1

The Quest for Durability

When, Where and How Do Policies Feed Back into Politics?

> . . . governments stimulate [. . .] industries dependent on [. . .] legislation for their existence, and these industries form the fighting legions behind the policy. The [policy] likewise [. . .] [creates] [. . .] losers [who] adapt themselves to the new conditions imposed upon them, find themselves without the means to continue the struggle, or become discouraged and go out of business. *Is this not true, in varying degrees, of nearly all other policies also? New policies create a new politics*.
>
> (Schattschneider, 1935: 288, emphasis added)

1.1 The Quest for Durable Climate Policies

Climate change is often described as a wicked policy problem *par excellence*. The Intergovernmental Panel on Climate Change (IPCC) has made the scientific case for cutting greenhouse gas emissions to effectively zero by the middle of this century ('net zero' emissions), most recently in its 2018 special report on the most likely impacts of a temperature rise of 1.5°C (IPCC, 2018: 1). That report effectively underlined the need for 'rapid, far reaching and unprecedented changes in all aspects of society' (IPCC, 2018: 1). The economic rationale for adopting such a radically different trajectory of human development is well known. So why – to paraphrase Nicholas Stern (2015), one of the world's leading climate economists – is the world still waiting for deep and rapid decarbonisation to occur?

It is undeniably true that many new climate policies have been adopted by governments in the last decade or so (Averchenkova *et al.*, 2017). Indeed, climate change is arguably one of *the* most active areas of environmental policy making (Huitema *et al.,* 2011). However, the policies that have been adopted are collectively not delivering emission reductions rapidly enough to avert dangerous climate change (United Nations Environment Programme, 2018; van Renssen, 2018). To support deep and rapid decarbonisation, climate policies must certainly be sufficiently large in number and stringent in their ambitions; but they should also be

https://doi.org/10.1017/9781108779869.003 Published online by Cambridge University Press

politically durable (Rose, 1990: 274). The word 'durable' means persistent, steadfast and unyielding. Therefore, by definition, a policy that is durable *lasts*. Durable climate policies nurture a society-wide expectation that deep decarbonisation has begun and will persist through to the end of the twenty-first century and beyond. Above all, key actors should perceive such policies to be durable: because deep and rapid decarbonisation is inevitable there is no point opposing the policy.

The importance of establishing durable climate policies has been repeatedly underlined by Stern himself (2006: 368), by influential international bodies such as the IPCC (Parson and Karwat, 2011: 744) and economists working in the World Bank (2010: 339–40). There is also a growing strand of academic literature that identifies policy durability as a critical factor enabling decarbonisation (Eskridge and Ferejohn, 2001; Parson and Karwat, 2011: 751; Levin *et al.*, 2012: 1271; Rietig and Laing, 2017: 576; Iacobuta *et al.*, 2018: 10; Edmondson *et al.*, 2018), at international, national and regional levels (Compston and Bailey, 2008: 268; Webster, 2008: 60; Princen, 2009: 17; Keohane and Victor, 2011: 19). Borrowing from Schattschneider (1935: 288), who is quoted in the epigram above, durable climate policies will create and in turn be supported by 'a new politics' of deep decarbonisation. Politics and policy are, in other words, two sides of the same coin, and should be studied that way accordingly.

As a broad starting point, in this book we define a durable policy as one that endures and is influential over a particularly long period of time. Such a policy fosters and sustains its own political support base over time, triggering legacy effects 'that endure even after the waning of the political forces that generated the policy's original enactment' (Jenkins and Patashnik, 2012: 15). In the real world of politics, it is often immensely difficult to design and secure sufficient support to adopt such policies (Goodin, 1996: 29; Glazer and Rothenberg, 2001: 110; Sidney, 2005: 80–81; Peters, 2018: 7). Ensuring that they endure – that they have the capacity to ride out the inevitable political bumps in the road that lies ahead without diminishing their effectiveness – is an altogether more challenging task. In climate policy making, election-focused politicians often seek to persuade powerful societal actors to make long-term investments in what are often new, unproven technologies such as electric cars, carbon capture and storage facilities, and ultra-low carbon transport fuels (Glazer and Rothenberg, 2001: 6; Liang and Fiorino, 2013: 109). Even if those actors agree to make such long-lasting investments, it does not necessarily mean that the accompanying policies (or the investments) will endure: circumstances could very easily change and politicians may opt to pursue different goals. The history of renewable energy deployment is littered with examples of ambitious policies that secured sufficient support to be adopted, but were subsequently revised and/or subjected to sudden cutbacks that significantly disrupted the innovation and diffusion of new green energy technologies

(Cointe, 2015; Meckling, Sterner and Wagner, 2017: 920; Michaelowa *et al*., 2018: 279; Gürtler *et al*., 2019). In the area of climate change, policies which were originally perceived to be ambitious and politically popular have also been scaled back and some have even been completely dismantled (van Renssen, 2018: 357; Rosenbloom *et al.*, 2019: 168). Policy retrenchment has occurred across the globe, including in Canada (Fankhauser, *et al*., 2015: 55), Australia (Pearse, 2017), the United States (Rabe, 2016), Spain and Germany (Meckling, Sterner and Wagner, 2017: 920). The 'inconvenient truth' is that a surprisingly large number of existing climate change policies have been neither durable nor influential enough (van Renssen, 2018). Durable policies do not, in other words, appear to readily 'design themselves' (Howlett and Lejano, 2013: 11). This reality throws the contemporary challenge of using policy to trigger rapid decarbonisation into stark relief.

Yet the very idea that policy durability is somehow difficult for policy designers to achieve runs counter to a stream of work in public policy analysis. Schattschneider (1935: 288) expected new policies to create 'new' forms of politics. The 'new politics' that make some policies durable flow from the new coalitions of political support – comprising interest groups, businesses, policy makers and voters – that inevitably spring up around them after the adoption process is complete. Kaufman (1976) famously claimed that because of these dynamics, all public policies eventually achieve a state of immortality. In his widely cited work on welfare state policies, Pierson (1994) implied that durability in that area is relatively common; policy dismantling is the conspicuously rarer phenomenon, only occurring when policies fail to create sufficiently strong supportive coalitions or nurture new opponents.

The term 'policy feedback' refers to the variety of ways in which existing policies shape subsequent politics and policy-making dynamics in ways that affect their durability (Béland and Schlager, 2019: 184). Schattschneider's (1935) original observation greatly informed a growing literature that has sought to understand more precisely how, when and for whom 'new policies create a new politics' (Pierson, 1993: 595; see also Kumlin and Stadelmann-Steffen, 2014: 5). Pierson (1993) did much to popularise policy feedback, but the concept has deep intellectual roots. These were reviewed by Skocpol (1992: 58) who also argued that feedback should be the focus of a dedicated research programme:

> Too often social scientists [. . .] forget that policies, once enacted, restructure subsequent political processes [. . .] *We must make [. . .] policies the starting points as well as the end points of analysis: As politics creates policies, policies also remake politics*.
>
> *(emphasis added).*

She too emphasised that policy and politics are two sides of the same coin. Policy feedback and policy durability are thus interrelated concepts: a policy that fails to

https://doi.org/10.1017/9781108779869.003 Published online by Cambridge University Press

nurture a new and more supportive form of politics is less likely to be durable than one that does, and vice versa. With respect to decarbonisation, Meadowcroft (2011: 73) has made the same basic claim, arguing that more durable policies are needed at all levels of governance to 'create positive feedbacks driving further reform'.

