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EU Renewable Energy Support Law: An Autonomous-Principled Sub-Field of Energy Law

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Abstract

Supportive financing for renewable energy sources (RES) is crucial for the attainment of clean energy transition. Nevertheless, "renewable energy support law", that is, the corpus of rules that govern the design, enactment and implementation of support schemes for RES is not consolidated as a discipline of law yet. Accordingly, this paper aspires to crystallize renewable energy support law as an autonomous sub-field of energy law. It investigates the features that determine the disciplinary identity of an area of study: a link with societal challenges, the development of concrete objectives and methods, and the formulation of principles. The paper proceeds to establish that energy law meets these criteria. Next, it demonstrates that, within the broader framework set by the "Energy Trilemma" theory, renewable energy support law has special societal relevance, and, mostly, distinctive principles: a) the market-based and market-responsive character and b) the predictability of the terms of support, which are autonomous, and unique in this discipline of law; c) the principle of an open, transparent, competitive, non-discriminatory, and cost-effective granting of support, which is a unique feature of this field, but draws inspiration from public procurement law; and, d) borrowed from State aid law, the avoidance of unnecessary market distortions.

Keyowrds

Renewable energy support law; energy law; Energy Trilemma theory; energy solidarity; market-based and market-responsive support; the predictability of the terms of financial support; open, transparent, competitive, non-discriminatory, and cost-effective granting of support; no unnecessary market distortions; Article 194 TFEU; Renewable Energy Directive 2018/2001

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1. Introduction

Reaching a clean energy transition is a top policy priority for the European Union (EU) and its Member States.[1] And the clean energy transition is driven by legal and regulatory initiatives.[2] Indeed, numerous acts of hard law and soft law[3] have been adopted in the last few years to an extent that makes it difficult for one to keep track of all the developments. Such reforms have been very technical, in the sense that they often regulate issues linked with engineering and innovation or with the functioning of the electricity markets and the production and use of fuels. This does not come as a surprise because such an interchange with various disciplines has been an identified feature of what can be called "energy law", while the introduction of rules that will regulate the expansion and use of new technologies has been identified as one of its *raisons d' être*.[4]

On the other hand, such emphasis on technical matters in response to what rises each time as a pressing problem precedes a clear doctrinal and theoretical background that would underpin decisions and reforms in the field and would guide one as to how the relevant rules should be interpreted and apply. Legal intervention in the area of energy, as frequent as it is, is sporadic and fragmented. This exacerbates (legal) uncertainty in a field that is already characterized by a plethora of disputes, is still under development and lacks established solutions/patterns, and is inherently complex and highly technical.[5]

In this regard, this paper aspires to contribute to the theoretical consolidation of energy law, with a special focus on "renewable energy support law", that is, the corpus of rules that govern the design, enactment and implementation of support schemes for renewable energy sources (RES).[6] Such support schemes are regulatory instruments applied by Member States that aim to promote energy from RES, by reducing its production cost (e.g., by granting investment subsidies or lower tax rates to RES generators), by increasing its selling price (e.g., through fixed feed-in tariffs at which energy from RES is sold or through bonus payments conferred on RES generators), or by establishing systems of renewable energy obligations that require suppliers to feed their customers with minimum volumes of energy from RES.[7]

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[1] For the EU and its Member States, see characteristically, Commission, "REPowerEU Plan" COM(2022) 230 final (18 May 2022). But also globally, more than 175 countries, which is about 90% of the members of the UN, have set targets for the development of renewable energy sources. See IRENA, "Renewable Energy Targets in 2022 - A Guide to Design" (International Renewable Energy Agency, 2022), ch 2.

[2] For a presentation of different such initiatives, *see* among others *ibid*., Mithatcan Aydos et al., "Scaling Investment in Renewable Energy Generation to Achieve Sustainable Development Goals 7 (Affordable and Clean Energy) and 13 (Climate Action) and the Paris Agreement: Roadblocks and Drivers" (Columbia Center on Sustainable Investment, 2022).

[3] *See* for example Regulation (EU) 2024/1747 of the European Parliament and of the Council of 13 June 2024 amending Regulations (EU) 2019/942 and (EU) 2019/943 as regards improving the Union's electricity market design, OJ L2024/2747, 26.6.2024; Communication from the Commission – Guidelines on State aid for climate, environmental protection and energy 2022, OJ C80, 18.2.2022; Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources (recast), OJ L328, 21.12.20218.

[4] On the development and the *raisons d' être* of energy law, see *inter alia* Kaisa Huhta, *The Coming of Age of Energy Jurisprudence*, 39 JERL 199 (2021); Ruven Fleming, *The 'Trias': A New Methodology for Energy Law*, 28 EEELR 164 (2019); Adrian Bradbrook, *Energy Law as an Academic Discipline*, 14 JERL 193 (1996).

[5] Theodoros Iliopoulos, *Quo vadis, European Renewable Energy Support Law?* FWO Project 12C7523N – Project Outline, p. 15.

[6] See more on Theodoros Iliopoulos, *Law of Finance for Renewable Energy Projects in the EU* (Routledge 1t ed. 2024).

[7] *See* also Directive 2018/2001, *supra* n. 3, Art. 2(5).

Very interestingly about EU renewable energy support law, in spite of its apparent link with energy law, it has not developed on the basis of energy law provisions. Indeed, in the 2000s Member States resisted the Commission's calls and attempts for the introduction of rules on the supportive financing of RES in a renewable energy directive.[8] As a result, the attainment of a minimum homogeneity of national support schemes, and a minimum design quality and implementation stability was for years relying on the application of State aid law,[9] State aid soft law guidelines,[10] and the law of the free movement of goods.[11] The absence of secondary law provisions on support schemes was terminated with the enactment of the Renewable Energy Directive 2018/2001, which introduced certain rules governing the design and implementation of support schemes.[12] But State aid law requirements and conditions were so influential, that the content of the directive's relevant provisions largely echoes them (as can be easily seen with a textual comparison between the directive and the State aid guidelines). Because of these peculiarities, renewable energy support law has concentrated less attention by energy law scholars, and fragmentation and the lack of a solid theoretical foundation is even more acute in the field, which, however, is crucial for the attainment of a clean energy transition. This has triggered the interest of this paper to identify and analyse legal principles that (should) govern the supportive financing of RES and found EU renewable energy support law as a sub-field of energy law.

After this introduction, aa theoretical part follows, which examines the criteria that determine the disciplinarity identity of a field of law, with the focus on energy law. The third part distils concrete legal principles of European energy law. Next, the fourth part of the paper calls attention to renewable energy support law as a sub-field of the discipline of energy law, and investigates the principles that specifically apply in this sub-field. A fifth part concludes the chapter.

2. On Energy Law as a Discipline

Determining and utilizing distinct disciplines is important for reasons of conceptual clarity and of systemization and further utilization of the knowledge that has been produced.[13] However, defining what constitutes a discipline is a difficult and complex or even "fuzzy" endeavor.[14] Characteristic attempts for delineating the concept of a discipline have defined it as "a comparatively self-contained and isolated domain of human experience which possesses its own community of experts [and] its

[8] *See* David Jacobs, "Designing Financing Mechanisms for Electricity from Renewable Energy Sources" in Jale Tosun, Sophie Biesenbender, and Kai Schulze (eds), *Energy Policy Making in the EU* (Springer 2015), 107–128.

