Softening the surface but hardening the core? Governing renewable energy in the EU

Jonas J. Schoenefeld & Michèle Knodt

Published online: 19 Jun 2020.

Submit your article to this journal

View related articles

View Crossmark data

Citing articles: 1 View citing articles

Routledge
Taylor & Francis Group

Softening the surface but hardening the core? Governing renewable energy in the EU

Jonas J. Schoenefeld[a,b] (iD) and Michèle Knodt[a] (iD)

[a]Institute of Political Science, Technical University of Darmstadt, Darmstadt, Germany; [b]Tyndall Centre for Climate Change Research, School of Environmental Sciences, University of East Anglia, Norwich, UK

ABSTRACT
Soft law and governance captured the attention of scholars in the 2000s, and new policy challenges and the novel introduction of 'harder' elements now drive a (re)turn to these discussions. This article explores the extent to which dynamics leading towards 'harder soft governance' (HSG) appear in the EU's renewable energy governance by comparing the 2020 and 2030 Renewable Energy Directives. Document analysis and interviews reveal a surface-level softening because the new 2030 directive contains no binding national targets for the Member States. An entrepreneurial Commission has been seeking to introduce 'harder elements' at the core by focusing on implementation, allowing for potentially deeper influence on the national energy mixes though the Energy Union. Two main factors drive these changes: the evolving international context of climate change governance, as well as re-configurations of the actors in the EU. Future research should explore the effectiveness of emerging HSG in detail.

Academic debates on 'soft' and 'hard' governance, as well as on the related concepts of 'soft' and 'hard' law, are receiving increasing scholarly attention (e.g. Eliantonio and Stefan 2018; Graziano and Halpern 2016; Saurugger and Terpan 2016; Terpan 2015). In the 2000s, soft governance approaches such as the Open Method of Coordination (OMC) (e.g. Radaelli 2003; Tholoniat 2010; Trubek and Trubek 2005) were extensively debated, and substantial policy developments and pressing coordination challenges have prompted scholars to return to earlier thinking. Understanding the (re)turn to softer steering approaches in various substantial policy fields in European Union (EU) studies is especially important because forging agreement among the

---

CONTACT Jonas J. Schoenefeld ✉ jonas.schoenefeld@tu-darmstadt.de

EU Member States appears increasingly difficult. An important emerging insight is that the new soft governance frequently contains 'harder' elements, as Knodt (2019) demonstrates in the case of EU climate and energy policy. While descriptive accounts of this novel phenomenon have emerged from various quarters (e.g. Oberthür 2019), explanations of the respective shifts between soft and hard governance over time do not yet exist. This article addresses this gap by analysing and explaining the dynamic balance between soft and hard governance in the area of EU renewable energy governance.

Energy governance has characteristically espoused a mix between shared and no EU competence, but there is now increasing pressure on the Member States to move towards coordination. These characteristics make it a suitable policy field to look for soft and hard elements in conjunction. To do so, this article focuses in on the evolution of EU-level renewable energy policy. Renewable energy development constitutes an important contribution to the significant efforts required to reduce greenhouse gas emissions to contain global warming to well below 2 degrees Celsius in line with the 2015 Paris Agreement. Renewable energy sources, including biomass, geothermal, solar, and wind energy and hydropower, do not rely on emission-intensive fossil fuels and replenish themselves through natural processes. This article analyses renewable energy policy in the context of the soft-hard governance typology proposed by Terpan (2015) and refined by Saurugger and Terpan (2020) for this special issue.

More specifically, this paper centres on the 'Directive on the promotion of the use of energy from renewable sources' (2009/28/EC) – hereafter the '2020 Renewable Energy Directive', as well as its revision in the Directive on the promotion of the use of energy from renewable sources (recast) (2018/2001) – hereafter the '2030 Renewable Energy Directive'. These directives were negotiated and eventually adopted in the periods from 2007 to 2008 and 2014 to 2018, respectively. The analysis also takes into account relevant elements of the recent Energy Union Governance Regulation (Regulation 2018/1999; Röben 2018). This paper considers existing academic debates in novel ways, analyses legislative and policy documents, and draws on fresh evidence from seven interviews with staff of Member State permanent representations, national ministries and the European Commission (hereafter the 'Commission') conducted in the context of the Kopernikus ENavi project.[1] The following section unpacks the soft-hard governance typology, which is then applied in in the section thereafter to assess the 2020 and 2030 Renewable Energy Directives. Then the fourth section endeavours to explain the observed shifts in the renewable energy policy. Finally, the last section draws these factors together, elaborates on their connections and concludes with future research directions.

Assessing and explaining shifts between soft and hard governance

This article starts with the typology proposed by Terpan (2015), which is further elaborated in the introduction to this special issue (Saurugger and Terpan 2020), to distinguish between soft and hard law as well as non-legal norms on the basis of the 'nature of the obligation' (hard, soft or none) and the 'nature of the enforcement mechanism' (hard, soft, or none).[2] This typology constitutes a refinement of earlier efforts at characterising 'legalisation', which may be understood '…as a particular form of institutionalisation characterised by three components: obligation, precision, and delegation' (Abbott and others 2000: 401). Saurugger and Terpan (2020) argue that if the content of an obligation is very precise, it is harder than an obligation that remains vague or unclear. Analogously, an enforcement mechanism that relies on the judicial system is harder than one that relies on surveillance and monitoring practices or more informal 'naming and shaming' (Schäfer 2006). Given the EU's complex institutional structures, applying the concept of legalisation from international law generates significant challenges because the concept struggles to accommodate the wide range of actors and mechanisms that the EU uses to enforce its legislation (see Mattocks 2018; Schäfer 2006; Trubek and Trubek 2005). We therefore adapt and extend the typology to distinguish between soft and hard elements at the *surface* and at the *core*. The *surface* of a law/governance approach comprises the more visible, public, and openly politicised elements, such as headline European or national targets. Surface items tend to generate political force by keeping issues on political agendas and by providing public yardsticks for assessing policy effects over time. By contrast, the *core* of law and governance contains the less visible, potentially more technical and sometimes purposefully de-politicised, implementation-related elements that likely contribute to policy success and involve multiple actors. Crucially, soft and hard elements at the surface and at the core are not static but may change over time.

Observing such changes in soft and hard governance invariably generates demand for explaining them. In the introduction to this special issue, Saurugger and Terpan (2020) assume that at least three broad classes of factors may drive such processes, namely, changes in the context, such as crises or more long-running trends; the legal norm itself and its perceived effectiveness or ineffectiveness; and finally, the actor configurations that surround the legal norm. This article investigates two promising categories of potential causal drivers proposed by Saurugger and Terpan (2020), namely, how changes in the (international) context and the dynamic and evolving configuration of actors have affected the balance between soft and hard governance in the area of renewable energy.