However, since Skocpol's penetrating insight, the literatures on policy durability and policy feedback have generally gone their own way, greatly limiting our ability to understand the durability of climate change policies. First, a significant proportion of policy feedback studies have concentrated on the unfolding political effects of welfare state policies, which typically involve national governments distributing large quantities of public money via pensions, unemployment and disability support. Concentrated policy benefits are what most clearly differentiate these types of policy from others (Jacobs and Mettler, 2018: 347). Many climate change policies, on the other hand, are an example of a type of policy which Lowi (1972) would recognise as more regulatory, meaning that they often involve imposing concentrated costs on target groups to generate long-term, relatively diffuse benefits (in the case of climate change, via a more stable and habitable climate). In these conditions, relatively durable policies sustained by positive policy feedbacks and new, more supportive forms of politics, are arguably much less likely to appear than they are in some areas of social policy (Pierson, 1993; Weaver, 2010; Jacobs and Weaver, 2015). In fact, Lowi's work and that of others (Heidenheimer *et al*., 1990: 309) suggests that regulatory policies are more likely to generate the forms of political opposition hypothesised by Schattschneider (1935), thus potentially rendering them significantly less, not more, durable. At first blush, this essential insight does appear to broadly correspond to the unfolding empirical patterns of climate policy making noted above.

Second, as academics we lack a sufficiently clear definition of policy durability (Thompson, 2012; Carlson and Fri, 2013; Rabe, 2016), to put alongside definitions of policy feedback. Often, policy durability is elided with other terms and concepts, including policy sustainability (Patashnik, 2003, 2008), policy stability (Rietig and Laing, 2017; Rosenbloom *et al.*, 2019: 168), policy consistency (Biber, Kelsey and Meckling, 2017: 628) and policy stickiness (Schmidt and Sewerin, 2017: 3; Schmidt *et al.*, 2018). Some academics have directly equated durability with stability, as when Jenkins and Patashnik (2012: 10) defined it as 'the longevity of a legislative product', i.e. how long a policy persists 'in its original form without significant change'. Thompson (2012: 17), equated durability with 'political strength that allows [policies] to resist retrenchment, erosion, or termination'. We will certainly incorporate these two interpretations into our own analysis, but we also suspect that durability has other important dimensions that also deserve to be considered, such as policy stringency. For example, some scholars have stretched their definition of durability to include a policy's ability not only to endure, but to

expand and become more stringent through time (Rietig and Laing, 2017). Carlson and Fri (2013) have, however, noted that continual increases in stringency are not necessarily beneficial. In doing so, they have helpfully draw attention to another potentially important distinction between a policy's durability (stability) and its flexibility. Rabe (2016: 105–106) further distinguished between three components of climate policy durability, one of which focuses on stability (political resilience, 'does the policy survive intact?') and another which focuses on flexibility (design flexibility). In what follows, we shall explain why and how all these dimensions are pertinent. Indeed, there may often be an inherent tension between them both in principle and in practice. In Section 1.4 we will explore why and how the manner in which these dimensions interconnect is particularly salient in an area of particular long-term policy making such as climate change.

Third, there is a great deal of ambiguity about the most relevant analytical dimensions of policy durability. For us, three appear to be especially significant. The first relates to the *means* of policy, as expressed through specific implementing policy instruments. A particular policy instrument such as a tax or a regulation is not durable if it is rapidly amended or even completely dismantled (Lazarus, 2009: 1193; Thompson, 2012: 17; Carlson and Fri, 2013: 121). Although there is no accepted minimum time threshold that an instrument must pass to be counted as 'durable', it is often equated with at least one electoral cycle (Hacker and Pierson, 2014: 651; Rabe, 2016: 105–106).[1] The second dimension concerns the policy's overarching *goals*, which of course are an expression of its stringency. Some recalibration of a policy's implementing instruments is likely if the policy as a whole is to remain on course to achieve its goals (Hall, 1993), but a policy is unlikely to be durable if its goals are significantly changed (Patashnik, 2003: 207; Jenkins and Patashnik, 2012: 10; Chattopadhyay, 2015: 7). Finally, it is important to be mindful of a policy's *outcomes,* i.e. do the most durable policies actually produce the substantive effects that their designers originally expected (Patashnik, 2003: 207; Schneider and Ingram, 2019)?[2] Some policies may become so durable that designers struggle to 'keep up' as the world changes around it (Hacker and Pierson, 2014: 647). It has been argued that as they 'drift' (Béland, 2007), such policies may become progressively less effective over time. For example, welfare state policies drift when the value of benefits fails to adjust to rising levels of inflation (Hacker, 2004: 246; van der Heijden, 2011). In the rest of this book, we shall explore whether unpacking these three dimensions and applying them to the case of climate change differentiates policy durability from some of the similar terms and concepts outlined above.

Fourth, while the defining characteristics of durable policies have been relatively well established,[3] as noted above the determinants and unfolding effects of durability continue to be black-boxed in the existing literatures (Clemens and Cook, 1999).

https://doi.org/10.1017/9781108779869.003 Published online by Cambridge University Press

Crucially, how do the most durable policies – and the 'new' politics that they supposedly trigger and benefit from – actually come about (Levin *et al.*, 2012)? In many ways, this is the key question exercising climate policy makers today. One reason why the existing literatures have struggled to provide answers is that they often adopt a particular research design, which involves focusing only on the most durable and/or most successful policies and tracing them back to their origins (Pierson, 1993: 602). Although insightful, this approach tells us too little about the 'non-cases' – the situations where policies were popular enough to be adopted but thereafter failed to endure, perhaps because positive feedbacks from supportive coalitions did not emerge, or because new forms of opposition appeared (i.e. negative policy feedbacks) that actively undermined them. In climate policy, the number of 'non-cases' is already too high to be ignored, even before policy designers attempt to design more durable and stringent policies to enable much deeper and faster decarbonisation.

Finally, existing accounts do not explicitly investigate whether policy durability is intentionally designed. This matters in a policy area such as climate change, where some policy makers are attempting to achieve highly ambitious long-term goals ('net zero' emissions) by nurturing virtuous cycles of mutually reinforcing feedback between durable climate policies and new countervailing coalitions that have a self-interest in promoting ever deeper forms of decarbonisation (Brunner *et al.*, 2012: 267; Huberty and Zysman, 2013: xiii).[4] One thing that renders climate change a particularly wicked policy problem is its inter-temporal nature – implying that policy designers should design solutions that are not only politically popular enough to be adopted and remain in place, but also stringent enough to bind their target groups to objectives that endure over time (Levin *et al.*, 2012: 124; Howlett and Rayner, 2013). The normative argument that politicians should intentionally design such policies is well known and has been repeatedly made (Levin *et al.*, 2012; Meckling *et al.*, 2015: 1171; Meckling, Sterner and Wagner, 2017: 918). However, whether and how often they successfully do so has not been definitively determined.[5] In fact, this important question is often left completely open (Edmondson *et al.*, 2018: 5; Pahle *et al.*, 2018: 861; Roberts *et al.*, 2018: 305; Meckling, 2019: 330). By referring to 'intentional design' we are not implying that there is a single, rational and omnipotent policy 'designer' (Goodin, 1996: 28). Rather, in thinking about durability from a policy design perspective we will illuminate how many different actors including, but not limited to, politicians interact with one another to shape, amend or hinder attempts to trigger deep and rapid decarbonisation (Levin *et al.*, 2012: 148). In his agenda-defining article, Pierson (1993: 624) argued that 'especially as government activity becomes widespread, politicians are likely to become aware that [their] policy choices have political consequences', leading them to consciously design with policy feedback

https://doi.org/10.1017/9781108779869.003 Published online by Cambridge University Press

in mind. Sadly, his point has been overlooked by a generation of policy feedback scholars (but see e.g. Schneider and Ingram, 1997: 101; Soss and Schram, 2007: 111; Jacobs, 2011; Pechmann, 2018). Indeed, the work that has been conducted on social policies has regularly made the rather gloomy prediction that the most positive policy feedbacks are likely to emerge slowly and in a largely *un*intentional manner (Soss and Schram, 2007: 111; see also Levin *et al.*, 2012: 148; Rosenbloom *et al.*, 2019: 172). Finally, intentional does not mean that all observed policy effects were necessarily intended (Goodin, 1996: 28); rather we seek to investigate the feedbacks that are generated when actors aim to shape their and others' long-term future.