[9] Consolidated version of the Treaty on the Functioning of the European Union [2012] OJ C326/47, Article 107; Commission Regulation (EU) No 651/2014 of 17 June 2014 declaring certain categories of aid compatible with the internal market in application of Articles 107 and 108 of the Treaty, OJ L187, 26.6.2014.

[10] Guidelines 2022, *supra* n. 3; Communication from the Commission — Guidelines on State aid for environmental protection and energy 2014-2020, OJ C200, 28.6.2014.

[11] Iliopoulos, *supra* n. 6.

[12] Directive 2018/2001, *supra* n. 3, Art. 4-6.

[13] On the discussion on the conceptualization and definition of "disciplines" *see* among others Paul Trowler, *Depicting and researching disciplines: strong and moderate essentialist approaches*, 39 StudHighEduc 1720 (2014); Armin Krishnan, *What Are Academic Disciplines? Some Observations on the Disciplinarity vs. Interdisciplinarity Debate*, ESRC NCRM Working Paper 03/09 (2009), https://eprints.ncrm.ac.uk/id/eprint/783/1/what_are_academic_disciplines.pdf; Anthony Biglan, The characteristics of subject matter in different academic areas, 57 JApplPsych 195 (1973).

[14] See Christophe Roux, "Conclusion: A Discipline Viewed from the Fringes— Opportunities Taken and the Risk of Deinstitutionalisation" in Gabriella Ilonszki and Christophe Roux (eds), *Opportunities and Challenges for New and Peripheral Political Science Communities* (Palgrave Macmillan 2022), 257-281, p. 259. See also Tony Becher and Paul Trowler, *Academic Tribes and Territories* 41-57 (The Society for Research into Higher Education & Open University Press, 2d ed. 2006).

peculiar constellation of distinctive components: such things as shared goals, concepts, facts, tacit skills"; [15] "a specific body of teachable knowledge with its own background of education, training, procedures, methods and content areas";[16] or "a body of knowledge with a reasonable logical taxonomy a specialized vocabulary, an accepted body of theory, a systematic research strategy, and techniques for replication and validation".[17] Such definitions are rather broad, and different systems of knowledge or domains of human experiences or activity can claim autonomy as a discipline.[18] But common elements that can be distilled as constituent for a discipline are its reliance on a generally accepted theoretical foundation, the use of well-forged methods, as well as the strong link with practice and with societal concerns and demands.[19]

The link with practice and the interaction with societal factors is even stronger for social sciences, including the law, the disciplinarity identity of which is typically found to be "bound to the profession".[20] But within the broader field of the discipline of law, there are different areas that share common theoretical and pragmatic foundations, but they have also developed their own concepts, methods and objectives. In fact, and arguably in response to the rise of new challenges in a rapid-changing word, the last few years have been characterized by a "considerable expansion in areas of special jurisprudence" and "most of the contemporary theoretical attention is focused on specific areas of law, rather than in law in general".[21] For example, seeds have been planted or efforts have intensified for the consolidation of the fields of climate law,[22] artificial intelligence law,[23] and, of course, energy law.[24]

In general, energy law determines the rules that govern the exploitation of energy resources, the production of energy and the access to energy services.[25] Such rules are called on to address particularly sensitive and complex societal challenges, such as the liberalization of the energy markets, the increase of energy security and the tackling of energy poverty, the rise of self-consumption and the comprehension and crystallization of energy democracy, the roll-out of smart meters and the functioning of a smart grid, and of course the tackling of climate crisis, the rational and efficient use of natural resources, and the attainment of a clean energy transition . In this regard, energy law

[15] Moti Nissani, *Fruits, Salads, and Smoothies: A Working Definition of Interdisciplinarity*, 29 JEducThought 121 (1995), p. 122, citing Michael Polanyi, *Personal knowledge* (University of Chicago Press 1t ed. 1962).

[16] Guy Berger, "Opinions and Facts" in OECD, *Interdisciplinarity: Problems of Teaching and Research in Universities* (OECD 1972), 19–74, p. 23.

[17] Janet Gail Donald, *Learning to Think: Disciplinary Perspectives* (Jossey-Bass 1t ed. 2002), p. 7, citing Paul Leroy Dressel and Lewis Mayhew, *Higher Education as a Field of Study* (Jossey-Bass 1t ed. 1974).

[18] On such a critical analysis of the attempts of conceptualization of discipline, see Trowler, *supra* n. 8.

[19] See Robert Post, *Debating Disciplinarity*, 35 Critical Inquiry 749 (2009).

[20] Douglas Vick, *Interdisciplinarity and the Discipline of Law*, 31 JLawSoc 163 (2004), p. 175. *See* also Fleming, *supra* n. 4; W. Murphy and Simon Roberts, *Introduction*, 50 ModLawRev 677 (1987).

[21] Felipe Jiménez, *Legal Principles, Law, and Tradition*, 33 YaleJL&Human 59 (2022), p. 63. See also Nicola Countouris, *European Social Law as an Autonomous Legal Discipline*, 28 YEL 95 (2009), for an analysis on the basis of key components that determine the autonomy of a legal area.

[22] *See* among others Jaqueline Peel, *Climate Change Law: The Emergence of a New Legal Discipline*, 32 MelbULRev 922 (2008).

[23] Céline Castets-Renard and Jessica Eynard, *Artificial Intelligence Law Between Sectoral Rules and Comprehensive Regime* (Larcier 1t ed. 2023).

[24] See for example Kaisa Huhta, *The Contribution of Energy Law to the Energy Transition and Energy Research*, 73 GlobalEnvironChang 102454 (2023); Raphael Heffron et al., *A Treatise for Energy Law*, 11 JWELB 34 (2018); Alexandra Wawryk, International Energy Law: An Emerging Academic Discipline in Paul Babie and Paul Leadbeter (eds), *Law as Change* (University of Adelaide Press 1t ed. 2014) 223-255; Kim Talus, *EU Energy Law and Policy* (Oxford University Press 1t ed. 2013).

[25] This definition builds on the definition suggested in Bradbrook, *supra* n. 4, p. 194.

necessarily goes beyond fields of law that are also closely related with some, but not all of the above aspects, such as environmental law, climate law, competition law or contract law.

