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The dismantling of renewable energy policy in Italy

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ABSTRACT

The expansion of renewables is still dependent on appropriate policy support. Nonetheless, in the wake of the economic crisis, even pioneer European countries have begun to dismantle the set of measures implemented in the past decades. Policy dismantling in the area of renewable energy is a recent phenomenon that has attracted little attention in comparison to the study of the diffusion of support schemes. By focusing on the dismantling of renewable energy policy in Italy, this contribution helps fill this gap and highlights an important aspect of the current politics of energy transition. It shows how interactions between the political economy of the renewable energy sector, policy design, institutional constraints and external events affect policy dismantling. It also demonstrates the role of self-undermining mechanisms and framing effects in the dismantling of renewable energy policy.

KEYWORDS Policy dismantling; Italy; renewable energy; political economy; policy feedback; policy framing

Introduction

Since the 1990s, many countries have established policies for promoting renewables as a strategy to achieve climate change objectives, to increase energy security and to promote technological innovation or economic growth. In the power sector, governments have placed greater emphasis on policy instruments – also known as electricity from renewable energy sources (RES-E) support schemes – such as feed-in tariffs (FIT) and (to a lesser degree) tradable green certificates (TGC) (Mendoça *et al.* 2009; Haas *et al.* 2011). These policy instruments have been primarily responsible for the large expansion of renewable energy output and large cost reduction of the associated technologies, and scholars' interest in the subject has risen with the diffusion of RES-E support schemes in all industrialized countries (e.g. REN21 2015). However, Schaffer and Bernauer (2014: 16) point out, 'we know quite little about the dynamics of the underlying policy choices in this area'. In particular, the major stream of literature has focused on the adoption by a country at a certain point in time of

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some RES-E support scheme, whereas only a limited amount of research has studied the evolution of these policies over time (Shaffer and Bernauer 2014). Even less analysed is the recent phenomenon of dismantling renewable energy policy; i.e. the reduction, weakening, lack of update or termination of existing renewable energy policy (Gürtler *et al.* 2019).

This new trend is worth monitoring to understand the politics of energy transition. Even if renewable energy technologies have become increasingly competitive, appropriate policies continue to remain critically important for their future development (e.g. IEA 2018). Moreover, this recent trend is also an interesting analytical puzzle. Previous research has demonstrated that policy dynamics in the renewable energy sector tend to follow path-dependent patterns of development characterised by self-reinforcing mechanisms (Jacobsson and Lauber 2006, Lafferty 2008, Laird and Stefes 2009; Shaffer and Bernauer 2014). Once a RES-E support scheme is established, the interest groups which benefit from its functioning – such as renewable producers – can mobilize to support the status quo or ask for a further expansion of the policy (e.g. Ryland 2010; Meckling *et al.* 2015, Schmid *et al.* 2019).

Against this background, this contribution has two main goals. First, to close an important empirical gap in the literature by offering an account of the dismantling of renewable energy policy in Italy. Second, to contribute to cumulative research in the new field of renewable energy policy dismantling. Thanks to policy first implemented in the late 1990s, in 2014 Italy had become the fourth country worldwide – and the second in the European Union (EU) after Germany – for the deployment of renewable capacity in power generation (REN21 2015). Italy, however, also represents one of the European frontrunners in the dismantling of its ambitious RES-E support scheme, focused mainly on solar photovoltaics (PV) (Gürtler *et al.* 2019; see also Di Dio *et al.* 2015). Thus, the Italian case has both practical and analytical relevance as far as renewable policy dismantling and the politics of energy transition are concerned.

This contribution contains three sections. In section 2, I illustrate and discuss the analytical framework that I adopt to study policy dismantling in the renewable energy sector. This framework builds on the one that Gürtler *et al.* (2019) develop but improves upon it in three respects. First, it enables a careful assessment of policy changes in the renewable energy sector in order to underscore periods of expansion and dismantling. This aspect – well known in social policy scholarship as the 'dependent variable problem' (Green-Pedersen 2004) – has been neglected by recent research on renewable policy dynamics (e.g. McGowan 2020). Second, it specifies self-undermining mechanisms that can favour dismantling by affecting policy coalitions and weakening the bases of political support for renewable energy policy. Third, it considers how framing effects can

reduce the costs of dismantling and make this strategy more likely. In section 3, I apply this framework to the Italian case. Finally, in section 4, I reassess the lessons learnt from the Italian case study and discuss some insights for future research on renewable energy policy dismantling.

Understanding the dismantling of renewable energy policy: a framework for the analysis

Policy dismantling is a sub-category of the broad field of policy change, which implies a 'reduction', 'decrease', 'diminution' or even 'termination' of existing policy outputs (Bauer and Knill 2014, p. 30). Because of the specific direction of policy change, scholars consider dismantling to be subject to particular dynamics, causes, conditions and strategies that require a distinct analytical approach (Bauer *et al.* 2012, Jordan *et al.* 2013). Bauer and Knill (2014), in particular, clarified how to assess the direction of policy change in terms of 'policy density' – the breadth of legislative activity in a given policy field – and 'policy intensity' – the relative strictness and/or generosity of policies – in order to characterise periods of expansion and periods of dismantling. They also highlighted factors that can affect dismantling decisions, including external factors, situational factors and institutional constraints and opportunities.