1.2 Our Argument in Brief

Our broad aim in this book is to understand whether policy designers seek to intentionally create durable climate policies that are supported by positive policy feedbacks, and if so why, how and with what effects. We do so by exploring how policy designers combine or otherwise package together the various internal elements of policy (Schneider and Ingram, 1997: 2–3) – long-term goals, policy instruments, specific targets etc. – into an overall policy that facilitates deeper and more rapid decarbonisation. Many scholars have pinpointed the relationship between specific climate policy designs and their resulting effects and outcomes as a topic that deserves much greater analytical attention (Biber *et al*, 2017: 636; Schmidt and Sewerin, 2017: 2; Edmondson *et al.,* 2018: 11; Roberts *et al.*, 2018: 306; Skjærseth, 2018: 15). But with some exceptions (Hacker, 2004; Weaver, 2010; Jacobs, 2011; Schneider and Ingram, 2019), in the policy feedback literature issues of design and instrumentation have rarely been centre stage, in spite of Pierson's (1993: 603) suggestion that analysts should start with policy design processes and then move forwards to uncover their feedback effects and policy outcomes.

One of Pierson's (1993: 603) most thought-provoking research ideas was to carry out 'comparative analyses that examine the use of different policy instruments to achieve similar goals' in order to 'determine if the variation in instruments has political consequences'. We directly embrace this challenge by sampling across the main policy instrument types (regulatory, voluntary and market-based) and tracing out the policy feedbacks created by each instrument to determine how far they affected their durability. We adopt a 'within system' case design in order to hold relatively constant a range of 'non-policy' variables.[6] Our chosen political system (our 'locus') is the European Union (EU). The EU is a world leader in the adoption of new climate change policies (Jordan *et al.*, 2010) and hence has (unlike many comparable political systems such as the USA) adopted a sufficient number

https://doi.org/10.1017/9781108779869.003 Published online by Cambridge University Press

of policies to suggest it is at least broadly committed to intentional design (Huberty *et al.*, 2013: 254). We aim to break new ground by investigating the *post-adoption* policy feedbacks arising from these instruments to arrive at a fuller understanding of both their long-term political *durability* and their effectiveness at entrenching decarbonisation dynamics in wider society. We explore the design features that policy designers could in theory have drawn upon on to render their policies more durable, such as standards and technology requirements that force target groups to make significant, up-front investments in the policy's long-term existence. More specifically, we explore the thought-provoking – but largely untested – claim that genuinely effective policies are likely to incorporate a mix of design features that promote durability by locking certain aspects into place, but provide sufficient flexibility to prevent policy drift and redundancy (Jordan and Matt, 2014; Seto *et al.*, 2016: 437; Edmondson *et al.*, 2018: 1; Peters, 2018: 9).

Throughout, our approach is essentially empirical as opposed to normative, and is directly informed by relevant theories of politics and policy. We try not to fall into the trap of assuming that greater durability is necessarily more appealing than less durability. Our own sense of reflexivity is reinforced by the fact that many forms of policy durability are often regarded as something to avoid in environmental politics. In areas such as agriculture and transport, durable policies that lock in unsustainable forms of production and consumption have acted as formidable barriers to deep decarbonisation in the past (Unruh, 2000; Skovgaard and van Asselt, 2018). Hence for many environmentalists, the overriding design challenge in climate policy is how to break down 'carbon lock-in' (Unruh, 2000) and replace undesirable, yet politically durable, carbon-promoting policies with equally durable but environmentally more sustainable alternatives (e.g. Downie, 2017). In terms of the three dimensions of durability outlined earlier in this section (means, goals and outcomes), multiple changes in policy and governance are likely to be involved to achieve such a change. In the remainder of this book, we will therefore seek to understand policy durability as the outcome of a political process in which various actors are promoting particular forms and dimensions of durability, for different purposes and with different effects.

Having sketched out our broad argument, we now introduce the rest of this chapter. In the next section, we further elaborate the link between policy durability and policy feedback, our aim being to promote new work that links both (Campbell, 2012: 334; Mettler and SoRelle, 2014: 152). We then reconstruct the existing literatures on both concepts to address the policy design puzzles that loom large in relation to climate change mitigation.[7] Finally, we explore the claim that effective policies are likely to incorporate some design features that make them durable, but also others that provide designers with a degree of flexibility to cope with changing economic, technological and environmental circumstances (Peters, 2018: 136). The

perceived need to craft policy designs that simultaneously incorporate durability and flexibility (Carlson and Fri, 2013: 119; Jordan and Matt, 2014) has been noted in the literature, but often only in broad terms and without a sufficient account of human agency in selecting one or the other type (Goodin, 1996: 39–43; Duit and Galaz, 2008: 311; Huberty, Kelsey, and Zysman, 2013: 252).[8] We address this research gap by developing and applying a new typology that distinguishes between *policy durability devices* and *policy flexibility devices*. In the final section, we conclude and signpost the remainder of the book.

1.3 Policy Feedback Effects, Mechanisms and Directions

In the last two decades, policy feedback has emerged as a significant organising concept in policy analysis, providing a framework for studying how policies affect subsequent politics and their own development over time (e.g. Béland, 2010; Mettler and SoRelle, 2014: 152). In this vein, Pierson (1993: 596) claimed that 'major public policies . . . constitute important rules of the game, influencing the allocation of economic and political resources, modifying the costs and benefits associated with alternative political strategies, and consequently altering ensuing political development'. So rather than treat each policy battle as one in which all alternatives are equally plausible, he argued that scholars should understand how the political conflicts over new policies are structured by the actors and institutions established and/or remoulded by previous ones (Hacker, 1998; Weir, 2006: 171). Schattschneider (1935) was of course also concerned with understanding the various forms that the new politics took; policy feedback research arguably provides analytical tools and concepts to accomplish this task, going well beyond a policy's economic and social effects – the standard fare of *ex post* policy evaluation studies (Mettler and Soss, 2004: 55). Unlike many popular accounts of policy change (Howlett and Cashore, 2009), policy feedback scholars seek to identify and account for the *endogenous* sources of change, which over time can have important effects that often go under-reported (Greif and Laitin, 2004; Mahoney and Thelen, 2009). Finally, Pierson's definition makes it clear that the main focus should be on 'major' policies – or for us, the most durable ones – although this begs the question of how they became major in the first place.

Ever since Heclo (1974: 316) and Lowi (1972), policy scholars have been primed to expect policy to shape politics. In attempting to operationalise the general claim that 'past policies themselves influence political struggles' (Pierson, 1993: 596), we shall differentiate between a number of terms and concepts related to policy durability that are too often elided, specifically: policy feedback *effects,* the various *mechanisms* through which such effects are generated; the *directions* of

feedback (positive, negative and/or combinations of the two); and the link back to specific policy *designs.*[9] In the remainder of this section, we review each of these in turn.

Policy Feedback Effects

Policy feedback effects, as we define them here, are the effects that a policy has on actors. The existing literature has identified a remarkably diverse array of policy feedback effects, ranging from direct effects on target groups and government ministries and agencies (Patashnik, 2008: 30), through to indirect effects on other interest groups (Mettler and Soss, 2004: 55; Kumlin and Stadelmann-Steffen, 2014: 6–8; Mettler and SoRelle, 2014: 151). Other work has uncovered much subtler, longer-term effects on wider society – on levels of civic participation (Mettler and Soss, 2004: 55), on public opinion (Soss and Schram, 2007) and even on fundamental conceptions of democracy and citizenship (Schneider and Ingram, 1997: 66; Schneider and Sidney, 2009: 110). Such potentially fundamental and far-reaching effects may surprise some climate policy analysts who are all too used to policies lasting for relatively short periods and contributing little or nothing to deep decarbonisation.