Analysing soft and hard EU renewable energy governance

Understanding the broader context of renewable energy governance

The origins of EU energy governance date back to the foundation of the European Community and eventually crystallised into a three-pronged approach focusing on security, sustainability, and competitiveness (Hoerber 2013; Knodt 2018). Serious discussions on renewable energy policy at the EU level commenced in the 1980s and 1990s (see Haigh 1996), when the European Community first began to coordinate Member State approaches and later began setting targets for renewable energy expansion (Howes 2010). EU action on renewables thus originated from efforts to improve the sustainability and security of the European energy supply and from the ambition to better coordinate the various different support schemes emerging in the Member States (Hildingsson *et al.* 2012; Knodt 2018).

By the mid-2000s, it had become increasingly clear that the early voluntary (i.e. soft) efforts to stimulate renewables proved insufficient to reach the self-imposed targets (such as producing 22.1% of all Community electricity from renewables by 2010), difficulties that became clear in the implementation of the Renewable Electricity Directive (2001/77/EC) (Solorio and Bocquillon 2017). Consequently, the EU instituted more stringent, legally binding targets in the 2020 Renewable Energy Directive (Hildingsson *et al.* 2010; Kanellakis *et al.* 2013). Introducing mandatory targets proved politically contentious with opposition from particular Member States, but the Commission and the European Parliament were in favour of such action (Hildingsson *et al.* 2010). Such resistance emerged even though the directives allow the Member States to reach their targets flexibly (see Trubek and Trubek 2005: 360–61). The 2020 Renewable Energy Directive left the precise national renewable mix up to the Member States because different kinds of renewables (e.g. those based on wind, sun, water, or biomass) were technically or politically more effective/feasible than others, given national topography and political constellations.

The 2020 Renewable Energy Directive

The 2020 Renewable Energy Directive (2009/28/EC) was adopted as part of the Climate and Energy Package in 2008. At that time, European leaders sought to put in place ambitious measures to lead and demand action from others at the 2009 climate change summit in Copenhagen (Solorio and Bocquillon 2017). The political moment was propitious, with a German presidency of the European Council from January-June 2007, where

Chancellor Angela Merkel brokered an agreement on a set of comparatively ambitious targets at a key European Council meeting in March 2007 (Bürgin 2015; Solorio and Bocquillon 2017). These efforts ultimately culminated in the EU's 2020 Climate and Energy Package, which, in addition to setting targets for greenhouse gas emission reduction and energy efficiency (not addressed here), included a new and for the first time relatively comprehensive directive on stimulating renewable energy. The 2020 Renewable Energy Directive prescribes that EU countries must generate 20% of their final energy consumption from renewables by 2020 and achieve a share of at least 10% of renewables in transport (Article 3). Major areas of contention included whether to create harmonised support schemes at the EU level (not pursued) and the bindingness of the overall target (Boasson and Wettestad 2016). The 2020 Renewable Energy Directive allocates an individual target to each Member State (Article 3). To do so, the directive contains a formula, which defines the legally binding contributions, building on a flat rate increase in renewables of 5.5% in each country, and further additions dependent on prior efforts, as well as the individual economic situation of each Member State (European Commission 2008; Howes 2010; Solorio and Bocquillon 2017). Table 1 details the national contributions resulting from this process and set forth in the directive.

In order to ensure continuous progress, the directive introduced National Renewable Energy Action Plans (NREAP) to be prepared by the Member States (see Article 4), as well as regular progress reporting (see Aldy 2014; Knodt 2019; Schoenefeld et al. 2018).[3] The latest progress report on renewable energy development from the Commission demonstrates that the EU as a whole will likely achieve its renewable energy target but that continuous 'sustained effort' will be necessary because renewable energy deployment has slowed since 2014 (European Commission 2019b). In the case of non-compliance, countries may face financial penalties through EU infringement procedures (Deutscher Naturschutzring 2018, Interview June 2019). The Commission has already sent notifications and/or begun infringement procedures against various Member States, including Poland (European Commission 2017a) and Ireland (European Commission 2014), related to the transposition of the directive in the area of renewables in transport and other elements. The Court of Justice of the European Union (CJEU) can enforce Member State renewable energy targets.

The 2030 Renewable Energy Directive

A landmark in renewable energy development planning beyond 2020 occurred during the European Council summit in October 2014; the

Table 1. Renewables development in 2005 and national targets by 2020 in the 2020 Renewable Energy Directive.

	Share of energy from renewable sources in gross final consumption of energy, 2005	Target for share of energy from renewable sources in gross final consumption of energy, 2020
Belgium	2,2 %	13 %
Bulgaria	9,4 %	16 %
Czech Republic	6,1 %	13 %
Denmark	17,0 %	30 %
Germany	5,8 %	18 %
Estonia	18,0 %	25 %
Ireland	3,1 %	16 %
Greece	6,9 %	18 %
Spain	8,7 %	20 %
France	10,3 %	23 %
Italy	5,2 %	17 %
Cyprus	2,9 %	13 %
Latvia	32,6 %	40 %
Lithuania	15,0 %	23 %
Luxembourg	0,9 %	11 %
Hungary	4,3 %	13 %
Malta	0,0 %	10 %
Netherlands	2,4 %	14 %
Austria	23,3 %	34 %
Poland	7,2 %	15 %
Portugal	20,5 %	31 %
Romania	17,8 %	24 %
Slovenia	16,0 %	25 %
Slovak Republic	6,7 %	14 %
Finland	28,5 %	38 %
Sweden	39,8 %	49 %
United Kingdom	1,3 %	15 %

Source: Directive 2009/28/EC, Annex I.

European Council decided on the 2030 framework for climate and energy policy, including a position for a new renewable energy target. The European Council proposed increasing the target to 'at least' 27% renewables in final energy consumption in the EU Member States by 2030 (European Council 2014). Intense discussion on whether there should be a renewable target at all (as opposed to simply an overall greenhouse gas emission reduction target) preceded this decision, with countries such as Denmark and Germany, as well as renewable energy producers, strongly in favour of a renewable-specific target (Fitch-Roy and Fairbrass 2018: 65–7). The target approach prevailed, and at the insistence of the European Parliament (which preferred a 40% target), the renewable energy target was eventually raised to 32% in 2018 (Article 3; Interview June 2019) (European Parliament 2018).