Drawing on this recent strand of literature, Gürtler *et al.* (2019) develop an analytical framework for studying dismantling in the field of renewable energy policy. This framework innovates and adapts the one formulated by Bauer and Knill (2012, 2014) to this policy field, although it does not consider how to assess the direction of policy change for renewable energy policy. Firstly, the original category of 'situational factors', intended to capture factors that result from the dynamics within the specific field of policy itself, is further specified in two categories: i) the political economy of the policy field and ii) aspects related to the policy design. Both categories point to endogenous dynamics at work within the specific field of policy itself. However, the former serves to capture the dimension of *politics* within the policy field, while the latter focuses on the dimension of *policy*. Following this logic, the Bauer and Knill (2012, 2014) category of 'institutional constraints and opportunities' represents the dimension of *polity*, i.e. the overall configuration of the national political system and how it enables or constrain policy dismantling. Finally, the original category of external factors – related to exogenous socio-political and economic events or trends, which may influence dismantling but are not themselves influenced by the policy in question – is relabelled 'macro-level factors'. This is to differentiate them from the institutional features of the national political system, also 'external' to the policy field. Figure 1 illustrates the revised framework proposed by Gürtler *et al.* (2019).[1]

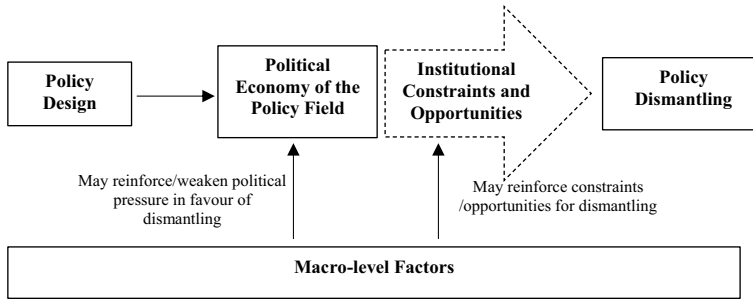

Figure 1. Policy dismantling: a framework for the analysis. *Source*: adapted from Gürtler *et al.* (2019, p. 3).

The *political economy of the policy field* includes the inter-relationship between structural features of the energy system and the configuration of actors with their interests and political power. Structural factors refer to the (relatively) static physical and institutional infrastructures of the energy system. In turn, these translate into specific actors' constellations showing particular interests and resources in the political realm. According to Gürtler *et al.* (2019), these constellations and the structural features of the energy system shaping their interests have a key influence on whether renewable energy policies are more (or less) prone to dismantling. For example, in an energy system with strong growth in energy demand, the interest of actors in favour of dismantling renewable energy policy is likely to be weaker than in a system with declining consumption and more competition for market shares. Similarly, an energy system dominated by a small number of large state-owned companies active in traditional fossil-based power generation are more likely to target political pressure in favour of dismantling than systems with more suppliers with a more diversified power generation portfolio.

With regard to *policy design*, the focus is on how the specific design of policies influences dismantling processes. This pattern of influence is not direct, as the complexities of policy design are unlikely to affect directly the preferences of decision-makers. However, policy design can affect the political economy of the policy field, which may, in turn, translate into pressure for dismantling. Following research on policy feedback, Gürtler *et al.* (2019) focused on the role of 'resource effects', i.e. the effects of policy design on the distribution of costs and benefits among relevant actors of the policy field. Policy design can favour the emergence of coalitions of actors around specific measures (positive resource effects), as well as losers who want to reverse the policy (negative resource effects) (e.g. Pierson 1994, Bauer and Knill 2012, Béland and Howlett 2016).

Negative resource effects are crucial in order to understand dismantling. In particular, the emergence of 'unanticipated losses' for mobilised social interests can trigger self-undermining feedback, weakening the bases of political support for the policy (Jacobs and Weaver 2015). This mechanism focuses on adverse consequences that were not predicted or considered by powerful political actors – actors with substantial political resources and, thus, the capacity to apply effective pressure for policy change – at the moment of policy enactment (ibid. 445). A similar self-undermining mechanism seems especially important in the area of renewables. 'Natural opponents' (Jacobs 2014), such as large utilities active in fossil-based power generation, generally underestimated the initial effects of RES-E support schemes. Yet, as the newly introduced instruments become more successful, the incentive for powerful actors to review their preferences regarding the policy grows. Elements of policy design (or flaws in it) that make controlling the pace of development of renewables difficult – such as, favouring an uncontrolled boost – can eventually hinder the policy (e.g. Del Río and Janeiro 2016). This is especially the case when the self-undermining feedback is not balanced by positive resource effects. In other words, if the new policy instruments are unable to expand the coalition of the supporting actors, those winners that will mobilize to maintain or expand the existing arrangements (e.g. Lockwood 2013, Schmid *et al.* 2019).