Orren and Skowronek (2002: 742) have tried to make sense of these rather varied effects by arguing that policies 'classify the groups, impart the identities, forge the divisions, and strike the alliances that channel future political action'. Pierson (2006: 118) later argued that policies 'can profoundly alter the political terrain over time'. What existing policies change 'are not just actors' perceptions of what is possible in political life, but also *the kinds of actors that are around, their capacities, and their policy preferences*' (emphasis added). These are undeniably big analytical claims. The key word is 'can' and it relates to the issue of contingency first noted by Schattschneider (1935) in the epigram at the beginning of this chapter. In an attempt to understand it, Skocpol (1992) distinguished between two main policy effects: those that transform *state capacities* (e.g. through the creation of new bureaucracies that support the development of 'their' policy programmes); and those that impact on the identities, goals and capabilities of *social groups*, but especially interest groups (for fuller reviews, see: Mettler and Soss, 2004: 55; Béland and Schlager, 2019: 186). Pierson (1993: 597) argued that feedback effects on publics could be the most wide-ranging and politically consequential of all, but at the time lacked the empirical evidence to confirm it. It is fair to say that much of the subsequent literature has utilised rather general categories of effect[10] that are difficult to relate back to particular policies. Moreover, as noted above, there has been a marked tendency to adopt backward tracing methods that document specific effects (e.g. on pensioners) in great detail,[11] rather than establishing causal links

between specific policy designs and the full array of effect types and categories (Patashnik and Zelizer, 2013: 1075, fn. 44).

Policy Feedback Mechanisms

Causality is just as important in durability research as it is in other areas of policy analysis, but often the existing literatures have not fully explicated the underlying causal mechanisms of feedback (Kelsey and Zysman, 2013: 82). This criticism is particularly germane in the environmental policy literature, where feedback mechanisms are often conflated with feedback effects (Fahey and Pralle, 2016; Meckling, 2019: 319; see also Oberlander and Weaver, 2015: 41–42). This conflation is unfortunate because in his original stocktake, Pierson (1993: 597) clearly distinguished between two main types of causal mechanisms: 1. *resource/incentive mechanisms* that create or directly channel *resources* to actors and/or influence the alternative choices open to them; and 2. *interpretive mechanisms* that influence flows of information and, as a result, shape how actors interpret the world around them (see Table 1.1). For example, when policy feedback operates through *resource/incentive* mechanisms, policies channel new sources of revenue into government departments or to particular interest groups. They may also alter prevailing incentive structures, encouraging actors to make long-term, difficult-to-change commitments to certain patterns of living (e.g. government transport policies may directly affect where people

Table 1.1 *The dimensions of policy feedback*

		Actors affected		
		Government elites	Interest groups	Mass publics
Feedback mechanism	**Resource/ Incentive**	Administrative skills and capacities	Clienteles Direct funding Policy niches Access to decision makers	Lock ins: • Individual commitments
	Interpretive	Policy learning: • Cognitive shortcuts • Use of existing policy designs • Negative learning	Policy learning: • Negative learning • Focusing events • Effects – traceability and visibility • 'Quiet' policies	Effects: • Traceability and visibility

Source: based on Pierson (1993: 626).

https://doi.org/10.1017/9781108779869.003 Published online by Cambridge University Press

choose to live and work). By contrast, *interpretive* mechanisms involve the channelling of information, e.g. by politicising previously uncontroversial policies by making their effects more visible whilst rendering others less visible, causing them to become more depoliticised. This second type of mechanism builds directly on Lowi's (1972) penetrating observation that some policies (such as regulatory ones) do not necessarily need to transfer significant financial resources to be politically influential.

Directions of Policy Feedback

The first generation of studies to emerge after the publication of Pierson's (1993) influential article mostly focused on only one direction of policy feedback – *positive* feedback. When positive policy feedback prevails, a cycle of self-reinforcing activity arises that follows a path-dependent pattern (Pierson, 2004: 18). In such a situation (originally hypothesised by Schattschneider (1935) and further discussed in Chapter 2), policies become steadily more durable as their feedbacks lock them into place. For example, some policies strengthen their own political support base by delivering highly visible, concentrated benefits to a particular group in society. Over time, external political pressures to dismantle them may grow, but the coalitions supporting them will leap to their defence (Biber, 2013; Patashnik and Zelizer, 2013: 1072; Oberlander and Weaver, 2015: 39).

Of course, Schattschneider (1935), Skocpol (1992: 531) and Pierson (1993: 600) had expected policies to generate feedback in not one, but two directions: positive and negative. By undermining a policy's own political support base, negative feedbacks are destabilising in their effects, opening up new opportunities to amend, weaken and possibly even dismantle the original policy. They are associated with the well-known patterns of incrementalism that characterise many areas of everyday policy making (Baekgaard, Larsen and Mortensen, 2019). But it is really only in the last decade or so that scholars have paid more attention to both types (Weaver, 2010; Jacobs and Weaver, 2015; Biber *et al.*, 2017: 612). A classic example is to be found in post-Civil War pensions policy in the USA, which prompted recipients to mobilise to protect it (positive feedback) but also generated opposition from those who claimed it was emblematic of corrupt or patronage politics (Skocpol, 1992; see also Mettler and SoRelle, 2014: 153). Scholars studying feedback from other perspectives (e.g. policy design) have also entertained this possibility (Schneider and Sidney, 2009: 108), as have those investigating longer-term processes of conversion and drift (Hacker *et al.*, 2015). However, policy feedback scholars have tended to adopt a rather binary view – either focusing on one direction or the other.[12] Consequently, the precise circumstances in which some policies generate different directions of feedback is still unclear, as is the scope for intentionally guiding them through conscious policy design.[13]

https://doi.org/10.1017/9781108779869.003 Published online by Cambridge University Press

Policy Design and Feedback

For scholars of policy durability, a salient puzzle concerns the link between particular policy designs and various effects, mechanisms and directions of policy feedback. It is fair to say that scholars have not made as much progress in addressing this puzzle as Pierson (1993: 628) had originally hoped, largely because they have, as already mentioned, focused on the unintended (and very often choice-constraining) effects of durable policies (Campbell, 2012: 338). For example, in the welfare state literature, the rather blunt distinction between universal and means-tested welfare state programmes has long been held to be decisive, with the former assumed to produce more positive feedback than the latter, given that more people stand to benefit (Campbell, 2012: 338).[14] More recent studies, however, have tried to understand the effect of specific policy designs, showing how they affect the production of policy effects by altering the relative size, duration and visibility of benefit flows, as well as the proximity and nature of recipients (Campbell, 2012: 342). For example, welfare policies that are hidden (i.e. that distribute benefits indirectly via the private sector or through tax codes rather than cash payments) may generate weaker positive feedback because recipients believe that it is the market that is at work, not public policy (Mettler, 2011). Voters struggle to form a clear view of the extended or 'submerged state' that is delivering benefits to them. When they do form a view, it is that the benefits are mostly being provided by the private sector (Mettler and SoRelle, 2014: 171), not the government. Similarly, Patashnik (2008: 3, 155) and Jacobs (2011) have sought to explicate the conditions under which policy designers seek to manipulate both resource/incentive and interpretive mechanisms with the express intention of generating particular feedback effects. This type of more design-focused feedback research is noteworthy because it works across both of Pierson's mechanisms, but for reasons that will become clearer in Chapter 2, it remains all too rare (Jacobs and Mettler, 2018: 347, 349).

Empirical Foci

Finally, according to a recent state-of-the-art review (Mettler and SoRelle, 2014: 173–175), the existing policy feedback literature, while extensive, continues to offer a rather partial view of the relationship between durability and feedback because it mostly addresses the effects of a relatively small subset of cases (generally welfare state policies) in a limited number of jurisdictions (mostly the USA). Since the early 2000s, the effects on mass publics and voters have more or less become the default policy area to focus on (Mettler and Soss, 2004; Campbell, 2012; Mettler and SoRelle, 2014). By contrast, policies in areas such as the

environment and climate change, where policy designers are more likely to be regulating than (re)distributing money, have attracted noticeably less attention. Comparatively little work has analysed policy durability and feedback in European and, in particular, EU settings (Meckling, 2019: 320; but see e.g. Daugbjerg, 2003; Jordan and Matt, 2014; Skogstad, 2017; Skjærseth, 2018; Kleine and Pollack, 2018: 1504). As we will show in Chapter 2, these analytical design choices have left many important features of the climate policy landscape in shadow, such as the role of interest groups in shaping (and being shaped by) the feedback effects of different policy instruments, including regulatory ones.

