Months and its Consequences

As already mentioned, pursuant to article 39 par. 6 of Law No. 4062/2012, amending article 187 par. 2 of Law No. 4001/2011, which amended in turn article 3 of Law No. 3851/2010, "the competent operator issues the Grid Connection Quotation within 4 months from the submission of the relevant application." However, what usually happens in practice is that due to (actually existing or alleged) work overload and lack of personnel, this deadline is rarely respected, whereas in many cases the sometimes selective delays extend to almost 2 years from the initial submission of the relevant application.

According to general Administrative Law Principles the use of a present tense or of the words "shall" or "must" shows a clear tendency for an obligation that needs to be fulfilled within the deadline provided.² However, according to article 10 par. 5 of Law No. 2690/1999 (Code of Administrative Procedure) the deadlines included in laws are generally indicative as regards the Administration, unless clearly stated as being exclusive. This means that no concrete consequences follow in case the Administration fails to respect these deadlines if no relevant provision exists. In other words, in case the legislator omits to declare that the deadline is exclusive and to provide for specific consequences, then the deadlines provided for are obligatory on one hand but their violation remains without concrete legal implications on the other hand.

This "loose" wording included in the Law regarding the Operator's obligation to issue the Grid Connection Quotation within the deadline of 4 months facilitates the de facto violation of the deadline, since the Operator in many cases delays the issuance of the Grid Connection Quotation. Thus, the investor remains unprotected against the Operator's arbitrariness, not being able to put a pressure on the Operator to respect the provided deadline of 4 months. This results in the investor suffering multiple damages, since he faces unforeseeable delays in the scheduled investment's implementation. Plus, given the fact that the Feed-in-Tariff for RES gradually reduces, the investor usually ends up with getting a much lower guaranteed price for the energy produced by RES than initially scheduled. This very negative result has a domino effect on other aspects as well, since the investor has

² Dagtoglou (2012)

developed the project's business plan based on different financial data (i.e., bank financing agreements based on different expected revenues, etc.).

What is more, the moratorium recently imposed on the PV licensing procedure, pursuant to the Ministerial Decision No. Y.A. Π .E./ Φ 1/2300/otk.16932 (Official Government Gazette B' 2317) due to the "coverage" of the national targets set by the Ministerial Decision no A.Y./\Phi/01k.19598/01.10.2010 has significantly affected many investors, whose investments were "trapped" by this moratorium. More specifically, investors who didn't have a binding Grid Connection Quotation from the Operator, despite the fact that they submitted the relevant application almost 2 years ago in some cases, can no longer proceed with implementing their investments. Therefore, the violation of a deadline, which-as already mentioned—is regarded as indicative, has lead to a semi-permanent situation where investors suffer huge financial losses and are unable to complete their investments, despite having already invested huge amounts of money in, i.e., buying or renting the land and possibly some equipment. At the same time, the only protection they can have against this situation they found themselves in is to pursue compensation for the losses suffered due to this delay through the time-and money consuming—legal path. However, this path is also not very easy to follow, since they have the burden of proving the extent of the damage suffered and of establishing the causal link between the Operator's behavior and the damage suffered.

It is also worth noting that this awkward situation has caused a difficult constellation for the Regulator. Many investors have filed complaints to RAE regarding the repeated delays as regards the issuance of the Grid Connection Quotation by the Operator. However, RAE has rejected³ such complaints by stating that "the provided deadline of 4 months cannot be applied." Such a statement is problematic from a legal point of view, since it fails to grant the necessary normative value to the respective legislative provisions that are violated by the Operator. So the Operator remains de facto unpunished for the relevant breach and investors de facto unprotected.

4.2 Retroactive "Solidarity" Tax on RES⁴

Apart from this still unresolved issue in the licensing procedure, which creates uncertainty as regards the timeframe for the execution of RES investments, the recent imposition of the retroactive tax measure on RES producers' turnover further destabilizes the investment environment. Moreover, the relevant legislative provision arguably infringes EU Law. More in particular, the measure in question is considered to constitute illegal State aid, as well as being incompatible with the EU Energy Law and, specifically, clear RES development Policy objectives and principles.

³ See indicatively RAE's Decision no 750/2012.