Self-undermining feedback can also be triggered by negative 'interpretative' mechanisms (e.g. Schmid *et al.* 2019; see also McGowan 2020). Interpretative mechanisms focus on the information and cognitive processes associated with policy learning. These mechanisms have negative effects when relevant actors (politicians or bureaucrats), who previously supported the policy, revise their preferences based on new information about the effects of those past policy choices. Empirical research has highlighted that policy designs that incorporate cost and/or impact measures and indicators are more likely to be subject to dismantling decisions (e.g. Bardach 1976). This is the case for RES-E schemes that are closely monitored by national governments and international organisations, such as the EU (e.g. European Commission 2008). In this regard, Gürtler *et al.* (2019) noted that inflexibility in the policy design – i.e. the inability to adapt instruments to the changing market or technological conditions – or overgenerous financial support can contribute to the creation of a hostile environment for renewables.

Finally, 'framing effects' amplify self-undermining feedback (Jacobs and Weaver 2015, p. 447–48). Policy elites (politicians and group leaders) seeking policy change are expected to frame arguments that strategically exploit voters' negativity biases. Negativity bias is the tendency of citizens to be more sensitive to negative information (policy losses) than positive information (policy gains) (e.g. Pierson 1994). If policy elites are able to frame the

status quo as a loss-imposing arrangement and their preferred reform as a loss-avoiding alternative, the costs of the policy change are reduced, making the option more politically feasible. Obviously, 'framing can cut two ways' (Jacobs and Weaver 2015, p. 448); while those opposing the current policy have incentives to frame it as overly costly or risky, those who favour the existing arrangements will counter-frame the status quo as the safer option. Some conditions, however, can favour elites' arguments in favour of policy dismantling. Their arguments will be more successful when losses are salient and visible to the average citizen and concentrated in time. Policy failures tend to draw substantial public attention when they erupt into dramatic focusing events (Baumgartner and Jones 2009). Often, these events are associated with an external crisis and exogenous shocks. However, focusing events can also have a strong endogenous component; they are often consequences of deficiencies in the policy design itself (Jacobs and Weaver 2015).

Self-undermining feedback, in the forms of 'unanticipated losses', negative interpretative effects and framing effects, can weaken the bases of support for the policy. However, to understand dismantling, it is important to look at the interplay between these endogenous dynamics and *macro-level factors*. According to Gürtler *et al.* (2019) these factors include a wider set of events pertaining to the exogenous environment that are able to influence dismantling decisions by affecting the political economy of the policy field as well as the system of institutional constraints and opportunities (as suggested by the arrows in Figure 1). They comprise macro-level changes or events such as economic crisis and shocks, ideological turns or disasters and accidents that affect the legitimacy of certain (energy) policy options (e.g. the Fukushima nuclear disaster). Changes in government represent another macro-level factor that can affect the distribution of political power beyond the policy field and open a window of opportunity for policy dismantling. Self-undermining feedback can increase the political pressure against the existing arrangements. However, this pressure is not enough to produce a policy change until a window of opportunity opens, i.e. until partisan allies of the policy coalition seeking change gain control of the executive and/or legislature channelling the mounting pressure into actual decisions taken in appropriate political venues (Kingdon 1984). With this regard, the structure of institutional constraints and opportunities is another important factor for understanding policy dismantling. *Institutional constraints and opportunities* indicate those institutional and political features of a specific political system or polity that make dismantling more or less likely. Those features include characteristics of the legislative, executive and judicial system as well as of the party and electoral system (Tsebelis 2002, Bauer and Knill 2012, 2014). The combination of these elements creates a structure of constraints and opportunities that can be less or more conducive to translating the preferences of

political actors favouring dismantling into effective policy decisions in this direction. In different political systems, politicians are confronted with many (or few) veto players and this can hinder (or facilitate) their dismantling strategy.

The dismantling of Italian renewable energy policy

As anticipated, Italy is among those European frontrunners of dismantling, along with Spain and the Czech Republic (Gürtler *et al.* 2019; see also Di Dio *et al.* 2015). Like these countries, Italy is also an 'extreme' example of the phenomenon under investigation and is particularly suitable for an exploratory analysis of renewable energy policy dismantling (e.g. Seawright and Gerring 2008). In what follows, I apply the analytical framework illustrated in the previous section to the Italian case while highlighting some emergent dynamics of the current politics of energy transition.[2] Firstly, I offer an overview of the key policy changes in Italian renewable energy policy from the late 1990s to the mid-2010s. By reviewing the relevant legislation and policy measures, I provide an assessment of the direction of these changes in order to highlight the shift from an early period of policy expansion to one of policy dismantling. Then, by combining primary data (government documents and parliamentary hearing records) and secondary sources (specialised media and existing academic research), I elucidate the role of the factors considered in the analytical framework that favoured the dismantling decisions.

