An Chomhairle Náisiúnta Eacnamaíoch agus Shóisialta
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The Framing of Climate Action
in Ireland: Strategic Considerations

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The Framing of Climate Action in Ireland: Strategic Considerations

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Executive Summary

Introduction: Framing Policy Problems

Climate change is one of the most pressing issues facing policy-makers today, and Ireland's record on climate action is widely accepted as being disappointing. Part of the explanation for this lies in the uncertainty about what action Ireland can and should take, and uncertainty about how acceptable any climate action will be to various groups in society. In this context of uncertainty, how a problem is *framed* can have a significant impact on subsequent decisions taken to address that problem. Drawing from behavioural science and political science, this paper examines if and how the framing (or reframing) of climate action can lead to more progress in this challenging area.

The Joint Oireachtas Committee on Climate Action has stated that a substantial communication effort is required if citizens are to accept climate action. As a result, the cross-Party consensus presented in the report includes the call for an all of government approach to climate change. This approach is to include developing and launching public information campaigns on the need to take climate action, before the end of 2019 (Joint Oireachtas Committee on Climate Action, 2019: 29). The preparation of such campaigns presents an opportunity, one which arises infrequently, to consider how climate action should be framed to maximise acceptance by society.

Policy frames are sense-making devices and they impact how decision-makers respond to events. For example, policy-makers have been shown to be more likely to choose high risk options when the result is presented as 'preventing deaths' as opposed to 'saving lives'. Climate action can be framed in many ways, and that framing is not inconsequential. Policy-makers might ask "what is climate action an exercise in? Is it an exercise in adaptation? Transition? Mitigation? Compliance (with obligations and targets)?" The answer to this question, the framing of climate action, can be expected to influence the choices policy-makers make (i.e. those actors in policy-relevant situations where they are involved, either directly or as onlookers and stakeholders). For example, research suggests that whether climate action is framed as either adaptation or as mitigation impacts how quickly policy responses emerge.

What can 'framing' concepts contribute to climate action policy?

This paper takes a behavioural political science approach and looks at the impact of four factors—*irrationality*, *ideology*, *interests* and *institutions* (the four I's)—on climate action policy as understood by policy-makers and decision-makers. It then examines how the framing of climate action might prompt more *shared understanding* of climate action, and address the barriers to progress presented by the four I's.

Drawing on key concepts in the literature in the behavioural and political sciences, the paper outlines how these could be applied to address climate action as a policy challenge. Several considerations are required:

    i.   How/if the frame links to beliefs or values or to a challenge faced collectively (e.g. climate action as an exercise in social justice as opposed to an exercise in technical modelling and forecasting);

    ii.   If it can increase the salience of climate action (e.g. climate action as an exercise in mitigating flooding as opposed to an exercise in delivering a green future);

    iii.   How the frame can deflate the concept of winners and losers and assist in overcoming ideological barriers (e.g. climate action as an exercise in resilience as opposed to an exercise in ensuring a just transition);

    iv.   If the frame can help deal with competing interests through being a 'positive-sum intertemporal trade-off' as opposed to a 'zero-sum present-day redistribution' (e.g. climate action as an exercise in economic growth as opposed to an exercise in costly adaptation); and

    v.   If the climate action frame moves decision-makers away from narrow mandates and towards higher goals, this can assist in overcoming institutional barriers (e.g. climate action as an exercise national security as opposed to an exercise in sectoral decarbonisation).

The paper suggests that framing should be actively considered in the design of communication and social-change campaigns. To assist such efforts, the paper then (i) outlines how a policy frame can be constructed and some of the pitfalls which may emerge along the way, and (ii) recounts the experience of two international climate action framing exercises.

- The paper notes the importance of 'how' policy frames emerge, as the process can have an impact on the frame. For example, it can emerge from either a passive, discursive process, or from an active strategic process. A significant consideration will be whether any (new) strategic framing of a policy issue is

intended to resolve conflict, aid diagnosis of a problem, articulate a solution, motivate collective action, or achieve some other objective.

Cautionary lessons from the literature on framing are also outlined. The importance of identifying and taking an appropriate 'window of opportunity' for strategic framing is highlighted. Is the frame broad enough to engage all the necessary actors, yet narrow enough to have an impact? Is the frame elastic enough to be modified over time? Is the frame credible and salient enough to resonate with policy-actors and decision-makers? Who will articulate any new policy frame and are they credible from the perspective of key constituents? The analysis discusses the importance of these considerations.

- Two examples of climate action framing processes are examined, from the Netherlands and Australia where transition and resilience respectively were adopted as key policy frames. The Dutch experience points to the importance of policy frames but highlights how they can also be expendable, that there is a danger that the intended frame is not the one which manifests itself, that there is need to deeply embed a frame so as to challenge incumbent actors, and that striking a balance between a flexible and specific frame can be difficult. Australia's experience teaches us that framing can have a positive impact but also that policy frames can suffer from multiple interpretations, that care must be taken to ensure the frame is effective at regional as well as national level, and that framing exercises are best accompanied by a monitoring and evaluation mechanism, and a willingness to innovate.

Framing Climate Action in Ireland: Current Frames and Potential Approach

The paper reviews seven relevant national policy documents and reports that there is no one dominant framing here: compliance, adaptation, mitigation, transition, and resilience are all part of the mix in terms of how climate action is framed in Ireland. Climate action is also framed as a technical, government, or security issue at times, and the so-called energy trilemma (a trade-off between sustainability, security of supply, and competitiveness) arises as a frame on occasion.

In the second half of the paper, the opportunity for a strategic framing exercise for climate action in Ireland is examined. Framing climate action as 'resilience' might drive climate action. It is a familiar frame, used recently in Irish enterprise policy and as such might resonate with enterprise policy actors (e.g. firms, networks, government Departments, enterprise bodies/agencies).

Enterprise policy actors have been successful in securing supportive, sustained cross-government action over time in terms of skills, taxation, regulation, and supports etc., to good effect in a way that cannot be said of climate policy actors.

Success in these areas is used to market Ireland in terms of trade and investment in a way that success on climate action is not.

The paper explores such a resilience frame for climate action. Tackling climate change could be described and understood as an exercise in resilience, to make Ireland a more resilient country—that is, to ensure the ability of the system and its component parts to anticipate, absorb, accommodate or recover from the effects of climate change in a timely and efficient manner, including through ensuring the preservation, restoration or improvement of its essential basic structures and functions. A resilience frame offers the potential to animate and push enterprise policy actors and the wider policy community in ways more supportive of Ireland's climate policy objectives. Ireland's improved resilience in terms of the share of renewable energy sources we use, the amount of fuel imported, our greenhouse gas emissions, or our general environmental performance could be added to the suite of metrics used to market the country internationally in the areas of trade and investment. This would link climate action to one of the most salient and coveted metrics: jobs.

The paper provides an examination of how, when, and by whom a new frame would be established in Ireland. Key aspects of such a strategic framing exercise include: the need to clarify the frame's meaning; to consider potential misuse of the resilience term; to avoid promoting an unrealistic win-win narrative; and to be aware of the limitations of the resilience frame (as 'bouncing back').

Conclusion

In its conclusion, the paper points to the critical importance of recognising and addressing the need for a shared understanding and the impact of the four I's of irrationality, ideology, interests and institutions, and makes the case for strategic policy framing as one response, acknowledging its pitfalls. While there is potential for a strategic reframing process in Ireland to help decision-makers, it is a process that must not be undertaken without careful planning and execution, as well as determination. In particular, the paper identifies how strategically reframing climate action in Ireland, as an exercise in resilience, is one route to consensus and concerted action in the face of the four I's. Should that be potential be realised, a strategic framing exercise could help policy-actors and decision-makers in Ireland devise and take climate action which would move us closer to our stated ambition in this crucial area.

Chapter 1
Policy Framing and Climate Action

1.1   Introduction

In June 2018 the then Minister for Communications, Climate Action and Environment came in for criticism on social media for making the point that, in global terms, Ireland's greenhouse-gas (GHG) emissions are negligible. The basis for the ensuing criticism was not that the statement was incorrect, rather that it was a poor framing of the climate-change challenge. Empirical research in the field of behavioural science teaches us that individuals are not the rational, preference-seeking, optimising actors that standard economic theory might lead us to conclude. In fact, our rationality, will-power, and self-interest are all bounded. The result is that, among other things, how a decision is framed can alter how we respond—a phenomenon not easily explained by standard economic models.

The Joint Oireachtas Committee on Climate Action has stated that a substantial communication effort is required if citizens are to accept climate action. As a result, the cross-Party consensus presented in the report includes the call for an all of government approach to climate change. This approach is to include developing and launching public information campaigns on the need to take climate action, before the end of 2019 (Joint Oireachtas Committee on Climate Action, 2019: 29). The preparation of such campaigns presents an opportunity, one which arises infrequently, to consider how climate action should be framed to maximise acceptance by society.

At a simple level, the impact of framing is obvious. Is a shopper more likely to purchase a meat product that is labelled '20 per cent fat' or the same one labelled '80 per cent lean'? Is a patient more likely to opt for a surgical procedure that is described as having a '90 per cent success rate' or one where 'fatalities are one-in-ten'? Why do more people state they could comfortably live on 80 per cent of their income, than state they could comfortably save 20 per cent of their income? This is more than mere semantics, and framing is more than 'spin', marketing or propaganda. Framing effects are phenomena empirically established in behavioural science, and their impact on policy-making continues to be scientifically examined (see section 2.5). Framing a decision matters, and this appears to be especially true when levels of uncertainty and complexity are high, as they are in the realm of climate action.

As will be discussed later, climate action can be and is framed in a variety of ways (e.g. transition, resilience, transformation, adaptation, mitigation, etc.). Placing

climate policy efforts in a frame where Ireland's GHG emissions are negligible was criticised because it was believed it could portray climate action in Ireland as futile. This explains why the frame was described by one non-governmental organisation (NGO) as 'counter-productive'. The minister in question subsequently clarified the point, saying that while our emissions are negligible, by playing its part Ireland can lead by example, and that every small action can have a far greater global impact. Intentions and interpretation matter, and how challenges, opportunities, evidence and options are presented can be expected to influence decision-makers.

In this context, a recent report prepared for the Environmental Protection Agency (EPA) includes a call for a 'stronger and more positive decarbonisation narrative' for Ireland; in other words, a new framing of climate action (Torney, 2018: vii). The NESC Secretariat has previously looked extensively at how climate change is and might be framed, with a view to aiding transition (see next section).

The EPA is responsible for protecting and improving Ireland's environment and inter alia provides independent reporting to inform decision-making by government. Why does the research suggest that the narrative around climate change in Ireland needs to be changed? The reason cited is that low-carbon transition is a 'profoundly political and societal challenge'. The report recommends a new frame that goes beyond compliance with externally imposed targets, takes seriously the need to protect those who will lose out as a result of the transition, reflects an important spatial dimension, and—perhaps most importantly—helps to secure buy-in. The importance of framing climate action in a manner that secures greatest political and social buy-in is at the core of what the report to the EPA calls for. For example, it refers to the inevitable requirement to construct new electricity grid infrastructure to facilitate decarbonisation of the energy system (e.g. increased offshore wind and ocean energy). Experience tells us that the planning and roll-out of such infrastructure is fraught with problems of community and hence political buy-in. Along with the necessary engagement and consultation processes, the report for the EPA suggests that a new framing of energy transition can help: a 'more positive economic and social narrative is required' (Torney, 2018: 12).

This recommendation in the report to the EPA emerged from an analysis of the institutions shaping policy in Ireland's electricity market, and is merely the most recent such call. The NESC Secretariat has previously examined this issue extensively and has offered wide-ranging advice.

1.2   Building on NESC Secretariat Research

Over recent years, NESC and the NESC Secretariat have examined in great detail the governance and institutional framework for policy-making in the realm of sustainability and the environment, and continue to probe these issues. Work is currently underway on related issues of cost-benefit analysis, multistakeholder agreements, infrastructure/land-use/housing, transport, and agriculture. Most pertinent to the issue at hand here are four particular NESC Secretariat reports:

- Reframing the Climate-change Policy Challenge (O'Donnell, 2012);

- Social and Behavioural Aspects of Climate-change (Moore, 2012);

- Ireland and the Climate-change Challenge: Connecting 'How Much' with 'How To' (NESC Secretariat, 2012); and

- Greening the Economy: Challenges and Possibilities for Integrating Sustainability into Core Government Policy (NESC Secretariat, 2013).

Previous NESC Secretariat research has found behavioural science to be helpful analytically, and has identified the reframing of climate change and behavioural change as a key element to be considered more directly. It has recounted the argument that 'changing the terms in which problems are cast is also vital: however subtle, switching language matters' (Shove, 2003, cited in Moore, 2012: 10).

The Secretariat has stated that 'effective communication can help to create a sense of fairness in resulting policy measures. This can be a powerful force in driving behaviour and people, moving away from an individualised frame towards one that puts their actions in the context of a large-scale endeavour. It is also important to make climate action relevant to people's lives. Making climate change closer psychologically and the potential impacts relevant to people in terms of their location, social group and other demographics is also important' (*ibid.*: 82 and 83). This point is examined more closely in the next chapter.

The 2012 NESC Secretariat research noted the impact that framing can have: 'Communications should underscore the human causes, that solutions exist to address [climate change], and that it should be acted on now. However, how the message is delivered is complex. Some key elements include: the emotional impact, wider impacts of the message and trust. For example, linking action on climate-change to positive moral emotions such as pride and gratitude can provoke a pro-social response that rewards respondents with feelings of well-being. There is evidence to suggest that strategies which utilise less visible mechanisms and non-pro-environmental messages can effect change. Trusting the messenger is key to effective communication—governments are expected to lead by example to adopt measures and to take climate-change seriously' (*ibid.*: 83).

Similar to the aforementioned report to the EPA (Torney, 2018), the NESC Secretariat in 2012 highlighted the case argued by the Green Alliance in the UK for 'delivering a strong narrative for all actions on climate-change announcements and measures; a plan detailing how government and individual action over the next five years will contribute to that; and clear examples of what individuals can do'. They argue that this can be achieved by:

- building greater visibility and consistency for messages;

- enabling trusted messengers to communicate;

- providing coherence and cohesion to practical action;

- avoiding a vacuum for negative stories;

- providing the bigger picture;

- changing what people see as normal energy behaviour; and

- helping to avoid the rebound effect, where financial savings through energy efficiency contribute to greater energy use elsewhere.

(Green Alliance, 2012 cited in Moore, 2012: 84).

Having noted the importance of how climate issues are framed, the NESC Secretariat's analysis then described the dominant framing of the climate challenge—a linear framing—and concluded that Ireland should widen this frame. The concept of a frame was not defined in these 2012 papers, as it is here (see Section 1.3). The analysis also emphasised reframing 'the problem' or 'the challenge' as opposed to reframing 'climate action', as is the case in this paper.

The NESC Secretariat put forward three key ideas in 2012 as critical in framing strategies and policies for Ireland's transition:

- Climate-change policy is a loop not a line, in which there is a dynamic relation between 'how much' emissions reduction and policy action governments commit to and their understanding of 'how to' achieve decarbonisation.

- It is necessary to balance the policy emphasis on 'how much' emissions reduction to target with more focus on 'how to' decarbonise the economy and society.

- The transition to a carbon-neutral economy and society must engage actors at all levels and in all sectors, through a governance system that animates, learns from and pushes networks of firms, public organisations and communities to ever-greater decarbonisation.

The dominant, linear frame highlighted by the NESC Secretariat affected policy responses in a number of ways, including by placing the decision on *how much* adjustment ahead of consideration of *how to* achieve this. It also placed a strong focus on high-level political actors (governments acting together), and conveyed a preoccupation with international negotiations, targets and timetables, and on emissions-trading schemes as a central policy approach or instrument.

The need to widen the policy frame arose from a number of identified pressures and from three elements of work: a hard-headed view of international policy processes, a realistic view of the market-based instruments, and a rigorous view of key analytical or cognitive issues involved in making climate-change policy. The result was a call for a three-track approach to action to deliver a more ambitious and effective response to climate change in Ireland:

- **Track 1: Strategic and Institutional**, including Ireland's engagement with the UN and EU climate policy processes, new institutional structures and five strategic building blocks;

- **Track 2: Exploration and Experimentation**, to consciously build policy and organisational networks in specific areas and push these to ever-greater decarbonisation; and

- **Track 3: Design and Implementation**, focusing on where early action makes sense and is feasible, and on measures to meet Ireland's 2020 targets.

Within Track 1 lies a foundation for the analysis here, namely the need to develop and reframe climate policy, including ensuring we have effective institutions for policy analysis, decision-making, evaluation and learning. The NESC Secretariat's assessment concluded that Ireland's policy process and institutions have not worked as well as they might in making and implementing climate-change policy. Part of the solution must be devising mechanisms that produce real commitment, technical engagement, and action *within* government and its agencies. The NESC Secretariat went on to suggest that the climate-change policy challenge needs to be changed in a number of ways, including by defining a unified, consistent and realistic view of how policy options and actions will be assessed.

This paper picks up this point and—agreeing that shifting emphasis from 'how much' to 'how to' is important—is concerned with the question of how to 'what': how to transition? how to mitigate? how to transform? how to comply with targets? What is climate action an exercise *in*? Is it transition, adaptation, mitigation, compliance, ensuring equality, building resilience? Does this matter for commitment, engagement and action within government and its agencies? It is axiomatic that framing matters, but does that mean that strategic framing can affect decision-making by policy-makers in a way that delivers better outcomes? It is a complex area. This paper tries to avoid seeking definitive answers to questions about whether or which climate policy frames are dominant, the difference

between calls for frame widening or frame rejection, etc. It picks up just one of the threads emerging from the NESC Secretariat's 2012 work as its starting point: investigating the framing of climate action, considering the decision-making process, and presenting a realistic picture of how the assessment of policy options is affected by particular forces. The paper teases out calls for a new framing and narrative for climate action in Ireland, employing a specific analytical framework (the impact of institutional and ideological factors, and the role of interests and irrational decision-making—see Chapter 2), and with a specific focus: if and how strategic policy framing could be impactfully undertaken.

Understanding policy framing, and why and how it shapes the assessment of options and actions specifically in the realm of climate action, involves collating lessons from many fields, from climate-change studies to political science, psychology and behavioural science. These are areas with vast literatures, and so this paper summarises the desk research review of over fifty relevant studies in these areas to explore the following:

- Policy frames and climate action (remainder of this chapter);

- The impetus to reframe climate action (Chapter 2);

- Strategic policy framing (Chapter 3);

- Lessons from international experience (Chapter 4); and

- Ireland's climate action frame and 'resilience' (Chapter 5).

In doing so, this paper provides and employs lessons from international experience to inform further considerations of how to improve Ireland's performance in response to climate change and, specifically, if and how strategic policy framing of climate action in Ireland could affect this. Specifically, the analysis that precedes Chapter 5 allows that chapter to include **an initial assessment of the potential to strategically frame climate action in Ireland in a manner more closely aligned with the successful elements of enterprise policy, reflecting that policy's recent adoption of *resilience* as a key theme**.

1.3   What is a Policy Frame?

The concept and power of the 'frame' and 'framing' has been increasingly analysed and applied since Goffman's 1974 work Frame Analysis: An Essay on the Organization of the Experience (see Benford and Snow, 2000). In parallel, the literature on behavioural science has been growing since the seminal works of Kahneman and Tversky: Judgement Under Uncertainty (1974), Prospect Theory: An Analysis of Decision under Risk (1979) and Choices, Values and Frames (1984).

Empirical behavioural science research illustrates that human emotions limit our ability to make purely rational decisions (see Section 2.5 for more on this). Kahneman and Tversky's prospect theory explains observed decision-making under uncertainty and risk, revealing how decisions 'can be described or framed in multiple ways that give rise to different preferences, contrary to the invariance criterion of rational choice' (Kahneman and Tversky, 1984: 341). A key outcome of this framing effect is that seemingly inconsequential variation in the presentation of choice affects preferences and decisions. This empirical finding is central to the discussion here.

Multiple studies have demonstrated the impact of framing on decision-makers, 'when (often small) changes in the presentation of an issue or an event produce (sometimes large) changes of opinion' (Chong and Druckman, 2007: 104).

> For example, when asked whether they would favour or oppose allowing a hate group to hold a political rally, 85 per cent of respondents answered in favour if the question was prefaced with the suggestion, "Given the importance of free speech," whereas only 45 per cent were in favour when the question was prefaced with the phrase, "Given the risk of violence". Similarly, about 20 per cent of the American public believes that too little is being spent on "welfare," but about 65 per cent says that too little is being spent on "assistance to the poor. (Rasinski 1989, and Sniderman and Theriault, 2004, cited in Chong and Druckman, 2007)

Thaler and Sunstein in their book Nudge (2008) describe policy frames as 'powerful nudges' that 'must be selected with caution' (Thaler and Sunstein, 2008: 37). Policy-frames work due to decision-makers' tendency to be passive. Individuals' decision-making processes do not do the work required to assess whether alternative framing would affect the outcome; 'one reason they don't do this is because they wouldn't know what to make of the contradiction' (*ibid*. see Section 3.3 also).

The UK's Behavioural Insights describe framing as 'how the presentation of an issue, not its substantive content, can determine whether it is noticed and how it is interpreted' (BIT, 2018: 8). In their example, politicians and civil servants were 38 percentage points more likely to choose a higher risk policy option when it was presented in terms of 'how many deaths it might prevent', rather than 'how many lives it might save'.