⁴ Kapros (2011)

4.2.1 Illegal State Aid Within the Meaning of Art. 107 I TFEU

Wholesale Energy Market⁵

In order to better understand why the imposed tax constitutes a state aid measure favoring fossil fuel energy producers and energy suppliers, a quick overview of the Greek electricity wholesale market and its basic elements is deemed necessary. The Greek wholesale electricity market is based on a day-ahead unit commitment market clearing and generation dispatch formulation. On the day ahead, injectors, i.e., producers, importers, hydro, and RES, are mandated to place their energy and reserve offers, their techno-economic declarations defining the features of the units they are using to offer energy or nonavailability declarations in case they are unable to offer energy for the dispatch day. At the same time, energy suppliers place their demand bids. The objective is to minimize the cost of balancing the energy to be absorbed with the energy to be injected in the system, while meeting the reserve requirements and the generation units' technical constraints.

The Day Ahead Scheduling (DAS) solution is provided by the Operator of the Electricity Market, which is responsible for clearing the transactions within the DAS (Article 118 of Law No. 4001/2011), determining the clearing prices of the energy, i.e., the System Marginal Price (SMP), and of the reserves. Thereafter the Operator of the Electricity Market ranks the offer bids in an offer curve by increasing price, while it ranks the demand bids in a demand curve by decreasing price. The quotations should reflect at least the unit's variable cost. The intersection of the demand and the offer curves sets the SMP—all generators that offered bids lower than the market price are scheduled to inject energy, while all buyers that offered demand bids higher than the market price are scheduled to be served.

Support Mechanisms

Apart from the mandatory wholesale pool, conventional electricity producers from natural gas are remunerated through additional mechanisms, i.e., the socalled "Variable Cost Recovery Mechanism" (VCRM), as well as a Capacity Payment Mechanism (CPM). The VCR mechanism was initially introduced as a temporary measure in order to compensate new private entrants in the energy market and provides for additional payments, so that the natural gas unit committing energy for the DAS ends up with a profit equal to 10 % of its variable cost, in case this profit is not reached through the market revenues for energy. In other words, the recovery mechanism provides for the natural gas fired units to always recover their commitment costs, thus eliminating a potential deficit and "neutralizing" financial dangers linked with possible distortions of the Greek electricity market. As far as the Capacity Payments Mechanism is concerned, it is based on the obligation of the suppliers to present sufficient guarantees. Each supplier, self-

⁵ Andrianesis et al. (2012)

supplying customer and exporter (hereon: "load representatives") is assigned a Capacity Adequacy Obligation, according to the energy consumed by each load representative during the periods of increased probability of loss of load, as calculated by the SO. Furthermore, each producer issues, for each of his units, Capacity Availability Tickets. The total number of Tickets issued for each unit equals its net capacity. The Tickets constitute a call to load representatives for the conclusion of Capacity Availability Contracts. Currently, only a Regulated Mechanism (RM) is offered to the market participants. The producers and the load representatives participate in the Capacity Availability Market by concluding Contracts with the SO. In this case, the producers receive a regulated price for the available capacity with which they participate in the RM.

RES Special Account

In Greece, renewable energy generation is mainly promoted through a guaranteed FIT system, the main rules for the application of which have been set by Article 13 par. 1 of Law No. 3468/2006, as amended by Article 5 par. 2 of Law No. 3851/2010. Moreover, the Operator of Electricity Market (LAGIE) and the Electricity Transmission Grid Operator (DEDDIE) collects the amounts paid to RES electricity producers from a Special Account (so-called "RES Special Account"), which is financed by:

- (i) The amounts paid by the electricity producers and suppliers, corresponding to the renewable energy injected in the transmission system and distribution grid situated in mainland and on the interconnected islands,
- (ii) The amounts paid by the Suppliers of the Noninterconnected Islands for the power absorbed in these islands' systems,
- (iii) The Special Levy for the Reduction of Greenhouse Gases (SLRGG), which varies among different Customers' categories, and which is paid by every single electricity consumer in the country.

Moreover, the lignite fired units are imposed a special levy of 2 Euros per MWh of energy produced. This special levy is also included in the Special Account's resources. This Account is exclusively intended to cover the cost difference between the higher FIT paid to RES producers and the SMP paid to LAGIE. This means that the receivables of the Special Account should equal the total RES costs that LAGIE must pay to all RES producers for the total amount of energy generated by their RES and cogeneration power plants for high-efficiency heat and energy in Greece (mainland and noninterconnected islands) at the FIT which applies under their power purchase agreement.

