Between Energy Transition and Internal Market Agenda: The Impact of the EU Commission as a Distinct Energy Policy Actor



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Abstract The EU Commission has newly evolved into a leading energy policy actor. At the same time, the Commission's proclamation of an "Energy Union" depicts a visionary future rather than the current reality; the internal energy market still awaits full integration and the transition towards a sustainable energy system is taking place largely on the national level (e.g., the *Energiewende* in Germany). To shed some light on this muddled situation, we analyse the Commission's promotion of the internal market and policy harmonisation/centralisation from an economic perspective along two dimensions. First, on the *content* dimension, we investigate whether the double challenge of decarbonising the energy system and finalising the internal market exhibits trade-offs. Second, on the form dimension, we outline the benefits of (de)centralising energy policies. For both dimensions, we build on the theory of fiscal federalism to elucidate the normative aspects of the discussion and the Public Choice approach to positively explain the emergence of the current situation. Overall, we find that the normative policy evaluation indeed differs in some respects from the Commission's positions, while the latter can be well explained via the Public Choice approach.

1 Introduction

The European Union (EU), as a descendant of the *European Coal and Steel Community* of the 1950s, displays a long history of debate on the energy sector. This "long energy journey" (Buchan and Keay 2016) is still continuing—with a

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number of related but distinguishable issues currently driving the discussion. First, this concerns the preferable course of energy policies with respect to the double challenge of tackling climate change and fully integrating the internal market. Second, this concerns the issue of how (de)centralised energy policy should be. Within these problem areas, different disciplines have also chosen different analytical foci. From a legal perspective, the development of EU law and its impact on national energy policies has been at the centre of attention (e.g., Callies and Hey 2013; von Unger 2014). The political science literature has analysed, amongst other issues, the interactions between actors, interests and institutions on different levels of governance (e.g., Knodt 2010; Ohlhorst 2016). The economic discussion has most heatedly debated whether (and, if so, which) renewable energy support policies are effective and efficient climate policy instruments (e.g., Lehmann and Gawel 2013; Stavins 2014). However, a comprehensive politico-economic analysis of the double challenge of tackling climate change and fully integrating the internal market is lacking.

The overlap of competences between the national and the EU level further complicates the issue. Prior to the Lisbon treaty, energy policy had not been a formal competency of the EU. So it was only in 2009 when the Lisbon treaty entered into force, that energy policy was established as a co-responsibility of the EU—thereby strengthening the Commission's position. Then again, Member States explicitly stipulated their sovereignty over national energy mixes (Art. 194 TFEU). As a result, frictions remain inevitable—this concerns both substantial differences on how to square climate policy and the internal market agenda, as well as struggles over competences.

The analytical starting point of this paper, then, is that in order to clarify the discussion, two dimensions should be distinguished. First, the content dimension (what is the vision for the energy system?) revolves around the double challenge of decarbonisation and market integration. Second, the form dimension (who decides upon energy policy?), pertains to the issue of the appropriate degree of (de) centralisation. Certainly, these dimensions appear often mixed within the discussion: For instance, it is often argued that, based on the supposed overall cost savings from coordinated deployment of renewables, support for renewables should be organised in a more centralised way (e.g., Bigerna et al. 2016). What is more, the EU Commission, as a pivotal actor within EU energy policy debates (e.g., Thaler 2016; cf. Steinebach and Knill 2017), makes the case for connecting both dimensions in practice: the "Energy Union" is said to meet all challenges and suit all regional and national interests (e.g., energy security) best. Specifically, the EU Commission (2015) seems to provide two answers to the above questions. With respect to the content dimension, the Commission contends that the internal market is broadly compatible with the sustainability transformation of the energy system. Procedurally, the internal market principle dominates other interests such as the climate challenge in the sense that the burden of proof always lies with those who argue that a deviation from the market principle is unavoidable. With respect to the form dimension, the Commission argues that, in line with the internal market agenda, decision-making should move towards more centralisation and towards harmonised policies.

In this paper, we aim to scrutinise the Commission's position critically. First, we review whether the Commission's positions rest on economically sensible grounds, i.e. we take a normative economic perspective. We condense this normative discussion into two propositions:

- 1. There is a trade-off between the goals of finalizing the internal market and the sustainable transformation of the energy system.
- In order to manage this trade-off efficiently, a mix of centralisation and decentralisation is advisable.

Second, we analyse how the Commission's positions in terms of policy content and form are to be explained: How can the Commissions' efforts to centralise energy policies be accounted for theoretically, and how are the Commission's existing "cogovernance" opportunities to be explained, given that member states still have the last word? By addressing these questions, we provide a positive analysis of the Commission's stance. For the purpose of this analysis, we adopt the public choice approach. This approach assumes that the self-interest of actors involved in the political process (voters, politicians, bureaucrats and interest groups) is the main explanatory criterion to understand policy outcomes (seminal Tullock 1967; see Kirchgässner and Schneider 2003 for an introduction). This perspective leads to a "politics without romance" (Buchanan 1984) view that does not expect policies to be welfare-maximizing, that is, efficient from a normative economic perspective. Rather, politicians act as brokers (McCormick and Tollison 1981), balancing different stakeholder interests so as to maximise their own special interest, which consists mainly in getting (re-)elected. Likewise, bureaucrats (Niskanen 1971) and interest groups (Olson 1971; Stigler 1971) aim to influence the political process in their favour—that is, they engage in "rent-seeking".

Based on this economic policy perspective, we derive and defend two hypotheses regarding the Commission's positions on *content* and *form* of energy policy:

- 1. *Content:* The Commission frames the internal market as the overarching principle, because this is where it has its legal competences.
- 2. *Form:* The Commission pushes for centralisation and harmonisation as this strengthens its position.