Overview of renewable energy policy dismantling in Italy

Following Bauer and Knill (2014), I divide the development of Italian renewable energy policy into two main periods in terms of *instrument density* and *substantial intensity*. Instrument density is an indicator of policy density: it considers the number of policy instruments adopted by the government. Substantial intensity, on the other hand, considers the generosity and scope of these measures and it is an indicator of policy intensity. An expansion of the policy characterised the first period (from the late 1990s to the late 2000s); new instruments were adopted and then recalibrated to increase their generosity and scope (Table 1). Policy dismantling characterised the second period (from the early 2010s to 2014); existing instruments were terminated and/or adjusted to reduce their generosity and scope (Table 1).

In 1999, the centre-left government of Romano Prodi introduced in Italy the first support scheme that was completely dedicated to renewables: a quantity obligation scheme with TGC. In 2005, the centre-right government of Silvio Berlusconi introduced a new support scheme for PV: the so-called Primo Conto Energia (Table 1). The new centre-left government of Romani Prodi then improved this policy. It enacted the Secondo Conto

Table 1. Key changes and direction of policy change in Italian renewable energy policy (1999–2014).

Date	Policy Measure/Law	Notes	Assessment of policy change: (+) = policy expansion; (-) = policy dismantling
March 1999	TGC (Legislative Decree 79/99)	Introduces a TGC system for all RES-E. GCs duration 12 years. GCs minimum size 100MWh	*Instrument density* (+): adoption of new policy instruments
July 2005	Primo Conto Energia (M.D. 28 July 2005)	FIT for PV, generous incentives, duration of incentives 20 years, with annual cap	*Instrument density* (+): adoption of new policy instruments
February 2007	Secondo Conto Energia (M.D. 19 February 2007)	FIT for PV, no spending cap, generous incentives	*Substantial intensity* (+): adjustment of existing instruments to increase generosity
December 2007	Tariffa Onnicomprensiva (Law n. 244 of 24 December)	FIT for non-PV power plants under 1 MW (or under 200 kW for wind), duration of incentives 15 years	*Instrument density* (+): adoption of new policy instruments
	Amendments to the TGC system (Law n. 244 of 24 December)	Improvements of the TGC system: increase of quota obligation for suppliers; extension of GCs duration from 12 to 15 years; GCs minimum size from 100MWh to 1MWh (in order to improve smaller installation)	*Substantial intensity* (+): adjustment of existing instruments to increase generosity and scope
August 2010	Terzo Conto Energia (M.D. 6 August 2010)	Limited reduction of the incentives plus cap (8,000 MW of PV installed capacity by 2020)	*Substantial intensity* (-): adjustment of existing instruments to reduce generosity
May 2011	Quarto Conto Energia (M.D. 5 May 2011)	Incentives gradually decreasing over time plus annual cap	*Substantial intensity* (-): adjustment of existing instruments to reduce generosity
July 2012	Quinto Conto Energia (M.D. 6 July 2012)	Incentives gradually decreasing over time plus annual cap set at a very low level Spending cap reached on July 2013 (termination of the Conto Energia)	*Substantial intensity* (-): adjustment of existing instruments to reduce generosity *Instrument density* (-): termination of existing policy instruments
	M.D. 6 July 2012, abolishes the TGC and the Tariffa Onnicomprensiva	Termination of the TGC scheme Termination of the Tariffa Onnicomprensiva	*Instrument density* (-): termination of existing policy instruments *Instrument density* (-): termination of existing policy instruments
	M.D. 6 July 2012 establishes a 'new system'	Feed-in tariffs for small- and medium-size installations (from 1 to 5 MW) Competitive auctions for larger installations (above 5 MW)	*Substantial intensity* (-): these new instruments reduced the generosity and scope of the policy (*)
October 2014	'Spalma incentivi' (Decree Law No 91/2014)	Introduces retroactive adjustments in FIT for PV	*Substantial intensity* (-): adjustment of existing instruments to reduce generosity

Source: author's elaboration. Note: M.D. = Ministerial Decree; (*) = see also the comments in the main text.

Energia, a program that maintained the generous incentives and removed the cap set with the Primo Conto Energia. With the Budget Law 2008 (Law n. 244 of 24 December 2007), the Prodi government also enacted a new feed-in scheme – the so-called Tariffa Onnicomprensiva – for non-PV small generations and introduced some adjustments that increased the generosity and scope of TGC system (Table 1). Finally, with the implementation decree of Budget Law 2008, the Prodi government also established a mechanism to support the price of the green certificates (GCs) making more convenient renewable investments.

This robust policy expansion, in terms of instrument density and substantial intensity, began to be scrutinized following the appointment of the new centre-right government led by Silvio Berlusconi in the wake of the 2008 financial crisis. However, when the Berlusconi government enacted the Terzo Conto Energia it only provided for a limited reduction of the incentives for PV and set a long-term national target for the total installed PV capacity (Table 1). Then, it designed the Quarto Conto Energia with a lower level of financial support and an annual cap. By enacting the Quinto Conto Energia, the Monti government further lowered financial support for PV and introduced a stringent cap – set at 6.7 billion euros – that was already reached in June 2013. This date signified the termination of the Conto Energia support scheme. The Monti government also terminated the TGC system and the Tariffa Onnicompresiva and replaced them with a new system designed with the Ministerial Decree of 6 July 2012. This new system is based on a combination of feed-in tariffs for small and medium-size installations and competitive auctions for the larger ones (Table 1). In addition, with the Ministerial Decree of 6 July 2012, the Monti government introduced a system of registries for new installations with an annual capacity quota and a spending cap set at 5.8 billion euros. In terms of *density*, with two instruments, the new system mirrors the previous one. However, in terms of *substantial intensity* it shows a reduction both with regard to the generosity (lower spending cap) and scope, as the auctions and the registers are intended to decrease the number of potential beneficiaries of the policy. Finally, in 2014, the new centre-left government of Matteo Renzi, with Decree Law No 91/2014 – known as Spalma incentivi – retroactively reduced the existing feed-in incentives for PV. These policy changes negatively affected the growth of renewables in Italy, which have stalled since 2014 (Terna 2020).