The importance of working across a fuller array of policy areas and jurisdictions has been noted (Pierson, 2006: 124), but not acted upon with sufficient vigour. New research that builds on Lowi's (1972) core argument (that policy determines politics) by analysing a broader range of cases could, we believe, be highly insightful.[15] Recall that in more regulatory policy areas, politics is normally dominated by powerful interest groups such as business, often vying for supremacy with policy entrepreneurs (Heidenheimer *et al.*, 1990: 309), particularly when they are representing diffuse interests (Wilson, 1980). In such conditions, significant political hurdles have to be surmounted even to get policies adopted, let alone ones that will endure and remain politically influential enough to make a difference. Hacker's (2004: 8–9) path-breaking work on the US welfare state – covering both its private and public components, and pensions as well as healthcare – suggests that policy feedbacks tend to play out differently in such settings.[16] Other things being equal, policies that seek to impose concentrated costs on small groups are less likely to be adopted. And if they are adopted, they are more likely to generate a very different – i.e. much more *negative* – direction of feedback, eventually rendering them less durable. Hacker (2002) usefully demonstrated how employers in the USA responded very differently to initial policies on social insurance (which they strongly opposed) and retirement (which they broadly supported). These responses had long-term and politically consequential effects. In fact, the tendency for small, contingent events in the policy formulation stage to subsequently generate profound effects is a recurring theme of the literatures on durability and path dependence (see e.g. Kay, 2012), again underlining the need for more forward-tracing approaches.

In Chapter 2 we explain why climate change offers a fascinating setting in which to look afresh at these post-adoption dynamics. But before we do so, in the next section we explain why key concepts in both literatures should first be re-thought and re-interpreted. This could, we believe, open up new opportunities for dialogue with communities studying other relevant topics including (intentional) policy design, policy instruments and the political power of incumbent interests, in a wider variety of policy areas than just the welfare state.

1.4 Restructuring Existing Research to Study Climate Change

Moving from Effects to Feedbacks

Policy feedback scholars have responded to Pierson's call (1993: 596) to specify when, where and how policy creates new forms of politics. Nevertheless, much of their work, especially recently, has centred on what we term 'policy feedback effects' (Schneider and Sidney, 2009: 108; Mettler and SoRelle, 2014: 156, 165).[17] These effects can be defined as a policy's immediate downstream consequences prior to any impact on subsequent policy making, i.e. before any complete feedback loop to the policy itself. Thus, if the policy in question (P) was adopted at time t, the most noteworthy first-order effects would be those appearing at t+1. However, in order to count as a *policy* feedback, those *effects* must have a politically significant impact not only on the original actors at t+1, but also on the original policy P, which may change to a greater or lesser extent (P2). A policy feedback can thus be defined as a politically consequential effect that operates via a set of intervening causal mechanisms to eventually affect the original policy.[18] To be sure, feedback does not have to produce significant policy changes in order to interest political scientists; positive feedbacks may have a politically consequential impact on the original policy by making policy change less likely. Our central point, however, is that a good deal of existing research has focused on first-order effects, *not* feedbacks (Pierson and Skocpol, 2002: 715). In making this distinction, we depart from some of the existing literatures, which generally treat policy feedbacks and policy feedback effects as the same concept (see e.g. Weaver, 2010: 138).

Moving from effects to feedbacks has some important implications. Firstly, it means looking at unfolding cycles of policy making, starting and ending with a particular element of policy such as a policy instrument (Sabatier and Jenkins-Smith, 1999: 119). Second, whereas first-order effects can in principle be studied over relatively short time periods, policy feedbacks require the study of at least one full cycle of policy making (to capture possible policy change) and hence potentially much longer periods of time. In a widely cited contribution, Sabatier and Jenkins-Smith (1999: 118) argued that the minimum time period for studying policy making should be at least ten years in order to capture multiple policy cycles (see also Campbell, 2012: 344). As explained below, our analysis passes this threshold.

Campbell's (2003) careful unpacking of how the US Social Security programme 'made' citizens indicates what can be revealed when effects and feedbacks are studied over long periods. She not only confirmed the presence of many different and interacting mechanisms and effects (Campbell, 2003: 6), but also how the citizen-level effects interacted with broader interest group-level effects. Thus, the Social Security programme empowered elderly beneficiaries with increased financial resources (through resource/incentive feedback mechanisms) while

https://doi.org/10.1017/9781108779869.003 Published online by Cambridge University Press

simultaneously encouraging them to lend their support to it (through interpretive mechanisms). Stronger and more mobilised beneficiaries in turn allied with and supported strong interest groups (including the American Association of Retired Persons), creating formidable new policy coalitions – notably the so-called grey lobby. However, in her analysis, Campbell also took the extra step and analysed how these clienteles not only resisted attempts to cut Social Security benefits but actually fought for new, more generous policies, i.e. she traced how first-order effects (e.g. increased resources through Social Security benefits) created policy feedbacks. She referred to these as 'spirals' (*Ibid.*: 2), showing that the policies were first a cause and then an effect of their beneficiaries' greater political participation (*Ibid.*: 66). We want to know whether her general approach can be adapted and applied to other policy issues and/or jurisdictions, namely climate change policy in the EU.

Explicating the Mechanisms of Feedback

Moving from effects to feedbacks also entails grappling with the vexed issue of causality. Policy analysts are becoming more conscious of the issue's importance (Falletti and Lynch, 2009; Grzymala-Busse, 2011; Capano *et al.*, 2019), and slowly the point is being taken on board as the various fields of research on policy durability evolve and intertwine (Béland, 2010: 582; Campbell, 2012: 345). After Pierson (1993), initial work usefully demonstrated the general utility of his two-fold typology of feedback mechanisms (Mettler and Soss, 2004: 60; Campbell, 2012: 338) and confirmed the value of studying both types together (Weaver, 2010; Skjærseth, 2018). Pierson (1993: 611, 625) was firmly of the view that the interaction between them was analytically puzzling and politically consequential, as the two types could simultaneously contradict and/or reinforce one another. We are also of the view that these are important and under-appreciated points, that are ripe for new empirical investigation (Pahle *et al.*, 2018: 862). Because we will sample across different instrument types in a regulatory policy area, the probability increases that we will encounter negative as well as positive feedbacks. And crucially, because we are examining a policy area in which the EU does not normally distribute significant financial benefits, we are primed to look for interpretive mechanisms and examine any interaction with resource/incentive mechanisms (Pierson, 1993: 611).

Incorporating Different Feedback Directions

Starting with a selection of policy instruments (as opposed to policies that are known to be durable) and tracing forwards also offers an opportunity to look afresh

at the various directions of feedback. In Chapter 2, we will argue that only relatively recently have public policy scholars begun to build negative feedbacks[19] into their thinking (Howlett, 2009a: 253–254). If the overall direction of the feedback effects are positive, we would expect the initial policy P to become progressively more durable at t+1, t+2, t+3 etc. (Pierson, 2004: 174). As a consequence, what may originally have been a politically contested issue will gradually drop out of political debate as the policy becomes an accepted (and hence more durable) part of the broader policy landscape (Pierson, 2005: 46). As noted above, this possibility certainly aligns with the normative ambitions of many climate policy activists. But if the direction of feedback is negative, then we would expect P to be undermined at t+1, which could in turn trigger a set of policy responses ranging from fairly small adjustments through to its removal and possible replacement by a new and possibly weaker policy (P2) at t+1 etc. – an outcome that would surely alarm many environmentalists.

Very much building on Schattschneider's (1935) original insight, Weaver (2010: 159) has claimed that the concept of negative feedback is 'readily generalizable' to all policy sectors. However, this (broad) claim has not yet been put to the test (Baekgaard, *et al.*, 2019). It is rather puzzling that it has taken so long for analysts to do such a thing, given that Lowi's (1972) original 'policy determines politics' argument is such a key axiom of policy feedback thinking. In this book, we draw on Pierson's earlier work on how the interplay of institutional and policy-specific factors affected the opportunities to achieve cuts in welfare state policies (Pierson, 1994: 171–175), turn it on its head and process trace the political effects generated by three archetypal policy instrument types.