The 2030 renewable energy target may be adjusted upwards in 2023 (European Commission 2018) if there are, for example, technological developments that justify doing so (Article 3[1]) (Deutscher

Naturschutzring 2018). In contrast to the 2020 Renewable Energy Directive, the new 2030 Renewable Energy Directive contains a binding target at the EU level (Article 3) but does not directly define binding national renewable targets. This approach emerged as a compromise between North-Western Member States who by and large preferred ambitious action on renewable energy and the Central and Eastern Member States, who wanted to limit EU control over their national energy mixes (Knodt 2018; see Fitch-Roy and Fairbrass 2018: 93). This setup may lead to significant collective action problems, where Member States may attempt to shift blame if they fail to collectively reach the EU-level target. To address this issue in the planning and implementation phase, the Energy Union Governance Regulation (Article 3, Regulation [EU] 2018/1999) requires the Member States to report on their renewables in the Integrated National Energy and Climate Plans. Member States have to publish their plans in addition to submitting them to the Commission (Article 3[4]). In particular, the national planning processes soon turned into a way to build 'structured dialogue' between the Member States and the Commission and thereby became much more than a mere reporting instrument (Knodt 2019; Knodt *et al.* forthcoming). The plans allow the Commission to assess both potential 'ambition gaps' or, further down the line, 'delivery gaps' (Governance Regulation Preamble 56) (Knodt 2019), and then take corrective action, which could, for example, happen through additional financial mechanisms (Interview January 2018). However, in addition to these enhancements, the Governance Regulation also contains a new Annex (II), which includes a formula for calculating indicative national renewable targets. The Commission did not initially propose this formula, which was added during the trilogue negotiations between the Commission, the Parliament and the Council (Knodt 2019; Knodt *et al.* forthcoming; Oberthür 2019), at German insistence, as one interviewee indicated (Interviews February 2018; June 2019). The formula uses a similar approach to that applied in the 2020 Renewable Energy Directive (see 'The 2020 Renewable Energy Directive'), taking into account the economic capabilities of each country, as well as the state of its renewable development. However, in contrast to the 2020 Renewable Energy Directive, the lack of binding, national renewable energy targets means that the CJEU cannot enforce country-level progress/achievement.

Harder soft enforcement: reporting on renewable energy policy in the Energy Union

In contrast to the 2020 Climate and Energy Package, the 2030 Climate and Energy Framework now contributes to the 'Energy Union', a much

more comprehensive effort to streamline climate and energy governance across the EU (Knodt and Ringel 2018; Ringel and Knodt 2018; Röben 2018; Szulecki and others 2016). While reporting on renewable energy has long existed, usually conducted by the European Environment Agency (e.g. European Environment Agency 2019), the Energy Union Regulation bundles multiple reporting streams (including that of the 2030 Renewable Energy Directive) and thereby lifts monitoring activities to a much more prominent, and potentially political, level. This is especially the case because the Commission regularly reports on progress in the Energy Union through 'State of the Energy Union' reports. The Commission has published four such reports to date, namely, in November 2015 (European Commission 2015), February 2017 (European Commission 2017b), November 2017 (European Commission 2017c), and April 2019 (European Commission 2019a). Given their prominent position, these reports are a useful gauge to assess the importance of renewables in EU energy governance.

Careful analysis revealed that renewables feature strongly in each report, but the reports contain specific graphs on renewable deployment in the EU only from February 2017 onwards (second report, see European Commission 2017b: 4). Becoming more detailed over time,[4] the fourth report seeks to provide additional causal explanations of the greenhouse gas emission trends observed, including the contributions emerging from the renewable energy sector (European Commission 2019a). In 2019, the Commission for the first time provided detailed lists of countries that were on track to achieve their renewable energy targets and of countries that still needed to do more (European Commission 2019a: 6). These lists may be understood as a concrete effort at 'praising and shaming' the renewable energy leaders and laggards and thereby harden the softer monitoring processes outlined in the Energy Union Governance Regulation (2018/1999) by means of additional publicity. The fact that the Energy Union reports have to be formally presented to the European Parliament and the Council (Regulation 2018/1999, Article 35) is further evidence of the hardening trend (while Member States have to report to the Commission, which in turn reports to the Parliament and the Council on Renewables under the 2020 and 2030 Renewable Energy Directives, the political prominence of the Energy Union reports signifies further hardening). Compared to monitoring and reporting processes outlined in the 2020 Renewable Energy Directive, the monitoring and reporting of renewable energy development incorporated into the Energy Union Regulation (linked with the 2030 Renewable Energy Directive) therefore further limits the room in which Member States can manoeuvre and streamlines implementation (Interview August 2017).

Applying the Terpan typology to renewable energy governance in Europe

Based on the typology and our surface/core extension, it is clear that the 2020 and 2030 Renewable Energy Directives differ. The 2020 directive would very much qualify as 'hard law' in the sense that it contains both precise national obligations for renewable development until 2020 (i.e. a binding European headline target, as well as binding national targets), as well as a 'hard' enforcement mechanism. The Member States regularly report on their progress to the Commission, which has recourse to the CJEU through infringement procedures. However, there appears to be some retroactive 'softening' of the 2020 targets through the new 2030 Governance Regulation (thus blurring the lines between the two). For technical reasons, it will only be possible to determine the level of renewable energy goal attainment under the 2020 Climate and Energy Package by 2021. If countries are found to have deployed insufficient renewables by then, they will have another year (until 2022) to remedy the situation. Thus, any infringement procedures related to target achievement will likely not commence until 2023, which also coincides with the first reporting obligation for renewables under the new Governance Regulation/the 2030 Renewable Energy Directive.

By contrast, in comparison to the 2020 Renewable Energy Directive, the revised 2030 Renewable Energy Directive entails – especially at the surface – a softening. The lack of consensus on visible nationally binding renewable energy targets can be interpreted as a significant effort in surface-based softening of renewable energy policies at the EU level. However, we are simultaneously observing a process of 'hardening' the 'softer' provisions in the 2030 Renewable Energy Directive at the core through the Energy Union Governance Regulation (Ringel and Knodt 2018; see Knodt and Ringel 2018; Knodt *et al.* forthcoming). The new formula that emerged in the Governance Regulation (i.e. a separate piece of legislation) in the late negotiation stages in 2018 de facto reintroduces a way for the Commission to determine national targets (see 'The 2030 Renewable Energy Directive'), and there are further efforts to introduce sanctioning mechanisms through, for example, Implementing or Delegated Acts, over which the Commission has much more control (Knodt 2019; see also Energy Systems of the Future 2019). While the latter elements have not yet been fully agreed upon, both the surface obligations and the enforcement mechanism have been softened in the headline legislation (i.e. the new 2030 Renewable Energy Directive compared to that of 2020), but the Commission is seeking to 'harden' the enforcement mechanism at the core through Energy Union reporting and the formula (see Ringel and Knodt 2018). Some scholars have argued that this

reconfiguration between the 2020 and the 2030 directives amounts to little change in the 'hardness' of renewable energy governance at the EU level (see Oberthür 2019), but we believe that it is too soon to make this judgement, as much of the softness and hardness of the 2030 Renewable Energy Directive depends on its future implementation. Energy Union reporting (see 'Harder soft enforcement: reporting on renewable energy policy in the Energy Union') hardens the enforcement mechanism of the 2030 Renewable Energy Directive by raising the profile of renewable policy and increasing political visibility, including the possibility of naming and shaming through high-level State of the Energy Union reports (see Trubek and Trubek 2005). In sum, we detect softening at the surface but a hardening of the core in renewable energy governance to 2030.

Explaining soft and hard EU renewable energy governance

This section seeks to explain changes in the legislation that we discussed above – that is, the inability to agree on binding national renewable energy targets in the 2030 framework (as compared to the 2020 framework), as well as the enhancement of the enforcement mechanism of the 2030 Renewable Energy Directive through the formula and high-level Energy Union reporting. We particularly focus on the context, as well as on the configurations of actors as key potential explanatory factors of the observed changes.