Robert Shiller notes:

> The human brain has always been highly tuned towards narratives, whether factual or not, to justify ongoing actions, even such basic actions as spending and investing. Stories motivate and connect activities to deeply felt values and needs. Narratives "go viral" and spread far, even worldwide, with economic impact. The 1920-21 Depression, the Great Depression of the 1930s, the so-called "Great Recession" of 2007-9 and the contentious political-economic situation of today, are considered as the results of the popular narratives of their respective times (Shiller, 2017: 967).

The framing-effect concept has been extended to explain developments in public policy. Baumgartner and Jones' punctuated equilibrium theory (1993) links the urgency and mobilisation that precedes a sudden policy shift to framing effects. That theory recognises that interests in any given policy area will vie to influence the framing of a decision in order to influence the ultimate response by policy-makers. In these instances, information that was previously available may be reframed and this reframing encourages policy-change.

At a recent NESC workshop on low work-intensity households, one participant suggested that interventions could be enhanced if the issue was reframed from one of 'activation' to one of 'active inclusion', a term more frequently used at EU level.

Framing effects are impactful in a variety of decision-making contexts, but especially under uncertainty, a persistent problem for policy-makers. This is true even in the era of evidence-based policy-making as it is 'a truism in policy studies that 'the evidence' does not speak for itself. Someone needs to speak up for a policy problem in a way that sparks the attention and concern of their audience' (Cairney, 2018: 202). It is impossible 'to completely separate empirical facts from human values and ways of thinking' (Cairney and Oliver, 2018: 400). Because frames become the 'major storylines through which [organisations] set problems and make sense of experience', they pose a threat to organisational learning by limiting valid inference (Argyris, 1999: 12 and 13).

The opportunity for strategic policy framing arises from the 'susceptibility of people, including policy makers, experts, and citizens, to the way issues are framed' (Dewulf, 2013: 322). Emphasis can be placed on selected aspects of the issue 'at the expense of others, by drawing different boundaries around the issue and by putting forward different elements as the core of the issue' (Dewulf, 2013: 322). This opportunity for the strategic framing (or reframing) in a way that shapes decisions and actions extends to climate policy issues. For interests and decision-makers to communicate and influence effectively, they must 'achieve a match between message content, framing, and the concerns and values with which audiences resonate' (Moser and Dilling, 2007: 687).

In short, how an issue is framed will affect how it is perceived and responded to by decision-makers, where (in this case) a 'decision-maker' is any actor in policy-relevant situations where they are involved, either directly or as onlookers and stakeholders. (Framing effects operate at the level of the individual, but it is valid to consider policy framing facing cohesive groups or institutions—see next chapter). Before looking at how policy is and can be framed, some clarity on what 'policy frames' and 'policy framing' are in the context of this paper is useful.

A number of instructive definitions are present in the literature (Benford and Snow, 2000; Chong and Druckman, 2007; Fünfgeld and McEvoy, 2011; Dewulf, 2013; McEvoy et al., 2013; Hermwille, 2016; Béné et al., 2018) . For example, framing is described as 'the ways in which actors understand, portray, and categorise issues' (Cairney, 2012: 185). For Dekker, policy frames are 'interpretive packages providing a consistent causal story of how the problem came about and how it should be solved' (Dekker, 2017: 127). For others:

> In policy-making, framing is a process in and through which policy-relevant actors inter-subjectively construct the meanings of the policy-relevant situations with which they are involved, whether directly or as onlookers and stakeholders. When facing such situations, especially when what worries or confronts them is a matter of some concern and appears uncertain or ambiguous, actors typically ask, explicitly or implicitly, the question that Goffman posed, whose answer "framing" explicates: "What is it that's going on here?" (Hulst and Yanow, 2014: 97)

The definition used for this paper is based on the work of Weick, and Starbuck and Milliken (see Weick, 1995):

Policy frames are *sense-making devices*. They are how policy issues are structured, and provide the frame of reference for decision-makers to comprehend, conceptualise, understand, explain, and respond to issues and events. A particular narrative will flow from the frame.

Following Paschen and Ison (2014), the terms *frame*, *narrative*, *story* and *storyline* **are all used in this paper to describe the observable language that influences opinion and behaviour, affects issue-understanding across a variety of stakeholders, and guides particular kinds of analysis, decision-making, action and outcomes.** The frame generates a particular narrative. It is worth noting at this point that the terms *frame*, *narrative*, *story* and *discourse,* etc., do have different and specific meanings in the relevant literature, that the relationship between them

is 'complicated and contentious' (Dewulf, 2013: 323), and that 'semantic borders… can be blurry' (Hermwille, 2016: 238).

The terms are not interchangeable in instances where their use in intended to communicate very specific meanings, and where that specific meaning is consequential to the discussion. As set out above, this paper uses the terms narrative, story and storyline to describe how frames shape decision-maker understanding of and response to issues. This is not consequential to the discussion, and the interchangeability is in the following context:

> Persuasive framing, the intentional use of language to influence opinion and behaviour, is observable in the discourses of politics, the media and the market. Narrative has become a buzz-word in this context and predominantly refers to the question of how climate-change information and adaptation policies are framed, or 'storied', strategically in order to achieve broadest possible credence across a variety of stakeholders. In more critically analytical understandings, 'narrative' tends to be used synonymously with the idea of prescriptive 'story-lines' and restrictive discourse in Foucault's sense that guide particular kinds of analysis and action (Leach *et al.*., 2010). In recognition of this, the social science methods of frame analysis and discourse analysis of public and policy discourses, for example, are applied with the aim to understand and productively direct the use of such framing narratives toward decision-making outcomes (Goffman, 1974) (Paschen and Ison, 2014: 1084)

The field of frame analysis in public policy studies is built primarily on the work of Schön and Rein from the 1980s on, and is an important analytic tool for those seeking to understand, for example, the mismatch between the implementation of policy versus the policy intent (van Hulst and Yanow, 2014: 92). As set out earlier in this paper, such a mismatch is assumed to exist in the case of climate action in Ireland. Policy frames are 'not static, reified entities but are continuously being constituted, contested, reproduced, transformed, and/or replaced…' (Benford and Snow, 2000: 628). Chong and Druckman refer to a decision-maker's 'frame in thought'. In their example, 'if an individual believes that free speech dominates all other considerations in deciding whether a hate group has the right to rally, that individual's frame in thought is free speech. If, instead, he or she gives consideration to free speech, public safety, and the effect of the rally on the community's reputation, then his or her frame in thought consists of this mix of considerations' (Chong and Druckman, 2007: 105 and 106).

Issues and events, thus, will have multiple frames, but it is the notion of a dominant policy frame that is key if attempting to understand how they are broadly understood by, and responded to, by decision-makers. The dominant policy frame for an issue will change over time as events unfold and the actors respond. For example, over a period of decades the dominant frame for US-Soviet relations can

be thought of as changing from the post-1945 *cold war*, to the 1970s *arms race*, to eventual *détente* in the era of disarmament and *perestroika* from the mid-1980s.

The dominant policy frame and related narrative is the outcome of a 'policy process in which multiple frames are contesting, but where one frame prevails and characterises policies' (Dekker, 2017: 127). The dominant policy frame is the general, coherent interpretation of a policy issue that captures a definition of the problem and a related strategy to solve it. On the question of whether multiple frames are problematic, a definitive answer is not obvious. On the one hand, a dominant frame can encourage a shared understanding of the problem, and make an impactful (unified) response more likely (Hermwille, 2015). On the other hand, in highly contested areas, multiple frames provide flexibility of interpretation that can allow competing views to buy in to a response (Dekker, 2017).

In the realm of public policy and agenda-setting, the dominant frame can emerge by actors 'drawing the highest attention to one image by accentuating some facts and omitting others, linking problems to deeply held beliefs and values, using simple stories to assign cause and responsibility, exploiting crises or events, selecting the measures that produce the most supportive evidence of a problem, and tailoring these strategies to different audiences' (Cairney, 2018: 204). Above all, it is the impact of the dominant policy frame on problem-understanding and subsequent response that makes policy framing important.

So how does framing make a difference? As no public policy decision is taken by one person, the extent to which decision-makers share an understanding of the problem, its impacts and potential responses is crucial. If a policy frame increases the likelihood that understanding of an issue is shared by more of the decision-makers, it follows that agreed action is more likely (see Section 2.2 also). Frames, like narratives, are 'simple stories that describe a problem, lay out its consequences and suggest (simple) solutions' (Hermwille, 2016: 238).

Framing is a way of making sense of a topic from an individual perspective, and helping decision-makers arrive at a shared meaning and sense of purpose in addressing the challenge (Fünfgeld and McEvoy, 2011: 5). Frames and narratives 'guide both analysis and action in practical situations' (Dewulf, 2013: 322). Policy frames do this by helping decision-makers 'locate, perceive, identify, and label' issues and events within their own lives and within the world at large (Benford and Snow, 2000: 614).

Dewulf states that policy framing has been shown to 'affect people's decision preferences, particularly under conditions of uncertainty. Decision problems that are formulated in different ways—for example, in terms of gains versus losses—trigger different preferences even if the underlying decision problem remains the same in terms of probabilities and expected outcomes. This happens through the setting of anchors, that is, points of reference against which alternatives are evaluated' (Dewulf, 2013: 322).

Adger *et al* go further, stating that the way in which a problem is framed '*determines* the way in which responses are identified and evaluated and therefore influences the range of response characteristics' (Adger *et al.*, 2011: 762, emphasis added). This is a result of problems being framed, for example, from either a very narrow, technological perspective, or a broader and more encompassing view. The former emphasises identified threats, the possibilities of specific responses, and targeted actions. The latter is a more inclusive approach, accentuating the management of issues, recognising the importance of other system drivers and the maintenance of response flexibility, all of which depend on the local context (*ibid*). Dewulf (2013) agrees, stating that the dominant policy frame 'will direct the kind of policy change that can take place' (Dewulf, 2013: 323). The specific complexities of communicating science are explored in depth in research by the US National Academies of Sciences, Engineering, and Medicine (2017).

Looking to a real-world example of how frame narratives influence decision-makers and actions, Hermwille (2016) has examined if and how differences in the dominant frames and narratives in three countries help explain their respective policy responses to the Fukushima disaster in 2011.

Following the Fukushima earthquake and the associated nuclear meltdown at the Dai-ichi power plant, Japan, Germany and the United Kingdom each re-examined their nuclear power policy, and amended processes across power sectors. According to Hermwille's analysis, the way in which nuclear power was framed in each country can help explain that process:

> The Fukushima disaster had a significant impact on the ongoing changes in the power sectors. Both in Japan and Germany, the event initiated or at least dramatically accelerated a shift towards renewable energies. In the United Kingdom this was not the case for lack of a persuasive narrative. Instead, some commentators even made rhetorical use of the disaster to underpin the narrative of nuclear power as a low-carbon technology and argue for its expansion (Hermwille, 2016: 243), see Table 1.1.

Table 1.1:   Example of How Event-Framing and Narrative Can Shape Policy

	Pre-Fukishima Narrative	Framing of Nuclear Policy	Post-Fukishima Narrative	Framing of Nuclear Power
Japan	Japan is a densely populated, relatively isolated island group and has no appreciable fossil resources of its own. Nuclear power is the only means to secure energy supply.	*Angst*	From 'survive in the medium to long term completely without nuclear power' to 'nuclear power renaissance'	*Shifting*
UK	Nuclear should play a key role in taking Britain towards a clean prosperous future as it is a safe power and the lowest-cost, large-scale, low-carbon electricity source.	*Key role*	Nuclear power currently appears to be the most cost-effective of the low-carbon technologies, and should form part of the [power] mix, assuming safety concerns can be addressed.	*Status quo*
Germany	Nuclear power is a potentially catastrophic threat that we cannot control. Therefore we need a nuclear phase-out as fast as technically possible *and:* Renewables cannot yet technically and economically cover the country's power needs. Nuclear power will act as a necessary bridging technology until it is certain that renewable sources of energy can fulfil this need.	*Catastrophic but necessary*	Eliminate the risks emanating from nuclear power in Germany in the future; renewable energies and energy efficiency, through the strong German pioneering spirit and engineering ingenuity, can ensure both a nuclear phase-out and ambitious climate protection at the same time.	*Confidence*

Source: Based on Hermwille, 2016.

The power of a frame to influence understanding and action lies in its ability to answer the decision-maker's question 'what is it that's going on here?', as described by Goffman (1974). Managing multiple interpretations and reaching an understanding is 'always based on emotion and personal belief, as well as (and sometimes contradicting) physical and measurable data' (Moezzi *et al.*, 2017: 1). A dominant policy frame mediates between complex issues and the decision-maker's understanding, providing a narrative with which to reconcile emotion, personal belief and data. Frames provide a narrative that acts as 'the vehicle of meaning and intermediation' between decision-makers and event, and 'are established as an analytical entity to unpack' how events translate into change (Hermwille, 2016: 237).

The narratives provided by policy frames 'allow people to connect social, economic, political, and technological elements together in ways that are meaningful to them' (Miller *et al.*, 2015: 67). It is this narrative power of policy framing that makes it 'a valuable tool for enhancing societal capacity to meet… governance challenges', challenges that are central to this research (*ibid*.: 65). In order to serve as that valuable tool, a policy frame must have certain characteristics. It is not enough for a specific frame-term to simply be used regularly in relation to a policy or even to be the most regularly used term to frame a challenge. The literature review undertaken by Béné *et al* in 2018 *inter alia* highlighted six ways in which framing terms can be employed, with differing consequences.

Béné *et al*'s review suggests that the way in which the frame is used will affect its effectiveness, how it is interpreted, what it is expected to achieve, what issues are at stake, and what characteristics of the frame are important. This in turn will affect whether the frame and narrative are used as a loose metaphor to 'inspire' and guide the policy agenda-setting, or used as a rigorous analytical framework to solve a problem.

The analysis also included a warning not to ignore the 'no use' and 'buzz word' categories, noting that these types of '(mis)use should—or could—deserve more attention', given that they contribute to poor policy implementation (Béné *et al.*, 2018: 121). That said, Dekker argues quite convincingly that an *ambiguous* frame is not the same as a misused frame, and should not be seen simply as 'no use' or a 'buzz word'. In contexts of complexity and political controversy, there exists the 'strength of weak frames'. Dekker finds that strong and weak frames 'serve different purposes. Weak frames may not be the most efficient in steering policy action, but can be sensible in situations of uncertainty and successful in compromising between competing information and interests. Weak frames enable policy-making in a deadlock' (Dekker, 2017: 141).

Table 1.2:   Frame Usage and Effectiveness

Frame Usage	Description	
		Most Effective
Indicator	Frame-term is used as a metric.	
Goal	Frame-term is used as the target to aim for, and decisions are taken with the aim of achieving this target.	
Analytical Tool	Frame-term is used as an aid to help think about and understand certain issues, and find improved solutions.	
Metaphor	Frame-term is used as a concept to encourage an integrated approach to action, and to help break silos.	
Buzz Word	Frame-term is used to gain attention (e.g. to increase chances of publication, or to attract funding).	*Least Effective*
No Use	Frame-term has little or no use beyond its inclusion in literature, etc.	

Source: Modified from Béné *et al.*, 2018.[1]

Ultimately, it may be impossible or impractical to seek a context-independent hierarchical ordering of frame usage, as there are various ways in which framing and reframing can work in specific contexts. The ordering presented here reflects this paper's emphasis on climate action decision-makers in or close to the political sphere. Further, given that the climate policy problem is characterised by uncertainty, complexity and ambiguity, devising a framing of climate action that would lend itself to adoption of an agreed metric would be a significant challenge.

1.4   Climate Action Frames

This paper deals with framing climate *action* not climate-change, examining the potential for framing the *response* to our altering climate, and not the *problem* itself. At its most basic, it looks at how climate action is framed by the completion of

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[1]   Béné *et al* did not present these six frame usages in any hierarchical order of effectiveness. The ranking suggested here reflects assumptions set out earlier regarding the specific decision-makers of interest and the existence of solutions that have not been implemented. The order of types (especially *metaphor*, *analytical tool*, *goal* and *indicator*) is worthy of debate.

this sentence: 'climate action is primarily an exercise in … ', where the concluding word(s) might be *transformation* or *mitigation* or *compliance* or *resilience* or *ensuring equality*, etc. How climate action is thus framed can have a significant impact:

> Reframing strategies can help actors change the presentation or substance of their position in order to find common ground and break policy deadlocks. Understanding how others frame an issue differently can lead to changes in emphasis that make a proposal mutually acceptable, or highlight actions that cost little to one side but are symbolically important to the other. (Behavioural Insights Team, 2018: 11)

As a simple example of how the framing of climate action might affect a decision-maker's response, consider the following. If asked about their views on a particular flood protection project, are more people likely to express support if the question was prefaced with the words: 'Given the importance of long-term flood safety…', or if it was prefaced with: 'Given the importance of the rights of the current property owners that would have to move…'? (Dewulf, 2013: 322). If the research cited by Chong and Druckman in the Section 1.3 is any indication, majority support for the flood protection project would fall to a minority as a consequence of the altered framing. This is merely a simple thought-experiment, but a reading of the relevant literature suggests that how climate action is framed does have significant consequences.

Paschen and Ison state that **how we 'story' climate action 'determines how we understand and practice adaptation, how risks are defined, who is authorised as actors in the change debate, and the range of policy options considered**' (Paschen and Ison, 2014: 1083). For McEvoy *et al*, framing can be 'decisive' in this policy area because of its particular nature:

> This process of framing becomes particularly important when attempting to arrive at a shared meaning and sense of purpose of complex socio-ecological phenomena, such as climate-change. Importantly, framing can be decisive in knowledge production, influencing research agendas, policy development and implementation, as it is often of agenda-setting character. (McEvoy *et al.*, 2013: 282)

Moezzi *et al* view policy framing as a central issue for climate action: 'framing of the problem affects the types of solutions that researchers and policymakers propose. We suggest that a more storied framing of the 'problem' of energy and climate-change research could contribute to a wider set of 'solutions'' (Moezzi *et al.*, 2017: 8).

Juhola *et al*'s analysis finds that 'different initial framings of adaptation result in a particular definition of the problem, and consequently lead to particular policy solutions whilst excluding others… Different persuasive arguments are used to

support or undermine the need for adaptation, and reveal underlying rationales for environmental policy-making in each of the case study countries' (Juhola *et al.*, 2011: 460).

In addition to the complex socio-ecological nature of climate action highlighted by McEvoy *et al*, they refer to a 'stuck-ness' in consideration of climate action issues and believe that policy framing can 'help loosen this grip'. Framing climate action in a particular way can help by letting actors speak and inquire differently, by providing a different set of data and voices, and by shedding some 'rigid notions of truth' (Moezzi *et al.*, 2017: 7).

For Kirby and O'Mahony, framing is significant in how both the problem and the solutions are considered by decision-makers: 'Not only is the climate-change message presented though framing devices, but so too are the dominant policy options of how we might transition to a low-carbon society'.

For example, where a policy response is heavily influenced by technical, quantitative modelling, the key variables of political and social power it rests on can be severely oversimplified… 'the very production of the scientific knowledge on climate-change policy can have the result of focusing transition studies on the engineering of mitigation and adaptation, while neglecting issues of power in society and the competing values that inform different social visions…' (Kirby and O'Mahony, 2018: 42-43). Dewulf adds that 'frame differences have implications for what counts as reasonable adaptation policy' (Dewulf, 2013: 321).

This advice—to ensure that solutions (as well as climate challenges) are optimally framed for decision-makers—is important. Because of the complexity facing decision-makers, 'the research emphasis can be seen to have expanded from a predominantly physical science domain to a research arena where significant input is now also being drawn from across the social sciences, e.g. adding value to efforts to improve assessment methodologies, contributing to the reframing of state-of-the-art scientific understanding and ultimately providing new insights into the formulation of adaptation planning' (McEvoy *et al.*, 2013: 280). Dewulf proposes the three key phases for climate action as understanding, planning and managing, with framing 'a crucial process not only in the understanding phase, but also in the planning and managing phases' (Dewulf, 2013: 322). In this context, it is unsurprising that 'narratives, stories, and storytelling have become more common in energy and climate-change research and policy' (Moezzi *et al.*, 2017: 1), though there is 'a continuing struggle in policy debates about how climate-change adaptation should be framed' (Dewulf, 2013: 321).

There are myriad competing narratives around climate action. Simmons (2018) uses Thompson's three competing 'stories' concept to categorise them at a high level:

    i.   Egalitarian: Profligate consumption and production patterns of the global North are the fundamental cause of global climate-change.

ii. Hierarchist: Uncontrolled population growth in other regions of the world places local and global eco-systems under pressures that quickly become dangerously uncontrollable.

iii. Individualist: The price of natural resources is the most important factor in both controlling demand and footing the bill for environmental protection.

Simmons' point is that, though each of the three narratives 'contains its own internal logic, it stands in tension with the others and holds only part of the solution to this policy problem. Progress depends not on choosing a 'winner' from competing frames, rather blinkers must be removed, and appropriate attention and weight attached to each frame, to allow more effective policy solutions to emerge' (Simmons, 2018: 239).