The complexity and breadth of aspects that energy law relates to is eloquently expressed by the theory known as "the Energy Law and Policy Triangle" or "the Energy Trilemma". According to it, aims of energy law (and policy) can be classified into three broader categories, that is, economic interests, security and (geo)political interests, and *lato sensu* environmental protection. Energy law and policy should strive to attain the best balance between such interests that might be complementary or conflicting on different occasions.[26] The wide acknowledgment of the "Energy Trilemma" by energy law scholars is substantial for the consolidation and systmetization of energy law objectives, but it is also crucial for the development of energy law methods. For example, the proposed "trias" methodology for energy law starts with the focus on objectives, which are then translated into principles "set out in framework legislation" and they help in "forming a legal rule that is complete and precise".[27] Following such methodical steps is, of course, not alien to other fields of law – but since energy law is a legal discipline, it does share methods with other fields of law. Further, the classic legal interpretation methods apply to energy law too. However, the trias methodology successfully demonstrates the particularly strong link of energy law with foundational policy objectives. As such, although the "trias" is phrased rather as a method for the 'creation' of laws through orderly steps, it can extend to evidence the high relevance of teleological thinking for the interpretation and application of energy law. Another characteristic methodological block of energy law is interdisciplinarity (e.g., understanding of technical matters of engineering and of complex multi-level governance structures), which is identified as a necessary and omnipresent feature of energy law (without denying that interaction with other disciplines is increasingly noted in other legal fields too).[28]

Energy law has established its unique objectives and has forged its own methods. But it is also very important for its disciplinarity nature to phrase and sculpt its own principles that reflect and serve the objectives set, shape the methods used and influence their execution.[29] Before investigating principles on energy law, a conceptual clarification is necessary:

While legal scholarship has not reached an agreement about the concept and definition of principles, there is consensus that "standards" are categorized into rules and principles, and hence the latter are distinguished from the former.[30] Starting with the rules, and following the acknowledged definition of Ronald Dworkin, they are "applicable in an all-or-nothing fashion. If the facts a rule stipulates are given, then either the rule is valid, in which case the answer it supplies must be accepted, or it is not, in which case it contributes nothing to the decision".[31] In producing such effects, it is ordinarily accepted that rules are characterized by a large degree of specificity.[32] As valuable as such

[26] Raphael Heffron, *Energy Law: An Introduction* (Springer 1t ed. 2015), ch 1.3. *See* also, among others, Luisa Marti and Rosa Puertas, *Sustainable energy development analysis: Energy Trilemma*, 1 STE 100007 (2022); Olga Weiss et al., *The Swiss energy transition: Policies to address the Energy Trilemma*, 148A Energy Policy 111926 (2021).

[27] Fleming, *supra* n. 4, 166.

[28] *See* for example Huhta, *supra* n. 4.

[29] On the development of energy law principles and their importance for energy law as a discipline, see Huhta, *supra* n. 4; Heffron et al., *supra* n. 24; Fleming, *supra* n. 4; Iñigo del Guayo, *The evolution of principles of energy law (a review of the content of the Journal of Energy & Natural Resources Law, 1982–2022*, 40 JERL 43 (2022).

[30] See Ronald Dworkin, *The Model of Rules,* 35 UChicagoLawRev 14 (1967). While numerous scholars accept this categorization, one can see the terms principles, rules, standards, and norms, used interchangeably in different analyses. Such terminological variations do not nullify the conceptual distinction between "rules" and "principles".

[31] *ibid*, p. 25.

[32] *See* John Braithwaite, *Rules and Principles: A Theory of Legal Certainty*, 27 AUJlLegPhil 47 (2002)

remark might be, it is a generalization that does not connote that there are different types of rules (e.g. commands and exemptions, "power-conferring" and "duty-imposing rules") and that they might have different degrees of specificity or vagueness, e.g., because of the use of abstract legal terms in their formulation.[33]

This creates a thin line separating rules and principles, which are generally regarded as "standards" that do not impose concrete commands and "do not set out legal consequences that follow automatically when the conditions provided are met,"[34] but are "unspecific or vague prescriptions" that lead to "an infinitely creative range of action possibilities".[35] For a more accurate distinction between rules and principles, this paper endorses the approach of Robert Alexy who sees principles as "optimization commands", that is, "norms" or "standards" that require the best attainment of a certain objective within a framework that is each time determined by legal and factual factors.[36] As for the nature of these "optimization commands", it can vary as there are many different types of principles of law. From a plethora of distinctions that have been accurately identified and suggested,[37] this paper makes a difference between principles that reflect moral values, and principles that serve the coherence of a legal system, the consistent methodical interpretation of the law, and the smooth application of the law, without a direct link to moral values (but an indirect link can be identified with the proper level of abstraction).[38]

The next pages build on the above analysis to focus on and investigate legal principles of European energy law and of the sub-field of European renewable energy support law.

3. On Principles of European Energy Law

Identifying principles of energy law, be it national, European or international, is not an easy task. This is because the field of energy law has evolved thanks to its special capacity to "absorb" concepts and principles from other fields of law that have benefitted from a stronger and more deep-rooted disciplinary foundation.[39] A classic example here is the field of environmental law, the principles of which found an expression in international and European treaties decades ago,[40] and have been the

[33] *See* in this regard Louis Kaplow, *Rules Versus Standards: An Economic Analysis*, 42 DukeLawJ 557 (1992); Joseph Raz, *Legal Principles and the Limits of Law*, 81 YaleLJ 823 (1972), p. 834 ff.
[34] Dworkin, *supra* n. 30, p. 25.
[35] Braithwaite *supra* n. 32, p. 51. See also Takis Tridimas, *The General Principles of EU Law* (Oxford University Press 2d ed. 2006), ch 1.
[36] Robert Alexy, *Sistema jurídico, principios jurídicos y razón práctica*, 5 Doxa 139 (1988). See also Gabriel Encinas, *La teoría alexiana de los principios y dos concepciones de la democracia*, 44 Doxa 377 (2021), ch. 2.2; Joaquín R.-Toubes Muñiz, *Legal Principles and Legal Theory*, 10 Ratio Juris 267 (1997).
[37] See for example Jiménez, *supra* n. 21; Mark Van Hoecke, "The Use of Unwritten Legal Principles by Courts" in Hans-Joachim Koch & Ulfrid Neumann (eds.), *Praktische Vernunft und Rechtsanwendung* (Franz Steiner Verlag 1t ed. 1994); Manuel Atienza Rodríguez and Juan Ruiz Manero, *Sobre principios y reglas*, 10 Doxa, 101 (1991); Aleksander Peczenik, *Principles of Law: The Search for Legal Theory*, 2 Rechtstheorie 17 (1971).
[38] See also Jiménez, *supra* n. 21, p. 67-68; Antonio-Enrique Pérez Luño, *Derechos Humanos, Estado de Derecho y Constitución* (Tecnos 1t ed. 1984), p. 289-290. Seemingly *contra*, Dworkin, *supra* n. 23, arguing that principles that are not founded on moral values are in essence policy priorities. See also Ronald Dworkin, *Taking Rights Seriously* (Harvard University Press 1t ed. 1977).
[39] Huhta, *supra* n. 4; Raphael Heffron and Kim Talus, *The evolution of energy law and energy jurisprudence: Insights for energy analysts and researchers*, 19 EnergyResSocSci 1 (2016).
[40] See for example United Nations Convention on the Law of the Sea (adopted 10.12.1982, entered into force 16.11.1994); United Nations, Rio Declaration on Environment and Development, A/CONF.151/26, 12.8.1992; Single European Act [1987] OJ L169/1.

subject matter of thorough process by legal scholarship.[41]However, notable progress towards forging energy law as a discipline has been made in the last few years. The academic efforts for a systematization of principles of energy law have intensified. Accordingly, an heptad of principles has been put forward, including the principle of national resource sovereignty; the principle of access to modern energy services; the principle of energy justice; the principle of prudent, rational and sustainable use of natural resources; the principle of the protection of the environment, human health and combatting climate change; the principle of energy security and reliability; and the principle of resilience.[42] It can be debatable to which extent the above suggestions, or at least some of them, can in practice serve as actual legal principles or they practically rather express generally accepted and universal objectives of energy law, which also conform with the "Energy Trilemma" theory. Yet this analysis certainly contributes to the consolidation of energy law objectives, while the doctrinal and practical importance of an attempt to distil and catalog principles of energy law is beyond doubt.