The global/international context of EU renewable energy policy

Evolving international climate change negotiations strongly influenced EU renewable energy legislation in both cases – the 2020 and the 2030 directives. Both directives were negotiated as a part of broader packages, namely, the 2020 Climate and Energy Package and the 2030 Climate and Energy Framework. Renewable energy policy formed but one element of the broader efforts to put forward credible EU-level policy proposals to address climate change (Solorio and Bocquillon 2017). The EU has a long history of attempting to provide global climate leadership vis-à-vis strong domestic policy proposals and has thus often been perceived as an ambitious promoter of renewables (Wurzel and Connelly 2011). However, early in the creation of the United Nations Framework Convention on Climate Change (UNFCCC), which forms the international legal backdrop for EU climate action (Bodansky 1993), it had already become apparent that leading at home was by no means easy, for example, efforts to develop an agreement on a carbon tax failed in the early 1990s (Haigh 1996; Schoenefeld and Rayner 2019). In the mid-2000s, the EU and

particularly Denmark – which is often described as one of the EU's green leaders (Dyrhauge 2017) – had a keen interest in delivering a strong overall package, as Denmark was to host the annual Conference of the Parties (COP) to the UNFCCC in late 2009. Even though the EU succeeded in negotiating the 2020 framework (and even offered to increase its own effort if others were to follow suit), the Copenhagen summit was perceived as a resounding failure at the time and weakened subsequent renewable energy policy making within the EU (Bürgin 2015), even though it eventually contributed to sparking a new approach to global climate change governance (Held and Roger 2018). This failure in turn increased the need for action even more in the early 2010s when the EU negotiated the 2030 framework, as the international community had agreed to finalise a new, comprehensive climate change agreement in 2015. Once again, a European state (France) offered to host the negotiations, which ultimately proved successful through the 2015 Paris Agreement (Held and Roger 2018). Taken together, the ambition to remain a leader in multilateral climate change governance prompted the EU institutions and the EU Member States to revise EU renewable energy legislation and make it as binding/hard as possible to gain credibility and implement it successfully (Walker and Biedenkopf 2018, Interview September 2017).

European countries, notably Germany, Spain, and Denmark, were also instrumental in creating a more specific international renewable energy governance architecture, including the 'Renewable Energy Policy Network for the 21st Century'[5] and ultimately and most significantly, the 'International Renewable Energy Agency' (IRENA)[6] (Meckling 2019). Driven by the ambition to create global markets for their nascent renewable energy industries in the early 2000s and to export their policy approaches and ultimately technologies (Steinbacher 2018), as well as by increasing public concern over climate change and the need to reduce emissions, these countries sought to build international support for renewables that would allow the sector to stay firm in the face of rising opposition from incumbent, large domestic energy companies (Meckling 2019). While this endeavour only partially succeeded (e.g. the most significant solar panel manufacturers are now in China, while significant parts of the wind industry have remained in Europe), these efforts led to the creation of an international framework that has stimulated considerable momentum and a corresponding expectation of continued, ambitious EU renewable energy development.

Finally, politics and public opinion became more negative towards renewable energy between the negotiation of the 2020 and the 2030 Renewable Energy Directives, as the example of Germany shows. In

particular, the debate on the cost of the surcharge (a levy on energy bills used for supporting renewables) stipulated in the German Renewable Energy Sources Act (EEG) started gathering steam in Germany, so much so that the Merkel III coalition between the conservatives and the social democrats (2013–2017) found it legally and politically expedient to revise the EEG in 2014 with a view to reducing the levy (Vogelpohl and others 2017). This debate on costs – developing more force given the aftermath of the 2008 financial crisis and its economic impact on various European countries – put further pressure on similar feed-in-tariff systems in various countries, notably, Spain (Solorio and Fernandez 2017). Italy and Portugal were also adversely affected. Our interviews revealed that Germany in particular became a signifier of what *not* to do because other countries became concerned about the costs of the *Energiewende* (Interview January 2018) and therefore about the means to reach ambitious renewable energy targets. In summary, mounting international pressure to act, the domestic ambitions of leadership, and the key role of EU Member States in brokering international agreements are key explanatory factors of why the EU continued to look for ways to make its own renewable energy governance after 2020 as binding as possible, even though the domestic political and legal backdrop had become significantly more challenging for renewable energy policy in the meantime.

Actor configuration

Another important area identified by Saurugger and Terpan (2020) concerns shifting actor configurations affecting changes in renewable energy law and governance. We identify two key trends: On the one hand, there is a gradual strengthening of the Commission's leverage in implementing renewable energy legislation over time. On the other hand, there is a relative weakening of the Member States, but this has also been counteracted by some more recent developments, including the role of the European Parliament. This section discusses both effects in turn.

The Commission plays a key role in this process. In proposing the targets, it moved from stressing international climate leadership (2020 Renewable Energy Directive) to emphasising cost-effectiveness in the negotiations for the 2030 Renewable Energy Directive; in particular, the then Energy Commissioner Guenther Oettinger has been ascribed a central role in advocating for lower EU-level targets for renewables and non-binding national targets (Bürgin 2015). Since there are no binding national targets in the 2030 Renewable Energy Directive, the Commission has subsequently made several attempts to gain leverage over the Member States in the implementation process (Knodt and Ringel 2018). The

introduction of the formula used to calculate the renewable energy shares for each Member State in the Governance Regulation has clearly strengthened the hand of the Commission, even though Member States explicitly objected against national targets (Knodt 2018; Knodt and Ringel 2018). The role of the Commission was complemented by the European Council and the European Parliament's role in building political agreement on the targets – especially in 2014, when the European Council strongly steered towards the use of specific policy instruments.[7]

Second, the weakening of some pro-renewable energy Member States must be understood in terms of two general trends: Domestically, a number of traditional renewable energy leader states have been perceived to be struggling to fulfil their national 2020 targets, a development that weakened their leadership and clout in the negotiations of the 2030 Renewable Energy Directive because they could no longer claim to be leaders in the movement. For example, countries such as Germany, France and Spain may not achieve their 2020 renewable energy targets, prompting the European Environment Agency to state that 'further efforts to deploy renewable energy sources across the EU are needed', especially to address rebound effects (European Environment Agency 2019: 1). Figure 1 shows that even though some of the smaller Member States have either already reached their targets or are very close to them at the time of this writing, the potential failure of some of the largest Member States to deliver may lead to possible under-achievement at the European level. This is, in part, because fossil fuel consumption as a form of energy generation has increased across Europe (European Environment Agency 2019).