Once a frame emerges, its prominence and impact can be expected to shift, just as 'the climate-change agenda has moved from one of scientific problem framing to one more concerned with the implementation of societal responses' (McEvoy *et al.*, 2013: 281.) Thus, the dominant policy frame has moved from 'climate science' to the 'mitigation' and 'adaptation' frames, to a point where 'detailed political, ethical, social and normative analysis has become increasingly important (*ibid*.)'.

In terms of adaptation, Fünfgeld and McEvoy (2011) identify four main frame-types:

- *Hazards* approach: 'Hazards' are closely linked to disaster risk management. This natural disasters frame has been a dominant consideration in policy discussion on climate change. Increasingly broader notions of climatic hazards are being adopted, linked with other socio-economic and environmental trends; for example, population expansion into bushfire-prone areas in south-east Australia or coastal zones likely to be affected by sea-level rise or storm surges.

- *Risk management* approach: This is the dominant, organisational practice for dealing with many types of uncertainties in local government and the private sector. Central to the notion of risk are uncertainty and perception. Risk is defined as the combined product of hazards, exposure and vulnerability, and there is a close connection between hazards and risk-management approaches.

- *Vulnerability* approach: This focuses on who or what will be affected and in what way. A wide range of possible policy responses to vulnerability is possible. For example, outcome vulnerability relates to the residual impacts (e.g. on a habitat, an ecosystem, or a municipality) after all feasible adaptation responses have been taken into account. A contextual framing of vulnerability considers vulnerability in the broader context of interactions between climate and society.

- *Resilience* approach: The 'resilience' concept originated in ecology but is now being translated and applied to human systems. It is defined as the ability of

groups or communities to cope with external stresses and disturbances as a result of social, political or environmental change.

Examples of climate action frames include: adaptation, mitigation, transition, resilience, compliance, transformation, global equality, just transition, green growth, hazards/disaster risk management, pollution, vulnerability, technical problem (tame), governance problem (wicked), state security, human security, ideological clash, etc.

The existence of multiple frames, multiple levels of framing, and shifting dominant climate action frames has created a contested space (see Table 1.3). According to Dewulf, **the presence of competing climate action frames is not without consequence**. In the first example, global policy arrangements to address adaptation (an energy issue) develop more slowly than for mitigation (a hydrological issue).

Hovi *et al.,* contradict this, stating that adaptation is a more benign policy challenge than mitigation. They cite three reasons: 'First, for a wide range of measures (though not for all) the time span between action (cost) and effect (benefit) will be shorter. Second, a policy of adaptation can to a larger extent rely on measures providing tangible benefits for specific sectors or groups. Third, for most adaptation measures externalities will be local, national, or regional rather than global in scope' (Hovi *et al.*, 2009, 36). These factors make adaptation more politically feasible than mitigation because these features shorten the time inconsistency problem, and ameliorate domestic, political problems. Regardless, **both researchers agree that climate action in the context of either an 'adaptation' or 'mitigation' frame will differ.** Further empirical case-study analysis would be valuable here.

Returning to Dewulf's second example in Table 1.3, there is a dichotomy of effort into (a) projects focusing on technological solutions and reducing impacts, and (b) projects that more explicitly include uncertainties and governance issues. In the third and final example, there are parallel efforts to (a) reduce exposure to hazards and mitigate the effects of dangerous climate-change (e.g. insurance instruments), and (b) improve economic, food, health, environmental, personal, community and political security.

The complications arising from multiple levels of framing, multiple frames, and shifting dominant climate action frames are compounded by the presence of sub-frames and the issue of frame-scale. For example, climate action is often framed as an *adaptation* process, yet within that frame lie narratives that are not inconsequential. Preston *et al* (2015) break *adaptation* into eight subsets, each of which has consequences for the climate action response. For example, where *adaptation* itself is framed as a new issue ('adaptation is novel'), this can

simultaneously encourage research and innovation, yet undermine the extensive history of individual/organisational adaptability. Where *adaptation* is framed as an indigenous issue ('adaptation is local'), this can simultaneously encourage action at scale that will be salient and impactful, yet discourage national and international bodies to engage (Preston *et al.*, 2015: 471).

Table 1.3: **Examples of Competing Climate action Frames: Frame A versus Frame B**

Example	Frame A	Frame B
1	**Adaptation** • Human-induced climate-change • Climate-neutrality • Reduce emissions • Energy issue	**Mitigation** • Impact on vulnerable groups • Climate-proofing • Deal with impacts (e.g. floods) • Hydrological issue

2	**Tame Technical problem**
	• Techno-scientific issue
	• Impact assessments
	• Technological solutions
	• Give voice to:
	  • Scientific expertise
	  • Citizen's knowledge claims
		Wicked Governance Problem
		• Socio-political issue
		• Communication strategies
		• Power relations key
		• Increase stakeholder participation

3	**State Security**
	• System focus
	• Emphasis on risk of conflict as natural resources degrade:
	  • Between groups in society
	  • Between states
		Human Security
		• Actor focus
		• Emphasis on the vulnerable:
		  • Social inequities
		  • Discriminatory policies
		  • Economic injustices
		  • Unequal power relations

Source: Based on Dewulf, 2013.

On the issue of scale, McDermott and Surminski (2018) investigate the link between the nature of information and its interpretation, and the impact on climate action at local level. Using the case of flood risk management in Cork city, they find that providing data and analytical tools is not necessarily sufficient. '[More] emphasis needs to be put on creating an ongoing process of engagement, involvement and participation to navigate the difficult normative decisions that local decision-makers

face.' Decision-makers must make normative judgements even when appraisal and data is available; for example, on the appropriate or acceptable level of social risk, and on issues of equity (distributional issues and discounting the future) (McDermott and Surminski, 2018: 21). Where such normative judgments are to be made and will have an impact on response, how the climate action problem is framed is critical. Certainly, the three levels of framing identified by McEvoy *et al* (Meta, Conceptual, and Operational) need to also align with the scale of the frame. Dewulf refers to 'framing mitigation as a global issue and adaptation as a local issue, or framing the security implications of adaptation at the system level (linked to state security) versus at the actor level (linked to human security)'.

Similar to Preston *et al*'s argument above, a frame's scale can 'be used as a means of legitimising inclusion and exclusion of actors, proposals, and arguments in policy processes. Actors can behave strategically by framing the scale of the problem such that they situate themselves at the centre of power, such that they avoid responsibility for the problem or such that the problem gets scaled up or down' (Dewulf, 2013: 327).

Overall, the literature referred to up to this point provides the basis for assuming that policy-framing is an important factor in how decisions are reached in contexts of uncertainty, and that climate action can be and is framed in a variety of ways. This begs the further question of why a strategic framing of climate action might be considered.

Chapter 2
Why Reframe Climate Action?

2.1   Introduction

In the previous chapter it was noted that, even in the era of evidence-based policy-making, evidence (such as climate science) does not speak for itself, that someone needs to frame the policy problem in a way that garners the attention and concern of decision-makers. It was also noted that a key outcome of the framing effect is that seemingly inconsequential variation in the presentation of choice affects analysis and decisions, and this is true in the sphere of climate action policy. Taken together, these points suggest there is an opportunity to consider the policy framing of climate action, as presented to and received by Ireland's decision-makers. Following Section 1.4, the decision-makers of interest here are actors in the climate action policy area where they are involved, either directly or as onlookers and stakeholders, with an emphasis on the political governance sphere. The importance of this sphere to progressing climate action is clear. It has been stated that facing the climate challenge 'does not require a new committee, tribunal or convention. It requires a concerted commitment by existing political actors—political parties, policy experts and civil servants—to reconceptualise what is in Ireland's 'interests' in light of the unassailable scientific evidence already in the public domain' (O'Neill, 2018: 19). Improving the arrangements for policy analysis and decision-making on climate action, to in turn help achieve wider buy-in and commitment, must be a core objective.

Employing Weibel and Ingold's four categories (2018), the emphasis is on actors and entities having formal competences in the area of climate action. This is not to the total exclusion of those who are influential but have no authority to change policy, or actors known to be influential in this policy area. The analysis is also mindful of 'latent-actors', not yet mobilised (e.g. in newly formed or nascent groups; marginalised groups) (Weibel and Ingold, 2018: 336–337). The emphasis on the political governance sphere is not exclusive, but reflects the centrality of these particular decision-makers (public servants, officials, politicians) in ensuring that climate action matches climate ambition. These decision-makers are unique in their ability to legitimately mandate or prohibit action to progress Ireland's transition to low-carbon. That said, singular focus on the government would be unwise:

> The engine of information processing in policy systems are sub-governments. Sub-governments are defined collections of policy actors in government, and around government, who develop and make policy

within substantively specific issues. Usually, these sub-governments will contain an authoritative body (for example, a city council or congressional committee), an administrative unit for implementing policy (for example, the ministry of transportation or the police department), and supportive constellations of those interested in the policy issue (for example, Greenpeace or the Chamber of Commerce). Finally, sub-governments may also operate within specific policy areas (for example, energy policy), but be delineated along functionally differentiated lines (for example, regulate energy or subsidise the industry) (Koski and Workman, 2018: 294)

Framing effects operate at the level of the individual, but it is valid to consider policy framing facing sub-government institutions, as people fill positions in these bodies and they have agency (that is, choice) in the decisions the sub-government institution makes, and the institutions are an extension of the information-processing capacity of individuals (Koski and Workman, 2018: 297; Weibel and Ingold, 2018: 326). Organisations have been described as having their own 'behavioural world; the qualities, meanings and feelings that habitually condition patterns of interaction among individuals within the organisation in such a way as to affect organisational inquiry' (Argyris and Schön, 1996: 29). This includes the degree to which organisational behaviours are open or closed, flexible or rigid, risk-seeking or risk-averse. The importance of the organisational behaviours in climate action policy is obvious.

Individual behaviour is shaped by the sub-government structures in which one operates. These structures are the rules (the cognitive, interpretive frames and cultural norms) and resources (economic resources and authoritative and allocative power). In acting, 'the agent reproduces these structures' (Hermwille, 2016: 239). Sub-government institutions are a reflection of the individual decision-makers within them, and individual decision-makers are shaped by the sub-government institution they are active in. It is argued that governments, as decision-making institutions, need to 'nudge' themselves towards better decision outcomes (Hallsworth and Egan, 2018; see Section 2.5). In short, it is appropriate (and valid) to consider how employing policy framing can assist decision-makers collectively in the climate action policy area.

The challenges facing these sub-government decision-makers have been well articulated. They include 'the significant role of climate science, the global dimension, the combination of long-term threats and short-term costs, the associated challenge of achieving political commitment across government, and the technical nature of the main action areas, such as energy, transport and efficiency' (NESC Secretariat, 2012: 41). Climate action means overcoming problems of path dependence and institutional lock-in. Central to meeting these challenges is the ongoing need for Ireland to 'create effective domestic institutional arrangements for policy analysis, decision and development; and identify its strategic approach to decarbonisation, energy policy and green growth' (NESC Secretariat, 2012: 35). Given that policy framing affects 'information processing, steers policy debates, and

directs decision-making processes, it is of key importance to understand the framing of climate-change adaptation' (Dewulf, 2013: 328).

It is believed that policy framing and narratives can play a positive role in enhancing climate action policy analysis and decision-making. The NESC Secretariat's extensive work in 2012 makes a case for reframing the climate challenge based on a particular framework of analysis, while the call in the report for the EPA (Torney, 2018) for a new narrative for Ireland's transition is based on a short review of institutions in the electricity sector. The case set out here for any strategic policy framing of climate action is based on a different, specific analytical framework, which emphasises the impact of institutional and ideological factors, the role of interests, and irrational decision-making.

Climate action has been described as belonging to that 'strange category of things government does not want to do, but must do' (O'Neill, 2018: 14). Even if decision-makers are assumed to want to devise and implement climate action policies that will see Ireland's objectives achieved, the policy area is contentious. According to a report for the EPA, a new framing and narrative is needed because climate action presents 'a profoundly political and societal challenge' (Torney, 2018: 12).

While that report refers to how institutions can constrain climate action, analysing the governance challenge and how policy framing has the potential to assist means further disaggregating the socio-political challenge. Therefore, the problem is disaggregated here into four broad categories: ideology, interests, irrationality and institutions (see FitzGerald, 2016).

Figure 2.1: Analytical Framework
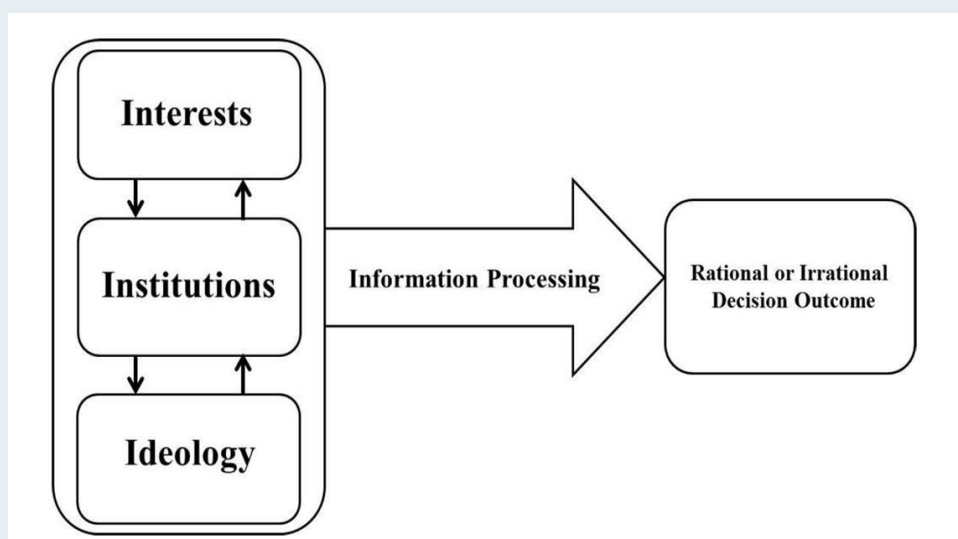
Source: FitzGerald, 2016.

Climate action proposals and policies encounter the forces of interests, institutions, and ideology, and must be interpreted by irrational decision-makers. The question is whether the framing of that climate action can mitigate any negative impact of interests, institutions, ideology, and irrationality. These four factors thus provide the strands for this analysis, and resonate with alternative categorisations. For example, describing energy policy deliberations Valentine *et al* (2017) recount six causes of contention that might be applied to wider climate action consideration: ideology, evangelism, interests, complexity, risk/uncertainty, and undemocratic exclusion:

    i.   Values and ideology: Distinct systems of values and beliefs can lead to competition over what should be prioritised.

    ii.   Energy evangelism: Energy is such a heated topic that the outcome can become a matter of religious or political faith, downgrading or ignoring opposing information.

    iii.   Competing interests: Energy is big business and no one wants to lose when the loss amounts to one's livelihood.

    iv.   Complexity and change: Stakeholders base their support on data and technology projections that are contentious and change rapidly.

    v.   Risk and uncertainty: Differing interpretations of hazards and their implications can convince people to make poor decisions.

    vi.   Undemocratic exclusion: Energy systems can exclude or marginalise people from the decision-making or licensing process.

These six causes of contention can be captured in the four categories applied here: ideology (1 and 2), interests (3), irrationality (4 and 5), and institutions (6). Key decision-makers must consider which climate action policies are optimal for Ireland in pursuit of stated objectives and, along with the need for a *shared understanding*, are hampered by the presence and impact of *ideology*, *interests*, *irrationality* and *institutions*. With reference to Table 2.1:

- Climate action has moved from being a techno-scientific issue to a broad socio-political issue, meaning that a *shared understanding* of evidence is required. Policy framing might assist the arrival at a common interpretation of the issues.

- Climate action involves near-term costs and distributional effects, and requires strategic action and investments by the state, elected governments and private actors. This raises the issue of perceived winners and losers, and of the role of the state. Climate action decision-making is therefore unavoidably political and *ideological,* and will generate reactions from *interests* affected by decisions. Policy framing might help mitigate the impact of these two factors on decision-making.

- Climate action is to address a sometimes abstract, structural challenge, characterised by longer-term benefits, pervasive uncertainty and complexity. This raises the challenge of *irrationality* in decision-making (e.g. bounded rationality, decision-making biases, loss aversion, salience effects, time inconsistency, etc). Policy framing might address some of the impacts of irrationality in decision-making.

- Climate action must be collective, raising challenges associated with *institutions* such as fragmentation and competing mandate problems. Policy framing might help address the effect of institutional challenges on decision-making.

Table 2.1: **Governance Challenges, Policy Framing and Narratives,**

Climate Action Governance Challenge	How Policy Framing/Narrative Might Help
Need for Shared Understanding	• Shapes how contested issues are understood • Assists shared interpretation of evidence, often by non-experts • Provides general, coherent interpretation of the issue • Supports a shared definition of the problem, and a linked strategy to solve it • Links climate action to deeply held beliefs and values shared by decision-makers • Draws highest attention to common elements • Emphasises crises or events faced collectively • Sustains understandings over the timeframes needed
Ideological Issues and Competing Interests	• Deflates the 'winners and losers' argument, and/or clarifies state and market roles (e.g. mitigation, resilience, or human security versus adaptation, transition, global equality, state security, or ideological clash) • Blurs the boundaries of power • Brings competing interests together • Shifts emphasis from zero-sum redistribution to positive-sum intertemporal distribution • Moves debate from 'narrow' to 'higher' issues • Aligns climate action with rational self-interest, electoral mandate and electoral success • Provides legitimation/power • Mitigates hindrances from competing interests via framing contest

Irrationality	• Simplifies the chain of reasoning from 'decision' to 'consequence'
	• Situates complexity within narrative that makes the decision-maker care (e.g. prestige, emotion-driven aspects)
	• Influences what the decision-maker believes there is to be 'lost' or 'gained'
	• Brings the problem 'home' and highlights success
	• Reduces the cost of decision-makers' being informed
	• Brings forward the pain of poor decisions (and the benefits of good ones)
	• Frames complex processes saliently
	• Makes the impact of climate action detectable and the victims (and villains) identifiable
	• Takes advantage of moments to present choices
	• Influences the timeline across which action is needed and will have an impact
Institutional Problems	• (As per 'Ideological Issues' and 'Competing Interests' section plus…)
	• Reorganises the decision-making system
	• Presents opportunities to place elements of the decision in the hands of those less susceptible to ideology, interests and institutional challenges.

Each of these challenges and how policy framing and narratives might ameliorate their negative impact are discussed in more detail in the following sections.

2.2   Framing to Prompt Shared Understanding

There are many reasons why climate action policy is considered to be an area where framing effects are likely to be important. For some, the importance of policy framing in this area is obvious: climate action policies are 'intrinsically bound to how people and policymakers interpret adaptation and the unspoken assumptions and goals they have in mind' (Remling, 2018: 478). Climate action is a policy area that has moved beyond its initial narrow, techno-scientific basis, and is now firmly seen as a broad socio-political issue. As a result, more interpretation is taking place, and by more people, many of whom have no technical expertise. This makes arrival at shared understanding of the problem, not to mention appropriate responses, increasingly difficult. As Moezzi *et al* ask: 'how do we balance the presence of multiple interpretations with the need for collective action?' (Moezzi *et al.*, 2017: 1).

According to one analysis, 'framing effects can be addressed through reframing strategies, strategies that help actors change the presentation or substance of their position, in order to find common ground and break policy deadlocks' (Hallsworth and Egan, 2018: 3). Climate action policy has evolved to require 'guidance and governance since a transition is purposeful and intended, and a broad range of actors is expected to work together in a coordinated way. Political actors, as well as regulatory and institutional support play a vital role but they also work in a context in which the very meaning of what is considered sustainable can be subject to interpretation and might change over time' (Kirby and O'Mahony, 2018: 40). These decision-makers bring their individual or institutional perspectives and 'construct frames about policy issues that may differ considerably from how others frame the issues', and though a particular policy frame 'does not determine what happens next, … whoever is able to set the terms of the debate steers the debate in a certain direction' (Dewulf, 2013: 322).

Climate action's socio-political nature means it requires 'knowledge of risk perceptions, who or what needs to adapt, and how' (McEvoy *et al.*, 2013: 289). McDermott and Surminski say that, despite there being more accurate evidence for decision-makers to call upon, creating a shared understanding of the problem and enabling informed evaluation and discussion of remedial action is a fundamental challenge. They find that, while the quality and relevance of evidence are clearly important, it is the interpretation and the application during the decision-making process that 'determines if and what action is taken' (McDermott and Surminski, 2018: 3).

Interpretation is now central to translating the science into policy. Some fear that 'truly novel interventions may be misunderstood, actively repressed, or simply ignored' (Di Gregoro, 2017: 134). In addition, the science will only deliver its potential impact if 'the information is perceived by relevant stakeholders to be not only credible, but also salient and legitimate' (Gilchrist and Irvine, 2014: 28). As we know, interpretation is heavily influenced by framing, and increasing salience has become a key objective of policy framing in recent years.

The absence of a unifying frame may result in decision-makers appraising climate action in ways that 'consolidate the *status quo* [rather] than bring about the kind of change that is both transformative and directed towards a sustainable system'. The absence of the frame facilitates numerous ways (as opposed to a unified way) of understanding or representing the issue, meaning 'outcomes are always open to multiple, particular, contextual, positioned and subjective assumptions, methods, forms of interpretation, values and goals' (Leach *et al* in Hermwille, 2016: 239).