Based on the analysis of these hypotheses, it should become clearer why and in what way the Commission's positions deviate from our normative propositions as outlined above.

Meanwhile, in the political context of national energy policies, the Commission is exercising considerable impact. We illustrate the Commission's influence via the example of the guidelines on state aid for environmental protection and energy (EU Commission 2014) and their influence on Germany's renewable support. The 2014 reform of Germany's support scheme for renewable energies (the so-called RES Act) provides an illustrative case where the different issues discussed so far

intersect: competing visions for the future of the energy system left their mark, and so did the debate on the appropriate governance level for energy policy.

The remainder of this paper is structured as follows: in the next section, the normative analysis, we sketch the potential trade-offs between the goals of decarbonizing the energy system and finalizing the internal market. Subsequently, in the positive analysis, we investigate how the Commission's positions and its influence on actual energy policies are to be accounted for theoretically and empirically. On that basis, we outline the Commission's impact on Germany's revision of the RES Act. Finally, we discuss and conclude our findings.

2 Normative Analysis: Does the Internal Market Guarantee Sustainability?

2.1 Content Dimension: Trade-Offs Between the Goals of Finalizing the Internal Market and the Sustainable Transformation of the Energy System

The official narrative put forward by the EU Commission, for instance in its Energy Union package (2015), reads that market integration and the sustainable transformation of the energy system are complementary goals; by implication, failure to move forward on the internal market front would endanger the EU's climate mitigation pledges: "the unavoidable challenge of moving towards a low-carbon economy will be made harder by the economic, social and environmental costs of having fragmented national energy markets" (EU Commission 2015: 3). To be sure, the Commission's case is partly well-founded: The main instrument of the EU's climate mitigation efforts is the emissions trading Scheme (EU ETS) and the latter's struggles to become an effective trigger for decarbonisation are also rooted in nationally fragmented perspectives on energy policy. In order to foster market-based emission regulation, the reduction of overlapping regulations and the gradual expansion of the scheme to hitherto non-ETS sectors has been advised (Böhringer 2014). This would be well in line with and contribute to the full integration of the internal market.

However, when looking beyond ETS functioning, several points of friction between the internal market vision and sustainability transformation policies begin to appear. To start with, Buchan and Keay (2016: 84) analyse "the tensions between two of the EU's main goals: a freely operating market and a secure low-carbon energy system." They trace these frictions back to two risks: First, interventions in favour of (or against) particular technologies undercut the idea of a single, common market area; second, such interventions render electricity price signals ineffective, thereby undermining the basis of liberalisation. In consequence, a "clash" between liberalisation and intervention is diagnosed: climate externalities warrant government interventions on an "unprecedented scale", yet "unless they are carried out on a

consistent basis across the EU, [they] could threaten the whole basis of the single market in energy" (Buchan and Keay 2016: 13 f.).

Now the sustainability transformation of the energy system is more than decarbonisation, and other components need to be acknowledged as well: for instance, ecological sustainability concerns further externalities from conventional electricity production such as nuclear risks. Yet if the Commission's (2015: 2) vision of "an integrated continent-wide energy system where energy flows freely across borders, based on competition and the best possible use of resources" were realised, the decisions to phase out nuclear energy in Germany and Belgium were somewhat subverted. Again, this points to an important tension at the heart of the integration project: While the internal market constitutes a main pillar of the EU, Article 194 (2) TFEU preserves the member states' rights to decide upon their national energy mix. Clearly, this contradiction can only be solved in one of two ways—either the free flow of energy across borders diminishes national control over the energy mix (e.g., substituting national nuclear production with imports of nuclear energy), or technological decisions on the national level limit the degree of overall integration of electricity markets.

Even more fundamental trade-offs emerge when sustainability is not reduced to the internalisation of environmental externalities but understood in the encompassing sense of intra- and intergenerational justice. Specific conceptions about a just societal organisation of energy systems may then clash with idea of a common market on the EU level. Critics of market-based policies have for a long time opposed the Commission's "neoliberal" course on energy policy (Lauber and Schenner 2011). Consider the Commission's push towards tender schemes in renewable energy support. Tender schemes are regularly criticised for endangering bottom-up transformation initiatives by decentralised actors such as communal energy cooperatives (Tews 2015; Michalena and Hills 2016). Furthermore, some include municipal ownership of utilities and distribution grids as an essential pillar in their vision of the sustainability transformation, which is consistently framed as a "decentralised energy revolution" (e.g., Burger and Weinmann 2013). Yet, local efforts to re-communalise (or to prevent privatisation of) distribution grids for gas and electricity have been inhibited by EU procurement law: for instance, as the German Federal Court of Justice decided in 2013 (Case No. KZR 65/12 und 66/12). municipalities cannot just refer to the principle of subsidiarity and local selfgovernment when intending to attain or regain control over communal grids. Instead, they need to comply with EU procurement law and carry out transparent tender procedures where corporate bidders may naturally apply as well. In other words, the visions of "decentralised energy revolution" and "internal market" do not necessarily match.

¹While Germany is the focus of many pro/contra nuclear energy discussions, one should not forget other countries that have committed themselves to not using nuclear energy a long time ago, such as Italy or Austria, or non-Member States that will phase out nuclear energy, such as Switzerland.

What is more, empirical research shows that the deregulation of electricity markets has led to a decline in public renewable energy R&D (Smith and Urpelainen 2013; Grafström et al. 2017). The reason is that stronger competition yields lower profit margins and less room for investments in long-term energy technology innovation. But, due to the public good character of knowledge stocks, public R&D efforts form an essential part of long-term climate mitigation pledges. So here as well, the internal market agenda seems to work against the climate policy agenda.