Wholesale Electricity Market Distortions

Due to the fact that the SLRGG was initially introduced 12 years ago and has been always calculated in the same way, it fails to reflect the real additional cost/ benefit of meanwhile higher RES penetration: According to two scientific studies performed by the National Technical University of Athens and the Greek Foundation for Economic and Industrial Research (IOBE), the fees collected through SLRGG correspond only up to a percentage of 40–50 % to compensations granted to the RES producers. The reason for that is that SMP (which is crucial for the fair pricing of the SLRGG) does not represent the costs avoided by the suppliers due to every RES electricity megawatt-hour substituting a conventional electricity megawatt-hour. This happens for a number of reasons. Indicatively:

- (1) *The merit order effect.* As the RES produced energy contributed in the DAS increases, the SMP decreases. This is due to the fact that the more RES production increases, the less more expensive electricity producing units are needed to cover the demand in electricity. Since the SMP is determined by the most expensive unit to provide electricity every hour, the increase in the energy produced by RES results in the reduction of the SMP.
- (2) *The RES capacity credit and the subsequent value due to RES*. RES provide capacity to the System and therefore, save capacity payments.
- (3) The distortion of the SMP due to Public Power Corporation's (PPC S.A.) dominant position, which keeps it at an artificially low level. The fact that the SMP is distorted is largely due to the fact that PPC is currently the dominant electricity generator and supplier company in Greece. At the electricity generation level, PPC operates a quite diversified portfolio of power plants including lignite, natural gas, and large hydro, while its competitors have been permitted to invest only in gas power plants. At the retail level, PPC is virtually the only supplier since small alternative suppliers only hold an insignificant market share.

The motives for PPC retaining this artificially low SMP can be summarized in the following: (a) to contribute less, as a supplier, to the RES Special Account, since the suppliers only pay the SMP for each RES megawatt-hour fed into the system, and (b) to pay less, as a supplier, for electricity imports, since the latter are also paid only the SMP. If the VCR Mechanism would not exist, then PPC would also pay—as supplier—for the natural gas power units the SMP (and the Capacity Payment).

What actually happens is that the suppliers (currently mainly PPC) pay, through the wholesale mandatory pool, an unfairly low amount toward the entities which inject energy in the system (i.e., the conventional producers, the RES producers, and the importers) due to the distorted SMP, creating thus a deficit on the generation side as a whole. In order to partly compensate for this deficit, PPC pays an additional amount only to private natural gas fired power producers through the VCRM. By doing so, the whole deficit on the generation side (resulting from the distorted SMP) is transformed to a deficit in the RES Special Account only. On the contrary, this additional amount paid through VCRM should have been used proportionally to reduce the whole deficit existing on the generation side and not to protect only the conventional producers.

This results in the alleged need for the imposition of the tax levy in question "in order to limit the deficit of the RES Account."

Why the RES Tax Constitutes Illegal State Aid according to Art. 107 I TFEU⁶ The tax measure constitutes a state aid measure in the meaning of Article 107(1) TFEU, since it is found to meet all the 4 criteria included in that provision. More specifically:

- 1. *Transfer of state resources:* The measure is attributed to the State. The RES tax has been imposed by Law No. 4093/2012. Furthermore, the revenue from the RES tax comes under the control of the state, since it is collected by the Electricity Market Operator (LAGIE) and the Distribution Grid Operator (DEDDIE) and credited to the RES Special Account which is managed by LAGIE. LAGIE and DEDDIE are also controlled by the State (the latter as far as its duties regarding the Noninterconnected Grid Administration are concerned) and their duties with respect to the RES Special Account are mandated by Law No. 4001/2011 (articles 118 par. 2 and 129 par. 2). Additionally, the State forgoes potential revenue. The RES tax is not imposed on all energy producers, i.e., producers of electricity from fossil fuels, which is unfair. According to standard practice, the forgoing of tax revenue is equivalent to "consumption" of state resources (T-67/94, Ladbroke v Commission; C-66/02, Italy v Commission).
- 2. Economic advantage: It is well established in the case law that exemption from tax or nonliability for tax confers an advantage to undertakings which would otherwise have to bear the tax in their budget (C-6/97, Italy v Commission; C-487/06 P, British Aggregates v Commission). Producers of electricity from fossil fuels are not liable for the RES tax and therefore obtain an advantage in relation to their competitors (electricity producers from renewable sources).
- 3. *Effect on trade and distortion of competition:* Since electricity is traded across Member States (C-379/98, Preussen Elektra) it cannot be excluded that trade between Member States may be affected. Moreover, it cannot be excluded that there can be an indirect effect on trade because thousands of Greek undertakings use nontaxed electricity produced from fossil fuels as input into their operations. Electricity produced from fossil fuels accounts for more than 80 % of total electricity consumption in Greece (for a similar analysis of indirect effect on trade see Commission Decision SA.21918 on electricity tariffs in France, OJ C 398, 22/12/12). It follows that competition between producers of electricity which are not subject to the tax or undertakings which use nontaxed electricity and their competitors in intra-EU trade is distorted.
- 4. Selective measure: The beneficiaries of this solidarity are not specified, nor is the need for it explained. However, Law No. 4093/2012 stipulates that the proceeds from the tax will be credited to the "RES Special Account." It can be inferred, therefore, that the "solidarity" intended by the RES tax is solidarity with the RES Special Account, and it is needed in order to reduce the budgetary deficit of the RES Special Account. Although, as already mentioned, terminology issues ("solidarity contribution") and intentions linked with the

⁶ Hellenic State Aid Institute (2011)

adoption of a state measure are absolutely irrelevant as regards its legal categorization as a state aid for which only its effects are crucial, given the fact that the remuneration mechanisms of all electricity producers and the interdependence of various structural distortions of the Greek electricity market contribute jointly to the formation of the existing deficit in the RES Special Account, it must be concluded that if the aim of the tax is to strengthen solidarity with the RES Special Account, then the tax should apply to all those operators.

In any case, since the scope of the RES tax should extend to all electricity operators, then it must be inferred that the system differentiates between undertakings which are in the same legal or factual situation. This differentiation is arbitrary because it is not based on any objective distinction between electricity undertakings. The RES Special Account was established in the context of the Greek policy of encouraging production of electricity from renewable resources and reducing greenhouse gas emissions. Since producers of electricity from conventional fossil sources also contribute to greenhouse gas emissions, they are in a comparable legal or factual situation and should have also been subject to the RES tax. There is no objective reason for their exclusion. Even if it cannot be established a priori which undertakings should contribute to the solidarity aims of the RES tax (and therefore it cannot be defined which undertakings should be subject to the tax and which should be excluded), it can still be shown that the tax in its application differentiates between undertakings which are in comparable factual situation because they are competitively interlinked.

In addition, this differentiation cannot be justified from the nature of the contested RES tax. On the contrary, the aim of strengthening solidarity with the RES Special Account would require that the tax is levied on all producers who impact on the budgetary deficit of the RES Special Account. Moreover, since the very purpose of the RES Special Account is to internalize the environmental costs of conventionally produced electricity, it would follow that it must be the producers of electricity from fossil fuels that should be making additional contributions to cover the deficit.

4.2.2 Incompatibility of the Measure with the EU Normative Framework on RES as Well as EU Energy Policy Goals

Besides constituting a selective state aid measure, as established above, the tax measure in question also infringes provisions of the EU Energy Law and is found to be incompatible with the EU Energy Policy. The European Commission has repeatedly criticized the application of retroactive measures and has highlighted the negative effects that such measures may have in promoting investment in RES in the context of reaching EU Energy and Environment Policy targets in 2020. The imposition of this tax measure on the gross revenues of all already operating RES projects in Greece (apart from those for which the reference value of energy sold taken into account for the Power Purchase Agreement is being calculated according

to the one in force after (09.08.2012) is moving in the opposite direction from the aforementioned EU Energy policy. Moreover, the European Parliament and Council have repeatedly stressed (both in the Directive 2009/28/EC and the relevant Position Paper) the importance of retaining a stable investing environment for RES and the need the energy prices to reflect the external costs of energy production and consumption, "including, as appropriate, environmental, social and health care costs." Additionally, the Commission, in its Communication to the European Parliament, the Council, the European Economic and Social Committee, and the Committee of the Regions, titled "Renewable Energy: a major player in the European Energy Market" of 6th June 2012, renounces policies that hinder investment in renewables and in particular, policies that continue to subsidize fossil fuels, which, according to this document, should be phased out. In view of the complementarity of climate and renewable energy policies, a well functioning carbon market is deemed to be necessary, together with "properly designed energy taxes to give investors clear and strong incentives in low carbon technologies and their development." Further on, the Commission considers that the retroactive changes suddenly imposed on support schemes, despite the fact that they are often triggered by unexpectedly high growth, which rapidly increases expenditure rendering them not sustainable in the short term, undermine investor confidence in the sector.