Overall:

> … framing needs to be viewed as an important influence on adaptation pathways influencing not only our perspectives of climate risks but also how we assess them and ultimately how we respond (with consequent implications for the roles and responsibilities of different actors).

> Furthermore, if groups of actors (researchers, government, civil society organizations, households, individuals, etc.) persistently lack a shared understanding of what constitutes resilience and its relationship to the adaptation agenda, this will lead to inefficiencies in planning processes that seek to adapt to a changing climate as people will often talk unknowingly at cross-purposes without a common frame of reference. (McEvoy *et al.*, 2013: 289)

The previous chapter highlighted policy framing's ability to lead to 'shared understanding' as one of its core strengths. Policy frames are sense-making devices for groups of decision-makers, and the policy frame **shapes how contested issues are broadly understood by, and responded to**, by them. A narrative can unify the decision-makers by providing the general, coherent interpretation of climate action that supports a shared interpretation of the evidence, definition of the problem, and a linked strategy to solve it.

This may involve **linking climate action to deeply held beliefs and values shared by decision-makers, drawing the highest attention to common elements, or emphasising crises or events faced collectively** (Cairney, 2018). An awareness of the decision-makers' deeply held beliefs and values allows policy framers to consider how congruent (or otherwise) the climate-change narrative is, and hence how effective it might be in aiding a shared understanding:

> One of the most consistent [research] findings is that whether or not a narrative is congruent with an individual's values or beliefs matters in terms of how the narrative influences the recipient's interpretation of the narrative. What we mean is that if a person is, for example, conservative and they encounter a narrative that has content that they recognise as conservative, it is generally more favourably received. Congruent narratives are found to strengthen policy beliefs, increase the likelihood of accepting new policies, favourably structure how people recall policy consequential information, and lead to increased empathy. (Crow and Jones, 2018: 220-221)

The resulting shared understanding facilitated by a dominant or **unifying policy frame is more likely to be sustained (than fragmented understandings) over the timeframes needed to adopt and implement meaningful climate action.** As one scholar notes, 'adaptation cannot advance if conceptual understanding of adaptation processes must be rediscovered and renegotiated at the onset of every research endeavour or planning process' (Preston, 2015, 479). Above all, the unifying frame must be effective. It is possible that decision-makers could arrive at shared understanding through a unifying policy frame that does not yield meaningful action. Climate action, framed as an emissions problem, may allow decision-makers to share their understanding, but might well work against action, with decision-makers finding it difficult to see their actions reflected saliently in levels of emissions. Thus, the frame has to help policy-makers overcome

interpretation problems and issues such as salience (see Section 2.5), and ideological and other challenges.

2.3   Framing to Counteract Ideological Forces

Climate action incurs substantial costs in the short term, with related and distributional considerations. It will involve strategic action and investments by the state and private (market) actors. As Adger *et al* state, 'adaptive responses are not equal in terms of the sustainability of resource use, energy intensity, reduction of vulnerability, or in the distribution of their benefits' (Adger *et al.*, 2011: 757). The decision-makers of interest here face choices that are inherently and openly ideological. For example, how do we allocate the cost of transitioning away from cheaper fossil fuels, towards more expensive renewable energy sources, between the exchequer (taxpayers), households or enterprises? What about lower-income households? What about industrial energy and transport costs and their impact on national competitiveness, FDI, and trade? How should the necessary investment to fund climate action be allocated? By the state or through the market? Who should decide on (and fund) the optimal technology? What property rights will be affected, and how, as we transform our society? The transition to low-carbon and ideological choice are intertwined as climate action 'requires changes in socio-technical systems and wider societal change—in beliefs, values and governance that co-evolve with technology changes' (Kemp *et al.*, 2009: 78). The existence of the *just transition* frame exemplifies that an *unjust transition* is also a possibility, with winners and losers across the economy and society. The recent call for a new climate-change narrative in Ireland is based partly on a recognition of this, recommending a frame that takes seriously 'the need to protect those who will lose out as a result of the transition' (Torney, 2018: vii).

Decision-makers in the arena of climate policy cannot avoid ideological considerations around distribution effects, the role of the state versus the market, and the balance between rights and responsibilities. The climate actions they settle on 'are deeply political. They influence social relations, involve substantive redistribution of authority and resources and what may seem as 'good' adaptation in one place may lead to negative effects elsewhere' (Remling, 2018: 478). For some scholars these ideological issues, albeit with a variety of names, are at the core issue for climate action policy, and the failure to match the trajectory ambition. Di Gregorio refers to them as *policy core beliefs*, for example:

> Policy core beliefs include priorities such as the importance of economic growth versus environmental protection, the appropriate division of authority between government and markets, and core value priorities of a subsystems such as the need to address inequalities and poverty or to facilitate growth in order to achieve sustainability. (Di Gregorio, 2017: 134)

Kirby and O'Mahony speak of the *prevailing dominant paradigm*:

> … the reality that policy is much more influenced by the prevailing dominant paradigm than by the evidence of science. [Mitchell] describes it as a 'band of iron holding together a certain framework' so that the framework 'constrains certain actions or policies'; until this band of iron is broken, she writes, 'the UK can only do so much and no more in its quest to move to sustainable development'. And what holds for energy policy in the UK, holds equally for the range of policies to transition to low-carbon society in countries throughout the world. (Kirby and O'Mahony, 2018: 46)

Echoing the idea of 'winners and losers', Hendriks refers to '*haves and have nots'*:

> [Energy] issues are a central feature of our everyday existence, affecting our mobility, the way we produce and distribute food, and how and where we live. It is conceivable that as energy demand increases, the differentiations between 'energy haves and have-nots' will sharpen. The beginnings of such energy divisions are already evident as rising fuel prices continue to hit the poor the hardest. (Hendriks, 2008: 1014)

The impact of ideology on policy-making should not be underestimated. An ideological stance can 'serve as the primary perceptual filter for actors in a policy subsystem to determine interaction… These worldviews, including the role the state should take in policymaking, the importance of nature and nature conservation to an actor, or the degree of freedom given to certain individuals or firms, are difficult to change' (Weibel and Ingold, 2018: 333). Referring to energy policy specifically, Sovacool and Brown (2015) identify a number of competing ideological frames:

- The *free market libertarian* frame: Energy is a commodity, or collection of commodities such as electricity, coal, oil, and natural gas. It is best managed by the free market (key proponents include economists, financiers, some politicians).

- The *philanthropic* frame: Energy services are a fundamental human right (key proponents include NGOs, aid groups).

- The *justice* frame: Energy decisions must respect free, prior, informed consent, and be equitable in their distribution of costs and benefits (key proponents include lawyers, ethicists, philosophers, some politicians).

- The *neo-Marxist* frame: The global energy system exploits class inequality (key proponents include activists, socialists, unions, labour economists and political ecologists).

Overall, 'decisions are justified by, if not predicated on, beliefs—beliefs which may or may not be supported by objective data, constantly blurring the line between fact, fiction, and frames' (Sovacool and Brown, 2015: 37 and 38). Regardless of precise term, in what way does ideology affect, in a practical sense, climate action policy? While the concept of a *just transition* is prevalent and energy poverty is a prominent concern, the ideology of climate action—in the literature reviewed here—boils down to the normative views on the role of the state versus the role of the market. A recent review of three key European Union climate action policies concludes that 'the documents suggest that 'the challenge of adaptation' can be solved by having faith in markets and technological innovation', an approach (it is claimed) that reduces the likelihood of political opposition. For Mitchell—and Kirby and O'Mahony—ideology (a.k.a. as the *paradigm*) structures institutional power and relationships. The frame suggests that 'the market is best placed to select the means to achieve the objectives sought, within a broad regulatory framework set by the State'; for example, the UK's policy for stimulating the development of sustainable energy technologies has been argued to rest on the 'Regulatory State paradigm' (Kirby and O'Mahony, 2018: 44). The ideology of climate action manifests itself in the decision-making structures, which persist over time, creating 'ideological lock-in'. The ideology 'establishes its own institutions and those institutions initiate policies' based on the principles of the ideology (e.g. relying on competition in the market to be the main arbiter of value).

These ideological principles and polices 'promote narrow, short-term, economic considerations which are unlikely to deliver the technical, industrial, and human innovations required' (Mitchell in Kirby and O'Mahony, 2018: 44). In the UK, this manifests itself as powerful private firms, in the nature of their regulation by the state, in citizens' consumption practices, and in the nature of innovation. The relationship between these is based on political and economic power, and they shape what is possible, in terms of policy.

The role of the state versus the private sector in the design and delivery of climate action is an inherently ideological issue, but these roles have shifted over time. For example, infrastructure industries are often central to strategies and action to progress the transition of a low-carbon economy. Jordana (2014) notes that a few decades ago most infrastructure industries were owned and managed within the public sector, while privately provided infrastructure was not the norm (outside of the US). However, strained public finances, electoral resistance to higher taxes, the pace of innovation, a fear of state-owned white elephants, perceptions of public sector inefficiency, waste and 'gold-plating', and ever-increasing demands for more modern infrastructure, 'forced States to explore new forms of infrastructure provision. The end result has been a growing reliance on the private sector' (Jordana, 2014: 167). That shift in roles and involvement is received with more or less enthusiasm depending on one's ideological position.

The argument is that climate action ideologies favour certain approaches, actors and actions over others (Kirby and O'Mahony, 2018: 46). Interestingly, this does not necessarily mean *exclusion*. In the case of the pro-market ideology, the impact has

been presented as ideology complicating the parsimony of the research output regarding transition to a low-carbon economy. Rather than excluding, neglecting or marginalising views and actors, ideology can affect consideration of climate action by integrating 'as wide a range of issues as possible, placing the focus on the whole system and the dynamics that structure it' (Kirby and O'Mahony, 2018: 47).

So, if climate action is in fact hindered by the influence of ideological considerations (state versus the market; winners and losers), **framing can assist by deflating arguments and/or clarifying roles**. Certain frames are likely to be more helpful than others in this regard, for example by framing climate action in terms of mitigation, resilience or human security as opposed to adaptation, transition, global equality, state security, or (of course) as an ideological clash.

Giving more thought to the climate action policy frame may be as fruitful in resolving ideological forces as providing more evidence. **Where ideology is a barrier, effectively promoting climate action is less to do with facts and more to do with decision-makers' worldview**: 'more information or better data will do little to resolve conflicts by itself. People in a particular frame will discount even the most robust, reliable knowledge if it does not fit within their worldview or assumptions… [Rather] than attempting to marshal 'facts' whenever one encounters contention, perhaps a better strategy would be to decipher the deeper, underlying assumptions and values; ask what is at stake and who these benefit; and search for a common ground…' (Sovacool and Brown, 2015: 41).

Ultimately, **proponents of more ambitious climate action must more strategically and actively identify and consider the worldview that decision-makers will bring to the issue,** and frame the challenge in a way that deflates or clarifies the conflict inherent in it (state vs. the market, winners and losers).

2.4   Framing as a Response to Competing Interests

To recap, the decision-makers of interest here are actors in the climate action policy area where they are involved, either directly or as onlookers and stakeholders, with an emphasis on the political governance sphere. State actors, incumbent market operators, and investors in technology will pursue their own interests in the decision process. A subset of these decision-makers have particular interests, being subject to political constraints as elected, political decision-makers, government departments, or senior officials. Such decision-makers must be aware of the electoral mandate received, the popular mood, and, in many cases, the desire to be re-elected. Elected decision-makers are unable or unlikely to conflict with what they perceive to be the majority view of constituents. As O'Neill says of climate action, 'there are no (or few) votes in it. Doing it properly entails more effort and higher taxes. It involves uncertainty, complexity and a fractious mix of potential winners and losers' (O'Neill, 2018: 14). For Jacobs, one of the main hurdles to future-

oriented state action (such as in response to climate change) is the problem of electoral risk, rooted in the scarcity of voter attention (Jacobs, 2011).

Rather than being evidence of irrationality (see below), climate *inaction* can be a product of rational self-interest to avoid difficult action, hold/increase market share and power, minimise electoral punishment, and protect investment. Therefore, the need to improve the understanding of the politics and policies of climate action is described as being pressing because 'issues of power and politics had originally been somewhat neglected' (Markard *et al* in Kirby and O'Mahony, 2018: 40).

In its 2012 analysis, the NESC Secretariat exemplified this issue: 'democratic governments, especially in small open economies (or those without large hydro-carbon and nuclear energy supply), face great difficulty in imposing high carbon pricing, not only from business, but also from consumers' (O'Donnell, 2012: 32). This difficulty was identified as one of 'a tragic pair of truths' in the dominant framing (along with carbon pricing's inability to deliver the desired effect on the use and creation of technology). The NESC Secretariat added: 'We need some reframing to escape their apparently tragic force. When we reframe, we can' (*ibid.*: 33).

Climate policy is described as a sphere where 'powerful beneficiaries of existing systems and those who seek benefit from new opportunities compete for influence' (Miller *et al.*, 2015: 66). Sovacool and Brown describe climate action policy as:

> … often a domain of conflict, not cooperation, and it envelopes nexuses of differing interests. Organised consumer groups contend with organised producer groups to question energy rates and prices. Business and labour groups in the different industries, such as nuclear power, oil, coal, and natural gas, compete for preferential treatment by governments. Federal, state, and local stakeholders differ over the division of authority. Geographic regions seek to influence policy in ways favouring their situations as energy producers or consumers. (Sovacool and Brown, 2015: 38).

For these reasons, the authors go so far as to say that consensus should neither be expected nor sought. Whatever about universal consensus, this paper holds that shared understanding and some consensus among the decision-makers of interest is valuable and might, in theory, be assisted by a particular policy framing.

Key to this proposition is the finding by Hermwille that policy framing narratives 'can influence and in fact co-determine everyday decision-making by regime actors [and can] contribute to *delimiting the space of what is politically feasible'* (Hermwille, 2016: 238, emphasis added). Climate policy in Australia is explicit about this issue, stating that it is clear 'that modern politics shies away from leadership that involves rapid change or change that challenges public opinion, but such leadership is called for as challenges mount' (Australia 21, 2009: 7). In Ireland, the solution lies, in part, in 'a broader societal dialogue with a range of perspectives and

inputs that frames the issue carefully and scientifically before interest groups start lobbying' (O'Neill, 2018: 18).

By delimiting the space of what is politically feasible, policy framing can mitigate the barriers to climate action caused by NIMBY (Not In My Back Yard) views, and, perhaps more importantly in this case, by NIMTO (Not In My Term of Office) positions (Visgilio and Whitelaw, 2003: xiv).

Of course NIMBYism is a familiar challenge in climate policy and one that makes it 'difficult to create governance structures that hold up… Competing pressures may exist and, at least temporarily, delay building of new infrastructure capacity. For example, pressure groups may mobilise in opposition to the creation of new infrastructures, because of either wider environmental concerns, political opposition to particular technologies, or the immediate impact on their area (e.g. noise)' (Jordana, 2014: 168). It is not just change that mobilises interests, as 'social protests abound, surrounding every major form of proposed future energy development, including proposals to continue the status quo' (Miller *et al.*, 2015: 66).

Depending on the extent of that mobilisation and the overlap with constituents, political decision-makers and senior officials can be expected to be tempted by a NIMTO strategy. It may be accepted that climate action, and costly action, is required but it may only be politically acceptable if the pain is borne in the subsequent phase of the electoral cycle. As Hovi *et al* put it, 'a government eager to secure support for a broad range of [climate actions]—and to stay in power—may stall at the domestic political costs of implementing the mitigation measures required. Moreover, even if it were to put all its muscle behind the effort, it may very well fail. The dynamics of political processes are such that even broad support for a certain goal may be hard to translate into approval of the specified measures required to reach that goal' (Hovi *et al.*, 2009: 21). The benefits are almost certainly only to accrue years hence.

This intertemporal challenge is expanded on in the next section, but research suggests that 'even though policy-makers should be well aware of the trade-off between going fast and going slow, the benefits of waiting are likely insufficient to justify delaying rapid de-carbonisation, in light of the significant risks associated with waiting' (Denny and Weiss, 2015: 23).

Of course, not all political actors respond to the climate action challenge with indifferent, obstructive or delaying strategies: 'many view being a leader as politically advantageous vis-à-vis their various constituencies and their political ambitions (e.g. California Governor Schwarzenegger). The political calculus, however, is quite vulnerable to changing circumstance, and may thus be a less reliable motivation' (Moser and Dilling, 2007: 693).

In Ireland, strong commitments on climate action have led some to electoral success, the recent Citizen's Assembly points to a broad mobilisation in favour of

ambitious climate action rather than in opposition to it, and current progress towards legislation to end the granting of licences for fossil-fuel exploration and extraction all point to a potential, changing political backdrop.

How are interests and policy framing linked? Di Gregorio refers to the politico-economic conditions 'that grant power to particular vested interests' and that also affect the adoption of the policy frame: 'the strength of status-quo interests—that is, groups whose interests might be negatively affected by changes required to bring about transitions to sustainability—is critical. Countries in which status-quo interests are stronger will be likely to exhibit more win-win discourses, which are more amenable to business-as-usual arguments opposing significant—or sometimes any—changes…' (Di Gregorio, 2017, 135).

Abandoning the notion of consensus altogether, as suggested by Sovacool and Brown above, seems unwise given that 'decision-makers, interest groups and civil society organisations need each other, they are inter-dependent' (Dunlop and Radaelli, 2018: 261). In the midst of this interdependence sit multiple frames and narratives, some elements of which 'inevitably contradict each other philosophically, while others can harmonize to create a variety of policy coalitions over time' (Miller *et al.*, 2015: 67). Decisions on climate action are a product of 'mechanisms of exchange' and interactions where information is handled and changed: 'Though decision-makers are not seeking truth (indeed they are bargaining), they select, acquire and trade information to inform their negotiating positions. This ultimately influences what they are willing to 'give' to competitors but it also generates a by-product: learning' (*ibid*.). Again, these mechanisms of exchange offer the opportunity for policy framing.

Policy frames can assist in a number of ways. First, as discussed earlier, policy framing helps create a shared understanding in the face of the ambiguity associated with climate action. Such ambiguity is one of the drivers of controversy and limited political feasibility, as it 'exposes alignments of political power' (Dekker, 2017: 131**).** A unifying frame can **blur, in a positive way, the boundaries of power between competing interests**.

Second, a policy frame can **bring interests together to begin, continue or restart meaningful exchange**. Shared narratives 'are well positioned to accomplish the goals of facilitating improved engagement and decision-making among mixed groups that span not only traditional participants in energy policy but also an interested array of more diverse participants and overcoming the blinders inherent in legacy energy discourse and achieving greater integration of technical and social facts and values as futures are being deliberated and acted upon' (Miller *et al.*, 2015: 67).

Third, Jacobs' case studies (2011) suggest that framing the opportunities and trade-offs for the well-organised interests that would bear the investment's costs can be beneficial. More specifically, a long-term policy decision (such as climate action policy) might be framed as either an issue of horizontal, zero-sum redistribution

away from a group, or framed as **a positive-sum intertemporal trade-off that imposes costs on the group today, for greater benefits for them tomorrow**. Further, when decision-making institutions make it clear to interests that their first preference (redistribution) is not achievable, groups will often accept this second-best option.

Fourth, policy framing can **help exchanges between decision-makers shift from narrow, collective interests to 'higher' concerns**: '… at the individual and group levels, many facts of social systems, including social norms and narrow interests can hinder change, as can organisational culture and herd mentality. Communicators would do well to help people find higher common ground and identify ways to meet their diverse goals in ways that help reduce or at least not increase their emissions impact' (Moser and Dilling, 2007: 697). For example, as part of the *2030 Scotland Project*, framing was used that normalised change by 'communicating the performance of key low carbon behaviours as being the norm for those living in the low carbon society of 2030, as well as highlighting the existing norms that can be built on to achieve our goal of a low carbon society'. It also presented a shared journey: 'building recognition that becoming a low carbon society will require actions on the part of individuals and institutions across society by highlighting the roles that different sectors of society will play in the transition, where appropriate' (Gilchrist and Irvine, 2014: 3).

Fifth, policy framing can help **align climate action with rational self-interest, electoral mandate and electoral success**. Jacobs (2011) believes that finding a way to insulate decision-makers from electoral consequences is key to governing successfully for the long term, a not straightforward task. Central to achieving this is the view that there are wider electoral advantages in taking strong, public stances on climate-change issues. In this way, ambitious climate action can align with the rational self-interest of an elected decision-maker and his or her officials.

For example, following Dodsworth (2017), policy framing can allow *differentiation through antithesis* ('My Party is the only mainstream political party calling for X'). Or policy framing can assist the use of the *rhetorical technique of logic and reasoning* ('Opponents of this climate action say we are asking people to go back to living in wigwams'; 'Our opponents' position is an irrational obsession which is driven by ideology not evidence').

Another example is *evoking of ethos*. In proposing or supporting climate action, the decision-maker employs a frame that stresses both their own character and 'how this reflects the character of the country as a whole' (e.g. position is framed in the context of the recent Citizens' Assembly deliberations).

A final example is framing's ability to allow *policy unification*, the joining-together of climate action and other key concerns in order to appeal to an existing base and new voters. Strong, well-framed stances on climate action provide self-interested decision-makers a way to unite concerns and competing interests over climate

change, a resilient economy, strong employment, and good government, etc. (Dodsworth, 2017: 149 to 170).