The above discussion yields two implications: first, there is a clear role (economic rationale) for the state to intervene in energy markets in order to correct market failures. Second, the optimal degree of state intervention, which depends on value judgments varies according to the plurality of judgments: If preferences are heterogeneous, efficiency requires that the degree of state intervention be equally heterogeneous. This argument also underlies the discussion in the next subsection.

2.2 Form Dimension: A Mix of Centralisation and Decentralisation to Manage the Trade-Offs Between Internal Market Agenda and Sustainability Transformation Efficiently

Generally, there are reasonable arguments for and against centralisation of decision-making as well as for and against homogenisation of policies (for more extended discussions of these arguments, see Gawel et al. 2014a; Strunz et al. 2015 as well as chapter "Policy Convergence as a Multi-faceted Concept: The Case of Renewable Energy Policies in the EU" of this volume). In other words, there is a trade-off which implies that not all the benefits of both decentralisation and homogenisation can be reached at the same time.

The traditional argument for centralisation of decision-making highlights potential economies of scale and scope. Economies of scale arise when the centralised provision of public goods brings about lower average costs than decentralised provision. Economies of scope arise when centralised production of several outputs leads to lower costs than decentralised production. For instance, a centralised EU-wide deployment of RES could be more cost-efficient than national deployment because of lower administrative costs and optimised geographical allocation of RES capacities (assuming, for the moment, that local externalities are appropriately taken into account). In general, centralisation of decision-making is a means of addressing spillover effects (or positive and negative externalities) between smaller units.

In contrast, Oates' (1972, 1999) theory of Fiscal Federalism points to the beneficial role of decentralised government in tailoring the output of public goods according to local and regional preferences: if local preferences are heterogeneous, a differentiated provision of public goods is welfare-increasing. The second main argument against centralisation of decision-making points to the experimental function of decentralised problem-solving. In this "laboratory federalism" (Oates 1999; Ania and Wagener 2014) view, decentralisation provides the opportunities for

trial-and-error problem solving on small scales. Compared to a centralised approach, a higher number of alternative policy options can be tested which raises the chances of finding better solutions: different policy options compete and their respective (dis) advantages can be assessed. Thus, lock-in effects might be avoided. Finally, discussions about the above trade-offs also should consider that centralisation and homogenisation need not necessarily align: in particular, homogeneous policies may arise without centralisation but via decentralised, bottom-up processes of convergence (see Kitzing et al. 2012 as well as Chapter "Policy convergence as a multi-faceted concept: the case of renewable energy policies in the EU" of this volume).

With regard to the trade-off between internal market agenda and sustainability transformation, it is impossible to objectively derive an optimal solution to the trade-off. Ideological commitments on the market vs. state debate inescapably affect the evaluation here. That said, the following general conclusions seem to be broadly supportable: First, since climate change represents a global challenge, a centrally coordinated climate policy approach, as manifested in the EU's emissions reduction goals and the Emissions Trading Scheme, is indeed recommendable. Second, with heterogeneous visions about the future energy system (e.g, which mix of technologies?), a fully centralised and uniform approach towards the sustainability transformation is not optimal. Third, even if we assume a very market-oriented stance (e.g., no preference for communal ownership over corporate ownership with respect to grids), the "laboratory federalism" argument recalls the merits of decentralised policy experiments.

In the next chapter, we investigate which factors (besides ideological reasons) lie behind the Commission's strong promotion of the internal market agenda.

3 Positive Analysis: The Agenda of the EU Commission from a Public Choice Perspective

3.1 Theoretical Background: The Public Choice Approach

The public choice perspective is based on the assumption that political decisions are predominantly determined by the self-interest of all actors involved in the political process, that is, voters, interest groups, politicians and bureaucrats. Traditionally, the lobbying efforts of interest groups are placed at the centre of the Puclic Choice approach: various interest groups compete in their aim to extract rents by steering regulation in their respective favor (Stigler 1971; Tullock 1967). For instance, with regard to the energy system, incumbent conventional industries try to defend their position against new RES producers. Within the quest for "regulatory capture" [see Dal B6 (2006) for a review], environmental concerns of voters and environmental interest groups are often considered less powerful than conventional industry interests (Olson 1971; Kirchgässner and Schneider 2003). That said, the RES sector in Germany has also become a powerful lobby (Sühlsen and Hisschemöller 2014).

The role of politicians has been described as transfer brokers between these competing interests (McCormick and Tollison 1981): they redistribute welfare between different stakeholders so as to secure public support and maximise their chances of electoral success. On the one hand, politicians may aim to influence electoral outcomes directly by addressing the interests of the median voter (Downs 1957). On the other hand, they may also strive to satisfy interest groups which may indirectly affect electoral success by launching (or not) public campaigns. Finally, bureaucracy constitutes an important element within the process of policy formation and implementation (Niskanen 1971): administrative officials aim at maximizing their discretionary power and their departments' budgets. This concerns all levels of government. While we will explore the EU Commission's incentive to centralise decision-making power on the EU level in more detail, analogous incentives prevail on lower governance levels: national governments aim at preserving Member States' decision-making-power, regional administrations oppose uniform policies (on EU and national level) and aim for regional specifications at their discretion.

In sum, one might speak of a layered system of political markets (cf. Keohane et al. 1998), where politicians try to balance supply of and demand for regulation. The best organised interests succeed in framing the demand for regulation. Importantly, this perspective does not neglect ideological motivations: Early on, public choice theory acknowledged the influence of politicians' own ideological motivations on the supply of regulation (Peltzman 1976). Thus, a comprehensive theoretical framework relies on the interplay of interests, ideas and institutions (cf. May and Jochim 2013). The crucial point here is that interest-based and ideologically motivated behaviour are not mutually exclusive categories of action. Rather, they are constantly interacting, leaving an institutional imprint, which, in turn, feeds back into motives and interests. Furthermore, some specific argument may be both interest-based and ideologically motivated: in particular, rent-seeking might be framed (cynically: disguised) as promoting the public interest.