Apart from an increased academic interest in principles of energy law, there has also been legislative action in the field, at least as far as the EU level is concerned. Accordingly, Article 194(1) of the Treaty on the Functioning of the EU (TFEU) provides that "[i]n the context of the establishment and functioning of the internal market and with regard for the need to preserve and improve the environment, Union policy on energy shall aim, in a spirit of solidarity between Member States, to: (a) ensure the functioning of the energy market; (b) ensure security of energy supply in the Union; (c) promote energy efficiency and energy saving and the development of new and renewable forms of energy; and (d) promote the interconnection of energy networks".

Article 194(1) TFEU also requires that these energy policy objectives are pursued "in a spirit of solidarity between Member States". This formulation in essence frames a discipline-specific principle of energy solidarity, which is of course linked with the broader legal principle of solidarity and with the moral value ascribed to it.[43] The principle of energy solidarity has been acknowledged and scrutinized by jurists and academic scholars, even with reference to specific aspects of energy policy.[44] Very importantly, it has been recognized as a justiciable principle by the Court of Justice of the EU (CJEU).[45]

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[41] See for example Ludwig Krämer and Emanuela Orlando (eds), *Principles of Environmental Law* (Edward Elgar 1t ed. 2018); Philippe Sands et al. (eds), *Principles of International Environmental Law* (Cambridge University Press 1t ed. 2018); Eloise Scotford, *Environmental Principles and the Evolution of Environmental Law* (Hart Publishing 1t ed. 2017).

[42] See Heffron et al., *supra* n. 24; Raphael Heffron and Luigi Maria Pepe, "Energy law principles" in Vicente López-Ibor (ed), *Derecho de la energía y el clean energy package* (Aranzadi 1t ed. 2021).

[43] For an academic scrutiny of the principle of solidarity, *see inter alia* Ann-Christine Hartzén, Andrea Iossa, and Eleni Karageorgiou (eds), *Law, Solidarity and the Limits of Social Europe Constitutional Tensions for EU Integration* (Edward Elgar 1t ed. 2022); Eri Kasagi (ed), *Solidarity Across Generations Comparative Law Perspectives* (Springer 1t ed. 2020); Christian Lahusen and Veronica Federico (eds), *Solidarity as a Public Virtue? Law and Public Policies in the European Union* (Nomos 1t ed. 2018); Andrea Biondi, Eglė Dagilytė, and Esin Küçük (eds), *Solidarity in EU Law: Legal Principle in the Making* (Edward Elgar 1t ed. 2018).
The principle of solidarity finds various expressions in primary EU law. *See* TFEU, *supra* n. 9, Articles 67, 80, 122 and 222.

[44] *See, inter alia,* Catherine Banet, "Legal mechanisms to ensure energy solidarity in international and EU law" in by Cecilia Bailliet (ed) *Research Handbook on International Solidarity and the Law* 399-420 (Edward Elgar 1t ed. 2024); Kaisa Huhta and Leonie Reins, *Solidarity in European Union Law and its Application in the Energy Sector*, 72 ICLQ 771 (2023); Dirk Buschle, Energy solidarity: approaching a new constitutional principle, 10 EECJ 66 (2021); Ruven Fleming, *A legal perspective on gas solidarity*, 124 Energy Policy 102 (2019); Sami Andoura, "Energy solidarity in Europe: from independence to interdependence" (Notre Europe - Jacques Delors Institute, Studies & Report, 99, 2013).

[45] *See* Case T-616/18 *Polskie Górnictwo Naftowe i Gazownictwo v Commission (Engagements de Gazprom)*, 2.2.2022, ECLI:EU:T:2022:43; Case C-848/19 P *Germany v Poland*, 15.7.2021, ECLI:EU:C:2021:598; Case T-883/16 *Poland v Commission*, 10.9.2019, ECLI:EU:T:2019:567.

The CJEU has clarified the principle of energy solidarity is not merely a programmatic or symbolic dictum with a declaratory vale, but it requires the EU institutions and the Member States "to take into account, in the context of the implementation of [EU energy policy], the interests both of the European Union and of the various Member States that are liable to be affected and to balance those interests where there is a conflict".[46] On the basis of this conclusion, the CJEU annulled Commission Decision C(2016) 6950 final of 28 October 2016 that had approved the exemptions that Germany had granted to Gazprom with regard to its access to and use of the OPAL pipeline. The Commission was found to not have properly taken into consideration the effects that such exemptions, and the consequent increase of Gazprom's dominance in gas trade in Europe, would have in central and eastern European Member States.[47] The recognition of the justiciability of the principle of energy solidarity might prove decisive, having important consequences for EU energy law and EU energy policy, although developments with regard to the concrete application of the principle of energy solidarity are still rather slow or rather unappreciable.[48]

The principle of energy solidarity is not the only discipline-specific principle that one can find (somewhat tacitly) expressed in Article 194 TFEU. Indeed, the second paragraph of this provision requires that the measures established to achieve the EU energy policy objectives determined in Article 194(1) TFEU "shall not affect a Member State's right to determine the conditions for exploiting its energy resources, its choice between different energy sources and the general structure of its energy supply, without prejudice to Article 192(2)(c) [TFEU]". This "caveat"[49] can be largely equated to an EU-law expression of the principle of natural resource sovereignty that academic research has also identified. Of course, Article 194(2) TFEU has an "all-or-nothing" formulation, by way of a rule. However, a strict interpretation of the provision's formulation would lead to the paradoxical result that the EU energy competence is anemic and cannot be exercised as it necessarily to a degree affects national sovereign rights or choices. And, indeed, unlike the principle of energy solidarity, Article 194(2) TFEU has not led to the annulment of an adopted legal act; it is characteristic that even the introduction of various mandatory targets for the share of RES in the energy mixes in Directive 2018/2001 has generally accepted as a lawful reform. Thus, in spite of the absolute phrasing used, it should be accepted that Article 194(2) TFEU introduces a threshold that is linked with a proportionality analysis and prohibits EU energy policy measures that inordinately affect national energy choices.[50] Thus, this provision can be seen as reflecting or relying on a principle of "national sovereign energy choices" that requires balancing and optimization before the adoption of a measure of EU energy policy.