Sixth, policy frames can help **provide legitimation**: 'Politicians have to provide meaningful explanations for their decisions. If not, legitimation will erode. Also, domination in the form of (political) power resources rests on successful narratives, as, at least in a democratic system, political power will hardly endure without legitimation' (Hermwille, 2016: 239).

Finally, the process of framing or reframing can itself **help identify and mitigate hindrances that result from competition between interests**. The policy framing process can be used as:

> a strategy to reach communicational or political goals. When more actors are trying to influence a policy debate through framing, frame contests may be the result, in which frames and counter-frames are constructed, promoted, or undermined. Through framing, implicitly or explicitly, particular interests are advocated or undermined, power positions are maintained or challenged and particular actors are included or excluded from policy debate. (Dewulf, 2013: 322)

Initiating a frame contest is not without risk, however: 'actors may get trapped in a frame contest, where different actors strategically try to have their frames prevail. This can result in policy controversies, intractable conflicts, or paralyzed decision-making, which can severely hamper the achievement of adaptation outcomes' (*ibid*: 328).

2.5   Framing to Mitigate Irrationality

The regular statement that climate action is inadequate because policy-makers simply do not want to take it, that they lack motivation, is generally incorrect. Often, decision-makers are well motivated by moral, economic or legal imperatives yet progress is slow, targets are missed, and the trajectory slips. Obstacles (other than a lack of motivation) persist and, for Moser and Dilling, 'our mental models or habits of thought are among the most critical barriers to change'; however, these obstacles are rarely consciously considered (Moser and Dilling, 2007: 679 and 680). One reason why decision-makers' thought-processes are ignored is the presumption that policy-making during a policy cycle is rational, a presumption that has been described as 'the biggest work of fiction in policy studies'. The reality is that policy-making often seems counterintuitive and suffers from information overload. Policy-makers regularly have to ignore problems, never mind ways to understand and solve them. They often have to 'address policy problems without fully understanding them' (Cairney, 2018: 200 and 201). Contrary to the assumption underpinning what Moser and Dilling call 'Western rationalist mythology', decision-makers do not engage in rational thought exclusively, rather they arrive at decisions

based on 'a myriad of influences, including irrational beliefs and emotions' (Moser and Dilling, 2007: 685). Behavioural science takes these factors (bounded rationality, emotions and biases) into account.

> Fortunately, many economists would view the [rational actor model] as outdated. This is largely attributable to the advent of "behavioural economics," a subdiscipline of economics that incorporates more psychologically realistic assumptions to increase the explanatory and predictive power of economic theory. The field first achieved prominence in the 1980s and has been gaining influence since then. And much of the thrust of behavioural economics has involved, or at least could be construed as involving, an enhanced understanding of emotions. (Rick and Lowenstein, 2008: 139)

This paper is not intended to recount the history or development of behavioural science, but a summary might be useful (see Hargreaves Heap, 2016). The limits to rational human behaviour and the powerful role of emotions in decision-making have been facets of economic and political theory for centuries (FitzGerald, 2016: 14 and 15). Adam Smith's first book *The Theory of Moral Sentiments* (1759) noted that behaviour is the outcome of the struggle between what he termed the 'passions' and the 'impartial spectator'. Similar concepts persisted through to the 1930s where, for example, Keynes wrote of ephemeral factors influencing markets (Keynes, 1936: 98). It was only in the post-World War II era, particularly with the work of Paul Samuelsson (1947), that the rational-actor model, with assumptions of rationality, expected utility and optimisation, became embedded in theory. In the 1950s, Milton Friedman examined the realism of these assumptions and posited his 'as if' theory: actors may not be entirely rational but can be assumed to behave as if they are. It was believed that deviation from rational decisions may occur but does so randomly, is randomly distributed, that deviation had a mean of zero, and could thus be accommodated within the error term of the rational-actor model. In the subsequent fifty years, the notion of irrationality (bounded rationality and decision-making biases) emerged to again place the limits to rational behaviour and the power of emotions at the centre of decision-making theory. Empirical research has shown that deviation from rational decisions is not random nor randomly distributed, and thus cannot be accommodated within the rational-actor model's error term.

Herbert Simon questioned the capacity of the human mind to formulate and solve complex problems, as assumed by rational-actor models. Kahneman and Tversky provided 'experimental evidence that the departures from the normative ideal of expected utility theory are not just random. They are systematic and this upsets the comfort of… accommodation of the facts with the theory' (Hargreaves Heap, 2016: 62). Behavioural science has been increasingly influential since the 1980s, notably in the sphere of behavioural finance (Barberis and Thaler, 2003) and so-called nudging techniques (Thaler and Sunstein, 2008). This paper continues on the presumption that policy-making during a policy cycle is irrational, and that policy framing could strengthen governance of climate action by addressing some of these issues.

Before progressing, **it is important to briefly discuss the use of the term 'irrationality' in this research, not least because of its potential to offend decision-makers and provoke resistance.** Irrationality is a term used regularly in behavioural economics and behavioural science. For example, the Nobel prize-winning behavioural economist Robert Shiller writes about decision-making and the forces contributing to market bubbles and economic crises in his book *Irrational Exuberance* (2005), a New York Times bestseller. Author and economist Dan Ariely has written extensively about decision-making and its consequences in his books *Predictably Irrational* (2008) and *The Upside of Irrationality* (2010). Closer to home, the official inquiry into Ireland's financial crisis named *irrational forces* as a specific contributing factor (Nyberg, 2011; FitzGerald 2016).

Standard dictionary definitions of irrational (e.g. 'not logical or reasonable') are not intended to apply fully here. As in the aforementioned cases, irrationality is used with a specific meaning and purpose in this paper: **irrationality is the impact of bounded rationality** (Simon, 1955, 1957) **and empirically established decision-making biases** (Kahneman, 2011). Nobel prize-winning behavioural scientist Daniel Kahneman notes the potential for the concepts of irrationality and decision-making bias to cause offence:

> Much of the discussion… is about biases of intuition. However, the focus on error does not denigrate human intelligence, any more than the attention to diseases in medical texts denies good health. Most of us are healthy most of the time, and most of our judgments and actions are appropriate most of the time. As we navigate our lives, we normally allow ourselves to be guided by impressions and feelings, and the confidence we have in our intuitive beliefs and preferences is usually justified. But not always. We are often confident even when we are wrong, and an objective observer is more likely to detect our errors than we are. … [the aim is to] improve the ability to identify and understand errors of judgment and choice, in others and eventually in ourselves, by providing a richer and more precise language to discuss them. (Kahneman, 2011: 4)

Despite common definitions and usage, the terms irrationality and biases are not used pejoratively in behavioural science. Beliefs and emotions may lead individuals away from so-called rational decisions, but this is thought to have evolutionary roots. Abbott *et al* refer to an extensive review of economic decision-making in humans vs. nonhuman primates, which finds that 'many biases that appear to be irrational from a 'rational choice' perspective are rational from a biological or an evolutionary point of view' (Abbott *et al.*, 2016: 12). In fact, one of the so-called 'fathers of behavioural economics' (Amos Tversky) is reported to have joked that there once was a species that did not display a particular decision-making bias, the endowment effect, but the species is now extinct (Thaler, 2015: 261).

The endowment effect is the irrational tendency to put a higher value on our possessions than we would be willing to pay for them, and is just one of many empirically established decision-making biases.

The empirical base is also crucial. Framing effects go beyond semantics, 'spin', marketing or propaganda. Irrationality and framing effects are empirically established in behavioural science, and their impact on policy-makers and policy-making is continually examined with scientific rigour. Hallsworth and Egan (2018) cite a number of examples:[2]

> *Confirmation bias*. Politicians in Denmark who were given performance statistics about two hypothetical schools (one publicly funded, one privately funded) were much less likely to correctly identify which school was performing better when the answer clashed with their ideological preferences. The difference was huge: 92 per cent chose correctly when the answer was aligned with their beliefs, and only 56 per cent when it was not. Perhaps more alarmingly, when politicians were given more information, they actually performed worse, relying more on their prior attitudes.

> *Framing*. The presentation of policy ideas and choices greatly affects what governments end up doing. For example, politicians and officials were consistently more likely to choose a risky policy option when it was presented in terms of how many deaths it might prevent rather than how many lives it might save. This result was found in

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[2] The research examples cited are, in order:

- Baekgaard, M., Christensen, J., Dahlmann, C., Mathiasen, A., and Petersen, N. (2017). "The Role of Evidence in Politics: Motivated Reasoning and Persuasion among Politicians". *British Journal of Political Science*, 1-24.
- Sheffer, L., Loewen, P., Soroka, S., Walgraave, S., and Sheafer, T. (2018). "Nonrepresentative Representatives: An Experimental Study of the Decision Making of Elected Politicians", *American Political Science Review*, 112(2), 302-321.
- Banuri, Sheheryar, Dercon, Stefan, and Gauri, Varun (2017). *Biased policy professionals*. World Bank Policy Research Working Paper, WPS 8113.
- Bellé, Nicola, Paola Cantarelli and Paolo Belardinelli (2018). "Prospect Theory Goes Public: Experimental Evidence on Cognitive Biases in Public Policy and Management Decisions", *Public Administration Review*, online version of record before inclusion in issue. Available at: https://doi.org/10.1111/puar.12960.
- Bergman, Peter, Jessica Lasky-Fink, and Todd Rogers (2018). *Simplification and Defaults Affect Adoption and Impact of Technology, But Decision Makers Do Not Realize This*. Working Paper. Available at: https://scholar.harvard.edu/files/todd_rogers/files/simplification_defaults_affect_adoption.pdf.
- Liu, Xinsheng, James Stoutenborough and Arnold Vedlitz (2017). "Bureaucratic expertise, overconfidence, and policy choice", *Governance*, Volume 30, Issue 4 pages 705-725.
- Sheffer Lior, and Peter Loewen (2017). "Electoral Confidence, Overconfidence, and Risky Behavior: Evidence from a Study with Elected Politicians", *Political Behavior*. Available at: https://link.springer.com/article/10.1007%2Fs11109-017-9438-0.

experiments with 154 politicians across three national parliaments, 2,591 staff from the World Bank and UK Department for International Development, and 600 Italian public-sector employees.

Illusion of similarity. Policymakers struggle to differentiate their own experiences from those of the public they serve, often overestimating how much people will understand or embrace the policy in question. Their own deep involvement in the policy may make them assume that people will be paying attention, grasp what the policy is trying to achieve, and go along with it—none of which may be true. For example, a recent study showed that policymakers greatly overestimated how many parents would make even a small effort to sign their children up for a new educational intervention.

Overconfidence. A recent study of 597 U.S. climate change officials found that they tended to be overconfident in their knowledge and abilities, particularly when they had more years of experience. Moreover, this overconfidence also meant they were more likely to make risky decisions—a problem if this risk-taking is based on false assumptions. Another study found that politicians who were overconfident in their chances of re-election were more likely to make a risky policy choice; there was no relationship between risk-taking and a more objective measure of re-election chances.

Taken together, the evidence suggests that policymakers… are susceptible to biases themselves. (Hallsworth and Egan, 2018)

Framing should not be suggested or undertaken for its own sake, or for underhand reasons (see Section 3.3). Previous NESC Secretariat work, for example, illustrates the valid, real, desirable and significant policy action that can flow from a reframing in climate policy. In that case, it was proposed that widening the policy frame could deliver a more ambitious and effective response to climate change in Ireland via a three-track approach: strategic and institutional, exploration and experimentation, design and implementation (NESC Secretariat, 2012).

With the definition and empirical base briefly discussed, it is now time to separate the irrationality challenge facing decision-makers into two categories: problems arising from *bounded rationality*, and those arising from *decision-making biases*. This distinction has implications for why and how policy framing can help, as will be outlined later.

2.5.1   Bounded Rationality

Bounded rationality is a concept developed (and a term coined) by Herbert Simon in the 1950s, which 'explicitly rejects conventional economic theories and modelling techniques' (Ghisellini, 2018: 1). Economic theory based on rational actors pursuing optimisation implies certain computations. Simon's empirical proposition was that

'there is a complete lack of evidence that, in actual human choice situations of any complexity, these computations can be, or are in fact, performed' (Simon, 1955: 104). The explanation was *bounded rationality*:

> The capacity of the human mind for formulating and solving complex problems is very small compared with the size of the problems whose solution is required for objectively rational behaviour in the real world—or even for a reasonable approximation to such objective rationality. (Simon, 1957: 198)

Simon emphasised the limitations of knowledge and computing power of decision-makers in the face of everyday complexity, rendering them incapable of making objectively optimal choices. As a result of this bounded rationality, 'decisions are often based on the use of 'satisficing' (i.e. satisfactory plus sufficing) mental shortcuts such as heuristics' (Ghisellini, 2018: 1). Contrary to the normative rational actor/optimisation model, the descriptive behavioural science model has demonstrated that the reality is bounded rationality, bounded willpower (self-control failure) and bounded self-interest (co-operation). Devising the policy response to climate change requires high cognitive effort and a decision-maker incurs a high cost of being informed, relative to the short-run benefit (Downs Paradox), and political decision-makers have a finite 'pool of worry' (Millner and Ollivier, 2016).

These limitations have consequences for decision-makers in climate action policy, for example:

- *Bounded rationality can leave climate action decision-makers resistant to important facts*: 'In an information-overloaded world, our filters have become very selective. People may simply block out yet another climate-change story that follows an all-too familiar pattern, uses the same old 'talking heads,' triggers the same old associations, or worse, says one more time (in pictures or words) that 'the sky is falling' (Moser and Dilling, 2007: 694).

- *Bounded rationality can leave climate action decision-makers resistant to complete information*: 'Diverse sources of information, especially if independent, greatly increase the quality and quantity of information available to policymakers…. Informational costs pertain to the generation of information about a problem. Cognitive costs pertain to understanding the problem or processing the supply of information' (Koski and Workman, 2018: 304).

- *Bounded rationality can leave climate action decision-makers resistant to technical information:* One challenge in policy spheres such as climate action is to provide supporting balanced information 'in ways that allow people to grasp the technical and social complexities involved but without overly constraining their possible options or deliberations in advance' (Pidgeon *et al.*, 2014: 13607).

- *Bounded rationality can leave climate action decision-makers open to a reduced number of sources:* 'Problems are multifaceted, but bounded rationality limits the attention of policy makers, and actors compete to highlight one image at the expense of others. The outcome of this process determines who is involved (for example, portraying an issue as technical limits involvement to experts) and responsible for policy, how much attention they pay, and what kind of solution they favour' (Cairney and Oliver, 2018: 400).

These bounded rationality problems emerge from the complexity, ambiguity and uncertainty facing decision-makers involved in climate action policy. An important aspect of this policy area is if, when, and how to invest in particular infrastructure projects. As Jordana states, some argue that infrastructures are 'defined by their 'fixed asset' characteristics in that upfront initial investment is critical for the provision of services. In addition, these high fixed asset costs also mean that decisions are difficult to reverse' (Jordana, 2014: 165).

Further, because private investors crave regulatory certainty, the nature of modern, global, competitive project financing also implies a punishment for decision-makers should they seek to row back on a policy. High-cost and difficult-to-reverse decisions are not ones where complexity, uncertainty and ambiguity are particularly welcome. Many of the complexities associated with decision-making for significant infrastructure investment are present and impactful in the broad area of climate action also. These complexities lead to governance dilemmas for the state and others—in the light of bounded rationality—and include, in no particular order:

- settling on the appropriate time horizon;

- employing a complete set of criteria and pricing externalities to inform the decision;

- landing on the correct public/private mix and the resulting need for regulation;

- identifying the appropriate project scale (from mega/national, to small/local);

- deciding on appropriate decision-making level (national versus decentralised);

- selecting the optimal technology;

- ensuring democratic legitimacy for decisions to be taken over long timeframes;

- providing equitable distribution of risks/costs/benefits;

- balancing reliance on expert opinion with the need for societal participation in the decision;

- ensuring long-term finance capability; and

- guarding against 'lock-in' in terms of technology and costs.

(see Jordana, 2014)

Thus climate action presents decision-makers with 'an ever-deepening sea of information regarding policy problems, constituent demands and solutions… the problems are complex, multi-dimensional and boundary-spanning'. Complexity may be a feature of the *problem*, but also of the expected *benefits.* Jacobs notes the challenge of prediction, deriving from the complexity of long-term policy effects, as one of the distinct hurdles to future-oriented state action (Jacobs, 2011). Approaches such as punctuated equilibrium theory 'profoundly challenges the convention that governments cannot make good decisions because they don't have enough information. It contends that governments have too much information, that they are cognitive misers…' (Koski and Workman, 2018: 293 and 295).

In addition to this complexity facing decision-makers, comes ambiguity. They face ambiguity from the 'different perspectives on the (nature) of the problem and preferred solutions. For example, there is no consensus on what sustainable energy or agriculture means in real practical terms. For some biological agriculture is sustainable; for others the larger land requirements of biological farming makes it not sustainable in a global context. Each option has its own setbacks' (Kemp *et al.*, 2009: 81). Policy-makers face ambiguity even in the certainty of science: '[While] the expected effect of doubling CO_2 emissions… is an increase in mean global temperatures of the order of 1.5–2.5 degrees Celsius, there is more than a ten percent chance that it will result in temperature increases in excess of 6°C' (Denny and Weiss, 2015: 22).

In such circumstances, and if we assume that decision-makers face risks when choosing between climate actions (or between action and inaction), *ambiguity aversion* is likely to be at play. Ambiguity aversion is a decision-making bias whereby decision-makers display a 'greater willingness to take risk in contexts where people can quantify the risk or feel competent to assess the risk' (Lunn, 2013: 566) (see also Section 2.5.2).

Decisions on climate action present policy-makers with the risk of alienating interests and the electorate, placing costs on consumers, producers, industry and/or innovators, and the risk of simply getting it wrong. That risk can be difficult to quantify, making climate action less likely. On top of complexity and ambiguity comes an uncertainty that directly affects decision-making via, for example, maladaptation or policy paralysis:

> The inherent uncertainty that comes with climate risk assessments creates a dilemma for local decision-makers who need to incorporate climate-change into their plans. Natural responses to this dilemma might be:

    i.   taking a central or 'most likely' scenario and plan accordingly, or

    ii.   postponing decisions until better information arrives.

Unfortunately, ignoring uncertainty by taking the 'most likely' scenario risks *maladaptation*, such as poor investment decisions and unnecessary retrofit costs, and lock in a degree of irreversible urban development.

However, waiting for new information may result in *policy paralysis*, and improvements in the quality of available information (our ability to forecast) is far from guaranteed. (McDermott and Surminski, 2018: 5, emphasis added)

Before concluding on the challenge of bounded rationality, it is worth stressing that this phenomenon does not imply that all decision-makers are paralysed or disempowered in circumstances where complexity, ambiguity and uncertainty abound. In many cases they overcome the problems of bounded rationality, whether in the area of climate action or otherwise. As research into science communication challenges has shown, 'members of a varied cross-section of publics are perfectly capable of debating quite complex issues of environmental science, technology, and policy with which they have little day-to-day familiarity given the right tools and sufficient opportunity to do so'… [however] 'national-level issues by contrast typically bring with them significant additional layers of complexity and uncertainty, alongside a need to frame issues in terms of wider policy goals and system linkages' (Pidgeon *et al.*, 2014: 13606). How such policy framing can help counter the effects of bounded rationality will be discussed following an exposition of the second form of irrationality, decision-making biases.

2.5.2   Decision-Making Biases

Seemingly endless complexity, ambiguity and uncertainty meeting limited computational power is one aspect of irrationality but there is a second, important one. The study of decision-making biases stems not only from the work of Simon (see above) but, especially, from the phenomena implied by theories developed by Kahneman and Tversky (1974, 1979 and 1984).

Rather than investigating the consequences of bounded rationality (or generating knowledge and climate action *per se*), the focus here is on those beliefs and emotions, on 'biases that distort human decision-making processes', and on 'identifying the circumstances and the reasons why people deviate from rationality and do not act in their best interest' when considering knowledge (Ghisellini, 2018: 2). Of course, what someone's 'best interest' is, is an entirely subjective issue.