3.2 Content Dimension: The Internal Market Agenda and the Commission's Legal Competences

The EU Commission traditionally defends a liberal vision of the internal market. It is part of a discursive issue network that upholds a strong market-orientation, coupled with continued support for market-based instruments—critics prefer to frame the Commission's stance as support for "neoliberal instruments" (Lauber and Schenner 2011), thereby evoking the negative connotations of the fuzzy term neoliberal. We will address the Commission's preference for specific policy instruments below, in Sect. 4. Here, we are concerned with the more general stance the Commission adopts by promoting the internal market.

In April 2014, the Commission proposed new guidelines concerning state aid for environmental protection and energy. While guidelines may sound harmless enough, state aid law provides a powerful lever the Commission has at its disposal to influence national energy policies. State aid law, therefore, also illustrates our

proposition that ideological and formal/legal competences are tightly linked. Member States need to notify the EU Commission when they intend to implement a state aid (Article 108(3), TFEU); the Commission, in turn, investigates whether the state aid in question complies with its guidelines. The first two paragraphs of the 2014 guidelines (EU Commission 2014: 2) make the resulting power differential very explicit: "(1) In order to prevent State aid from distorting competition in the internal market and affecting trade between Member States in a way which is contrary to the common interest, ... State aid is prohibited. (2) ...the Commission may consider compatible market State aid to facilitate the development of certain economic activities within the EU, where such aid does not adversely affect trading conditions to an extent contrary to the common interest". Thus, whether national state aid can be considered as opposed to or in line with the EU's common interest, lies completely within the Commission's discretion. In view of this pivotal position, it has been argued that the Commission possesses "almost unrestricted veto power" over national state aid (Knauff 2017: 64).

The crux, of course, is: what makes a given legal measure state aid? Observe that the regulatory impact of a given measure will be the same, whether it legally counts as state aid that has been approved or whether it counts as regulation not pertinent to state aid law. From the Commission's perspective, however, the difference could not be bigger: in the first case, the Commission may actively influence the process of drafting national regulation via its veto power. In the second case, the Commission sees itself relegated to the role of spectator. Consequently, it is in the Commission's interest to frame national measures as state aid, the numerous exemptions from the general prohibition of state aid notwithstanding (Article 107(2,3) TFEU).

In practice, the Commission clearly tends to treat national measures as state aid requiring notification and approval. While Member States may decide to disagree, this may be a risky strategy for boundary cases. A negotiated compromise with the Commission to attain approval of some measure as state aid provides legal clarity, whereas the alternative may consist in prolonged legal uncertainty: the Commission may still decide to investigate and sue Member States at the EU Court of Justice for measures that have not been notified. Crucially, the standstill requirement (Article 88 TFEU) forces Member States to immediately suspend those provisions under investigation until a solution has been reached.

Indeed, Member States often fold under this pressure, Germany being case in point. The German government finally notified its support scheme for RES as state aid, and it did so against its explicit conviction that the German RES Act constitutes state aid in the sense of EU law (Knauff 2017). In the scientific debate, the Commission's judgment has been questioned as well (von Unger 2014; Gawel and Strunz 2014); even more interestingly though, seems the fact that legal precedents also point in the other direction. In 1998, the German *Stromeinspeisungsgesetz*, the antecedent of the RES Act, which was only introduced in 2000, had been challenged as inappropriate state aid. The ECJ gave its judgment in 2001, arguing that the RES

Act's antecedent did not count as state aid since it lacks the involvement of state financial resources.² At the time, the Commission conceded that the German renewable support system does not involve state aid. In order to motivate its renewed investigation of Germany's support scheme, the Commission (2013: 74) referred to revisions of the RES Act: "However, since the initial decision, the EEG-Act has been amended substantially. Given that the amendments introduced by the EEG-Act 2012 were not notified to the Commission, the aid has to be considered as unlawful new aid. [...] The Commission believes that the system at stake differs considerably from the PreussenElektra case" (emphasis added). The Commission did not deny that, in principle, support of renewables may be compatible with the internal market, it rather focused on the specifics of the financing mechanism of the RES Act. The resulting negotiating process between the Commission and the German government will be outlined in Sect. 4 below. For now, it is noteworthy that Germany's non-notification triggered the Commission's investigation, and that the Commission succeeded in making notify-as-state-aid the default option.

Quite probably it would not make sense to try to discern the respective shares of "ideology" and "quest for competences" in the Commission's internal market agenda. Instead, we would like to highlight the mutually supporting role of the internal market vision and state aid law for the Commission's standing (both in terms of legal competences and in terms of soft agenda-setting power). On the one hand, the Commission uses state aid law as "a compulsive lever to enforce regulatory harmonisation" (cf. Tews 2015: 11); on the other hand, the more energy market regulations are harmonised on the EU level, the stronger the legal and political standing of the Commission.

In conclusion, the lead hypothesis (i.e., the Commission frames the internal market as the overarching principle, because this is where it has its legal competences) is not meant as an exclusive identification of causal relationships. Rather, the implication of a Public Choice approach here reads that official motives, such as the one that only the internal market will deliver "clean energy for all" (EU Commission 2016), may deflect from the self-interest that contributes to shaping the agenda.