An additional factor related to actor configurations and influencing the negotiation of the 2030 framework is the 2004 EU enlargement. On 1 May 2004, ten new members joined the EU, representing the largest number of new members in its history (see O'Brennan 2006) – followed by Bulgaria and Romania in 2007. Given the substantial amount of legislation that had to be adopted to incorporate the *acquis communautaire* into national law and to effect the related administrative, organisational, and political changes, the new Member States were still in the adjustment phase when the 2020 Renewable Energy Directive was negotiated. These new Member States were unlikely to upset the political balance too much in the early years and prioritised other elements such as the Emissions Trading System in the negotiations.[8] By the mid-2010s, when the negotiation for the 2030 Renewable Energy Directive was underway with a view to the 2015 COP in Paris, this situation had changed. With more self-confidence and bolstered by a rising anti-European sentiment at home, many governments of the Visegrád Group opposed strong regulation on
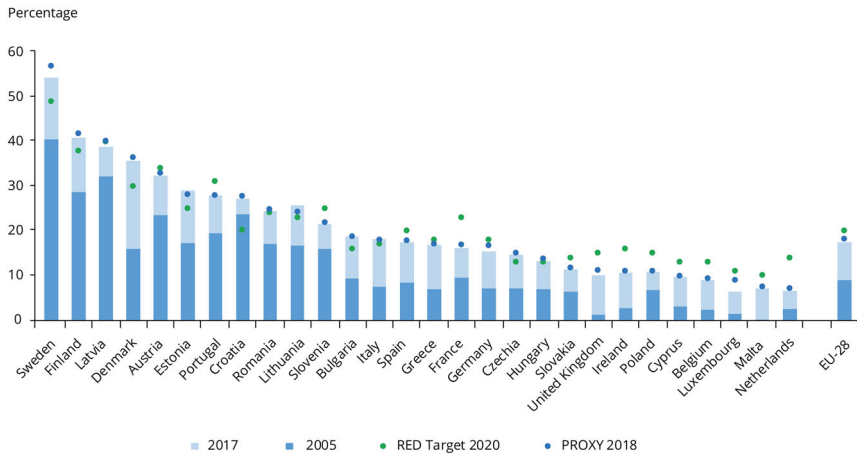
Percentage

Figure 1. Actual and approximated RES shares in the EU and its Member States.
Notes: The dark blue bars show the RES shares in 2005. The tops of the light blue bars show the levels that the RES shares reached in 2017. Colour online.
Sources: Figure provided by the European Environment Agency, based on European Environment Agency (2019).
Data available at: https://www.eea.europa.eu/themes/energy/renewable-energy/renewable-energy-in-europe-2019a

renewable energies (and especially binding, national-level targets), arguing that the Member States should stay in full control of choosing their energy sources (Interview August 2017); (even though some differences do emerge in this group on renewables; see Ćetković and Buzogány 2019). In particular, countries such as Poland were keen to retain control over their national energy mix to exploit their national coal resources and ensure the security of their supply (Solorio and Bocquillon 2017), lest they become dependent on Russian oil and gas, a situation that continues to be highly politically unattractive for the Polish people, especially in light of the recent Ukrainian gas crises (Zoll 2020). In our interviews, Polish representatives also stressed the need to retain flexibility because renewable energy expansion tends to be nonlinear and expansion costs tend to decrease over time (Interview March 2018). However, others outside the Visegrád Group, such as Romania, discovered that they were over-delivering on the 2020 target, especially because of biomass use from agriculture (Interview January 2018; see also Figure 1).

Another line of conflict affecting actor constellations was debates on 'technology neutrality' with regards to climate policy. A 'technology neutral' climate policy would impose a single, greenhouse gas emission reduction target, with Member State using their own discretion on how they would achieve it. The logical opposite is directly supporting certain technologies, such as renewables. A debate followed on whether or not to set a specific renewable energy target (Solorio and Bocquillon 2017). Member

States such as Denmark and Germany were in favour of a target whilst the UK, Poland, and the Netherlands preferred a technology neutral approach to retain flexibility (Interview January 2018), thus weakening overall Member State support for renewables (Bürgin 2015; Fitch-Roy and Fairbrass 2018: 65–7). Furthermore, a strong coalition of business groups supported the single target approach and ultimately, weakened renewable energy advocacy was unable to exert strong pressure (Fitch-Roy *et al.* 2019). In the end, the 2030 Renewable Energy Directive amounts to a degree of 'renationalization of the EU renewable energy policy's governance structure' (Solorio and Bocquillon 2017: 35), as it does not define binding national targets.

This debate originated from diverging Member State preferences over domestic energy use. A long-standing conflict over the use and exploitation of nuclear power flared up again and contributed to disunity regarding renewables. Countries such as the UK, France, Poland, and the Czech Republic have emphasised their desire to exploit nuclear resources (Bürgin 2015) and therefore strategically pushed for 'technology neutrality' in European targets, even though our interviews revealed that with current electricity market prices, nuclear development is not financially viable (Interview January 2018). Other countries, such as Germany, Denmark, Spain, Italy and Austria, which contain significant domestic anti-nuclear social movements, have been in favour of giving privileges to certain (renewable) technologies and therefore emphasised the need for European (and national) renewable energy targets. The political compromise that emerged in the 2030 Climate and Energy Framework reflects these tensions, given that a more ambitious greenhouse gas emission reduction target was set with a renewable target that is just slightly above business as usual projections (Solorio and Bocquillon 2017) – even though the European Parliament managed to raise this target above the original Commission proposal. The overt softening at the surface with more covert hardening at the core must thus be understood as an effort by the Commission to gain leverage in implementation and an effort by the Parliament to push for greater ambition; Member State disunity regarding various substantive policy issues has tempered some of these ambitions.

Conclusions and future directions

This article set out to analyse the more recent development of renewable energy legislation in the EU in light of the soft-versus-hard law and governance debate entertained in this special issue. We discovered softening at the surface but hardening at the core when comparing the 2020 and

2030 Renewable Energy Directives, which may be described as an increased hardening of softer elements in this policy area. We also revealed that while the Terpan (2015) typology is useful for describing the processes of (de)legalisation, it struggles to capture key surface and core effects, including softening of the EU renewables targets, and hardening through various linkages with the Energy Union governance (high-level reporting, defining indicative national targets). The corresponding entrepreneurial efforts of particular institutions such as the Commission and some Member States in bringing about legal and governance changes are not easily captured by the typology but contribute to an emerging debate in this area (Mattocks 2018; Knodt and Ringel 2018; see Bürgin 2015; Knodt *et al.* forthcoming). Our paper therefore extends the typology and specifically contributes to the elaboration of causal drivers.

Some authors have argued that the changes in renewable energy policy in the context of the 2020 and 2030 directives, remain mere technicalities (see Oberthür 2019). Our analysis suggests that a more differentiated view is in order – while we observe a softening at the surface, there are indeed hardening elements that have been introduced at the core to ensure some minimum level of coordination of renewable energy governance among the Member States. It is too soon to tell whether the 2030 framework and the corresponding Energy Union will be more, less, or equally effective when compared to the 2020 framework. The answer to this question depends in part on the (as yet still unknown) final effects of the 2020 framework, as well as numerous factors that may affect the 2030 framework. The latter depends to a significant degree on political will, that is, 'a sufficient set of decision makers with a common understanding of a particular problem on the formal agenda who are committed to supporting a commonly perceived, potentially effective policy solution' (Post *et al.* 2010: 671). Furthermore, the (successful) implementation of the Energy Union rides on the political will of the new Commission under President Ursula von der Leyen and the effort invested in this headline project.