Beliefs and emotions (as opposed to limited cognitive power) account for decision-making biases empirically established in behavioural science, and 'play a powerful

and necessary role in decision-making' (Moser and Dilling, 2007: 685). The ever-increasing number of identified biases is seen as one of the challenges to this area of study. Ghisellini argues for parsimony, noting that in the last few years it has been growing 'horizontally', with 'the daily discovery of yet another behavioural bias'. Nevertheless, decision-making biases should be considered 'features of our evolutionary design' (Ghisellini, 2018: 2 and 3).
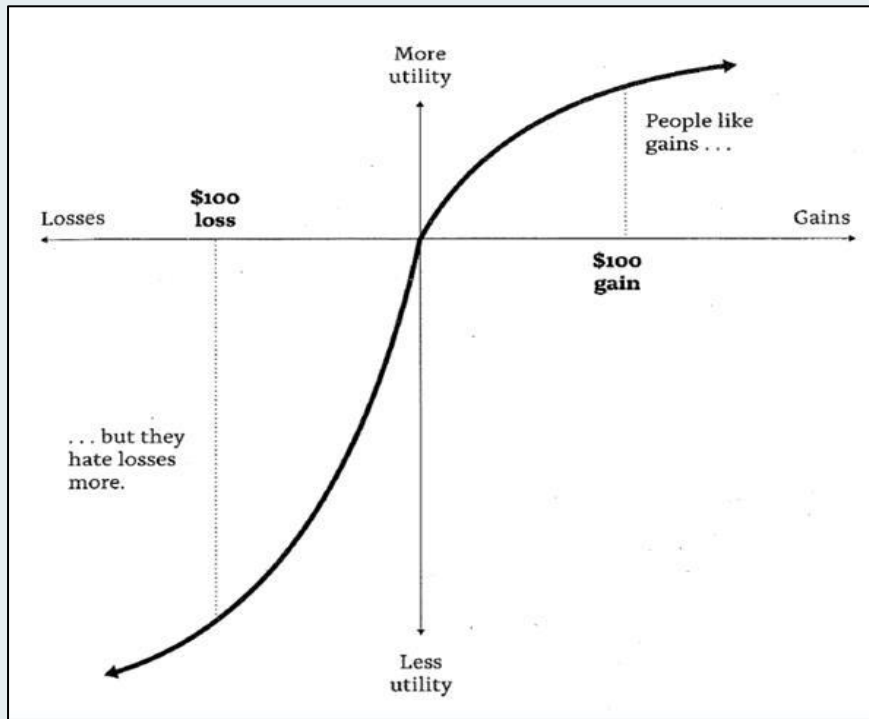
Decisions about climate action policy are particularly prone to these decision-making biases (see Millner and Ollivier, 2016 for an excellent overview). When it comes to strengthening governance, Jordana (2014) suggests that one key ingredient is 'changing conception of risk to political decision-makers. Risk aversion and optimism bias, whether because of behavioural biases, political needs (pork-barrel and log-rolling politics), or demands of powerful interest, means that decision-making can never be rational' (Jordana, 2014: 178).

Hallsworth and Egan (2018) note that policy-makers are affected by the same cognitive biases that they seek to address in others through behavioural insights and nudging (see examples above). Decision-making biases such as **loss aversion, salience effects and time inconsistency** are deemed of particular relevance to climate action in the literature reviewed. These are just three of the decision-making biases that the reviewed literature research suggests can be expected to affect decision-makers in Ireland and elsewhere. Their combined impact is captured in Kahneman's description of climate change as a 'perfect trigger' for decision-making biases: it is a 'distant problem that requires sacrifices now to avoid uncertain losses far in the future' (New Scientist, 2014). Losses, salience and time are at the heart of the challenge.

Decisions on climate action, like many others, rely on estimates of costs and benefits, and the rational actor/optimisation model assumes that we can reliably estimate each. Behavioural science has illustrated that decision-makers cannot reliably make such estimates, are risk-averse, and favour the status quo. The average amount a decision-maker is willing to pay for an object is much lower than the average amount they demand in order to give it up (endowment effect), and decision-makers are much more sensitive to potential losses than to potential gains (**loss aversion**) (Kahneman *et al.*, 1991; Doruk and Tavoni, 2016; Barberis, 2018). These decision-making biases help explain why policy-makers might not support climate action to prevent climate change, even where the reward is similar to the cost (see Figure 2.2).

The NESC Secretariat cites research illustrating that framing climate change in terms of local events and geography will help to make the issue more salient, will promote emotional and cognitive engagement with climate change, and will make the benefits of acting on climate change more tangible (Moore, 2012: 82 and 83). **Salience** effects refer to visibility or prominence, whereby individuals are likely to focus on information or items that are prominent or salient and ignore those that are less visible (Schenk, 2011: 253).

Figure 2.2: Loss Aversion Value Function

More
utility

People like
gains . . .

$100
loss

Losses

Gains

$100
gain

. . . but they
hate losses
more.

Less
utility

The way (government) decision-makers allocate attention 'means that certain issues and solutions are more likely to be salient to policy actors, regardless of whether they are the most urgent or important. This can mean that government 'overreacts' as attention on issues cascades rapidly, perhaps reaching for whatever solutions come to mind easily, even as slow-developing problems go unnoticed' (BIT, 2018: 8). Low visibility and slow development are problems inherent in climate action policy, and while most agree that action is necessary now, the resulting benefits will not be tangible for decades or even centuries. This bias is a key challenge as the impact of climate change is abstract for the decision-maker, and is (usually) not local to them.

The impact is mostly undetectable, and the victims (and 'villains') are unidentifiable. Climate action also involves slow change and a complicated chain of reasoning from an individual's decision or action to the global consequences. Climate action is subject to additional issues of salience, such as the conflation of 'weather' and 'climate' (Millner and Ollivier, 2016). These are challenging issues for individuals and firms:

Adaptation for business is often difficult. Potential future impacts on business are longer term and often unclear. Businesses often lack information or awareness of climate impacts. Some businesses lack the ability to respond to climate-change because of financial or other constraints (such as organisational and cultural or institutional constraints). In addition, the costs of adapting may be high. These difficulties may be reflected in the reluctance of certain businesses to prioritise adaptation measures. (Forfás, 2010: 16)

Enhancing climate *action* means making climate change more salient and relevant to decision-makers: 'global warming has to be made local, whether directly by focusing on impacts that matter to them, or indirectly by focusing on the co-benefits of climate-friendly action' (Moser and Dilling, 2007: 687). In Ireland's case, the 'lack of salience of environmental issues among voters—even Green Party supporters—means that political parties are rarely inconvenienced by having to pretend that they care. Insofar as Ireland is 'green,' it is a brand, albeit one that needs protection as well as promotion by the State. So far, climate change has appeared to be very remote from domestic politics' (O'Neill, 2018: 14).

Although anticipatory climate action is widely considered a cost-effective approach to managing climate risk, 'evidence suggests that experience with extreme events in the present day is a more common trigger of adaptation planning' (Preston *et al.*, 2015: 468). Even in instances where individuals recognise that adjustments across sectors of society and the economy are necessary to respond adequately to climate change, 'it can however be difficult to envision what… changes will mean for individuals and for households, and similarly how… sectoral changes, when taken altogether, will interact and affect our lives' (Gilchrist and Irvine, 2014: 1).

McDermott and Surminski say: 'It is this point of 'salience'—the relevance of the information produced to decision-makers… that often appears to be missing, particularly at a local or city level'. Citing Howarth and Painter in the context of using the Intergovernmental Panel on Climate Change (IPCC) reports for local adaptation decisions, they highlight that 'while much emphasis is placed on credibility in the IPCC process and a growing emphasis on legitimacy, salience, particularly in the context of local decision-making, is lacking' (McDermott and Surminski, 2018: 2-3). The low salience of climate change is a barrier to action. Conversely, Jacobs (2011) finds that increasing salience of a problem expands politicians' rhetorical options and shields them from voter backlash (e.g. attaining approval for state intervention by highlighting impending scheme bankruptcy). Jacobs' four case studies confirm the predicted importance of the salience of information about a policy's longer-term consequences, as informational conditions shaped decision-maker capacity to effectively frame the choice for voters in favourable terms (Jacobs, 2011: 246).

Narrative and stories matter to decision-makers. Addressing the salience issue was at the heart of the *Scotland 2030 Project: Picturing life in a low carbon Scotland* (2014). This was an exercise in framing to develop an evidence-based picture of life

in Scotland 2030 that was meaningful at a household level, and grounded in climate action policies. The key was increasing salience at decision-maker level in order to encourage climate action, using framing. The new frame was 'to communicate a positive vision of what the low carbon Scotland of 2030 might look like and what it might feel like to live in this low carbon society, using everyday examples' (Gilchrist and Irvine, 2014: 1). The output was a narrative that speaks about Scotland 2030 in the 'present tense from the future'.[3] This framing helped 'reduce the psychological distance between readers in the present and the low carbon future of 2030' (Gilchrist and Irvine, 2014: 5).

Climate action is needed to address a very long-term policy problem for decision-makers. By the end of this century:

> [Global] emissions of greenhouse gases should be reduced by 50–80 per cent below 1990 levels if catastrophic climate-change impacts are to be avoided. This is essentially equivalent to replacing a fossil fuel-based world economy with a low-greenhouse gas world economy, a strategy that will most likely take longer than half a century. Electoral cycles for legislative and executive positions are of a much shorter duration. (Hovi *et al.,* 2009: 22)

Time inconsistency (present bias, hyperbolic discounting) is the systematic change in individual preferences over time, whereby more immediate rewards become disproportionately more attractive (Lunn, 2013: 566).

Climate action is associated with immediate cost for longer-term reward. This bias is important as the negative impacts of climate change are greatly delayed, the positive impacts of climate action are also delayed, but climate action costs are 'up-front'. It has been noted that 'in the short term—which is the only temporal frame of reference available to political actors—it is not obvious what the rewards are, except perhaps the warm glow of civic virtue' (O'Neill, 2018: 14). For example, in Ireland, decision-makers could rapidly increase the cost to energy consumers—e.g. via the Public Service Obligation (PSO) levy—to support more renewable energy sources on the grid. The beneficial impact on our climate today would be zero. Leaving the PSO levy at its current rate will incur no new cost, and the climate outcome today would be the same (zero).

For a time-consistent decision-maker, other things being equal, if an action taken next year is beneficial, it is even more beneficial to take the action now (e.g. stop

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[3]   Example of 'present tense from the future': "The energy we use for heat and electricity now comes from a wider range of sources than it used to. By 2020, 30 per cent of the amount of energy we consumed was generated from renewable sources. Energy generation has also become more localised; we now produce much more of our energy in our individual homes and communities than we did previously" (Gilchrist and Irvine, 2014: 6).

smoking). And, under the rational model, if a decision-maker prefers €1,000 now to €1,100 next week, he or she must also prefer €1,000 in 25 weeks to €1,100 in 26 weeks. Experience suggests that neither scenario plays out this way in reality. Decision-makers can delay beneficial action due to present bias, and can overly discount (hyperbolic discounting) future benefits.

Denny and Weiss (2015) explore this issue further. For example, let us assume that technological progress will lower the future cost of climate action, in the form of renewable energy technology. If a decision-maker invests/supports renewable energy early and rapidly, they lose out. Money could have been saved by installing those technologies at a lower cost later. Climate action now is costlier and thus there are benefits to waiting. At the same time, climate action now may be less costly and thus there are benefits to hurrying. For example, 'given the longevity of greenhouse gases in the atmosphere, cumulative emissions matter, and lowering greenhouse gas emissions earlier is beneficial'. Or, there may in fact be a point of no return in terms of global greenhouse-gas concentrations, 'beyond which the costs of adapting to climate-change effects become essentially infinite. Hurrying can therefore be considered an insurance policy against the unknown but perhaps increasing risk of catastrophic damage' (Denny and Weiss, 2015: 19).

The challenge of intertemporal choice facing decision-makers is strong, making the urge to emphasise or overstate short-run benefits understandable. However, evidence increasingly suggests that 'current policy approaches to climate risk which stress short-term benefits and seek simple technological fixes to complex problems fail to significantly address multiple and interacting factors which affect system resilience and the needs of vulnerable populations' (Adger *et al.*, 2011: 758).

Loss aversion, salience effects and time inconsistency are by no means the sum total of decision-making biases complicating the world of decision-makers, but they are the ones that feature most prominently in the literature reviewed here. Nevertheless, it is worth pointing to a few further examples of biases that may be of interest to those looking at enhancing the governance of the transition to a low-carbon society. (Ambiguity aversion was discussed in the section on bounded rationality.)

Confirmation bias is a decision-making bias whereby people 'tend to put too much weight on information that confirms their prior beliefs and too little weight on information that conflicts with them' (Millner and Ollivier, 2016: 230). Similarly, motivated reasoning sees decision-makers fit perceptions of information to beliefs that cohere with their predispositions (Ripberger *et al.*, 2017). In other words, 'I don't like it, so I don't believe it'. In climate action policy, these biases can cause decision-makers to resist or reject important new facts or options that may speed up transition.

Differences in response to climate science have been explained as emerging not because of an aversion to the problem of climate change *per se*, but an aversion to the solutions associated with the problem (e.g. proposals that restrict free markets)

(Campbell and Kay, 2014: 809). Solution aversion predicts that certain solutions associated with climate change are more aversive for decision-makers who hold an ideology that is incompatible with or even challenged by the solution, and this increases scepticism about the problem's existence. This bias helps explain belief or scepticism among decision-makers regarding climate science. Ironically, this bias suggests that increasing the salience of solutions may have unintended, negative consequences.

Evaluability bias occurs when a decision-maker prefers option A to option B when they evaluate the two separately, but prefer option B to option A when they evaluate the two jointly (Sunstein, 2018: 1). Imagine a decision-maker has to choose between two climate action options: option A is a capital grant for a renewable energy project, and option B is a tax relief in respect of investment in that project. Evaluability bias arises as some important features of a grant system and a tax relief system are difficult or impossible to assess in separate evaluation. As a result, the decision-maker 'disregards or downplays them'. However, those features 'are much easier to assess in joint evaluation, where they might be decisive'. That said, when evaluating the grant and tax relief system at the same time, certain features of each may receive excessive weight, because, for example, 'they do not much affect people's actual experience' (Sunstein, 2018). Though not the same as decision-making biases (which arise from the impact of emotions and beliefs), two other forms of bias are worth noting in the context of climate action decisions, technocratic and economic bias (see Dewulf, 2013: 327):

- Technocratic bias arises when policy problems are described as 'well-structured and susceptible to be resolved by the use of specialist knowledge and technical expertise. This bias functions through distinguishing the relevant group of experts, who can relatively easily agree among themselves, from the large group of non-experts, who are not allowed to participate'.

- Economic bias arises when problems are defined exclusively as 'matters of calculating costs and benefits. Here, rather than restricting participation of non-experts, the range of acceptable arguments is restricted. Anything that cannot be translated in monetary value is thus side-lined from the discussion'.

These biases may be linked to cognitive phenomenon where, for example, 'elites in the policy realm are almost exclusively educated in the discipline of economics, which leads to a very narrow framing of available policy choices' (O'Neill, 2018: 18).

Whether due to bounded rationality or the cognitive biases summarised here, decision-makers in the area of climate action policy can be expected to deviate from a rational course. This may help explain why our ambitions and targets are not met. The next section examines the extent to which policy framing and narratives might ameliorate this problem.

2.5.3   Policy framing as a Response to Irrationality

Better coping with bounded rationality means addressing the challenges of complexity, ambiguity and uncertainty, while improving outcomes in the presence of decision-making biases involves mitigating the impact of loss aversion, salience effects and time inconsistency. Policy framing alone cannot solve these problems in their entirety, but it does offer the potential to help decision-makers if it can achieve 10 connected goals:

- Simplify the chain of reasoning from 'decision' to 'consequence'.

- Situate complexity within a narrative that makes the decision-maker care (e.g. prestige, emotion-driven aspects).

- Influence what the decision-maker believes there is to be 'lost' or 'gained'.

- Bring the problem 'home' and highlight success.

- Reduce the cost of decision-makers' being informed.

- Bring forward the pain of poor decisions (and the benefits of good ones).

- Frame complex processes saliently.

- Make the impact of climate action detectable and the victims (and villains) identifiable.

- Influence the timeline across which action is needed and will have an impact.

- Take advantage of moments to present choices.

Based on the reviewed literature, success on these points will not be delivered by any one significant 'silver bullet' action, rather it may involve repeated smaller actions, which on their own seem insignificant.

To begin, Jacobs (2011) finds that policy-makers use simplified mental causal models to render a complex problem tractable. At the most basic level, the overall question that precedes consideration of climate action is one step in policy framing, and a 'reliance on science' is not advisable. Having recognised that uncertainty and complexity 'structure contemporary policy-making environments', Simmons concludes that sense-making relies on more than scientific analysis, and therefore 'to make progress in confronting often intractable problems, the task is to ask the right questions rather than provide the right answers' (Simmons, 2018: 235). Certainly, it seems reasonable to suggest that some questions present more

complex causal models to decision-makers than others, depending on the climate-action frame used.

Table 2.2: **Examples of Initial Questions Based on Different Climate Action Frames**

How do we adapt our society and economy?	How do we address the global inequality arising from climate change?
How do we mitigate the impact of climate change?	How do we ensure a just transition to a low-carbon society and economy?
How do we transition to low-carbon?	How do we manage risks and hazards arising from climate change?
How do we build a more resilient Ireland?	How do we reduce our vulnerability to climate change?
How do we deliver green growth?	How can we comply with our international obligations?
How do we solve the technical aspects of climate change?	How do we bolster state security in the face of climate change?
How do we transform our society and economy?	How do we distribute the cost of climate action?

For example, framing climate action by asking a decision-maker 'how do we mitigate the impact of climate change?' could involve a simpler chain of reasoning and lower cognitive effort than framing the task with 'how do we address the global inequality arising from climate change?'. Similarly, asking 'what can Ireland do about our vulnerability?' might imply less complexity and cognitive reasoning than asking 'how do we comply with our international obligations?'. Policy framing can thus **simplify the chain of reasoning from 'decision' to 'consequence'**.

This basic concept might help explain why, as set out in the introduction, the then Minister was criticised for making the point that, in global terms, Ireland's greenhouse-gas emissions are negligible; it could imply to some that climate action is being framed as 'what impact can Ireland have on global emissions?'. The framing and complexity implied by the overall question is a very small component of the problem and solution.

The reality is that policy-makers are going to have their decisions framed by all manner of questions, and complexity cannot be removed or avoided indefinitely.

Therefore a communicator, 'especially a communicator of complex issues or facts, must make the audience care and pay attention before the audience is primed to accept the more complicated facts that might follow' (Crow and Jones, 2018: 223).

If the initial frame can lessen the cognitive effort required by decision-makers, subsequent information flows must try to **place inevitable complexity in a frame that makes the decision-maker care**. This means being aware of and playing to decision-maker preferences 'such as convenience, prestige, and so on. Communicators need to appeal to these emotional, belief-, value-, and identity-driven aspects of individuals, especially the 'empowering' emotions, rather than the ones that tend to promote apathy, denial, and disengagement, as well as to their rational side' (Moser and Dilling, 2007: 685). This is openly manipulative, but successful policy entrepreneurs 'identify how to manipulate or reinforce the cognitive biases of influential policymakers'. For example, they tell simple and persuasive stories combining facts with values and emotional appeals, engaging in coalitions and networks to establish trust in the messenger, and investing for the long term to learn the language of policy in key venues (Cairney, 2018: 201).

The frame can appeal to decision-makers sense of what is at stake. The *#savethesurprise* campaign helped persuade 100,000 audience members not to reveal on social media any of what they saw during the live dress rehearsals of the 2012 Olympic Games' opening ceremony (Girginova, 2017). Or, 'tobacco control is more likely when policy makers view it primarily as a public health epidemic rather than an economic good, while fracking policy depends on its primary image as a new energy boom or environmental disaster' (Cairney and Oliver, 2018: 400). The decision-maker may care more about health than economics. In this way, **the policy frame influences what the decision-maker believes there is to be 'lost' or 'gained'** in a way that shows a recognition of their loss aversion.

In terms of salience, policy framing of climate action—the presentation of it, not its substantive content—'can determine whether it is noticed and how it is interpreted' (BIT, 2018: 8). As noted above, framing can be used to reduce the psychological distance between decision-makers in the present, and outcomes in future. As part of the of *Scotland 2030 Project*, psychological distance is reduced by 'focusing on everyday lives and activities, speaking to the reader from the present of 2030, focusing in on local areas and grounding the vision in the Scottish context, and making the vision relevant to different types of people from different backgrounds'. In addition, success stories were highlighted via examples of where 'positive transitions are successfully being made in the here and now, helping to ground the vision in the reality of the present and to reduce feelings of helplessness in the face of a global challenge like climate change' (Gilchrist and Irvine, 2014: 1 and 3). In other words, **'bring it home' and 'highlight success'**.

The most common application of policy framing to address both complexity and salience effects is the use of heuristics, or mental shortcuts (Gigerenzer 2007, 2010; Haldane, 2012). Policy-makers' 'attention is guided by heuristics, just like everyone else's':

For example, a study of 14 senior ministers and party leaders from Belgium showed that they 'employ a number of rules of thumb to decide quickly about what matters and what does not'; an example is the 'wait and see' rule (where they do not act on information immediately, but see what others do and whether the issue resolves itself). Another obvious rule of thumb is whether an issue is attracting media attention (i.e. 'I should pay attention if everyone else is'). (BIT, 2018, 25)

While much of the discussion of heuristics in behavioural science highlights how they 'can lead people to make sub-optimal decisions, they also provide opportunities for simplifying decision frameworks when applied sensibly' (DPER, 2016: 43). Heuristics can be appropriate framing devices in complex decision-making circumstances because:

- Collecting and processing the information necessary for complex decision-making is costly.

- Disregarding information can make not only for cheaper but also for better decisions.

- In an uncertain environment, where probabilities are unknown, statistical weighting approaches to decision-making may no longer be suitable.

- Other things being equal, the smaller the sample, the greater the model uncertainty and the better the performance of simple, heuristic strategies.

- Complex rules may cause people to manage to the rules, for fear of falling foul of them.

(Haldane, 2012: 3-5)

Gigerenzer suggests that decision-makers employ 'fast and frugal' heuristic framing whose underlying reasons we are not fully aware of, yet that are strong enough to act upon, and that hit at the most important information while ignoring the rest (Gigerenzer, 2007: 16, 18). For example, doctors relying on the answer to just three questions to assess a patient's risk of serious complications as a result of a heart attack has been shown to be more effective than other complicated statistical measures (Breiman *et al.*, 1993 cited in DPER, 2016: 43).