3.3 Form Dimension: Centralisation and Harmonisation Benefit the Commission

Generally, the Commission attempts to centralise decision-making and harmonise energy policies on the EU level. This does not mean that the Commission claims that each and every decision on energy policy matters should be made in Brussels and Strasbourg—the principle of subsidiarity, as a founding principle of the EU, is duly respected. However, the Commission emphasises that "the majority of energy challenges facing the Union cannot be met through uncoordinated national action" (EU Commission 2016: 4). Furthermore, it highlights the "EU added value" for

²Case C-379/98 PreussenElektra AG v Schleswag AG.

Member States, who would benefit from efficiency gains arising from streamlined procedures and coordinated governance processes. So the Commission's framing is that it should be in the Member States own best interest to follow the road towards supranational integration.

In practice the Commission has not always succeeded in steering the Member States in the desired direction. For instance, since the 1990s the Commission has unsuccessfully aimed at harmonizing national support schemes for RES within the EU (Lauber and Schenner 2011; Jacobs 2012: 25ff.). Moreover, even though the 2009 Lisbon treaty for the first time grants the Commission explicit competences in energy policy, the Member States have preserved their formal sovereignty in this respect: Any measures taken by the EU "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" (Article 194(2) TFEU). The resulting overlap of competences has been described as a "governance dilemma" at the heart of energy policy-making in the EU (see also Hildingsson et al. 2011): since the Commission's desired mode of governance (top-down harmonisation) is not routinely available, it resorts to competition law to indirectly steer Member States in the desired direction (Tews 2015).

So it is understandable that the Commission presents its case in terms of benefits for the Member States. Yet the Public Choice perspective advises us to focus on the self-interest of actors (see above, seminal are Niskanen 1971; Peltzman 1976). In the context at hand, the underlying motives, that is, the Commission's incentive to increase (i) formal legislative competences and (ii) informal agenda-setting power, seem obvious. First, whenever legislative competences are transferred to the EU level, the Commission gains far-reaching influence on the respective matter due to its central position in the legislative process: following the EU treaties, only the Commission can initiate new legislation (Art. 17(2) TFEU). The Council and the Parliament may push for changes and amendments but if the Commission sees the general line of its proposal in danger, it can simply withdraw the proposal. Hence, the initiative monopoly translates into veto power in terms of secondary law (Knauff 2017). Second, even when legislative competences formally remain with the Member States, the Commission benefits from a "Europeanisation" of the discussion. Consider the so-called "open method of coordination", a voluntary process of communication and cooperation between the Member States (Borrás and Jacobsson 2004; Kerber and Eckardt 2007); in this process, the Commission acts as a moderator and agenda-setter, which brings along considerable informal influence on national policy-making (see also Callies and Hey 2013).

Naturally, and in line with the presumptions of Public Choice theory, national bureaucracies and politicians oppose any transfer of decision-making power to the EU level. This follows not only from the implied direct loss of legislative power but also from the expected indirect consequences of "Europeanised" climate and energy policy. Consider the effect of purely production-cost based allocation of energy infrastructure around the EU (i.e., the main goal of the proponents of an EU-wide approach towards RES, cf. Stavins 2014): the "free" allocation of energy infrastructure and technology choice implies a major redistribution of rents, which may lead to

potentially disruptive change in national industry structures, such as the relocation of solar power from Central to Southern Europe or the accelerated dismantling of coal power in Eastern Europe. So, beyond the mere ability to decide, decision-making power over energy policy is coveted as discretion over rents, which Member States would rather continue to allocate themselves in order to serve domestic rent-seeking pressure groups (cf. Gawel et al. 2014b; Strunz et al. 2015).

In sum, the Commission's levers of top-down harmonisation of energy policy remain limited. At the same time, national differences are too strong for Member States to set the tone for EU energy policy themselves. The commission expertly exploits this "governance dilemma" in its favour: under the guise of eliminating possible obstacles towards the common market, the Commission relies on state aid law to guide national energy policy-making. Overall, the Commission's position vis-á-vis the Member States and the EU Council becomes stronger, the higher the degree of centralisation (both with respect to formal procedures and informal discussion). Thus, the Public Choice well explains the Commission's preference for increasing supranational integration.

4 The EU Commission and the 2014 Revision of Germany's RES Act

In the following, we illustrate how the Commission's influence unfolds in practice via the reform process of Germany's RES Act in 2014. Traditionally, the main mechanism of the Germany's RES Act consisted of a feed-in tariff that guarantees fixed remuneration for every kWh of renewable electricity produced. To fund the scheme, a levy on electricity retail prices is to be paid by consumers. The success of the feed-in tariff in pushing the share of RES in Germany also meant that RES were leaving their former status as niche technologies (cf. Jacobsson and Lauber 2006). In consequence, a scientific and political debate on market and system integration of RES has come up (e.g., Kopp et al. 2012; Winkler and Altmann 2012). Specific discussions on how to reform the RES Act, therefore, also revolve around the question of how to facilitate the integration of RES, cutting deployment costs along the way.

Against the background of these debates, the EU Commission affected the 2014 reform process via two related channels. First, the EU Commission in 2013 opened in-depth proceedings against the refunding mechanism of the RES Act. More specifically, the Commission questioned the exemption scheme: energy-intensive industries only pay a fraction of the levy on electricity prices (consequently, the levy for the remaining industry-, business- and household-consumers increases). The Commission argued that this reduction of the levy for some consumers distorts competition in a way that negatively affects trade between Member States. This assessment also implied a considerable threat because, if legally affirmed by the ECJ, the German government would have had to immediately suspend the exemption schedule *and* demand that exemptions already granted be paid back in full. In other

words, competition law enabled the Commission to threaten heavy de-facto industry fines amounting to several billion euros. The Commission's official reasoning does not necessarily stand up to scrutiny because the distortion introduced by the exemption schedule concerns relative competitiveness and the distribution of the cost burden for RES deployment *within* Germany rather than between Member States (for a more detailed discussion, see Gawel and Strunz 2014). However, from the German government's point of view, even though it objected to the Commission's reasoning, the political risk of the looming industry back-payments was considerable—hence the government started to negotiate with the Commission on how to adapt the RES Act in ways acceptable to both sides (Tews 2015; Strunz et al. 2016).