Policy design

Problems in policy design, the mismanagement of the RES-E support schemes and the government's inability to control the pace of development of renewables (and the related costs) contributed decisively to the decision to dismantle.

The TGC system required power producers and importers of thermal energy to have a minimum share of renewables in their portfolio. However, the system provided some exemptions from this quota obligation requirement for particular energy producers. The quota obligation exemption, combined with delays in the authorization processes, prevented faster development of renewables in the first part of the 2000s (Figure 2). Thus, to avoid an excessive increase in the price of GCs, the government decided to allow the Gestori Servizi Energetici (GSE) – a publicly owned company established by the government to manage the Italian renewables support schemes – to sell its own GCs on the market at an administered price. The effect of this decision, which guaranteed a stable and high price for GCs, plus an insufficient increase to the quota obligation, resulted in an opposite market imbalance in the following years (Lorenzoni 2003). Since the late 2000s, the demand for GCs has been constantly more consistent than the supply, thus increasing the value of the certificates and making it more convenient to invest in renewables. The Budget Law 2008 also provided a mechanism through which unsold GCs in the market could be retired by GSE at the mean price of the previous three years. Such provision had an impressive impact: renewable electricity production under the TGC almost tripled in four years, from about 11 TWh in 2008 to about 28 TWh in 2011 (GSE 2013). However, this also contributed to a dramatic increase in the costs of the policy (see Figure 2).

The Primo Conto Energia was designed with a very generous tariff (European Commission 2008), but this design element was coupled with a cap based on quantity (first 300 MW and then 500 MW per year). The

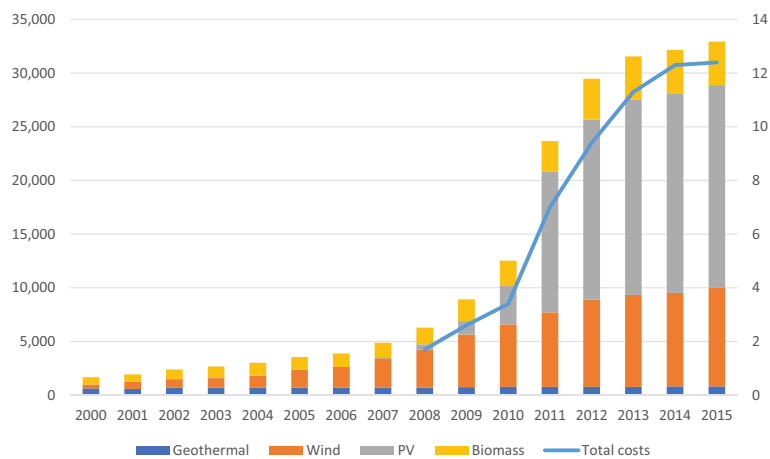

Figure 2. Renewable energy capacity (excluding hydro) installed in Italy (MW, left axis) and total costs for the RES-E support schemes (in billion Euro, right axis). *Sources*: For renewable energy capacity: Terna (2020). For the total costs: ARERA (2016).

Secondo Conto Energia maintained the generous tariff but abolished the cap (Antonelli and Desideri 2014). The tariff was set at this high level in order to compensate beneficiaries for administrative burdens and the delays in the authorization procedures. However, the scheme was inflexible as it did not provide for an adaptation of the incentives over time. The Terzo Conto Energia included only a limited revision of the incentives. It was not enough to slow the investment boom in PV, driven also by the important costs' reductions in the PV technologies (Antonelli and Desideri 2014). In 2011, a Quarto Conto Energia was introduced, designed with lower financial incentives gradually decreasing over time and an annual cap. However, announcement of the reform led to a rush of renewable producers registering their installations under the much more generous provisions granted under the Secondo Conto Energia (IEA 2016). This was possible because of a legal loophole introduced by the Parliament – with the Salva Alcoa Law – which remained open until June 2011. As a result, PV-installed capacity more than tripled in that year, from about 3,600 MW in 2010 to about 13,000 MW in 2011 (Figure 2). This unintentional PV boom – the 8,000 MW national target set by the Terzo Conto Energia for 2020 had been largely exceeded by 2011 – coupled with the parallel increase in renewable electricity production under the TGC, resulted in a dramatic increase in the costs of the policy, which almost doubled in one year (Figure 2). This uncontrolled boost in the costs for the renewables became a concern not only for policymakers but also for companies and householders, as the Italian RES-E support schemes were recovered via a surcharge on consumer bills (the so-called A3 charge).