This phenomenon has led to heuristics being employed in Irish public policy settings in recent years. In 2013, the design of the *JobsPlus* labour-market activation scheme exploited framing and heuristic thinking about salience and time inconsistency to increase the take-up of supports for the long-term unemployed (DJEI, 2013: 10). In 2015, heuristics were used to frame complex employment information about the

sustainability of employment across sectors of the economy, and provide early-warning signals to policy-makers for further action (DJEI, 2015a: 243-246).

A heuristic frame can be presented to and employed by policy-makers even where they do not know, or need to know, why the heuristic exists or its basis. For example, a recent publication by the Department of the Taoiseach reported on currency exchange rates, noting that the Euro/Sterling exchange rate stood at €0.88, and 'has been characterised by volatility but has stabilised in recent months' (Department of the Taoiseach, 2018: 1). Notably, the bulletin adds: 'over €0.90 is seen as a critical point in terms of significant negative impacts'. The factors that shape currency exchange rates are many and complex, but the creation of a '€0.90' heuristic frame allows policy-makers to ignore these and delay consideration of action until the Euro/Sterling exchange rate breaches that threshold. This is despite decision-makers most probably not knowing precisely why a policy response might be warranted at, say, €0.91 but not at €0.89.

Such heuristic framing can deliver two valuable benefits. First, it can **reduce the cost of decision-makers being informed**, and indicates that devising a climate-change heuristic would be a worthwhile pursuit. Second, if the resulting heuristic is affected by national policy and becomes a performance measure for the decision-maker (personally, ministry, government), **such policy framing can bring forward the pain of poor decisions (and the benefits of good ones)**.

Climate action has been identified as a policy area where heuristic framing could be particularly effective. It can help reduce complexity for decision-makers and increase the salience of the consequences of inaction:

> A good recent UK example is the… problem of plastic waste in the oceans and the rising interest as a result of [the television programme] *Blue Planet II*. The Prime Minister explicitly referred to the 'vivid highlighting' of marine plastic in the television series when she launched a 25-year environment plan a month later, and a plastic bottle deposit scheme was announced two months after that. (BIT, 2018: 28)

In this instance, **the complex behaviours, processes and interactions were framed saliently** in vivid images of marine plastic on the television, and contributed to tangible climate action. It is an example of how to **make the impact of climate action detectable and the victims and (villains) identifiable**.

How precisely heuristic framing can be used to enhance climate policy will mean getting a 'greater understanding of the manner in which heuristics enter the adaptation discourse' (Preston, 2015: 480). Policy framing may help overcome irrationality if it identifies and targets argumentation and evidence that decision-makers are using to make sense of climate action. Policy framing must focus on decision-makers' experience and the quick associations they make.

Preston contrasts the slow and methodical analytic reasoning that is a feature of *climate science*, with the automatic or instinctive nature of *climate decision-making*. This latter is susceptible to the introduction of new evidence and information:

> … because the dynamics of decision-making in policy environments may be short-term and opportunistic rather than deliberate, adaptation practice may rely more heavily upon heuristic reasoning. In addition, those involved in adaptation practice are more likely to rely upon experiential knowledge and alternative ways of knowing than the direct transfer of scientific knowledge into practice. (Preston, 2015: 480)

Figure 2.3:   Data Indicating Salience of Climate Action Issue: Ocean Pollution
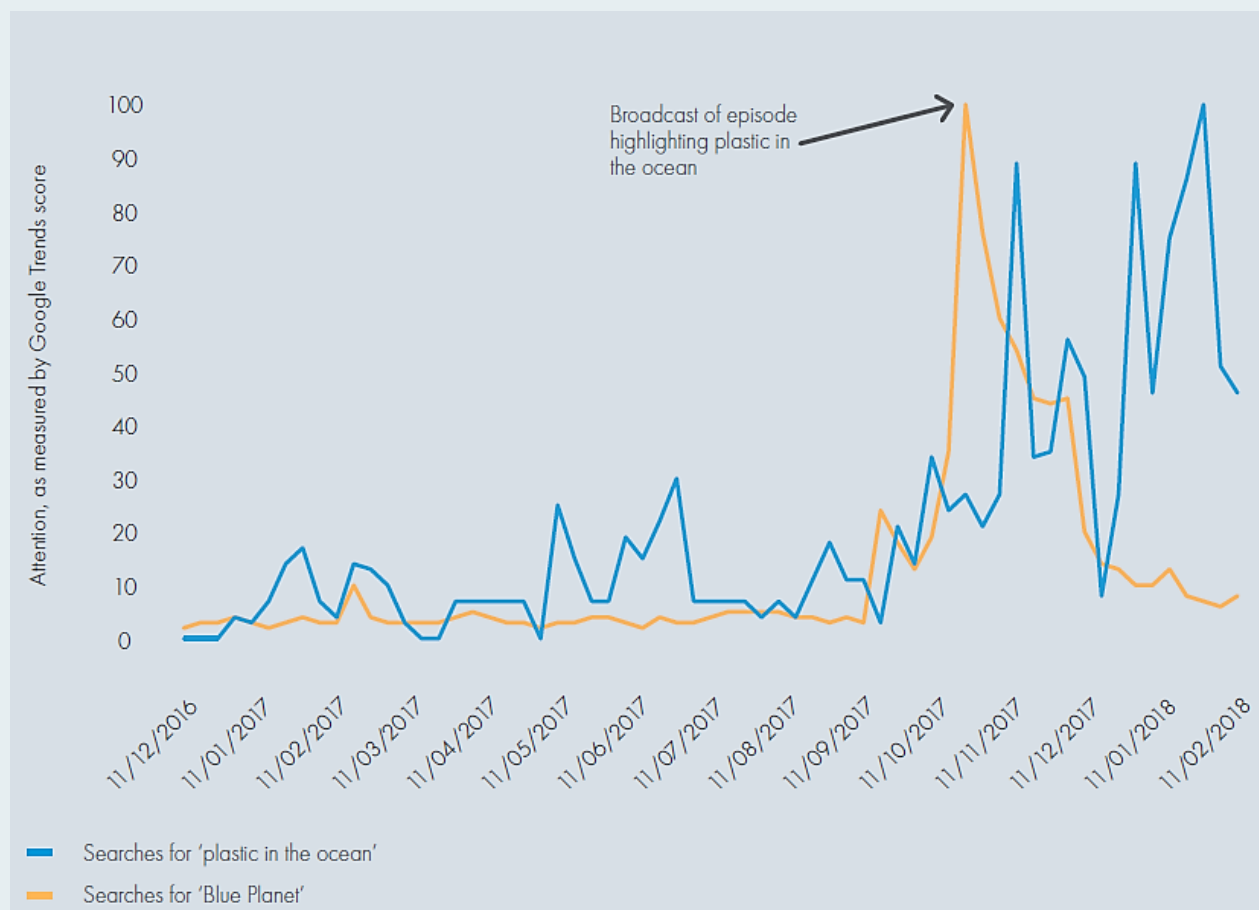
Any proposed heuristic frame for climate action should equip the decision-maker with the perception that their individual decision can actually ameliorate the problem (Dunwoody, 2007). This may mean **taking advantage of 'moments'**, such as waiting until climate-change consequences are particularly salient (local flood, water restrictions, issue prominence in media) to make proposals.

Nevertheless, devising and deploying fast and frugal framing heuristics should be considered carefully. Preston (2015) warns that 'it is imperative that heuristics are relevant and robust to the contexts to which they are applied. Otherwise, they can act to constrain rather than facilitate adaptation. Arguing, for example, that adaptation is local can shift responsibility for adaptation to local actors who are often not well-resourced to undertake adaptation' (Preston, 2015, 479). Further, Dunwoody (2007) argues that they are 'not a good recipe' for understanding complex concepts and processes (Dunwoody, 2007: 97). They can lead to a reliance on an expert or experts to deliver the fast and frugal framing, but 'duelling experts' may confuse the decision-makers.

Finally on heuristic framing: 'there is an increasing need for critical mutual reflection between scientists and practitioners as to which assumptions, heuristics, and adaptation principles enable successful adaptation in practice. In this endeavour, we would do well to promote co-production of knowledge in both theory and practice as crucial factors in increasing our own adaptive capacity to advance and further develop the relevance, practicality and effectiveness of adaptation research'; while it is not immediately obvious which climate action heuristic will be effective in helping decision-makers, 'adaptation practice is a key venue in which heuristics can be put to the test and critically evaluated for their utility' (Preston, 2015, 480–82).

Returning to the time inconsistency effects outlined above, climate action framing can shape the timeframes that decision-makers contend with. Adger *et al* (2011) illustrate how the frame 'determines the way in which responses are identified and evaluated and therefore influences the range of response characteristics'. The cases examined suggest that the policy framing communicates the urgency (or otherwise) of the problem, and this influences planning and implementation horizons.

One lesson here is that the policy frame can **influence the timeline across which action is needed and will have an impact**. In an example from Canada, forestry management framed as action to 'address the economic and social impacts of pine beetle infestation' privileges immediate economic needs over the long-term state of the ecosystem. Similarly, framing the response to variable rainfall in the Canadian prairie in terms of 'responding to the negative outcomes of drought events' prompts short-term action (crop insurance and income stabilisation programmes), rather than 'long-term practices such as conservation tillage, proper drainage measures, and the maintenance of landscape heterogeneity' (Adger, 2011: 762 and 763).

Overall, irrationality appears in the form of bounded rationality and decision-making biases, neither of which can be utterly mitigated by policy framing alone. However, if further work on framing climate action in Ireland delivered progress on the 10 connected goals outlined here, perhaps decision-makers would have the best chance possible of settling on policy actions that bring us closer to our ambitions.

2.6   Framing to Counteract Institutional Barriers

Institutions are the rules of the game, the 'norms, and shared strategies that structure human behaviour and choices, and are collectively created, adapted, monitored, and enforced' (North, 1990; Heikkila and Andersson, 2018: 310). It is axiomatic that institutions are important and impactful, and they are central to whether and how climate action is delivered. The decision-making institutions exist to help solve problems of collective action, agency and transaction costs, and to enforce contracts.

According to Hermwille, deciding on and implementing adaptation policy:

> … certainly is a daunting task, but it is often less an economic or technical problem than a political one. Take climate-change as an example: Technical options to mitigate climate-change and limit global warming to below 2° Celsius are available and the costs are considerably lower than many have expected and certainly much lower than the cost of inaction. Still, change does not happen or at least not at the required speed. A reason is that the global economy is locked-in into unsustainable practices not only through the legacy of the infrastructures that have been built up in the past but also through political and institutional settings and processes that are resisting change. (Hermwille, 2016: 237)

The importance of the institutional framework has been noted in previous work by the NESC Secretariat:

> … the problem of human behaviour which leads to emissions needs to be placed within the wider contexts where social practices are undertaken. Norms and values shape practices, and so do infrastructures, institutional arrangements and systems of governance. (Moloney *et al.*, cited in Moore, 2012: 18)

Climate action policy and the transition to low-carbon can be hampered by institutional problems such as indivisible benefits, where one institutional decision-maker can freeride while another institutional decision-maker takes on the costs. In addition, because social and political institutions are often established to help stabilise a society, they 'by their nature are resistant to change. This makes political institutions in some ways less responsive to a constituency's changing political

mood' (Moser and Dilling, 2007: 696). O'Neill notes that, despite international studies and the aforementioned Citizens' Assembly outcome, highlighting a 'growing awareness amongst Irish citizens of the need for action on climate change… we are held back somehow from progress towards sustainability by our uniquely open electoral system which affords political opportunity structures for naysayers of all hues' (O'Neill, 2018: 17). Finally, the institutional decision-making framework for climate action policy is fragmented, and comprises a multitude of actors with often competing mandates.

As analysis for the EPA has stated, much research examines the technical feasibility and potential cost of climate action policy options, but less frequently considers the institutions necessary to translate these options into reality (Torney, 2018: 1). This gap is partially addressed in the EPA publication, and is addressed further in this paper.[4]

Devising climate action leaves decision-makers to manage a 'complex social problem' and is challenging 'because the institutional arrangements that comprise policies can be complex and may affect a diverse set of actors and issues in ways that may be uncertain or difficult to predict' (Heikkila and Andersson, 2018: 309).

The main purpose of institutions is to respond to this diversity and uncertainty and solve co-ordination problems. The nature of climate action policy means many actors, public and private, must consistently act in a mutually supportive way. Institutions play a vital and positive role, allowing decision-makers 'to establish and prioritise particular values, norms, rules and roles, thereby reducing the complexity of choice. Sometimes this can be a very positive process, inspiring a flow of ideas and fast-thinking-type solutions to policy problems that 'fit' with the policy context. However, sometimes institutions can get in the way—reinforcing values, systems and practices that no longer fit so well, and acting as blinders to emerging issues' (Simmons, 2018: 235 and 236).

In this way climate action is a policy area very similar to infrastructure policy, a sphere 'embedded in wider multi-level politics that involve intergovernmental resource allocation issues. Decisions on planning, finance and technological options are not necessarily made in one department, let alone at one level of government. Such settings give rise to co-ordination problems, as different levels of government and different departments seek to protect their turf, shuffle the cost to other administrative units, and seek to impose their preferred policy option' (Jordana, 2014: 169).

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[4] The EPA publication focuses on the electricity sector and on the roles of six state institutions involved in the energy sector: the Department of Communications, Climate Action and Environment, the EPA, the Commission for Regulation of Utilities, SEAI, EirGrid, and An Bord Pleanála.

Imposing a preferred option often involves imposing a preferred policy frame or narrative around the problem at hand, or allowing a suboptimal/mixed frame to persist. Regardless of whether the institution is formal (e.g. an agency) or informal (e.g. a process), 'it can have tangible effects, establishing certain practices as legitimate or illegitimate, affecting who has the right to speak in what capacity, and grounding relationships of power and resource access. Political institutions, such as the type of political regime, and other politico-economic factors, such as the evolution of the constellation of power in key economic sectors, constrain agents' actions, including their discursive strategies' (Di Gregorio, 2017: 135). Added to this (and as discussed in Section 1.5), institutional actors in climate policy have numerous frames to choose from, each of which will shape what options are considered and who is involved in decisions. In short, 'institutional gatekeepers have privileged positions in the policy process' (Baumgartner, 2016: p.59).

One example of how institutions and policy framing combine to shape who is involved in climate action decisions (and hence the decisions themselves) can be found in an analysis of governance in Dutch energy reforms. In this instance, the analysis suggests there was a 'lack of meaningful public engagement' in transition policy and, to a large extent, 'the role of citizens in energy policy is reduced to that of the consumer' (Hendricks, 2008: 1019). The research states that the 'absence of the public is perhaps not so surprising when we reflect on how the energy problem and transition approach has been framed'.

This problematic institutional gatekeeping frame is, according to Hendricks, evident from the manner in which the Dutch Ministry for Economic Affairs depicted a sustainable energy system (Figure 2.4). 'The suggestion here is that sustainable energy is about government and market working together. We have to wonder where the public is' (Hendricks, 2008: 1019). This framing of the system, with two institutional players or groups of players (government and market), could also be seen as an ideological policy framing (see Section 2.3).

A more positive policy framing for climate action may be possible, as problem-solving requires 'new forms of engagement and institutional learning between scientists, policy-makers and wider stakeholder communities…' (McEvoy *et al.*, 2013: 280). Where and when these institutions meet, a framing opportunity arises. Similar to the issues and suggested responses outlined in Sections 2.3 and 2.4, policy framing can help institutions arrive at a shared understanding and a more unified approach.

Figure 2.4:   Dutch Economic Ministry's Depiction of a 'Sustainable Energy System'
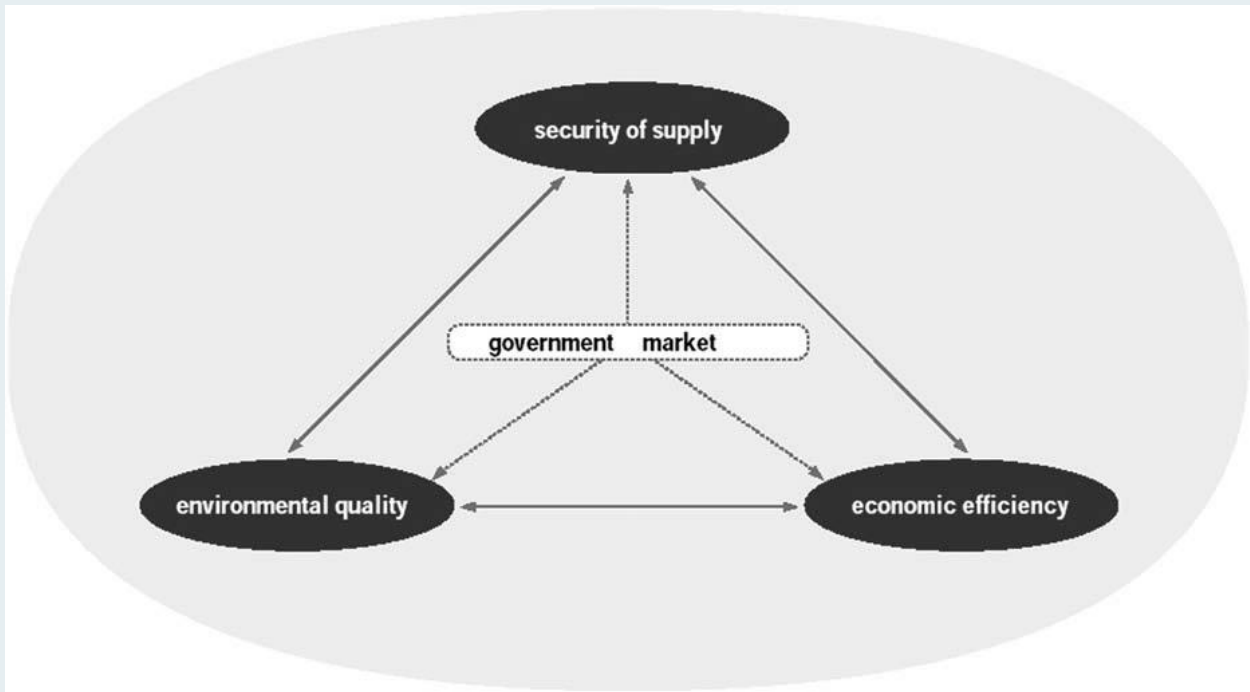
Source: Hendricks, 2008.

This is perhaps exemplified by the impact of the Climate Change Act on institutions in the UK. In their review of the legislation, Fankhauser et al (2018) find that one of the Act's main achievements is 'how it has transformed the way in which the political debate on climate change is conducted' (Fankhauser et al., 2018: 21). There appear to have been two mechanisms for this transformation. First, the legislation established reporting and monitoring processes that provided a structure to the debate on climate action, giving it a sense of regularity and routine rather than being *ad hoc*. Second, the Committee on Climate Change itself framed the policy area by establishing itself as 'an authoritative custodian of analytical honesty and rigour' (Fankhauser et al., 2018: 22). The legislation did display limitations as a framing device: while a positive impact is evident on political debate among specialists, the Act has had 'little discernible impact' on public debate in the media. This is because the regular reporting processes, which have transformed the discussion around parliament, 'were always meant for policy wonks and the inside of government' (ibid.). Despite calling for further research into how the Act shaped day-to-day policymaking, the review finds that 'the impact of the Act on the institutional framing of climate policy is undeniable' (Fankhauser et al., 2018: 21).

Taking the opportunity to frame or reframe the climate challenge means connecting the institutions' 'different frames into a jointly meaningful project [which] can generate motivation and commitment for collective action' (Dewulf, 2013: 327). Although different frames 'compete to occupy the same policy terrain', a new policy frame 'can disrupt institutions, and generate and legitimise alternatives'; 'new storylines cast institutions in a different light, and can prompt change' (Smith and Kern, 2009: 79 and 83).

To begin the process, the six suggestions from Section 2.4 should be considered, using an *institutional* rather than an *interests* lens, with attention paid to the formal and informal rules/mandates linked to the institutions, not just their interests. Can a new policy frame and narrative create a new, shared understanding, or bring institutions together to begin, continue or restart meaningful exchange? How will the decision-making institutions respond to climate action being framed as an intertemporal trade-off that imposes costs on the group today, for greater benefits for them tomorrow? Can a narrative shift institutions away from narrow mandates and rules towards 'higher' concerns? Can a policy frame align climate action with institutional mandates? Finally, could initiating a frame contest among institutions help identify and resolve conflict between them? A policy frame and narrative aimed at achieving some or all of these may help **re-organise the decision-making system in a manner that positively affects climate action policy**.

The recent report for the EPA provides some concrete suggestions. Having examined the institutional framework for Ireland's electricity sector, the analysis concludes that all the 'institutional tinkering in the world will not deliver decarbonisation without support from society' (Torney, 2018: 12). The result is the call for a new decarbonisation narrative:

- The report states that a more positive economic and social narrative is required, which would highlight not only the challenges but also the opportunities of the transition. This could move institutions away from narrow mandates and rules towards the 'higher' objective of economic and social progress.

- The report calls on the business sector to play a stronger role in this regard, pointing to experience in the UK (see Chapter 5).

- The call for a new frame that sketches transition as being about 'more than compliance with externally imposed targets' might affect which institutions promote climate action, and how. For example, the report says that any new narrative for Ireland 'must take seriously the need to protect those who will lose as a result of the transition' (Torney, 2018: 12). This is more of a social and economic concern than a scientific or technical one, and this again can affect institutional power and processes.