The core contribution of this article therefore lies in unpacking some of the causal factors that led to the policy and legal changes we observed. Drawing on the introduction to this special issue (see Saurugger and Terpan 2020), we argue that there are two broad factors that have influenced the development of renewable energy legislation at the EU level: the evolving international context, and especially, climate change negotiations, as well as actor re-configurations within the EU, namely, the role and relative strength of the Member States, as well as those of the Commission and the Parliament. An important conclusion emerging from this analysis is that contextual/international and domestic factors are

closely interlinked. International negotiations and EU ambitions to lead have fostered the urge to negotiate a new framework with a view to 2020/2030, thus providing the general rhythm and pressure for renewable energy policy activity. Many of the domestic debates at the EU level emerged precisely because of the need to agree on an international framework. By the same token, domestic developments have impacted the EU's ability to negotiate internationally, as, for example, disunity at home impacts how one is viewed by others, as the EU came to painfully experience during the 2009 Copenhagen summit. Since then, the EU has improved and adjusted its diplomatic efforts (e.g. Bäckstrand and Elgström 2013). Evidence from the case of renewable energy suggests that the effects of softening and hardening law and governance are likely to emerge at the interstitials of various causal factors, both at home and abroad.

Future research should focus particularly on exploring the impact of the harder and softer elements that we are currently observing, potentially also in the context of other factors, such as institutions, entrepreneurship, multilevel interactions, or crises. One fruitful avenue of work could be an analysis of the National Energy and Climate Plans (NECPs) required by the Governance Regulation once they become fully available (Knodt *et al.* forthcoming; Schoenefeld and Jordan 2017). Scholars could, for example, assess the extent to which the explanatory factors we unpacked in this paper relate to actual policy outcomes; that is, did the Commission manage to strengthen its hand, or did Member States find ways to retain more control over their national energy mix? Do similar trends towards softening/hardening at the surface/core also appear in other policy areas? Short-term successes may be deceptive, as the experience in Bulgaria and Romania shows, where 'EU targets and monitoring of member state [sic] implementation has contributed to short-term compliance, but not substantive change', potentially generating problems for the 2030 directive (Davidescu *et al.* 2018: 621). Exploring such questions will allow us to shed further light on the (re)emergence of harder soft governance, its origins and its future effectiveness. These insights will have significant implications for governing energy and, potentially, for many other policy fields in the EU.

Notes

1. Reference: 03SFK4P0, Consortium ENavi, Kopernikus.
2. Approaches of soft and hard law originated from debates on international law and have been dominated by legal scholars (e.g. Abbott and Snidal 2000). In the EU context, related phenomena have typically been discussed as aspects of soft and hard governance (e.g. Blomqvist 2016), an approach that

political scientists frequently favour because it incorporates a wider range of actors and effects (see Jacobsson 2004). This paper therefore examines the former, but generally use the terminology and breadth of the latter.

3. Policy monitoring and reporting frequently involve multiple actors, such as the Member States, the Commission and sometimes executive agencies. We indicate throughout the article who monitors and reports. Further arguments on the complexity of policy monitoring are available in Schoenefeld *et al.* (2019).

4. A growing level of detail over time may also reflect learning effects in reporting; see Schoenefeld *et al.* (2019).

5. http://www.ren21.net/

6. www.irena.org

7. We are grateful to one of our reviewers for highlighting this point.

8. We are grateful to Rainer Müller for highlighting this point.

Acknowledgements

Disclosure statement

Funding

Notes on contributors

Jonas Schoenefeld is a Postdoctoral Research Associate at the Institute of Political Science at the Technical University of Darmstadt and a Visiting Researcher at the Tyndall Centre for Climate Change Research, School of Environmental Sciences, University of East Anglia. He has research interests in governance and public policy in the EU, with a particular focus on policy monitoring and evaluation. He conducts this work in the context of energy, climate change and environmental policy. [jonas.schoenefeld@tu-darmstadt.de]

Michèle Knodt is Professor of Political Science, Jean Monnet Chair (ad personam) and Managing Director at the Institute of Political Science at the Technical University of Darmstadt. She is also Director of the Jean Monnet Centre of Excellence 'EU in Global Dialogue' (CEDI), Co-leader of the Loewe-Excellence

Centre 'emergenCITY', and Co-leader of the DFG Research Training Group 'Critical Infrastructures' and she chairs the COST Network ENTER (EU Foreign Policy Facing New Realities). She has published widely on the EU, is especially interested in energy and foreign policy and has received research grants from the German Federal Ministry of Education and Research (BMBF), the German Research Council (DFG), the Volkswagen Foundation and the European Commission. [knodt@pg.tu-darmstadt.de]

ORCID

Jonas J. Schoenefeld 🔟 http://orcid.org/0000-0002-9451-9174
Michèle Knodt 🔟 https://orcid.org/0000-0001-6055-4281

References

Abbott, Kenneth W., Robert O. Keohane, Andrew Moravcsik, Anne-Marie Slaughter, and Duncan Snidal (2000). 'The Concept of Legalization', *International Organization*, 54:3, 401–19.

Abbott, Kenneth W., and Duncan Snidal (2000). 'Hard and Soft Law in International Governance', *International Organization*, 54:3, 421–56.

Aldy, Joseph E. (2014). 'The Crucial Role of Policy Surveillance in International Climate Policy', *Climatic Change*, 126:3-4, 279–92.

Bäckstrand, Karin, and Ole Elgström (2013). 'The EU's Role in Climate Change Negotiations: From Leader to 'Leadiator', *Journal of European Public Policy*, 20: 10, 1369–86.

Blomqvist, Paula (2016). 'Soft and Hard Governing Tools', in Christopher Ansell and Jacob Torfing (eds.), *Handbook on Theories of Governance*. Cheltenham: Edward Elgar Publishing, 267–78.

Boasson, Elin Lerum, and Jørgen Wettestad (2016). *EU Climate Policy: Industry, Policy Interaction and External Environment*. Oxon: Routledge.

Bodansky, Daniel (1993). 'United Nations Framework Convention on Climate Change: A Commentary', *Yale Journal of International Law*, 18, 451–558.

Bürgin, Alexander (2015). 'National Binding Renewable Energy Targets for 2020, but Not for 2030 Anymore: Why the European Commission Developed from a Supporter to a Brakeman', *Journal of European Public Policy*, 22:5, 690–707.

Ćetković, Stefan, and Aron Buzogány (2019). 'The Political Economy of EU Climate and Energy Policies in Central and Eastern Europe Revisited: Shifting Coalitions and Prospects for Clean Energy Transitions', *Politics and Governance*, 7:1, 124–38.