Working Across Different Levels and Areas of Policy

Concentrating on the most durable policies is entirely legitimate but for policy durability researchers it equates to sampling on the dependent variable (Campbell, 2012: 347). Having done just that, it was likely that scholars would discover that 'most [policies] . . . [were] remarkably durable' and 'generally subject' to positive policy feedback (Pierson, 2004: 35). Indeed, Pierson (2006: 114) and others (Hacker, 2004: fn. 6) have argued that the 'major' policies are so durable that henceforth they should be re-conceptualised as institutions that essentially establish the rules of the game in politics. In this, they share the same tendency as other historical institutionalists who focus on other cases of deep institutionalisation such as the welfare state (Kay 2005) and some agricultural support policies (Daugbjerg, 2003).[20]

However, on closer inspection many of these studies are often pitched at the level not of single policy instruments, but much broader policy regimes and

https://doi.org/10.1017/9781108779869.003 Published online by Cambridge University Press

programmes (Pierson, 1994; Weaver, 2010).[21] Policy programmes comprise complex packages of multiple policy instruments that are directed at the achievement of a broader set of goals (Howlett, Mukherjee and Rayner, 2017: 130).[22] The broad focus of such work has encouraged analysts to categorise the resulting changes using similarly broad labels such as layering, drift and conversion (Hacker, 2004; Mahoney and Thelen, 2009; Jacobs and Weaver, 2015), which appear to conflate explanations of the underlying processes with descriptions of their outcomes. It is as if scholars are reluctant to move down a level of analysis and explore the feedback created by specific policy designs, perhaps believing that 'policy' is too ill-defined a concept to disaggregate into researchable categories (Pierson, 2006: 119). A significant analytical price has arguably been paid by opting to work mainly at a very broad level, in that it makes it hard to derive explanations for the precise feedback effects – i.e. both positive and negative – of specific policy instruments (Kay, 2012: 469). Furthermore, working at a broad level also delivers too little insight into the politics of designing the durable policies in the first place, 'black-boxing' the role of agency.[23] Yet it is precisely this topic which is at the forefront of contemporary policy debates on the governance of climate change.

Given that the central focus of policy feedback research is policy, one might have expected a more searching discussion of how to configure the policy variable in a way that facilitated more fine-grained empirical research. After all, one of the many contributions made by Pierson (1994: 175) was to unpack the welfare state into its constituent parts and show how the design of particular sub-elements generates different patterns of feedback, which in turn affects their vulnerability to dismantling. Yet the literature's reliance on a relatively 'blunt' (Kay, 2005: 556) conception of policy and the widespread practice of sampling on the dependent variable, has limited its ability to open up the 'black box' of policy design (Solmeyer and Constance, 2015: 1; see also Mettler and SoRelle, 2014: 165). In this book, we will explore what can be learned about policy durability when we unpack policy into its various sub-elements (Kumlin and Stadelmann-Steffen, 2014: 320), i.e. specific policy instrument types though to broader policy goals and paradigms. As we reveal in Chapter 2, this topic has long fascinated scholars working on single policy instruments (Ingram and Schneider, 1990: 67; Salamon, 2002: 11). If new bridges can be built between them and scholars of policy feedback and durability, what might the intellectual payoffs be? We return to this intriguing question in our final chapter.

The Intentionality of Design

Finally, we have already noted that the durability and feedback literatures have largely focused on effects that were at least partly or even wholly unintended by

https://doi.org/10.1017/9781108779869.003 Published online by Cambridge University Press

policy designers (Soss and Schram, 2007: 111). Examples in the social policy field include well-entrenched US policies that exacerbated racial and gender inequality. Campbell's (2015: 284) work on large policy 'juggernauts' such as the US Social Security programme could also be cited. These relatively durable policies have constructed elderly beneficiaries as worthy and deserving citizens, who now participate in politics at a higher level than other equivalent groups. It is worth noting that such policies first attracted scholarly attention not because they were difficult to adopt, but because they were either very effective or had become resilient to dismantling (Pierson, 1994). Some climate and energy policy scholars have adopted a similar approach (Levin *et al.*, 2012; Zysman and Huberty, 2013; Rabe, 2016: 139; Meckling and Nahm, 2018: 752; Pahle *et al.*, 2018: 861). For example, Rietig and Laing (2017: 576) selected a highly durable climate change law – the UK Climate Change Act – and subjected it to analytical scrutiny. Similarly, Stokes and Breetz (2018: 77) have examined the fastest growing alternative energy sources in the USA and tried to trace them back to the original policy drivers.

There is nothing intrinsically wrong with such research designs (Pierson, 1993: 602), but in focusing mainly on the 'victorious policy options' (Peters *et al.*, 2005: 1277), they risk being 'too contingent at the front end and too deterministic at the back end' (Pierson, 2004: 50; see also Kay, 2012: 471). Crucially they leave the effects of specific features of a given policy – such as its component instruments – in shadow.[24] By starting at the policy adoption process and tracing out the feedback effects of different types of instrument designs, we will examine how far it is possible to 'bring out . . . the complexity and uncertainty that characterize formative moments in the creation of policies' (Peters *et al.*, 2005: 1277). Crucially, we will investigate what a forward-tracing approach reveals about the 'non-cases' of durability (Campbell, 2012: 347), i.e. where positive policy feedback fails to emerge or is quickly counteracted and overwhelmed by negative feedback (see also Patashnik, 2008). We are particularly interested to know whether studying the non-cases puts us in a stronger position to understand the conditions in which particular feedbacks do or do not occur. We return to these important matters in Chapters 2, 8 and 9.

1.5 Designing Durable Climate Policies

Combining Policy Durability with Flexibility

In many ways, policy durability has become *the* holy grail of those seeking deep decarbonisation (Rosenbloom *et al.*, 2019: 168). But how should policies be designed to bring it about with sufficient rapidity? Many literatures, covering credible commitments, political delegation and constitutional law, have identified

https://doi.org/10.1017/9781108779869.003 Published online by Cambridge University Press

a host of what we shall term policy *durability devices*, i.e. design components aimed at increasing a policy's durability (for a summary, see: Pierson, 2000b: 480–481; Glazer and Rothenberg, 2001: 84–87). Policy programme-level durability devices include long-term targets to create confidence that a certain policy direction will endure, and regular reporting obligations so that the policy's benefits are sufficiently visible to voters, interest groups and private investors, to trigger positive feedbacks. Politicians can also tie their own hands by handing over policy monitoring, evaluation and/or flexibility responsibilities to independent agencies. Finally, at the level of specific policy instruments, designers can employ regulations to force target groups to make 'sunk' investments in the long-term durability of a policy and/or discourage free-riding.

However, there is often an implicit assumption that the more *durability* devices that can be employed – and hence the more durable and constraining individual policies can be made – the better (e.g. Hovi, Sprinz and Underdal, 2009: fn. 1). In the opening section, we noted that environmental policies that become too heavily locked-in may be just as politically problematic as fragile ones. Locked-in policies – such as in the area of pensions or renewable energy subsidies – can become financially unsustainable (Béland, 2010: 574; Gürtler, Postpischil and Quitzow, 2019), piling pressure on politicians to introduce flexibilities.[25] From a democratic theoretical perspective, highly durable policies may also fail to adjust to the changing preferences of citizens and voters (Patashnik and Zelizer, 2013: 1083). And policies may become outdated if they are overtaken by new scientific information, such as in relation to the expected rates and impacts of climate change (Carlson and Fri, 2013: 119), or if new game-changing technologies enter the market (Auld *et al.*, 2014: 13). In short, removing the opportunity to revise policies risks locking in policy design errors (Weaver, 1988: 11) and/or increasing the risk of policy drift (Hacker, 2004). After all, it is entirely possible that some policies endure because they are so ineffectual that no one bothers to oppose them (Carlson and Fri, 2013: 123). Thus, in policy design a fundamental question regularly arises: how can predictable opportunities be created to regularly revisit and revise a policy's design without completely disrupting it?[26] In principle, there is a wide variety of what we shall refer to as *flexibility* devices that designers can employ. In Chapter 2, we will explain that they include monitoring systems to identify the need for revisions, together with time-specific targets and explicit flexibility clauses which create predictable opportunities for policy changes to be made.