Overall, energy law meets the criteria to be considered an autonomous discipline. It has its own characteristics and a unique link with actual practical problems and social concerns; it aims to serve

[46] Case C-848/19 P Germany v Poland, *supra* n. 45, para. 73.
[47] *See ibid;* Case T-883/16 *Poland v Commission*, *supra* n. 45.
[48] *See* for example the laxer application of the principle in Case C-255/22 P *Orlen v Commission*, 26.9.2024, ECLI:EU:C:2024:790.
[49] *See* Angus Johnston and Eva van der Marel, *Ad Lucem? Interpreting the New EU Energy Provision, and in particular the Meaning of Article 194(2) TFEU*, 10 EELR 181 (2013).
[50] On the meaning of Article 194(2) TFEU, *see* Theodoros Iliopoulos, "The Zero-Carbon Energy Transition and the Competence of the EU" in Geoffrey Wood et al. (eds), *The Palgrave Handbook of Zero Carbon Energy Systems and Energy Transitions* (Palgrave Macmillan 1t ed. 2024), 73-89; Michael Fehling, *Energy Transition in the European Union and its Member States: Interpreting Federal Competence Allocation in the Light of the Paris Agreement*, 10 TEL 339 (2021); Gustavo Rochette and Elena Vela, *Is the German Nuclear strategy lawful under EU law? Article 194(2) TFEU and its limitations*, 14 JWELB 277 (2021); Kristin Haraldsdóttir, *The Limits of EU Competence to Regulate Conditions for Exploitation of Energy Resources: Analysis of Article 194(2) TFEU*, 12 EEELR 208 (2014).

concrete objectives that can be classified in core categories distinguished by the influential "Energy Trilemma" theory; in terms of methods, classic legal methodology applies and finds a concrete expression in the field of energy law, especially as typically combined with interdisciplinary methods. And, very importantly, principles of energy law have been phrased and they have set to evolve.

Having argued for the disciplinarity identity of energy law, the next section of the paper focuses on renewable energy support law. It aims to demonstrate its special societal relevance, objectives and methods, but it mostly focuses on legal principles that govern the selection, design and implementation of support schemes for RES.

4. Renewable Energy Support Law: A Sub-Field of Energy Law

The promotion of renewable energy sources in the EU is a flagship policy priority[51] and an explicit legal requirement. According to Article 3(1) of the Renewable Energy Directive 2018/2001, as amended in 2023, "Member States shall collectively ensure that the share of energy from renewable sources in the Union's gross final consumption of energy in 2030 is at least 42.5%. Member States shall collectively endeavour to increase the share of energy from renewable sources in the Union's gross final consumption of energy in 2030 to 45%. Member States shall set an indicative target for innovative renewable energy technology of at least 5% of newly installed renewable energy capacity by 2030".

Meeting these targets often requires regulatory interventions in the market so that renewable energy projects benefit from financial support that will ensure their bankability and their profitability in the mid- and long-term. In spite of the market maturity of many RES projects, such public market interventions are in many cases still necessary because the functioning of the markets entails too much risk. This is still true in the 2020s, with energy markets being very volatile due to the occurrence of different crises: the economic halt during the COVID-19 pandemic, and as followed by a post-pandemic sharp economic rebound, have led to energy inflation. The energy price crisis was deteriorated and reached unseen levels after the Russian invasion of Ukraine that increased and highlighted the scarcity of gas and of energy resources in general.

After the initial shock in 2022 a certain market stability, price stability and supply stability has been attained, also thanks to various interventions through hard law and soft law[52] and the capability of energy markets to adapt and sustain crises. However, such stability seems inconclusive and fragile, and since 2022 there is a constant threat that a major distortion of energy markets might occur at any time; besides, the global (geo)political situation has become even more fluid and precarious. This is of course not an accessible environment for investments. Renewable energy projects, in particular, require high-cost upfront investments, which means that market stability and a certain certainty about revenues is crucial for access to investment capital and for the decision of an investor to develop a project. To make matters worse, and the need for financial support more pressing and lasting, even under normal conditions renewable energy projects need to sustain the so-called "cannibalization effects": due to

[51] *See* REPowerEU Plan, *supra* n. 1; Commission, "The European Green Deal" COM(2019) 640 final (11 December 2019).

[52] *See* e.g. Regulation (EU) 2022/1032 of the European Parliament and of the Council of 29 June 2022 amending Regulations (EU) 2017/1938 and (EC) No 715/2009 with regard to gas storage, OJ L173, 30 June 2022; Council Regulation (EU) 2022/1369 of 5 August 2022 on coordinated demand-reduction measures for gas, OJ L 206, 8 August 2022. *See* also Council Regulation (EU) 2022/1854 of 6 October 2022 on an emergency intervention to address high energy prices, OJ L 267l, 7 October 2022; Commission, "Recommendation on speeding up permit-granting procedures for renewable energy projects and facilitating Power Purchase Agreements" C(2022) 3219 final (18 May 2022).

the marginal pricing of the electricity markets, an increased input of almost-zero-marginal cost energy from renewable sources would drive prices down. Consequently, the more renewable energy sources dominate electricity markets, the lower the price that developers of renewable energy projects will benefit from and, hence, the lower their revenues from the market.[53] Besides, the generation of wind and solar energy is unstable and this generation uncertainty further exacerbates revenue uncertainty.[54]

Therefore, there is an ongoing necessity for renewable energy projects to receive financial support and it is often support of public origin that is devoted to such mission, through the enactment and implementation of support schemes for renewable energy sources or, simply, support schemes. The corpus of rules that govern the design, enactment and implementation of such support schemes has been already referred to by this paper as "renewable energy support law". While this approach has a strong descriptive value, the rest of this section investigates the discipline characteristics of renewable energy support law as a sub-field of energy law. In doing so, this section draws attention to criteria that are crucial for the verification of the disciplinarity identity of a field (i.e. link with societal concerns or problems, special objectives and methodology, application of distinct principles) and investigates whether they apply and find a special expression in the area under scrutiny.

4.1. Special Link with Societal Challenges

Enacting rules about support schemes is linked with actual social needs. It has been already demonstrated that granting financial support to renewable energy projects is still necessary for the uptake of RES to an extent that will allow the attainment of the EU clean energy transition. In addition, the legal framework governing the design, enactment, and implementation of support schemes needs to secure their viability and cost-effectiveness and avoid the occurrence of regulatory failures. This has proven challenging, especially in the late 2000s and early to mid-2010s. In these earlier phases of EU renewable energy policy, Member States had applied very ambitious support schemes with the aim to de-risk investments in renewable electricity projects as much as possible and, hence, attract as many investments as possible, meet their renewable energy targets, and boost national industries' activity. However, it soon became clear that the effects of such ambitious support schemes were out of control. The authorities in many Member States all over Europe (from Belgium and Germany to Greece, Italy, and Spain, and to newer Member States, like Bulgaria and Czechia), approved very lucrative support schemes, and for for too many applicants.[55] And this without having priorly considered possible grid capacity constraints or possible mismatches between an increased supply and demand that was in fact decreasing because of the recession of the early 2010s. Further, the level of financial support that was offered to beneficiaries (and was in most cases administratively set by the authorities) proved to be too high compared to the actual market prices for electricity. Within this framework, the implementation of such support schemes was too expensive for electricity consumers who were

[53] *See* among others Natalia Fabra, *Reforming European Electricity Markets: Lessons from the Energy Crisis*, 126 Energy Economics 106963 (2023); Mario Liebensteiner and Fabian Naumann, *Can Carbon Pricing Counteract Renewable Energies' Cannibalization Problem?* 115 Energy Economics 106345 (2022); Nuno Carvalho Figueiredo and Patrícia Pereira da Silva, *The "Merit-order effect" of wind and solar power: Volatility and determinants*, 102 RenewSustainEnergyRev 54 (2019).