Davidescu, Simona, Ralitsa Hiteva, and Tomas Maltby (2018). 'Two Steps Forward, One Step Back: Renewable Energy Transitions in Bulgaria and Romania', *Public Administration*, 96:3, 611–25.

Deutscher Naturschutzring (2018). *Neufassung der Erneuerbare-Energien-Richtlinie*. Berlin: Deutscher Naturschutzring, available at https://www.dnr.de/fileadmin/Publikationen/Steckbriefe_Factsheets/18_07_17_EUK_RED_II_Factsheet.pdf (accessed 31 March 2020).

Dyrhauge, Helene (2017). 'Denmark: A Wind Powered Forerunner', in Israel Solorio and Helge Jörgens (eds.), *A Guide to EU Renewable Energy Policy*. Cheltenham: Edward Elgar Publishing, 85–103.

Eliantonio, Mariolina, and Oana Stefan (2018). 'Soft Law before the European Courts: Discovering a 'Common Pattern'?', *Yearbook of European Law*, 37, 457–69.

Energy Systems of the Future (2019). *Governance for the European Energy Union: Options for Coordinating EU Climate and Energy Policy up to 2030*. München: Deutsche Akademie der Technikwissenschaften e.V.; German National Academy of Sciences; Union of the German Academies of Sciences and Humanities e.V.

European Commission (2008). *Impact Assessment: Package of Implementation Measures for the EU's Objectives on Climate Change and Renewable Energy for 2020*. Brussels: European Commission, available at http://www.europarl.europa.eu/RegData/docs_autres_institutions/commission_europeenne/sec/2008/0085/COM_SEC(2008)0085_EN.pdf (accessed 31 March 2020).

European Commission (2014). *Renewable Energy: Commission Refers Ireland to Court for Failing to Transpose EU Rules*. Brussels: European Commission, available at https://ec.europa.eu/energy/sites/ener/files/documents/IP-14-44_EN.pdf (accessed 31 March 2020).

European Commission (2015). *State of the Energy Union 2015*. Brussels: European Commission, available at https://eur-lex.europa.eu/resource.html?uri=cellar:-ebdf266c-8eab-11e5-983e-01aa75ed71a1.0008.02/DOC_1&format=PDF (accessed 31 March 2020).

European Commission (2017a). *April Infringements Package: Key Decisions*. Brussels: European Commission, available at https://ec.europa.eu/commission/presscorner/detail/en/MEMO_17_1045 (accessed 31 March 2020).

European Commission (2017b). *Second Report on the State of the Energy Union*. Brussels: European Commission, available at https://ec.europa.eu/commission/sites/beta-political/files/2nd-report-state-energy-union_en.pdf (accessed 31 March 2020).

European Commission (2017c). *Third Report on the State of the Energy Union*. Brussels: European Commission, available at https://ec.europa.eu/commission/sites/beta-political/files/third-report-state-energy-union_en.pdf (accessed 31 March 2020).

European Commission (2018). *Europe Leads the Global Clean Energy Transition: Commission Welcomes Ambitious Agreement on Further Renewable Energy Development in the EU*. Brussels: European Commission, available at https://ec.europa.eu/commission/presscorner/detail/en/STATEMENT_18_4155 (accessed 31 March 2020).

European Commission (2019a). *Fourth Report on the State of the Energy Union*. Brussels: European Commission, available at https://ec.europa.eu/commission/sites/beta-political/files/fourth-report-state-of-energy-union-april2019_en_0.pdf (accessed 31 March 2020).

European Commission (2019b). *Renewable Energy Progress Report*. Brussels: European Commission, available at https://ec.europa.eu/commission/sites/beta-political/files/report-progress-renewable-energy-april2019_en.pdf (accessed 31 March 2020).

European Council (2014). *European Council (23 and 24 October 2014) – Conclusions*. Brussels: European Council, available at http://data.consilium.europa.eu/doc/document/ST-169-2014-INIT/en/pdf (accessed 31 March 2020).

European Environment Agency (2019). *Renewable Energy in Europe – 2019: Recent Growth and Knock-on Effects*. Copenhagen: European Environment

Agency, available at https://www.eionet.europa.eu/etcs/etc-cme/products/etc-cme-reports/renewable-energy-in-europe-2019-recent-growth-and-knock-on-effects/@@download/file/ETCCME_2019_8_RESeurope.pdf (accessed 31 March 2020).

European Parliament (2018). *Energy: New Target of 32% from Renewables by 2030 Agreed by MEPs and Ministers*. Strasbourg: European Parliament, available at https://www.europarl.europa.eu/news/de/press-room/20180614IPR05810/energy-new-target-of-32-from-renewables-by-2030-agreed-by-meps-and-ministers (accessed 31 March 2020).

Fitch-Roy, Oscar, David Benson, and Catherine Mitchell (2019). 'Wipeout? Entrepreneurship, Policy Interaction and the EU's 2030 Renewable Energy Target', *Journal of European Integration*, 41:1, 87–103.

Fitch-Roy, Oscar, and Jenny Fairbrass (2018). *Negotiating the EU's 2030 Climate and Energy Framework*. Cham: Palgrave Macmillan.

Graziano, Paolo R., and Charlotte Halpern (2016). 'EU Governance in Times of Crisis: Inclusiveness and Effectiveness beyond the 'Hard' and 'Soft' Law Divide', *Comparative European Politics*, 14:1, 1–19.

Haigh, Nigel (1996). 'Climate Change Policies and Politics in the European Community', in Tim O'Riordan and Jill Jäger (eds.), *Politics of Climate Change: A European Perspective*. London: Routledge, 155–85.

Held, David, and Charles Roger (2018). 'Three Models of Global Climate Governance: From Kyoto to Paris and Beyond', *Global Policy*, 9:4, 527–37.

Hildingsson, Roger, Johannes Stripple, and Andrew Jordan (2010). 'Renewable Energies: A Continuing Balancing Act?', in Andrew Jordan, Dave Huitema, Harro van Asselt, Tim Rayner, and Frans Berkhout (eds.), *Climate Change Policy in the European Union: Confronting the Dilemmas of Mitigation and Adaptation?* Cambridge: Cambridge University Press, 103–24.

Hildingsson, Roger, Johannes Stripple, and Andrew Jordan (2012). 'Governing Renewable Energy in the EU: Confronting a Governance Dilemma', *European Political Science*, 11:1, 18–30.

Hoerber, Thomas C. (2013). *The Origins of Energy and Environmental Policy in Europe: The Beginnings of a European Environmental Conscience*. London: Routledge.

Howes, Tom (2010). 'The EU's New Renewable Energy Directive (2009/28/EC)', in Sebastian Oberthür, Marc Pallemaerts, and Claire Roche Kelly (eds.), *The New Climate Policies of the European Union: Internal Legislation and Climate Diplomacy*. Brussels: Brussels University Press, 117–50.

Jacobsson, Kerstin (2004). 'Between the Deliberation and Discipline: Soft Governance in EU Employment Policy', in Ulrika Mörth (ed.), *Soft Law in Governance and Regulation: An Interdisciplinary Analysis*. Cheltenham: Edward Elgar Publishing, 81–102.