Second, this is where the EU Commission's 2014 guidelines on state aid for environmental protection and energy (2014/C 200/01) enter the negotiation stage. The guidelines aim at exposing RES to market pressure by leading Member States away from feed-in tariffs towards premium schemes and tenders. Specifically, the Commission (§127 ff.) requires that from 2017 on, support for new renewable energy installations "is granted in a competitive bidding process". While the Commission acknowledges that there shall be no retroactive changes to existing support commitments, the Commission's intention of a complete alignment in the medium term is very clear: during a transitional phase in 2015 and 2016 Member States should prepare by setting up competitive bidding processes and distributing "aid for at least 5% of the planned new electricity capacity from renewable energy sources". Furthermore, in order to "incentivise the market integration" of renewables, producers should sell their electricity from 2016 on directly on the market (§125). In other words, the Commission wants Member States to have aligned their support schemes by the end of the decade so that all renewable energy is directly marketed by producers and only the most competitive bidders receive support. Again, the Commission's legal reasoning could be questioned—the RES support scheme may not fall under the official definition of state aid (public budgets are involved or the state directly controls financial flows) in the first place: public budgets are neither directly nor indirectly affected by the scheme; the state only sets minimum prices for renewable electricity so as to ensure that producers of renewable energy are remunerated their previously guaranteed amounts of money per kWh.

Nevertheless, given the Commission's proceedings against the RES Act, the German government notified the RES Act as state aid with the Commission. As a result of the negotiations between Commission and the federal government, the 2014 reform introduced prototype tenders for large photovoltaic installations in Germany. Therefore, reform has been called "a hasty government's adaptation to supranational pressure" (Tews 2015: 280). From this point of view, Germany's reform is akin to preemptive obedience with the not yet existing guidelines. Indeed, this seems to be a remarkable case of "horse-trading" (Strunz et al. 2016: 39): in return for Germany's compliance with the forthcoming guidelines, the Commission rested its case against the exemption scheme. To be sure, the exemption scheme was also reorganised but, if anything, the exemptions have become even more generous over time (cf. Gawel and Klassert 2013; Gawel and Lehmann 2014). So the relevant concession from the German side seems to have been the introduction of prototype tenders. The

subsequent reform of the RES Act in 2016 confirmed that a shift of the support scheme from feed-in tariffs to tender schemes (by implication, a shift from price regulation to quantity regulation) is on the way: from 2017 on, onshore-wind, offshore-wind, large photovoltaic and biomass capacities will be remunerated following a tender procedure. Certainly, a number of details in the latest RES Act (technology-specific tenders, special treatment for small installations) may lead to the assessment that the shift is step-wise (Purkus et al. 2015; Gawel and Purkus 2016), but the general direction is very well in line with the Commission's preferences.

5 Discussion and Conclusion

This paper proposed that trade-offs between the goals of finalizing the internal market and the sustainable transformation of the energy system may exist (e.g., unrestricted flow of electricity vs. heterogeneous technological preferences); in order to manage these trade-offs, a mix of centralisation and decentralisation of policy-making is advisable from an economic point of view. By comparison, the EU Commission suggests that the internal market also constitutes the best way to achieve sustainable energy supply. While it acknowledges the principle of subsidiarity, the Commission emphasises the merits of more centralisation and harmonisation—merits that supposedly arise even from the Member States' perspective.

In principle, the Commission's focus on the internal market is legitimate. After all, who defends the common interest, who seeks to overcome coordination dilemmas if not a supranational institution as the Commission? That said, this paper emphasised the main insight of the Public Choice approach, that is, the self-interest of all political actors as a crucial driver of politics. Notably, the Commission's internal market agenda also promotes its own standing relative to the EU Council and the Member States. Thus, legal competences and ideological position merge in a mutually beneficial way. Even more obviously, the Commission's promotion of harmonised regulation and governance procedures—as advertised in the 2016 package "Clean energy for all"—caters to its own relative power position.

The 2014 state aid guidelines provided a prime example of how the Commission may gain ground on both the ideological and the competency agenda at the same time. Still, when criticising the Commission, one should clearly differentiate between *content* and *form*: does one refer to the Commission's efforts to direct Member States as such, or does one refer to the shift towards tender instruments? We will address both issues in turn:

Form: The Commission's guidelines implicitly suggest that a solution to the "market integration problem" has already been found and decentralised policy experimentation is needed no more. In contrast to that, one might also argue that the issue of how to integrate renewables into conventional electricity markets still merits trial-and-error competition for the best solution. For instance, it could be argued that rather than renewables having to adjust to the conventional energy-only

market, it is the conventional market structure itself that has to fundamentally change so as to accommodate the specific characteristics of renewables (volatility, marginal costs of zero). Hence, a decentralised process of problem-solving might lead to even better solutions to the market-integration problem. What is more, the highly detailed proposal of the guidelines contradicts the broad scope for state aid as laid down in Article 107 TFEU, which only precludes aid that is incompatible with the internal market. In consequence, the commission possibly overstretches its mandate of Art. 108 TFEU in that it intends to prescribe specific policy solutions for Member States still falling within Member States' genuine competences.