The political economy of the policy field

The uncontrolled growth of renewables, and the related costs, interacted with the political economy of the Italian electricity sector. From 2000 to 2008, Italian electricity consumption grew from about 280 TWh to 320 TWh. After the 2008 economic crisis, however, it drastically decreased to less than 300 TWh in 2014–15 (Terna 2020). The drop in electricity consumption, coupled with the expansion of renewables, provoked a situation of overcapacity for conventional thermoelectric plants, challenging the position of large utilities (NSE 2013, A2A 2017). Although the fall in electricity demand is a consequence of a macro-level factor, i.e. the economic crisis, the overcapacity in the electricity sector is the result of the interaction between this external event and a structural feature of the Italian electricity system: the expansion of Combined Cycle Gas Turbine generation from 2002 to 2011 (Terna 2014).

Two large incumbent utilities, ENEL and ENI, and a small group of competitors (Edison, E.On, Gdf-Suez) dominate the Italian electricity sector. These companies are especially active in the non-renewable sector (ENEL is

also involved in hydropower). ENEL and ENI, as state-owned companies, also enjoy privileged access to government decision making and have traditionally exercised a key influence on Italian energy policy (e.g. Lanza and Silva 2006, Prontera 2018). However, the ownership of renewables installations is dispersed among many smaller operators, especially in the PV sector, where small operators control 98% of the total installed capacity (ARERA 2014). Moreover, it is worth noting that Italy – ranked second in the EU after Germany for installed PV capacity – has long differed from Germany, where PV development has been parallelled by an increase in related PV industries and jobs. This trend is less evident in Italy (e.g. Antonelli and Desideri 2014; Cai *et al*. 2017, EY 2017), which means that the overall political weight of the renewable energy coalition was smaller than expected based on the size of Italy's PV boom. Several renewable producer organisations, including APER, Assosolare, FIPER, Ifi, GIFI, ANIE and environmental NGOs formed the renewable energy coalition. However, it was a fragmented coalition with few political resources. Conversely, when it became evident that the renewable energy policy was causing 'unanticipated losses' for large utilities – in the form of overcapacity, which was negatively affecting their businesses – these powerful actors and their organisation (Assoelettrica) mobilised to reverse the existing arrangements. Confindustria, the major Italian business organisation, joined the dismantling coalition, and reviewing the existing instruments became a crucial goal in order to reduce the costs of electricity bills for small- and medium-sized enterprises (SMEs), which were more affected by the economic crisis (Confindustria 2011).

Additional self-undermining mechanisms in the form of negative interpretative effects further weakened the political support for the policy. Until 2011, the Ministry of the Environment opposed dismantling. However, it later changed its position. It began to consider the Italian RES-E support schemes too difficult to manage, inflexible and excessively generous, especially because of the cost reduction in PV technology (Ministry of the Environment 2012). A similar change of position also characterised the main centre-left political party (the Democratic Party), which considered the costs of the policy as higher than the potential benefits in terms of jobs and economic development (Democratic Party 2012). It is worth noting that both actors had been very important in the earlier expansion of the Italian renewable energy policy.

From 2011, policy elites from the dismantling coalition were able to reframe the renewable energy policy, shifting it from a strategy that improved energy security and fostered economic growth, e.g. the green economy, to one that threatened the security of the (electricity) supply and economic development and hindered the competitiveness of Italian companies. The dramatic increase in the costs of the policy between 2010 and 2011 was an important focusing event in this regard. This event – resulting from

flaws in the policy design and mismanagement of the RES-E scheme for PV – manifested in a context that was still characterized by slow recovery from the economic crisis. This situation increased the salience of electricity bill costs for householders and companies (especially SMEs, which constitute the backbone of the Italian productive system). The fact that – by design – the RES-E support schemes costs were highly visible, as a specific component of the electricity bill, contributed to creating a structural environment favourable to the exploitation of citizens' negativity biases. Moreover, public agencies, such as the GSE and the ARERA (the Italian energy regulator) closely monitored and publicly reported the costs of the policy. Overall, in a similar environment, it was easier for policy elites favouring dismantling to frame the existing Italian renewable energy policy as a loss-imposing arrangement and their preferred reform as a loss-avoiding alternative.

Conversely, this environment was unfavourable for the counter-framing arguments proposed by the coalition actors that opposed dismantling. These actors – renewable producer organisations and environmental NGOs – sought to frame Italian renewable energy policy in terms of jobs and economic development and as means to increase energy security and reduce electricity bill costs (by reducing oil and gas imports and increasing competition in the power sector). This strategy, however, was not effective. After 2012, the Italian government reframed the debate over renewables around two issues: reducing electricity bill costs for householders and companies and preventing malfunctions in the electricity supply. The Monti government highlighted both these issues in 2013 when it formulated the new Italian Energy Strategy (NSE 2013). The government led by Matteo Renzi and the Democratic Party reiterated them when, in 2014, it introduced retroactive adjustments on the FIT schemes for PV.