Kanellakis, Marinos, Georgios Martinopoulos, and Theodoros Zachariadis (2013). 'European Energy Policy—A Review', *Energy Policy*, 62, 1020–30.

Knodt, Michèle (2019). 'Multilevel Coordination in EU Energy Policy: A New Type of "harder" Soft Governance?', in Nathalie Behnke, Jörg Broschek, and Jared Sonnicksen (eds.), *Configurations, Dynamics and Mechanisms of Multilevel Governance*. Cham: Palgrave Macmillan/Springer Nature, 173–91.

Knodt, Michèle (2018). 'EU Energy Policy', in Hubert Heinelt and Sybille Münch (eds.), *Handbook of European Policies: Interpretive Approaches to the EU*. Cheltenham: Edward Elgar, 224–40.

Knodt, Michèle, and Marc Ringel (2018). 'The European Commission as a Policy Shaper–Harder Soft Governance in the Energy Union', in Jörn Ege, Michael W. Bauer, and Stefan Becker (eds.), *The European Commission in Turbulent Times*. Baden-Baden: Nomos, 181–206.

Knodt, Michèle, Marc Ringel, and Rainer Müller (forthcoming). 'Harder Soft Governance in the European Energy Union Policy', *Journal of Environmental Policy & Planning*.

Mattocks, Kate (2018). 'Co-ordinating Co-ordination: The European Commission and the Culture Open Method of Co-ordination', *Journal of Common Market Studies*, 56:2, 318–34.

Meckling, Jonas (2019). 'Governing Renewables: Policy Feedback in a Global Energy Transition', *Environment and Planning C: Politics and Space*, 37:2, 317–38.

Oberthür, Sebastian (2019). 'Hard or Soft Governance? The EU's Climate and Energy Policy Framework for 2030', *Politics and Governance*, 7:1, 17–27.

O'Brennan, John (2006). *The Eastern Enlargement of the European Union*. New York: Routledge.

Post, Lori Ann, Amber N. W. Raile, and Eric D. Raile (2010). 'Defining Political Will', *Politics & Policy*, 38:4, 653–76.

Radaelli, Claudio M. (2003). *The Open Method of Coordination: A New Governance Architecture for the European Union?* Stockholm: Swedish Institute for European Policy Studies.

Ringel, Marc, and Michèle Knodt (2018). 'The Governance of the European Energy Union: Efficiency, Effectiveness and Acceptance of the Winter Package 2016', *Energy Policy*, 112, 209–20.

Röben, Volker (2018). *Towards a European Energy Union: European Energy Strategy in International Law*. Cambridge: Cambridge University Press.

Saurugger, Sabine, and Fabien Terpan (2016). 'Resisting 'New Modes of Governance': An Agency-Centred Approach', *Comparative European Politics*, 14:1, 53–70.

Saurugger, Sabine, and Fabien Terpan (2020). 'Normative Transformations in the European Union: On Hardening and Softening Law', *West European Politics*. doi:10.1080/01402382.2020.1762440

Schäfer, Armin (2006). 'A New Form of Governance? Comparing the Open Method of Co-ordination to Multilateral Surveillance by the IMF and the OECD', *Journal of European Public Policy*, 13:1, 70–88.

Schoenefeld, Jonas J., Mikael Hildén, and Andrew J. Jordan (2018). 'The Challenges of Monitoring National Climate Policy: Learning Lessons from the EU', *Climate Policy*, 18:1, 118–28.

Schoenefeld, Jonas J., and Andrew J. Jordan (2017). 'Governing Policy Evaluation? Towards a New Typology', *Evaluation*, 23:3, 274–93.

Schoenefeld, Jonas J., and Tim Rayner (2019). 'Monitoring Energy Policy', in Michèle Knodt and Jörg Kemmerzell (eds.), *Handbook of Energy Governance in Europe*. Cham: Springer. doi:10.1007/978-3-319-73526-9_43-1

Schoenefeld, Jonas J., Kai Schulze, Mikael Hildén, and Andrew J. Jordan (2019). 'Policy Monitoring in the EU: The Impact of Institutions, Implementation and Quality', *Politische Vierteljahresschrift*, 60:4, 719–41.

Solorio, Israel, and Pierre Bocquillon (2017). 'EU Renewable Energy Policy: A Brief Overview of its History and Evolution', in Israel Solorio and Helge Jörgens (eds.), *A Guide to EU Renewable Energy Policy: Comparing*

Europeanization and Domestic Policy Change in EU Member States. Cheltenham: Edward Elgar, 23–42.

Solorio, Israel, and Rosa Fernandez (2017). 'Spain and Renewable Energy Promotion: Europeanization Upside Down', in Israel Solorio and Helge Jörgens (eds.), *A Guide to EU Renewable Energy Policy: Comparing Europeanization and Domestic Policy Change in EU Member States.* Cheltenham: Edward Elgar, 141–61.

Steinbacher, Karoline (2018). *Exporting the Energiewende: German Renewable Energy Leadership and Policy Transfer.* Wiesbaden: Springer.

Szulecki, Kacper, Severin Fischer, Anne Therese Gullberg, and Oliver Sartor (2016). 'Shaping the 'Energy Union': Between National Positions and Governance Innovation in EU Energy and Climate Policy', *Climate Policy*, 16:5, 548–67.

Terpan, Fabien (2015). 'Soft Law in the European Union — The Changing Nature of EU Law', *European Law Journal*, 21:1, 68–96.

Tholoniat, Luc (2010). 'The Career of the Open Method of Coordination: Lessons from a 'Soft' EU Instrument', *West European Politics*, 33:1, 93–117.

Trubek, David M., and Louise G. Trubek (2005). 'Hard and Soft Law in the Construction of Social Europe: The Role of the Open Method of Co-ordination', *European Law Journal*, 11:3, 343–64.

Vogelpohl, Thomas, Dörte Ohlhorst, Mischa Bechberger, and Bernd Hirschl (2017). 'German Renewable Energy Policy: Independent Pioneering Versus Creeping Europeanization' in Israel Solorio and Helge Jörgens (eds.), *A Guide to EU Renewable Energy Policy: Comparing Europeanization and Domestic Policy Change in EU Member States.* Cheltenham: Edward Elgar, 45–64.

Walker, Hayley, and Katja Biedenkopf (2018). 'The Historical Evolution of EU Climate Leadership and Four Scenarios for Its Future', in Stephen Minas and Vassilis Ntousas (eds.), *EU Climate Diplomacy: Politics, Law and Negotiations.* Abingdon: Routledge, 33–46.

Wurzel, Rüdiger K. W., and James Connelly (2011). *The European Union as a Leader in International Climate Change Politics.* London: Routledge.

Zoll, Maksymilian (2020). 'Energy Governance in the Republic of Poland', in Michèle Knodt and Jörg Kemmerzell (eds.), *Handbook of Energy Governance in Europe.* Cham: Springer. doi:10.1007/978-3-319-73526-9_22-1