4.2.3 Effects of the Tax Measure on the RES Producers

The adopted tax measure has a retroactive effect in the sense that it did not exist, nor was it known at the time of the conclusion of the Power Purchase Agreements between the RES producers and the competent Operator and of the launching and financing of the relevant investments. Thus, the producers find their investments "captured" in a scheme that significantly reduces their income, whereas at the same time they have organized their business plans and scheduled their obligations according to the predicted income, which of course did not consider the later imposed tax.

This situation, coupled with the fact that the Market Operator pays the producers with a significant delay, today reaching a period of more than 5 months since the relevant invoices become due, worsens the situation even more, since many RES producers face serious problems of viability, with the banks on the one hand asking for default interest on top of the monthly installments and the tax further diminishing their income and hindering their financial situation.

5 Discussion–Conclusions

It becomes clear from all the above that the current legal framework regarding RES is suffering from over regulation and complexity, leading to a lack of investment safety, irrational bureaucracy, high implementation costs, and unforeseeable delays. It is lacking strategic structure, rather forming a patchwork

consisting of provisions from previous not so successful laws, therefore not leading to the covetable growth.

The national policies for RES in Greece seem to have been set rather superficially, without properly evaluating their consequences on the market operation, the economy, and the society. The RES regulatory framework seems to be moving in the wrong direction and despite the natural and geographical advantages Greece presents as far as RES development is concerned, growth and competitiveness in the economy that could very well arise out of a well-structured energy policy are still lagging behind.

It is expected that in the near future the photovoltaic production cost will equate the grid parity in other European countries, therefore leading to the abolition of the feed-in-tariff system with RES energy production entering the competitive energy market. It is essential, therefore, to simplify the RES legal framework, in order to adapt to the market rules for the economy and consumers' benefit.

Acknowledgments Many thanks go to my colleague at Law Firm "Metaxas and Associates" Ms. Chr. Sarantidou, Attorney At Law, LL.M. (NYU) for her assistance in drafting this chapter as well as to Ms. S. Katemoglou for her editorial support.

References

- Andrianesis P, Liberopoulos G, Kozanidis G, Papalexopoulos AD (2010) Recovery mechanisms in a joint energy/reserve day-ahead electricity market with non-convexities. In: Proceedings of EEM10 conference, Madrid, Spain, 23–25 June 2010
- Andrianesis P, Liberopoulos G (2012) The "Hidden Cost" of renewable energy sources in electricity pool markets. In: 9th international conference, 10–12 May 2012
- Andrianesis PE, Liberopoulos G, Papalexopoulos AD (2012) Greek wholesale electricity market: forthcoming market changes and bid/cost recovery. In: 8th Mediterranean conference on power generation, transmission, distribution and energy conversion, MEDPOWER 2012
- Dagtoglou PD, General Administrative Law, 6th Edition 2012, p. 158.
- Hellenic State Aid Institute (2011) State aid. Basic normative texts. Nomiki Vivliothiki, Athens

Kapros P (2011) The special RES levy: analysis and predictions. http://www.eletaen.gr/drupal/ sites/default/files/meleti_emp.pdf

- Metaxas A, EU Energy Law in G. Calavros—Th. Georgopoulos (2010) European Union Law (II). Nomiki Vivliothiki, Athens
- Maroulis G, Piria R, Zane EB (eclareon), Frank R, Bauknecht D (Öko-Institut) (2011) Integration of electricity from renewables to the electricity grid and to the electricity market—RES-INTEGRATION. http://www.oeko.de/oekodoc/1378/2012-012-en.pdf
- Sakellaris K (2010) The greek capacity adequacy mechanism: design, incentives, strategic behavior and regulatory remedies. http://ideas.repec.org/p/pra/mprapa/24642.html