Macro-level factors

The 2008 economic crisis, combined with changes in government, represented a crucial factor in the dismantling process. When the centre-left government enacted the TGC, in 1999, the Green Party was in the coalition supporting the government. The Green Party was also in the coalition supporting the 2006 centre-left government of Romano Prodi. A Green politician, Alfonso Pecoraro Scanio, was chosen as Minister of the Environment. Pecoraro Scanio was determined to improve the support schemes for renewables. First, he enacted the Secondo Conto Energia, which abolished the spending cap of the Primo Conto Energia. Then, with the help of the Ministry of Economy, from the Democratic Party, he promoted the Tariffa Onnicompresiva and the measures to improve the TGC system.

With the appointment of the new centre-right government led by Berlusconi and Forza Italia in 2008, a first window of opportunity for dismantling opened. Forza Italia proposed relaunching nuclear energy instead of focusing on renewables (a plan that was reversed after the 2011 Fukushima disaster).[3] Then, in 2010, with a growing economic and financial crisis characterising the context, the Berlusconi government put the Italian RES-E support schemes under scrutiny for their costs and negative impact on electricity bills. However, its dismantling efforts were successfully halted (see the next section). With the appointment of the Monti government in November 2011, a second window of opportunity for dismantling opened. The Monti government was a 'technical' government supported by a coalition of the main traditional political parties from the centre-right (Forza Italia) and the centre-left (Democratic Party). It was appointed at the apex of the Italian economic crisis, a critical period that coincided with the boom in Italian renewable energy policy costs (see Figure 2). The Monti government quickly put the reduction of the RES-E support schemes back on the agenda. The economic crisis and the uncontrolled increase in the costs of the policy provided a strong legitimacy for the dismantling measures passed in the Summer of 2012. Later, the uncertain economic situation contributed to legitimize the retroactive adjustments enacted by the centre-left government led by Matteo Renzi and the Democratic Party that had already joined the dismantling coalition in 2011 (unlike the previous centre-left governments, the Green Party was not in the coalition supporting the Renzi government).

Institutional constraints and opportunities

The Italian political-institutional system is, prima facie, unfavourable to the process of dismantling. Characterised by ample room for veto players, it is prone to policy stability (Tsebelis 2002). This reflects its perfect bicameral system, the presence of coalition governments and a high degree of fragmentation of the party system, which make it difficult for proposals coming from the executive to reach final approval without changes (e.g. Musella 2014).

Difficulties in policy dismantling became evident when the Berlusconi government sought to reverse the TGC scheme and the FIT for PV. In 2010, the Ministry of Economy and Finance proposed (with Law Decree no. 78 of 31 May 2010) the abolition of the obligation for the GSE to buy the GCs – the system previously established to sustain the price of the certificates. However, in the lower chamber of the parliament, 18 amendments against this proposal were proposed; the amendments came from political parties supporting the government, as well as from opposition parties. The Ministry of the Environment also opposed this idea. In the end, the Ministry of Economy and Finance reviewed its original proposal.

Problems also arose with the government's efforts to dismantle the Conto Energia. The Ministry of Economic Development sought to pass a ministerial decree to set a stringent cap for PV. The Ministry of the Environment and parliamentary members likewise opposed this proposal. In the end, the Berlusconi government introduced a less stringent cap in its 2011 reform of the FIT for PV (Quarto Conto Energia). Additionally, in this period, the parliament passed the Salva Alcoa Law, which allowed many PV operators to benefit from the higher financial incentives provided by the Secondo Conto Energia.

This situation drastically changed after the appointment of the Monti government. The peculiar features of this 'technical' government allowed it to act quite autonomously from parliamentary dynamics. In other words, during the Monti government, the Italian political-institutional system worked *qua* a system with few rather than many veto players. As the arrow in Figure 1 suggests, macro-level events can affect institutional constraints and opportunities. The debate on the 'excessive' costs of renewables had already started with the previous centre-right government of Berlusconi. Now, however, it was easier for the new government to implement the dismantling of the existing instruments by enacting a Ministerial Decree to 'bypass' the Parliament. The Renzi government, in 2014, continued along this path, introducing retroactive adjustments to the FIT scheme. Despite the opposition of renewable producers, a consensus on the excessive costs of renewables had now emerged and become consolidated among relevant policy actors.

Conclusions: insights for research on renewable energy policy dismantling and the politics of energy transition

Europe is still considered a leader in the area of climate change (e.g. Zito *et al.* 2019). However, after two decades of expansion, renewable energy policy is entering a new phase of dismantling and retrenchment in several countries of the region. Scholars have only recently begun to investigate the sources and drivers of this emergent phenomenon (e.g. McGowan 2020). The framework proposed by Gürtler *et al.* (2019) has merits based on its ability to order the different sets of factors that can influence dismantling decisions, underscore interactions among the endogenous and exogenous sources of these policy dynamics and allow for cumulative and comparative research on dismantling in the renewable energy sector.