Content: The guidelines compel Member States to align their renewable support schemes to "competitive bidding processes". While such an instrument could be readily justified from a theoretical economic point of view, practical experiences with tender schemes have been mixed (e.g., Lipp 2014). Furthermore, competitive tender schemes will increase uncertainty for potential investors in renewable energies; accordingly, risk premia will rise, and fulfillment of the overall expansion goals might be less certain than under feed-in tariff schemes. In general, tender schemes are not necessarily the best or the only instrument that can be implemented to integrate renewable energies into electricity markets. Recall that Article 107(3) (c) TFEU provides sufficient scope to justify very different schemes and corresponding financing mechanisms as aids to "facilitate the development of certain economic activities" as long as they do not adversely affect trading conditions "to an extent contrary to the common interest".

In sum, the EU Commission presents itself as a rational actor who pursues a specific policy agenda (i.e., market integration), which, in turn, also caters to its own interest of increasing competences. This should not come as a surprise, given that the Member States lack a common vision on how to advance energy policy on the EU level—even the cooperation mechanisms provided by the RES directive have, so far, mostly been neglected (Klinge Jacobsen et al. 2014). The Commission eagerly fills this void to foster both its own standing and to advance the internal market agenda. From a legal perspective one can conclude that the Commission stretches its influence via the state aid guidelines very far (e.g., von Unger 2014). Furthermore, as regards the trade-offs between sustainability transition and market integration, the Commission's positions appear biased towards the efficiency assumptions of the internal market agenda, possibly neglecting the requirements of sustainability as a partly decentralised bottom-up project. Therefore, while an active role of the Commission is to be welcomed, a more balanced approach that does not overstep its competences and acknowledges the above outlined trade-offs would be even better.

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References

Ania, A., & Wagener, A. (2014). Laboratory federalism: The open method of coordination (OMC) as an evolutionary learning process. *Journal of Public Economic Theory*, 16(5), 767–795.

- Bigerna, S., Bollino, C. A., & Micheli, S. (2016). Renewable energy scenarios for cost reductions in the European Union. *Renewable Energy*, *96*, 80–90.
- Böhringer, C. (2014). Two decades of European climate policy: A critical appraisal. *Review of Environmental Economics and Policy*, 8(1), 1–17.
- Borrás, S., & Jacobsson, K. (2004). The open method of coordination and new governance patterns in the EU. *Journal of European Public Policy*, 11, 185–208.
- Buchan, D., & Keay, M. (2016). Europe's long energy journey: Towards an energy union. Oxford: Oxford University Press.
- Buchanan, J. (1984). Politics without romance: A sketch of positive public choice theory and its normative implications. In J. Buchanan & R. Tollison (Eds.), *The theory of public choice II* (pp. 11–22). Ann Arbor: Michigan University Press.
- Burger, C., & Weinmann, J. (2013). The decentralized energy revolution. Business strategies for a new paradigm. Basingstoke: Palgrave Macmillan.
- Callies, C., & Hey, C. (2013). Multilevel energy policy in the EU. Paving the way for renewables. *Journal of European Environmental and Planning Law, 10*(2), 87–131.
- Dal Bó, E. (2006). Regulatory capture a review. *Oxford Review of Economic Policy*, 22, 203–225. Downs, A. (1957). *An economic theory of democracy*. New York: Harper & Row.
- European Commission. (2013). State aid SA.33955 (2013/C) (ex 2013/NN) Germany support for renewable electricity and reduced EEG-surcharge for energy-intensive users. OJ C 37, 7.2.2014, p. 74.
- European Commission. (2014). Guidelines on state aid for environmental protection and energy 2014–2020. Official Journal of the European Union (2014/C).
- European Commission. (2015). A framework strategy for a resilient energy union with a forward-looking climate change policy. Communication from the Commission to the European Parliament, The Council, The European Economic and Social Committee and The Committee of the Regions. COM(2015) 80.
- European Commission. (2016). Proposal for a regulation of the European Parliament and of the council on the governance of the Energy Union. COM(2016) 759 final/2.
- Gawel, E., & Klassert, C. (2013). Probleme der besonderen Ausgleichsregelung im EEG. Zeitschrift für Umweltrecht, 24(9), 467–480.
- Gawel, E., & Lehmann, P. (2014). Support for renewable energy in Germany after the 2014 renewable energy sources act. *Wirtschaftsdienst*, 94(9), 652–658.
- Gawel, E., & Purkus, A. (2016). EEG 2017 Towards more market orientation of German renewable energy support policy? *Wirtschaftsdienst*, *96*(12), 910–915.
- Gawel, E., & Strunz, S. (2014). State aid dispute on Germany's support for renewables. Is the commission on the right course? *Journal for European and Environmental Planning Law*, 11, 137–150.
- Gawel, E., Strunz, S., & Lehmann, P. (2014a). To what extent should the German energy transition be Europeanized?). Zeitschrift für Energiewirtschaft, 38(3), 163–182.
- Gawel, E., Strunz, S., & Lehmann, P. (2014b). A public choice view on the climate and energy policy mix in the EU – How do emissions trading scheme and support for renewable energies interact? *Energy Policy*, 64, 175–182.
- Grafström, J., Söderholm, P., Gawel, E., Lehmann, P., Strunz, S. (2017). Knowledge accumulation from public renewable energy R&D in the European union: Converging or diverging trends? Mimeo, Luleå University of Technology and Helmholtz Centre for Environmnetal Research, Leipzig.
- Hildingsson, R., Stripple, J., & Jordan, A. (2011). Governing renewable energy in the EU: Confronting a governance dilemma. European Political Science, 11, 18–30.