[54] On a more elaborate analysis of the reasons that make the supportive financing of renewable energy projects necessary, *see* Iliopoulos, *Law of Finance for Renewable Energy Projects in the EU* Routledge 1t ed. 2024), ch. 1.

[55] *See* for example Volkmar Lauber and Moritz Buschmann, "Germany: Challenges of a Full Transition to Renewable Energy" in Evanthie Michalena and Jeremy Maxwell Hills (eds), *Renewable Energy Governance* (Springer 1t ed 2013), 295-313; Sofia-Natalia Boemi and Agis Papadopoulos, A. Times of Recession: Three Different Renewable Energy Stories from the Mediterranean Region in Renewable Energy Governance in *ibid*, 263-274; Yassen Spassov, Anton Krustev and Vassia Nikolovska, *Lowest-cost Abatement in Light of the EU ETS and Renewable Feed-in Tariffs in the Electricity Sector in Bulgaria*, 29 JERL 281 (2011).

ultimately burdened with special bill surcharges for the collection of funds that would finance support schemes. The combination of inordinate electricity production, excessively generous support for project developers, and high charges for consumers led to regulatory failures. Many Member States decided to discontinue and reform the support schemes that would otherwise apply for many years,[56] so that consumers be relieved and the financial and technical viability of the electricity systems be protected. As necessary as such administrative decisions might have been, they damaged the investors' trust in national authorities, they gave rise to voices arguing that high prices are inevitable with more RES, which threatened the social acceptance of the clean energy transition, and they overall put a break in the growth of RES. The investment environment was further aggravated because of the large number of disputes between investors that requested to be remunerated on the basis of the original support schemes and contracts, and regulatory authorities that justified the reforms invoked necessity and reasons of public interest to justify the reforms. Such disputes ended up before national courts and the CJEU or arbitral tribunals, and another problem emerged: enforcement of arbitral awards in the EU, for those cases in which a tribunal decided in favour of the investments, has been problematic because the EU legal order regards such intra-EU investment arbitration as an arbitrary parallel system that competes the official judicial system of the EU.[57] The avoidance of a re-occurrence of such a regulatory failure and the smooth promotion of renewable energy sources without excessive financial burdens imposed on consumers, but also the reparation of trust between investors and authorities are special tasks of renewable energy support law. And indeed, as will be further shown below, Directive 2018/2001 introduced provisions governing the design and financial stability of support schemes.

4.2. Objectives and Methods

In terms of its objectives, it is doubtful that renewable energy support law has its unique and distinct goals; it rather serves and aims at the attainment of objectives of energy law, as eloquently expressed by "the Energy Trilemma" theory. Accordingly, the development of clean RES is manifestly linked with the environmental policy priority of the "Energy Trilemma". At the same time, it is linked with political and fairness considerations, in the sense that an increased generation and consumption of energy from renewable sources in the EU will also serve security of supply and access to energy services, but also the EU's self-sufficiency in energy and its resilience against external energy security threats.[58] Renewable energy support law aims to balance the attainment of the above with the economics policy priorities expressed in the Energy Trilemma. The relevant rules aim to ensure that such regulatory intervention will distort as little as possible the functioning of the energy markets and will lead to the growth of RES in the internal market without granting windfall profits to the beneficiaries to the detriment of the consumers. Thus, the objectives of renewable energy support law in practice summarize and constitute a special expression of the "Energy Trilemma". Renewable energy

[56] *See ibid. See* also Theodoros Iliopoulos, "Price Support Schemes in the Service of the EU's Low-Carbon Energy Transition" in Theodoros Zachariadis et al. (eds), *Economic Instruments for a Low-Carbon Future* (Edward Elgar 1t ed. 2020) 2-15.

[57] *See* for example Case C-429/20 P *Solar Ileias Bompaina v Commission*, 7.4.2022, ECLI:EU:C:2022:282; Case C-366/19 *BOSOLAR*, 26.10.2021, ECLI:EU:C:2021:944; Joined Cases C-798/18 and C-799/18 *Federazione nazionale delle imprese elettrotecniche ed elettroniche (Anie) and Others*, 15.4.2021, ECLI:EU:C:2021:280; Joined Cases C-180/18, C-286/18 and C-287/18, *Agrenergy*, 11.7.2019, ECLI:EU:C:2019:605. *See* also Ana Mercedes López-Rodríguez, *The Sun Behind the Clouds? Enforcement of Renewable Energy Awards in the EU*, 8 TEL 279 (2019); Fernando Dias Simoes, *When green incentives go pale: investment arbitration and renewable energy policymaking*, 45 DenvJIntL&Pol 251 (2017).

[58] *See* also REPowerEU Plan, *supra* n. 1.

support law also shares methods with the broader field of energy law.[59] For example, the "trias" methodology that has been put forward for energy law can equally apply to renewable energy support law. [60]In another example, the interaction with other disciplines is a characteristic feature of renewable energy support law, with regulatory economics and political sciences playing a key role in the field.[61]

4.3. Principles

A difficult question when it comes to renewable energy support law is whether it is governed by autonomous principles that are distinctive and not shared with other legal disciplines. Of course there are principles of energy law that are doctrinally relevant to the sub-field of renewable energy support law. Focusing on EU law, the principles of energy solidarity and of national sovereignty over energy resources, enshrined in Article 194 TFEU, also cover the design, enactment, and implementation of support schemes, but it has not happened that they apply in a concrete case so far. In this sense, their relevance seems of a more theoretical nature. Similarly, the principles that academic literature has put forward[62] in principle cover support schemes too, but they have not found an expression in this sub-field, at least not yet.

One can, however, distil more principles from the lessons learned from the development of the field before the enactment of support-specific provisions in EU secondary law and, ultimately, from the letter and the system of the Renewable Energy Directive 2018/2001. Articles 4-6 of the directive specifically relate to support schemes for RES and they contain rules,[63] but also formulations that should be seen as principles, in the sense that they provide vague prescriptions that do not require, enable, or prohibit a concrete action, but they rather constitute optimization commands. The next paragraphs are structured around the order of appearance of such principles in Directive 2018/2001 with the aim to analyse them and examine whether they are autonomous in the field of renewable energy support law or they are borrowed from other fields of law.