Designing Durable Policies in Practice

If successful policy design is about crafting policies that are durable in some respects but flexible in others, precisely which elements of design can be altered

https://doi.org/10.1017/9781108779869.003 Published online by Cambridge University Press

to strike the right balance between the two? In Hall's (1993) highly influential formulation, a policy design has three main sub-elements:

- *Policy goals* which specify the objectives to be achieved; these change rarely, e.g. as a result of radical policy revisions;
- *Policy instruments* to implement the goals; these tend to change more regularly in the light of experience;
- The *calibration or setting of those instruments;* these change most frequently and are constitutive of what Hall termed 'normal' policy making.

Crucially, in this book we shall treat these elements or levels as potential entry points for inserting durability and/or flexibility devices into a given policy to generate particular policy feedback effects (Howlett, 2009b). And as these effects alter actor preferences and capacities, they may feed through to policy feedbacks at some, or indeed all, of these levels. Finally, these three sub-elements are embedded within a *policy paradigm* which Hall (1993: 279) defined as a 'framework of ideas and standards that specifies not only the goals of policy and the kind of instruments that can be used to attain them, but also the very nature of the problems they are meant to be addressing'. In climate policy, the beneficial nature of deep and rapid decarbonisation has become an integral part of the overarching climate policy paradigm in many EU countries.

As we noted in the first section, policy designers rarely design a whole policy programme from scratch (Levin *et al.*, 2012: 132–133). Rather, they tend to focus on trying to package together different elements in a manner which is broadly commensurate with their general aims and objectives, as codified in the broader policy paradigm (Howlett, 2014). A common entry point is the design of specific instruments because they constitute the bridge between broad policy objectives and day-to-day governing actions (Schneider and Ingram, 1997; Salamon, 2002; Kooiman, 2003: 29–30, 44–45). The design of instruments is often perceived to 'define' both policy making and feedback generation, because it affects the distribution of costs and benefits (Heidenheimer *et al.*, 1990: 344; Daugbjerg and Sonderskov, 2012: 402). It is for these reasons that policy instrument selection and change is afforded such a central place in the policy design literature (Meckling and Nahm, 2018: 744), and this particular book.

Accepting that there may be change at some or all three levels opens up many potential design choices, covering an almost infinite number of permutations of goals, instruments and settings (Howlett and Cashore, 2009).[27] Although it is true that policy instruments rarely appear pre-packaged in their archetypal or textbook forms, we argue that in practice they generally follow a set of basic categories (e.g. market-based, voluntary, regulatory; see Salamon, 2002), upon which the comparative research programme on policy durability foreseen by Pierson and others can be

built. Crucially, these instruments types are most strongly differentiated in terms of their coerciveness (Salamon, 2002: 25) or stringency (Schmidt and Sewerin, 2018: 3, 11; see also Heidenheimer *et al.*, 1990: 310). In principle, regulation is the most coercive instrument. When selected, it is normally used by designers to generate effects with a relatively high degree of predictability, namely by imposing concentrated costs on target groups. At the other end of the spectrum of coerciveness we find voluntary instruments, which involve target groups volunteering to make short-term investments for longer-term societal benefits. Midway on the spectrum are market-based instruments which operate through the medium of market transactions. In Chapters 2 and 4 we discuss the most salient design features of these three instrument types, first of all in their textbook forms and then in the form in which the EU has actually used them to govern climate change over the course of the last thirty years.

In this book, we seek to investigate how far thinking about policy in terms of its instruments sheds new light on the links between policy durability and policy feedback. Salamon (2002: 24) famously argued that each instrument type has a specific set of internal 'dimensions', which give policy a distinctive 'spin' (Salamon, 2002: 11, 28), including, we might assume, the policy feedback it generates. In what follows, we sketch out the broad outlines of such a programme and explore its viability by testing it in a set of comparable empirical case studies within the EU. We focus on four instruments: the EU regulation on biofuel production, the market-based instrument of emissions trading (the EU Emissions Trading System), the voluntary agreement on carbon dioxide emissions from cars in force between 1999 and 2008, and the Cars Regulation that replaced it. These analyses explore how far each instrument type works through a set of feedback mechanisms to produce a distinctive set of endogenous policy dynamics, including – we expect – the opportunity to make subsequent changes that affect its durability.

1.6 The Broad Plan of the Book

Objective 1: Policy Design Intentions

Having summarised the research and policy gaps that motivated us to write this book, we are now in a position to outline our main objectives. Our first objective is to explore each instrument's formative moments in order to understand the intentions of its original designers with respect to policy feedback as well as the 'design space' in which they were operating (Howlett, 2011: 141–143). This space is bounded by a number of contextual constraints that make some options more politically feasible to accomplish than others. Within this space, we aim to understand the extent to which the nurturing of policy feedbacks was a conscious priority

https://doi.org/10.1017/9781108779869.003 Published online by Cambridge University Press

amongst designers. One standard assumption is that a potentially influential category of designers – politicians – are likely to be strongly motivated by an immediate desire to secure re-election, in which case manipulating feedbacks to deliver benefits over the long term may not rank as a particularly high priority (Patashnik and Zelizer, 2013: 1076; Oberlander and Weaver, 2015: 57). But what about other actors, possibly some with very different time horizons? In the EU, European Commission officials are unelected and hence may be more motivated to set and deliver against long-term policy goals. Meanwhile, some target groups such as businesses may be strongly motivated to minimise compliance costs, especially in the short run, but in the longer term may be alert to new business opportunities that have the potential to reap massive benefits by fundamentally reshaping the economic sector. By investigating these various actor types, their activities and their time horizons, we aim to understand whether there were discernible patterns in the policy designs they favoured (Mettler and SoRelle, 2014: 176) and, in particular, the entry points in Hall's three-level scheme that they gravitated towards. The standard advice from economists is that designers should first adopt broad, long-term objectives and independent agencies to instil policy making with credibility, and then (and only then) select the most appropriate instruments (Brunner *et al.*, 2012: 256). But others have advocated doing precisely the opposite – i.e. start with small, incremental re-calibrations of existing policy instruments and then, as positive feedbacks start to take hold, slowly 'ratchet up' to encompass ambitious policy programme-wide objectives that gradually lock in a new policy paradigm (Levin *et al.*, 2012: 125). By undertaking fresh empirical research, we hope to understand which of these two prescriptions approximates most closely to reality.

A key theme underpinning Objective 1 is that of *intentionality*. In the course of his work, Pierson (2000b) has repeatedly argued that designing effective and durable policies is next to impossible. If and when policy path dependence arises, it is more likely to have emerged in an unplanned rather than an intentional fashion. Moreover, if durable policies do take root, a fresh political problem almost inevitably arises: how to amend them (Pierson, 1994). But if this view of policy were true of all policy design situations, the scope for engaging in intentional policy design to deliver deeper and faster decarbonisation (Levin *et al.*, 2012: 138)[28] would be very limited indeed. Normatively, it also adds up to a rather alarming policy prognosis given the speed at which the world is hurtling towards dangerous levels of climate change.