- Jacobs, D. (2012). Renewable energy policy convergence in the EU: The evolution of feed-in tariffs in Germany, Spain and France. London: Ashgate.
- Jacobsson, S., & Lauber, V. (2006). The politics and policy of energy system transformation explaining the German diffusion of renewable energy technology. *Energy Policy*, 34, 256–276.
- Keohane, N., Revesz, R., & Stavins, R. (1998). The choice of regulatory instruments in environmental policy. *Harvard Environmental Law Review*, 22, 313–267.
- Kerber, W., & Eckardt, M. (2007). Policy learning in Europe: The open method of co-ordination and laboratory federalism. *Journal of European Public Policy*, 14, 227–247.
- Kirchgässner, G., & Schneider, F. (2003). On the political Economcy of environmental policy. *Public Choice*, 115, 369–396.
- Kitzing, L., Mitchell, C., & Mothorst, P. E. (2012). Renewable energy policies in Europe: Converging or diverging? *Energy Policy*, *51*, 192–201.
- Klinge Jacobsen, H., Pade, L. L., Schröder, S. T., & Kitzing, L. (2014). Cooperation mechanisms to achieve EU renewable targets. *Renewable Energy*, 63, 345–352.
- Knauff, M. (2017). Beihilferechtliche Steuerung der Energiepolitik? In J. Gundel & K. W. Lange (Eds.), Energieversorgung zwischen Energiewende und Energieunion (pp. 55–75). Tübingen: Mohr Siebeck.
- Knodt, M. (2010). Strategies of territorial and functional interest: Towards a model of European interest intermediation? *Journal of European Integration*, 33(4), 419–435.
- Kopp, O., Eßer-Frey, A., & Engelhorn, T. (2012). Können sich erneuerbare Energien langfristig auf wettbewerblich organisierten Strommärkten finanzieren? Zeitschrift für Energiewirtschaft, 36(4), 1–13.
- Lauber, V., & Schenner, E. (2011). The struggle over support schemes for renewal electricity in the European Union: A discursive-institutionalist analysis. *Environmental Politics*, 20(4), 508–527.
- Lehmann, P., & Gawel, E. (2013). Why should support schemes for renewable electricity complement the EU emissions trading scheme? *Energy Policy*, 52, 597–607.
- Lipp, J. (2014). Lessons for effective renewable electricity policy from Denmark, Germany and the United Kingdom. *Energy Policy*, 35, 5481–5495.
- May, P. J., & Jochim, A. E. (2013). Policy regime perspectives: Policies, politics, and governing. Policy Studies Journal, 41, 426–452.
- McCormick, R. E., & Tollison, R. D. (1981). *Politicians, legislation and the economy: An inquiry into the interest-group theory of government*. Boston: Martinus-Nijhoff.
- Michalena, E., & Hills, J. (2016). Stepping up but back: How EU policy reform fails to meet the needs of renewable energy actors. *Renewable and Sustainable Energy Reviews*, 64, 716–726.
- Niskanen, W. A. (1971). *Bureaucracy and representative government*. Chicago: Aldine-Atherton. Oates, W. E. (1972). *Fiscal Federalism*. New York: Harcourt Brace Javanovich.
- Oates, W. E. (1999). An essay on fiscal federalism. *Journal of Economic Literature*, 37, 1120–1149.
- Ohlhorst, D. (2016). Germany's energy transition between national targets and decentralized responsibilities. *Journal of Integrated Environmental Sciences*, 12(4), 303–322.
- Olson, M. (1971). The logic of collective action: Public goods and the theory of groups, second printing with new preface and appendix (Revised). Cambridge: Harvard University Press.
- Peltzman, S. (1976). Toward a more general theory of regulation. *Journal of Law and Economics*, 19, 211–240.
- Purkus, A., Gawel, E., Deissenroth, M., Nienhaus, K., & Wassermann, S. (2015). Market integration of renewable energies through direct marketing Lessons learned from the German market premium scheme. *Energy, Sustainability and Society*, 5(12), 1–13.
- Smith, M. G., & Urpelainen, J. (2013). Why has public R&D on alternatives to fossil fuels decreased in industrialized countries? *Environmental Science and Policy*, 25, 127–137.
- Stavins, R. N. (2014). The problem with EU renewables. *The Environmental Forum*, May/June 2014: 14. Available from http://www.hks.harvard.edu/fs/rstavins/Forum/Column_60.pdf

Steinebach, Y., & Knill, C. (2017). Still an entrepreneur? The changing role of the European Commission in EU environmental policy-making. *Journal of European Public Policy*, 24(3), 429–446.

- Stigler, G. (1971). The theory of economic regulation. *Bell Journal of Economics and Management Science*, 2(1), 3–21.
- Strunz, S., Gawel, E., & Lehmann, P. (2015). Towards a general "Europeanization" of EU member states' energy policies? *Economics of Energy and Environmental Policy*, 4(2), 143–159.
- Strunz, S., Gawel, E., & Lehmann, P. (2016). The political economy of renewable energy policies in Germany and the EU. *Utilities Policy*, 42, 33–41.
- Sühlsen, K., & Hisschemöller, M. (2014). Lobbying the 'Energiewende'. Assessing the effectiveness of strategies to promote the renewable energy business in Germany. *Energy Policy*, 69, 316–325.
- Tews, K. (2015). Europeanization of energy and climate policy: The struggle between competing ideas of coordinating energy transitions. *Journal of Environment and Development*, 24(3), 267–291.
- Thaler, P. (2016). The European Commission and the European council: Coordinated agenda setting in European energy policy. *Journal of European Integration*, 38(5), 571–585.
- Tullock, G. (1967). The welfare costs of tarriffs, monopolies and theft. *Western Economic Journal*, 5, 224–232.
- von Unger, M. (2014). Germany's renewable energy law, state aid and the internal market. An EU perspective. *Journal for European and Environmental Planning Law*, 11(3), 116–136.
- Winkler, J., & Altmann, M. (2012). Market designs for a completely renewable power sector. *Zeitschrift für Energiewirtschaft*, 36(2), 77–92.