4.3.1. Market-based and market-responsive design

Article 4(2) of Directive 2018/2001 states that support schemes for electricity from RES "shall provide incentives for the integration of electricity from renewable sources in the electricity market in a market-based and market-responsive way, while avoiding unnecessary distortions of electricity markets as well as taking into account possible system integration costs and grid stability". The first part of this provision adopts a principle-based approach that requires the market-based and market-responsive design of support schemes. Interpretive guidance for comprehending the abstract legal terms "market-based" and "market-responsive" is provided by Article 4(3) of the same directive. According to it, support schemes for electricity from RES "shall be designed so as to maximize the integration of electricity from renewable sources in the electricity market and to ensure that renewable energy producers are responding to market price signals and maximize their market revenues". Given the above, and on the basis of a literal and a reasonable interpretation of the law, it is construed that "market-based" design requires the maximum integration of electricity from

[59] And classic legal methods apply also here, similarly to how they apply to broader energy law too.
[60] Fleming, *supra* n. 4, 166.
[61] *See* for example Israel Solorio and Helge Jörgens, *Contested energy transition? Europeanization and authority turns in EU renewable energy policy,* 42 JEurInteg 77 (2020); Erik Gawel et al., *Rationales for technology-specific RES support and their relevance for German policy*, 102 Energy Policy 16 (2017); Richard Green & Adonis Yatchew, *Support Schemes for Renewable Energy: An Economic Analysis*, 1 EconEnergyEnvPol 83 (2012).
[62] *See* Heffron et al., *supra* n. 24; Heffron & Pepe, *supra* n. 42.
[63] For example, Art. 4(1): "[…] Member States may apply support schemes" or Art. 4(3): "[…] with regard to direct price support schemes, support shall be granted in the form of a market premium".

renewable sources in the electricity market, while "market-responsive" design relates to the granting of revenue incentives to beneficiaries to respond to market price signals.[64]

Therefore, Renewable Energy Directive 2018/2001 has introduced an optimization command for support schemes that is not linked with moral values (at least not directly), but it is oriented towards ensuring the design quality of support schemes and the quality of the effects that their implementation gives rise to. The directive also shows the practical implications of the application of the principle of market-based and market-responsive design. By way of following the "trias" methodology, the EU legislature set down the said principle and proceeded to phrase a concrete rule linked with it:[65] direct price support shall be granted in the form of market premiums or of "two-way contracts for differences".[66] But the third sub-paragraph of Article 4(3) of Directive 2018/2001 relativizes this requirement, by allowing exemptions for small-scale projects and demonstration projects.

The identified principle of market-based and market-responsive design is not borrowed from another legal discipline, but it is a unique and characteristic feature of renewable energy support law. Of course the terms "market-based" and "market-responsive" are standard terms that can be even used in everyday life, and in fact it can be found in different legal contexts. However, within the context of renewable energy support law, they have an autonomous meaning that differentiates them from other uses. Starting with the term of "market-responsive" design, few more uses can be found in EU hard law and soft law,[67] but the term is very much associated with the field of energy. The recently added Article 19h of the Electricity Market Regulation 2019/943 that relates to the flexibility of electricity systems uses a formulation that is identical with the one of Article 4 of the Renewable Energy Directive 2018/2001 and requires that non-fossil flexibility support schemes "provide incentives for the integration in the electricity markets in a market-based and market-responsive way". The term of "market-responsive" design is also used to denote the demand-side strategy that steers consumption of electricity thanks to the use of price signals.[68] This is different than the use of the term in a renewable energy support context that refers to the reaction of beneficiaries producers, and not of consumers. Regarding the characterization of an action or measure as "market-based", it is of a more general use and can be more often found in the discipline of energy law[69] or in other legal disciplines.[70] However, its use in the context of renewable energy support law is unique and it has an autonomous meaning, as it specifically requires that the granting of financial support leads to the integration of

[64] *See* also Iliopoulos, *supra* n. 54, ch. 3; Iliopoulos, *supra* n. 56, p. 8.
[65] Directive 2018/2001 *supra* n. 3, Art. 4.
[66] Defined in Art. 2(76) of Regulation (EU) 2019/943 of the European Parliament and of the Council of 5 June 2019 on the internal market for electricity (recast), OJ L158, 14.6.2019, as contracts "between a power-generating facility operator and a counterpart, usually a public entity, that provid[e] both minimum remuneration protection and a limit to excess remuneration".
[67] *See* for example Opinion of the European Economic and Social Committee COM(2009) 215 final, OJ C339, 14.12.2010 regarding consumer labelling schemes to enable consumer choice.
[68] *See* for example Commission, "Energy prices and costs in Europe" COM(2019) 1 final (9 January 2019).
[69] *See* for example Directive (EU) 2024/1788 of the European Parliament and of the Council of 13 June 2024 on common rules for the internal markets for renewable gas, natural gas and hydrogen, amending Directive (EU) 2023/1791 and repealing Directive 2009/73/EC (recast), OJ L2024/1788, 15.7.2024; Directive (EU) 2019/944 of the European Parliament and of the Council of 5 June 2019 on common rules for the internal market for electricity and amending Directive 2012/27/EU (recast), OJ L158, 14.6.2019.
[70] *See* for example Regulation (EU) 2021/694 of the European Parliament and of the Council of 29 April 2021 establishing the Digital Europe Programme and repealing Decision (EU) 2015/2240, OJ L166, 11.5.2021; Regulation (EU) 2017/1131 of the European Parliament and of the Council of 14 June 2017 on money market funds, OJ L169, 30.6.2017.

electricity from RES in the electricity market so that RES projects mature to an extent that the needs for financial support is diminished or even phased-out in the future.[71]

4.3.2. No unnecessary market distortion

Article 4(2) of Renewable Energy Directive 2018/2001 also requires that support schemes for electricity from RES avoid "unnecessary distortions of electricity markets". A public regulatory intervention that aims to financially support certain undertakings will possibly have a certain distortive effect, which is in principle legitimate, but it shall not be "unnecessary". The choice of the abstract term "unnecesary" by the legislature denotes that the nature of the effects of an intervention will be each time assessed *ad hoc*. The directive does not give a clarification or guidance or criteria that will be decisive for the relevant assessment, but there is a clear link with the principle of proportionality. Unlike the principle of market-based and market-responsive design, however, the principle of no unnecessary market distortion is not autonomous. It is a term that has its origin in State aid law, in which the Commission (and the CJEU) has often assessed the unnecessary distortive effects of an aid measure.[72]

4.3.3. Granting of support in an open, transparent, competitive, non-discriminatory and cost-effective manner

Article 4(4) of Renewable Energy Directive 2018/2001 requires Member States to "ensure that support for electricity from renewable sources is granted in an open, transparent, competitive, non-discriminatory and cost-effective manner". This provision uses a pentad of abstract legal terms[73] with the aim to ensure that the level of support and the beneficiaries will not be determined by the authorities on the basis of their discretion; such practice has been condemned as leading to unduly high levels of support, and often to regulatory capture, with inefficient developers securing access to a support contract. With Article 4(4) of Directive 2018/2001, potential developers will need to seek financial support in competitive bidding processes in which support is allocated to the best bids. The requirement for an "open, transparent, competitive, non-discriminatory and cost-effective" allocation of support is a classic feature of renewable energy support law, also found in other hard and soft legal acts.[74] However, it is doubtful whether this is an autonomous principle. On the one hand, of course, this exact formulation with these five abstract legal terms together is only found in the field of renewable energy support law. But, on the other hand, such a principle seems to draw from (or even have its origin in) public procurement law.[75]

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[71] *See* Commission, "European Commission guidance for the design of renewables support schemes" COM(2013) 349 final (5 November 2013).

[72] *See* for example Case T-57/11, *Castelnou Energía v Commission*, ECLI:EU:T:2014:1021, 3.12.2014; Case C-403/10 P, *Mediaset v Commission*, ECLI:EU:C:2011:533, 28.7.2011. *See* also Commission Decision (EU) 2021/2034 of 10 June 2021 on the State aid SA.28599 (C 23/2010) (ex NN 36/2010, ex CP 163/2009)) implemented by Spain for the deployment of digital terrestrial television in remote and less urbanised areas (outside Castilla-La Mancha) (notified under document C(2021) 4048), OJ L417, 23.11.2021; Commission Decision of 15 December 2009 on State aid granted by Germany in respect of certain activities of the Bavarian Animal Health Service (C 24/06 (ex NN 75/2000)), OJ L79, 25.3.2010; Commission decision of 12 March 2002 on the aid granted by Italy to Poste Italiane SpA (formerly Ente Poste Italiane), OJ L282, 19.10.2002.