Objective 2: Policy Feedback Mechanisms and Effects

Secondly, we follow Pierson's (1993: 602) suggestion and adopt a forward-tracing approach to map out the political feedback mechanisms and effects that have

https://doi.org/10.1017/9781108779869.003 Published online by Cambridge University Press

flowed from our instruments since their adoption in the early 2000s. We will examine important feedback mechanisms in each case and assess whether they were mainly resource/incentive or interpretive in nature. We have already noted that the existing literatures tend to subject the former to more detailed scrutiny. In the climate policy literature, the ability to impose costs on target groups in the short term is regarded as potentially decisive. But we are equally interested to know what happens when designers are forced (as they often are) to compromise and adopt less coercive instruments, or are distributing benefits (as in subsidies or emission allowances). Do interpretive mechanisms become more influential in such circumstances? Given the essential nature of climate policy, we expect negative policy feedbacks to be at least as influential as positive ones. Although myriad feedback effects could in principle be tested for (see Section 1.2 above), for the sake of convenience, we focus on the effects on some but not all actors, namely: target groups; government bodies; and other interest groups (Pierson, 1993: 624). Not all of these will have necessarily been part of the winning coalition that secured the adoption of the policy. Some, like the actors associated with Medicaid in the USA, may have been encouraged to support it (a positive feedback effect) having had no previous engagement (Campbell, 2015: 284). Others may have been unexpectedly drawn into policy design processes because the policy disadvantaged them in some way (i.e. they were newly created losers – hence manifestations of negative feedback effects). Following Pierson (2006: 118) and Skocpol (1992: 58), we will identify which of these three actor types were most heavily impacted by each instrument, document any significant effects on their capacity to act and any resulting changes to their policy preferences.

Objective 3: Policy Feedback and Durability

Our final objective is to bring the discussion back to the main theme of the whole book – policy durability – by examining how far the feedback mechanisms triggered feedback effects that altered the dynamics of subsequent policy making in a way that affected the initial policy**.** We will investigate whether feedback undermined the instrument (and with it, perhaps, the broader policy), or gradually made it more durable. We assess the degree of policy change according to the scope, the stringency and the durability of each instrument (i.e. how long it endured (in days) from the point of adoption to the point of revision) – three important degrees of change that we further explore in the next chapter. We will investigate whether this triad allows us to understand how policy feedback affected each instrument's subsequent development (Mettler, 2015: 271).

In order to address these three objectives, the rest of the book is structured as follows. Chapter 2 investigates positive and negative policy feedback in more

https://doi.org/10.1017/9781108779869.003 Published online by Cambridge University Press

detail and explores the role of different durability and flexibility devices. The next step in our argument involves showing how these devices vary across the main policy instrument types, which are summarised in their archetypal or textbook form. We conclude by reflecting on salient methodological challenges. The chapters in Part II relate these theoretical insights to the empirical experience of EU climate change policy. Because policy is rarely designed 'de novo' (Goodin, 1996: 30), we devote Chapter 3 to examining the prior development of EU climate policy, showing how policy programmes and instruments have co-evolved over time. We reveal that policy programme-level goals and objectives were originally established as long ago as the 1990s and were subsequently (and repeatedly) revised over time. Then we identify the general policy instrument preferences (Howlett and Cashore, 2009) that have slowly emerged in the EU since its founding in the 1950s. Together, these have heavily affected the design space in which climate policy designers worked. Chapter 4 examines the design features of our four instruments in much more detail. For each instrument, we introduce the relevant sector's greenhouse gas emission trends, give an overview of key policy actors and provide a brief preview of the instrument's early first-order feedback effects. Each instrument is subjected to more intensive, long-term analysis which traces out long, policy instrument change sequences in Chapters 5, 6 and 7, covering the period from the adoption of the initial instrument to June 2019. Given the known importance of stringency, the most obvious means to sample on the independent variable ('policy') is to move along the continuum of policy instrument types (Bemelmans-Videc *et al.*, 1998; Gunningham *et al.*, 1998: 344), i.e. starting with the most coercive (regulation – Chapter 5) and ending with the least coercive (voluntary action – Chapter 7) via the intermediate category of a market-based instrument – Chapter 6. In Chapter 8 we relate our empirical findings back to our theoretical framework, and in Chapter 9 reflect on our three objectives and identify new challenges for those who, like us, wish to understand how policy designers are rising to the politically demanding challenge of triggering deep and rapid decarbonisation.

Endnotes

1 Skocpol (1992: 58) usefully referred to this as a policy's political sustainability.
2 Hence, a policy can be politically successful but substantively ineffective (Skocpol, 1992: 58).
3 As noted above, they tend to have stable objectives and strong core coalitions, and over time garner support from a growing array of interest groups (Campbell, 2015).
4 Keohane (2015: 22) envisages these eventually coalescing into a larger and more powerful 'climate industrial complex'.
5 Some claim that intentionality is commonplace, whereas others disagree. Compare Meckling *et al.* (2015: 1171) with Huberty and Zysman (2013: 80) and Schneider and Ingram (2019: 194).
6 Political leadership, institutional structures etc. (see Campbell, 2012: 345).
7 Because of space constraints we set aside the related political challenge of adaptation – or of responding to climate impacts once they have manifested themselves (e.g. floods, heatwaves, forest fires).

8 This book is mainly concerned with public policy at EU level and not international climate diplomacy under the United Nations Framework Convention on Climate Change. In the latter context, flexibility refers to the ability of countries to purchase mitigation outcomes from other parties (Jackson *et al*., 2000).
9 Here understood as a noun, i.e. the architecture of a specific policy - see below and also Chapter 2.
10 Such as institutional drift, conversion and layering, etc. (Hacker *et al*., 2015).
11 What Pierson (2006: 124) termed 'demonstration projects'.
12 For analyses of both, see Weaver (2010: 142) and Skogstad (2017).
13 Here understood as a verb, i.e. the process of fitting together a set of policy means (instruments) to achieve specific policy ends (Howlett, 2014).
14 Hence the aphorism 'programs for poor people make poor programs. . . [because]. . . the coalitions that can form behind them are likely to be weak' (Amenta, 2003: 107).
15 It is telling that in his 1993 article, Pierson (1993: 599) generally refers to 'spoils', i.e. benefits. Later, he admitted that 'not all aspects of political life are subject to positive feedback' (Pierson 2004: 49) and later (Pierson 2006: 124) urged analysts to explore a wider variety of policy areas. It is also notable that Campbell's (2012: 338–341) more recent review was almost entirely concerned with policy benefits.
16 Patashnik (2008: 15) also concentrates on public interest reforms that do not generate concentrated benefits, a pattern not entirely dissimilar to climate mitigation.
17 In Campbell's (2012: 347) very useful turn of phrase they show 'the feed but not the back'.
18 But even Pierson has not been completely consistent on this point, having subsequently pleaded for new work on 'policy effects' (Pierson, 2006: 114).
19 Pierson barely mentioned negative feedbacks in his book (e.g. Pierson, 2004: 22 and 73). Ditto Campbell (2012) in her review.
20 The special attention afforded to pension policies is particularly noteworthy in this regard. It would be surprising if such schemes were *not* durable to some extent, given their age, scale and relative generosity, not to mention the significant personal commitments that individuals have made to their continuation (Béland, 2010: 569).
21 Note the affinities with the literature on policy regimes (May and Jochim, 2013: 427).
22 Interestingly, Pierson (2006: 121) has since backtracked on his initial claims, suggesting that it is 'not single policies operating in isolation that generate major effects, but clusters of policies with strong elective affinities'. Later he qualified that only '[. . .] *some* policies constitute enduring features of the political landscape that should be studied in similar fashion to traditional state institutions' (Hacker *et al.*, 2015: 183, emphasis added).
23 Which in the case of climate change policy is heavily carbonised (Unruh, 2002; Levin *et al.*, 2012).
24 Patashnik (2008: 12) adopted a slightly different approach to understanding the fate of large-scale public-interest reforms. Although he worked across a range of different policy types, he also (deliberately) sampled on the dependent variable, selecting cases of high and low durability.
25 This was of course Pierson's (1994) motivation for studying policy feedback in the first place.
26 Of course flexibility is not the only principle of 'good' policy design (for others, see Goodin, 1996: 39), but is the one that we will mainly focus on in this book.
27 This may partly explain why so many feedback scholars started with the most durable policy effects and/or types of mechanism and traced them back to their original instruments.
28 Levin *et al.* (2012: 138) claimed that there is no reason *a priori* why path dependence must emerge in an unpredictable and accidental fashion.