My study contributes to this research agenda in three ways. I firstly adopted Bauer and Knill (2012, 2014) original framework to carefully measure the direction of policy change in the renewable energy policy sector in terms of instrument density and substantial intensity. This issue, overlooked by Gürtler *et al.* (2019), is important to address the 'dependent variable problem' in energy policy research and better characterise periods of expansion and dismantling. Additionally, drawing on the recent scholarship on policy feedback (e.g. Jacobs and Weaver

2015, Schmid *et al.* 2019), I specified the self-undermining mechanisms that can affect policy coalitions and weaken the bases of political support for a renewable energy policy. Finally, I highlighted the role of 'framing effects' in the politics of policy dismantling. Under specific conditions, these effects can amplify self-undermining mechanisms and reduce the (political) costs of dismantling, making this strategy more likely.

The Italian case study confirms that understanding the interaction between self-undermining mechanisms and macro-level factors is crucial in order to understand policy dismantling. The design of the Italian RES-E schemes and the flaws in their management contributed to the rapid growth of renewables in the country. However, the fact that the government was unable to control the pace of development of renewables – and the related policy costs – was a key factor in the dismantling decisions. When the unanticipated losses for the large utilities and former incumbents became evident – due to overcapacity in the power sector – these powerful actors mobilised to reverse the existing arrangements. Business organisations joined the dismantling coalition as the costs of the policy negatively affected companies' competitiveness by increasing electricity bill costs. Negative interpretative effects further enlarged the dismantling coalition. Important actors, who had supported the policy during the expansion period, such as the Democratic Party and the Ministry of the Environment, began to consider the costs of the policy as much higher than the potential benefits.

Policy design, and flaws in it, along with the impact of the 2008 economic crisis, contributed to creating an environment that was favourable to policy elites' exploitation of citizens' negative biases. Focusing events, such as the 2011 boom in PV, and the visibility and salience of the costs of the policy, recovered as electricity bill surcharges, favoured those actors presenting the existing arrangement as a loss-imposing one and their preferred reform as a loss-avoiding alternative. Conversely, the environment was unfavourable to the counter-framing arguments of the anti-dismantling coalition. This coalition – formed by renewable producers and environmental NGOs – had limited political resources. The growth of renewables in Italy was not paralleled by the equally important development of the green industry and related jobs. The overall weight of the interests that could mobilise to oppose dismantling was very small. However, the mounting pressure for dismantling only translated into actual policy decisions when a (second) window of opportunity opened with the appointment of the Monti government at the apex of the Italian economic crisis. During this momentum, the Italian political institutional system worked as a system with few rather than many veto players. Later, in 2014, when the Renzi government enacted the retroactive adjustment of the FIT for PV, the legitimacy of the Italian renewable energy policy was already compromised.

The Italian case also illustrates some important features of current politics of energy transition. The long-lasting effects of the economic crisis have put

pressure on government (financial) support for renewables. Traditional actors, e.g. incumbent utilities and business organisations, have begun to more decisively question the legitimacy of RES-E support schemes. Simultaneously, the rise of right-wing populism could contribute to an undermining of public support for energy transition and climate change policy (e.g. Lockwood 2018). The challenges of designing appropriate polices to increase the winners of energy transition and make this process more inclusive have become increasingly imperative to avoid opposition and steps backwards. A synchronization between (targeted) industrial policy measures and RES-E support schemes is required to favour the parallel growth of renewables, the green industry and related jobs. This can increase the size and influence of the coalition of actors supporting renewables and the overall resilience of the policy (e.g. Meckling *et al.* 2015). The EU recognised these problems with the 2019 European Green Deal, which includes the Green Deal Investment Plan and the Just Transition Mechanism to foster green industry and protect business and workers that are most vulnerable to the energy transition. These innovations could weaken dismantling pressures at the domestic level, confirming that multilevel systems like those of the EU can provide supranational mechanisms to 'reinforce' states' climate actions (e.g. Wurzel *et al.* 2019).

Measures to manage overcapacity in the power sector (especially for countries with shrinking energy demand) are also needed to reduce resistance from the incumbent sector (e.g. Del Río and Janeiro 2016). In 2019, the Italian government was able to introduce a new RES-E support scheme (mainly focused on PV and on-shore wind) by including it in an integrated climate and energy package that provided for the launch of a capacity market (PNIEC 2018). This latter initiative eased the concerns of large utilities regarding the negative impact on their business by the further development of renewables in Italy. Finally, it is important to increase the visibility of the gains of energy transition, as well as the costs of inaction, among communities and the general public. This strategy can create an environment that is unfavourable to policy elite arguments that exploit citizens' negative biases and can reinforce counter-narratives that frame renewable energy policy in positive terms.

Notes

1. Gürtler *et al.* (2019) also focused on the possible influence of the political economy of the (renewable) energy policy sector on macro-level factors. However, I have not considered this dimension in this contribution.
2. As Flyvbjerg (2006, p. 229) explains, extreme cases are particularly suitable for generalization: they reveal more information because they activate more actors and study more key mechanisms of the situation.
3. Italy abandoned nuclear energy in 1987 after the Chernobyl disaster.

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