[73] For an analysis of the meaning of each of the terms, *see* Iliopoulos, *supra* n. 54, ch. 3.

[74] *See* Guidelines 2022, *supra* n. 3; Guidelines 2014, *supra* n. 10; Regulation 651/2014, *supra* n. 9.

[75] *See* for example Case C-665/19 P *NeXovation v Commission*, ECLI:EU:C:2021:667, 2.9.2021; Case C-647/19 P, *Ja zum Nürburgring v Commission*, ECLI:EU:C:2021:666, 2.9.2021; Directive 2014/24/EU of the European Parliament and of the Council of 26 February 2014 on public procurement and repealing Directive 2004/18/EC, OJ L94, 28.3.2014.

4.3.3. Predictability of terms of financial support

Article 6 of Renewable Energy Directive 2018/2001 aims to prevent the occurrence of a regulatory failure and an abrupt unilateral modification of the support terms by the authorities. It states that "Member States shall ensure that the level of, and the conditions attached to, the support granted to renewable energy projects are not revised in a way that negatively affects the rights conferred thereunder and undermines the economic viability of projects that already benefit from support". However, an absolute stability requirement is not necessarily a good feature for a regulatory regime. Indeed, when economic, social, technological and other conditions significantly change, regulatory regimes should be able to adapt to the changing circumstances and evolve. In such occasions, flexibility is a virtue for regulation, and it is thus too rigid to always require stability.[76] The need for a certain flexibility is also recognized by the EU legislature. The second paragraph of Article 6 of Directive 2018/2001 allows Member States to "adjust the level of support in accordance with objective criteria, provided that such criteria are established in the original design of the support scheme". Therefore, the Renewable Energy Directive in essence requires a balance is found between the exercise of the authorities' regulatory discretion and the rights and interests of the beneficiaries developers of RES projects. Given the above, and in spite of the explicit reference of the directive to the "stability of financial support", the principle that is identified is the principle of predictability of financial support. It is an optimization command that requires authorities to strike the optimal balance between stability and flexibility, also in line with the principles of legal certainty and the protection of legitimate expectations. Hence, this principle of renewable energy support law has a more direct link with moral values and classic legal principles.

5. Conclusion

This paper calls attention to the special field of "renewable energy support law". This term has a manifest descriptive value, as it can be used to refer to rules governing the design, enactment and implementation of support schemes for RES. But the main interest of this paper is the investigation of EU renewable energy support law as an autonomous-principled sub-field of energy law, with principles that have been forged from practice and now find an expression in secondary law..

The analysis started with an investigation of the factors that determine the disciplinarity identity of a field of study. On the basis of a literature review, it was inferred that the existence of a generally accepted theoretical foundation, the use of concrete methods, and the strong link with societal concerns and demands (which is even more important for the field of law) are crucial criteria for the recognition of a field as a discipline. Energy law seems to meet the disciplinary criteria: it serves concrete objectives and it aims to give an answer to pressing societal challenges. In this regard, a special theoretical foundation for energy law has been developed and it is further processed by jurists, practitioners and scholars. The "Energy Trilemma" theory is a doctrinally valuable expression of the objectives of energy law and the balancing between different objectives. Linked with above, the proposed "trias" methodology shows that energy law draws from classic legal methods; but teleological interpretation has a special role (because of the strong link of the discipline with foundational policy objectives), while it is generally accepted that in energy law interdisciplinary methods typically complement legal analyses.

Another key component for the development of energy law as a discipline is the existence and development of principles. Principles are defined as vague prescriptions that in essence constitute optimization commands, and they are contrasted to rules, which are specific standards that apply in

[76] *See* also Leigh Hancher, Pierre Larouche and Saskia Lavrijssen, Principles of Good Market Governance, XLIX TEM 339 (2004).

an “all-or-nothing” fashion. In the EU legal order one could directly mention the principle of energy solidarity and the principle of the national sovereignty over energy resources that find an expression in the TFEU. But energy law scholars have done notable work in identifying and phrasing more principles. Energy law is hence more and more acknowledged as a discipline of law.

The disciplinary criteria also apply to renewable energy support law. Its strong societal relevance can be proven by the fact that renewable energy support law is called on to deal with special challenges: to facilitate access to investment capital and secure a certain profitability for RES projects, to ensure the rapid and cost-effective attainment of the clean energy transition, without allowing an excessive burden for energy consumers, and to guarantee the quality of public regulatory intervention so that no regulatory failure follows. Regarding objectives and methods of renewable energy support law shares objectives and methods with energy law: the Energy Trilemma theory and the energy “trias” method are relevant here too. Classic legal methodology applies to renewable energy support law, which, because of its component dealing with financing, also draws a lot from economic law. In fact, renewable energy support law has been largely developed on the basis of the application of State aid law conditions, while the impact of a renewable energy directive to the field is practically nascent, beginning with the enactment of Directive 2018/2001. Interdisciplinarity is also exemplarily relevant because, on top of all else, the close ties with financial aspects make law and economics analyses necessary for comprehending and applying renewable energy support law. The above adds idiosyncratic characteristics to renewable energy support law that distinguish it from other areas of interest within energy law. But it also denotes a not as solid theoretical foundation, which might impede the coherence and effectiveness of legislative and regulatory interventions and the effectiveness of the application of the law (as it happened in the past, when many regulatory failures occurred and slowed energy transition down).

The theoretical foundation of renewable energy support law is strengthened with the identification of principles that a) are shared with “broader” energy law (e.g. the principle energy solidarity), but without having an impact on renewable energy support in practice; or b) specifically characterize the sub-field. This paper placed the emphasis on the latter category of principles. It identified four such renewable energy support legal principles and investigated whether they have an autonomous character or they are borrowed from other fields of law. Accordingly, the principle of market-based and market-responsive design is found to be genuinely autonomous, without having its origin in another field. The principle of predictability of financial support is also autonomous, but also linked with classic legal principles, such as the principle of legal certainty. The granting of support in an open, transparent, competitive, non-discriminatory and cost-effective manner is phrased in a manner that can be solely found in renewable energy support law, but it clearly draws elements from public procurement law. As for the principle of no unnecessary market distortion, it has its roots in State aid law.

Overall, renewable energy support law is a sub-field of energy law that has autonomous principles, i.e. the principle of market-based and market-responsive design and of predictability of terms of financial support. These principles (should) govern the enactment, interpretation and application of the rules of this sub-field follows, in line with the steps of legal methodology. Hence, the analysis and the analytical framework provided by this paper aspire to contribute to the consolidation of renewable energy support law as a sub-field of energy law, thus aspiring to offer doctrinal capabilities to both, and to assist in the interpretation of the law and in the law-making process. It is also noted that energy law and its sub-fields are not static, and hence this work can be seen as a first step for a more thorough understanding of the field.