- Similarly, the institutional landscape could be shifted by the report's recommendation that the new narrative reflect the important spatial dimension of transition.

In addition, policy framing might shake up positively the institutional framework for climate action decision-making by suggesting increased used of independent or insulated experts. Policy framing can **present opportunities to place elements of the decision in the hands of those less susceptible to ideology, interests and institutional challenges**. For example, one potential benefit from a scientific or technical framing and narrative for climate action would be to, at least temporarily, take some of the decision-making away from the political/elected system.

Such a concept 'already exists in the world of regulation and central banking, where the idea of insulation from electoral politics has been widely endorsed over the past three decades or so' (Lodge and Wegrich, 2014: 288). Consideration could to be given to devising a policy frame and narrative that would lend itself to the use of 'direct technocracy', led by experts but continuously consulting the people through a combination of democracy and data. Technocrats can, at least theoretically, make judgments about facts, without having regard to ideology, interests, re-election or particular institutional mandates. A technical policy frame could make it more possible to divert issues out of the existing, problematic decision-making stream into a technocratic 'lay-by' where options are prepared, and are then moved back into the traditional decision-making process. Such a process should not be confused with engaging in (seemingly endless) technical and modelling exercises as the ongoing focus of the response to the climate challenge. A time-limited, issue-specific exercise in 'direct technocracy' is a means to overcome institutional challenges, not create new ones. One example would be the Interagency Working Group on Social Cost of Carbon established in the United States which, between 2009 and 2010, developed four estimates of the global damages per ton of CO_2 emissions used in regulatory impact analyses since their release.

Overall, if one of the causes of the disconnect between Ireland's climate action and our ambition is 'locked-in' practices and political and institutional settings and processes resistant to change, it will be a difficult task for policy framing alone to unlock them. As outlined earlier, success will not be delivered by any single action, rather it could involve myriad coordinated strategic actions. For example, recent work by the NESC Secretariat highlights the potential role for national multi-stakeholder agreements in the next phase of Ireland's policy and institutional development on the transition to a low-carbon economy and society (Moore, 2012).

2.7   The Interaction of Factors

Despite being presented separately here, it should not be taken that the four factors—irrationality, ideology, interests and institutions—operate in the policy space independently of each other. The four almost certainly interact, as is evident from the literature reviewed here.

For Jacobs (2011), one of the distinct hurdles to governing for the long term is the interaction of the factors: a problem of institutional capacity, arising from interest groups' preferences for distributive gains over intertemporal bargains. Similarly, Di Gregorio *et al* describe decision-making institutions facilitating cooperation among irrational individuals, institutions which are changed or maintained as a result of the relative bargaining power of different interests (Di Gregorio *et al.*, 2017: 134). In that analysis, institutions and interests interact to shape the policy framing: 'not only do national level political institutions and politico-economic conditions [interests] impact organisations' ability to affect policy change, they also constrain the types of ideas that are circulated in discourse, in the first place' (Di Gregorio *et al.*, 2017: 141).

Section 2.3 provides an example of ideological and institutional factors interacting, when Kirby and O'Mahony speak of the dominant paradigm manifesting itself in the decision-making structure (e.g. regulators, markets, private actors), ideology establishing its own institutions, and those institutions initiating policy (Kirby and O'Mahony, 2018).

For Smith and Kern, irrationality and interests together are at the heart of the governance challenge as uncertainty and ambiguity pervade climate action, and what the problem means for society is contested in terms of both consequences and trade-offs (Smith and Kern, 2009: 78). Similarly for Jordana, where this time it is irrationality in the form of bandwagon effects and interests that interact: 'Policy bandwagons cannot be explained simply in terms of rational cost-benefit calculations. Rather they emerge in the context of the interplay between political and economic interests. These economic interests include construction firms, powerful users, producers, and engineers, which form coalitions with government departments whose portfolio and professional ties create close linkages to these concentrated economic interests' (Jordana, 2014: 168).

Turning to Ireland specifically, O'Neill (2018) suggests that a combination of irrationality, ideology, interests and institutions can help explain suboptimal climate policy, noting how political parties and institutions respond to aggregate preferences, the exposure of Ireland's decision-making system to interests (via our particular electoral system), the reliance on market and regulatory interventions, the lack of salience of environmental issues among voters and for decision-makers, and the need to develop in our political institutions greater coordination, robustness, flexibility and resilience. The analysis adds: 'closed policy networks operate to limit the framing of [the climate action] debate to a narrow set of issues

and interests, and successfully intertwine the interests of the State with economic interests' (O'Neill, 2018: 18).

Meckling and Nahm add weight, if it was needed, to the view that institutions condition climate policy-making. Their empirical research in climate policy-making in Germany and California provides an example of how vested interests influence the process (e.g. regulatory capture), and raises concerns about legislators delegating distributional conflict (ideological concerns) to bureaucratic actors (and what this means for democratic accountability). That said, it can protect policy-making from the worst influences of interests (Meckling and Nahm, 2018).

Simmons asks whether there are institutional solutions to problems arising from irrationality: 'So how do policymakers develop effective policymaking strategies when they are so limited by bounded rationality? Do their 'cognitive frailties' make them over-reliant on a combination of rational and irrational informational shortcuts to act quickly and make adequate decisions? If so, should institutions be designed to limit their autonomous powers, or instead should their ability to develop such heuristics be celebrated, and work be undertaken with them to refine such techniques?' (Simmons, 2018: 236). In the same spirit, Koski and Workman suggest that institutional capacity renders policymaking more stable, even in the face of irrationality and a 'complex stream of information that might otherwise produce volatility in attention' (Koski and Workman, 2018: 296).

How each of these factors operates individually to shape climate action policy is complex; how they interact, even more so. As shown, some of the ways that policy framing has the potential to mitigate one of the forces (e.g. sectoral interests) may help mitigate another (e.g. institutional fragmentation). If policy framing can assist, it may not be possible to disentangle the cause-effect mechanism of how it works. Section 2.8 brings together some of the ways that framing and narratives can assist, from what was outlined separately in the sections above.

2.8   The Task Facing Framing Strategies

On the face of it, there is a reasonable case for progressing with haste towards a reframing of climate action and a new narrative in Ireland. There is agreement that more ambition is needed. Decision-makers in the governance sphere are constrained by forces of ideology, interests, irrationality and institutions, as well as the need for a shared understanding. Policy framing can play a positive role in addressing these challenges.

Policy framing and new narratives can shift the discussion of climate change, and hence the nature of the response. For example, some climate action policy frames 'make the issue of scientific uncertainty less important… [Frames] of climate change as a moral or justice issue don't require perfect understanding to see why caring for creation or defending social equity is important' (Moser and Dilling, 2007: 689).

Hallsworth and Egan (2018) state that, while policy-makers are just as vulnerable to decision-making biases as anyone else, they act within institutions that can be changed to mitigate or eliminate those biases. However, policy framing can be considered an alternative to more costly and time-consuming institutional restructuring, in response to policy roadblocks:

> … restructuring governments is a natural impulse when things are not going well, but that restructuring is hard and may create more problems than it solves. Our cautions address classic problems of centralisation and delegation using the lens of information processing. We suggest the design of explicitly information-seeking institutions to contend with new problems, for governments to yoke the disparate flows of information from sub-governments through issue bundling and consider the value of convergence of policy signals from sub-governments as policy evidence itself. (Koski and Workman, 2018: 301)

As a response to the combined challenges facing decision-makers, reframing climate action looks appealing. Certainly it 'ticks all of the boxes' in terms of influencing the policy agenda (Table 2.3). The five insights from Cairney's review of a diverse collection of empirical studies call for a climate action strategy that manages to focus on the beliefs of decision-makers, adapts to their cognitive biases, combines evidence with a framing strategy, considers policy-makers' use of mental short-cuts, and encourages them to seek more information about a preferred solution.

Yet, even in advance of looking at the practicalities of reframing (Chapter 3), lessons from abroad (Chapter 4) or framing options for Ireland (Chapter 5), there is cause to make haste slowly. This is not because reframing is a distraction from knowledge-generation and analytical issues in climate-change policy (that must continue in parallel), rather it is because of the scale of the task that reframing might be expected to undertake.

Table 2.3: Strategies to Influence the Policy Agenda

Insight	Implication for strategy
Few problems reach the top of the agenda, and attention to problems is not dependent on the evidence of their size	Find ways to draw attention to problems by focusing on the beliefs of your audience more than your assessment of the evidence
Policymakers use 'rational' and 'irrational' ways to process a lot of information in a short space of time	Adapt to the cognitive biases of influential policymakers, and frame policy solutions as consistent with dominant ways to understand problems
There are many ways to frame any policy problem, and evidence often plays a limited role in problem definition	Combine evidence with framing strategies, persuasion and storytelling
Limited time forces people to make choices before their preferences are clear	Adapt to 'rational' and 'irrational' ways in which policymakers short-cut decisions
Policymakers seek to reduce ambiguity as much as uncertainty	If you simply bombard policymakers with evidence, they will have little reason to read it. If you win the 'framing battle', policymakers will demand evidence on your problem and solution

Source: Cairney, 2018.

The governance challenges that pervade climate action policy are well known and may extend beyond those arising from ideology, interests, irrationality, institutions, and the need for a shared understanding. The discussion in this chapter and the number (29) of potential ways that policy framing and subsequent narrative might assist (see Table 2.1) point to the scale of the challenge. While policy framing can never be the sole solution to decision-making obstacles, it faces a big task in even partially addressing the issues. For example, can any policy framing and ensuing narrative simultaneously link climate action to deeply held values shared by decision-makers, shift the emphasis from zero-sum redistribution to positive-sum intertemporal distribution, reduce the cost of decision-makers' being informed, and reorganise the decision-making system? The answer is probably 'no', though policy framing and narratives surely have an important role, and an awareness of how they can have a positive impact in the realm of climate action is valuable in itself.

At a minimum, even if reframing and a new narrative is not ultimately to be an active pursuit, the framing of climate action must not be ignored, nor the retarding forces outlined in earlier sections: '… neglecting the real world obstacles in a

communication campaign may cause many change efforts to die a silent death. Communication and social change campaigns need to explicitly consider and address these barriers to increase their chances of accomplishing their intended goals' (Moser and Dilling, 2007: 694). Above all, the importance of climate action and the need to drive ambition means the ultimate decision on whether to devise a new policy frame should be further informed by more detail of what reframing entails, international experience, and a discussion of the options for reframing in Ireland. These are the focus of subsequent chapters.

Chapter 3
Strategic Policy Framing

3.1   Introduction

> The framing of adaptation can be explicit in strategies, policy documents, or procedural guidelines, but is often implicit in discussions, choices about planning approaches and processes, and the selection of assessment methodologies. Making framings explicit is important for establishing a collaborative process for adaptation. Explicit consideration of framing is also likely to influence the types of adaptation options and 'pathways' considered. (Fünfgeld and McEvoy, 2011: 5)

External shocks and stresses such as climate change have no inherent meaning. Their meaning has to be:

> … constructed socially. They have to undergo a process of collective meaning-making… [an] exercise that uses narratives… to tie everyday understandings and experiences with decision-making. In other words, landscape shocks and stresses have to be interpreted, cognitive relations have to be established to connect the new to the existing. This interpretation is not contingent or arbitrary… Interpreting landscape change is synonymic to creating new narratives around or relating existing narratives to these shocks or stresses. Any social interpretation must be embedded in this repertoire of social collective narratives. It is this repertoire that limits the ability of political actors-policymakers, civil society and social movements to make meaning of proposed policies and thus limits the space of the politically feasible. (Hermwille, 2016: 240)

Here, this 'collective meaning-making' is synonymous with 'policy framing', and can be an active or passive process.

Policy framing is 'the result of lengthy and thorough processes of political negotiation and bureaucratic labour' (Dekker, 2016: 140), and in the literature is described as both a passive and active phenomenon: a process where 'issues, decisions, or events *acquire* different meanings from different perspectives' (Dewulf, 2013: 321, emphasis added), and a process where 'actors *construct* and represent meaning to understand a particular event, process or occurrence' (McEvoy *et al.*, 2013: 281, emphasis added). In their paper on social movements,

Benford and Snow (2000) outline a number of mechanisms through which policy frames emerge. The following two broad categories are based on their analysis, though some amendment is made to generalise from the experience of social movements to policy-making generally, and to capture the passive/active differential.

- A policy frame emerges from a *passive, discursive process*, from within the decision-makers' conversations and written communications on a particular policy area. Actors discuss and align issues and experiences so that 'they hang together in a relatively unified and compelling fashion' (*frame articulation*). These 'slices of reality' are assembled, collated, and packaged to become the policy frame. The individual elements may not be novel or original, but 'the manner in which they are spliced together and articulated' does provide a new angle of vision, vantage point, and/or interpretation'. In the discourse, some issues, events, or beliefs get accented and highlighted as being more salient than others (*frame amplification*).

- A policy frame emerges from an *active, strategic process*, where actors' framing actions 'are deliberative, utilitarian, and goal directed: Frames are developed and deployed to achieve a specific purpose'. Such active, strategic framing is designed to increase the numbers addressing the problem, to bridge two or more groups (who perhaps are respectively active and inactive in the policy area), to unite groups in response to the issue, or to encourage specific interests to add their expertise and influence to addressing an issue.

Based on that analysis, the following definition is suggested here:

Strategic policy framing is an active process, whereby policy-actors work with the specific objective of establishing an important frame (or sense-making device) which will be used by decision-makers in that policy area to comprehend, conceptualise, understand, explain, and respond to issues and events. A particular narrative will flow from the strategic policy frame.

The objectives of a strategic policy framing process may be one way of bridging the gap between the ambition and trajectory of Ireland's response to climate change, with more decision-makers and interests active and united.

The choice of when to undertake an exercise to strategically frame climate action, or any other policy issue, is important: 'timing matters' (Cairney, 2018: 202), for both the strategic policy framing process itself, and the specific activity to communicate the frame that emerges from that process. Thus the policy context must be judged carefully as potential adopters are unlikely to engage sufficiently

during a period of heightened activity and attention to the policy problem. Frame articulators and transmitters may have to work on the process while waiting for 'the right time to present it to policy-makers during a 'window of opportunity'… a 'window of opportunity' is best described as akin to a space launch in which policy-makers will abort the mission unless every relevant factor is just right' (Kingdon, 1984; Cairney, 2018).

Having assessed the policy context and considered if and when a window of opportunity might emerge, a policy frame could be strategically constructed for climate action. A new frame could promote a shared understanding, make attributions regarding who or what is central to the issue, articulate the alternatives, and urge actors to act in concert to effect change (Benford and Snow, 2000: 615) (such a process is explored further in Section 3.2).

3.2   Policy Frame Construction

At the most basic level, the lessons from behavioural science on message framing provide a good starting point for the construction of any policy frame—for example, the MINDSPACE checklist for policy-makers seeking to communicate options and calls for action.

Table 3.1:   The MINDSPACE Policy Communication Framework

Messenger	We are heavily influenced by who communicates information.
Incentives	Our responses to incentives are shaped by predictable mental shortcuts, such as strongly avoiding losses.
Norms	We are strongly influenced by what others do.
Defaults	We 'go with the flow' of pre-set options.
Salience	Our attention is drawn to what is novel and seems relevant to us.
Priming	Our acts are often influenced by subconscious cues.
Affect	Our emotional associations can powerfully shape our actions.
Commitments	We seek to be consistent with our public promises, and reciprocate acts.
Ego	We act in ways that make us feel better about ourselves.

Source: BIT, 2010.

Similarly, the EAST framework for the application of behavioural insights; EAST stands for Easy, Attractive, Social and Timely and was devised as an 'accessible, simple way to make more effective and efficient policy' (BIT, 2014).

Most instructively, the reviewed literature provides advice on how to strategically frame or reframe a policy issue. Benford and Snow (2000) suggest that strategic policy framing can occur via: *frame bridging* (where policy actors link 'two or more ideologically congruent but structurally unconnected frames regarding a particular issue or problem'); *frame extension* (where policy actors depict their concerns as 'extending beyond their primary interests to include issues and concerns that are presumed of importance to potential adherents', or *frame transformation* (where policy actors alter existing understandings and meanings to generate new ones). Crowe and Jones provide advice on narrative-building to influence policy: tell a story, set the stage, establish the plot, cast the characters, and clearly specify the moral of the story (Crowe and Jones, 2018: 221-223).

A key factor will be the purpose of the reframing and the narrative in terms of whether it is intended to resolve conflict, to articulate a problem, to communicate a solution, or to motivate collective action. For example, and most recently, the UK's Behavioural Insights Team presented a useful four-part approach, where a contentious issue is reframed using *frame incorporation*, *frame reconnection*, *frame accommodation* and *frame synthesis* (BIT, 2018: 23 and 24). To illustrate how these four approaches to strategic policy framing work, they use an example of a public body and an environmental group in conflict over a development:

> Imagine that a public agency is proposing to develop an area of woodland near a town that has suffered low economic growth. The woodland is seen as an area of natural beauty. The public agency's main frame is one of <u>economic stimulus</u>: by improving amenities, they may attract more people to the town, creating a multiplier effect. On the other side is a national environmental charity that has a strong presence in the region. Their frame is <u>environmental</u>: they want the development to protect the quality of the woodland against pollution and decay, so residents can continue to enjoy it for longer. They are concerned that privileging economic growth will harm the local environment. The two frames are in conflict and are leading to dispute that seems intractable.

The application of the four approaches is set out in Box 3.1.

Box 3.1:   Four Approaches to Strategic Policy Framing to Resolve Conflict

'The first strategy is frame incorporation. This is where one side incorporates a challenging element into their own frame by creating a 'watered down' version of it. An important part of the environmental frame is the charity's concern that this will set a precedent for future developments in the region: concern for economic growth, not the environment, would become the guiding principle. If the public agency began to understand this concern, it could emphasise the fact that this development is just a pilot that will be evaluated for its impact (including on the environment). That move would allow the charity to incorporate into its framing the idea that the development would target economic growth, but only in a provisional way.

The second strategy is frame reconnection. This is where both frames are respected and preserved, but a new link is created between them, so they appear to be complementary rather than incompatible. In the example above, this would mean that one side would continue to see the policy through an economic frame, and the other an environmental frame. But economic development could be reframed as a means of improving the local environment—for example, by making it easier for local people to invest in sustainable technologies. If the public agency needed to go further, they could promise that some form of 'tourist tax' was created and funnelled to a fund for this purpose.

The third strategy is frame accommodation. This is where one side changes their framing to accommodate aspects of the opposing frame. The difference from frame incorporation is that the new element is not watered down; instead, the existing frame is substantially changed as a result of the frame accommodation. In the above scenario, this could happen if the charity succeeded in reframing the idea of economic development to include wider concepts of value. For example, the charity could make the case that people would have better mental health and social capital if they had better access to the environment. They could point out that quality of life already forms part of economic assessments in healthcare (as in 'quality-adjusted life years'). The public agency might then reframe its idea of what 'economic development' means.

Policymakers might try to go further and explore how far they can achieve frame synthesis. This is where they not only try to accommodate alternative frames, but also try to design policy in a way that delivers multiple outcomes. Early explicit recognition of different frames can enable policymakers to ask themselves how a policy might need to be developed in a way that, for example, delivers both economic and environmental outcomes. So, in the example above, it might be possible to capture the development gain from developing part of the wood, use it to enhance the biodiversity of the remaining wood, and improve access for local residents so they can enjoy the benefits more - which would deliver greater social benefit than the initial proposal. But this synthesis requires policymakers to identify potential frames upfront and iterate the policy to address them, rather than seeing any changes as mitigations or add-ons late in the process.

These strategies show that actors may reach mutually acceptable outcomes by changing elements of their proposals. The reframing is not simply about one party trying to persuade another to accept their frame; the greatest benefits may come from a mutual process of making sense of the policy issue' (BIT, 2018: 24).

Source: Excerpt from BIT, 2018.

The framing strategy outlined in this BIT example might be called *conflict-resolution framing*, devised strategically to help competing sides reach agreement and allow a policy or action to proceed. But strategic framing may be undertaken for purposes other than resolving conflict. For example, Benford and Snow (2000) refer to *diagnostic framing*, devised strategically to develop and articulate injustice, identify victims/victimisation, or attribute blame, source or culpable agents. They also describe *prognostic framing*, devised strategically to articulate the proposed solution, plan or strategy. Finally, they discuss *motivational framing*, devised strategically as a 'call to arms' or to set out the rationale for engaging in ameliorative collective action. This form of strategic framing and subsequent narrative is to provide a compelling account for engaging in collective action and for sustaining participation (Benford and Snow, 2000: 615-618)

Thus, **an important early consideration here is whether any new climate action frame for Ireland is intended to resolve conflict, aid diagnosis, articulate a solution, motivate collective action, or deliver some other objective**.

It is assumed here that a motivational, collective action frame would be useful in prompting more ambitious climate action. In that case, Benford and Snow again identify four important factors to reflect on. To aid in this, the examples of climate action frames presented in Chapter 2 are reproduced here:

Examples of climate action frames include: adaptation, mitigation, transition, resilience, compliance, transformation, global equality, just transition, green growth, hazards/disaster risk management, pollution, vulnerability, technical problem (tame), governance problem (wicked), state security, human security, ideological clash, etc.

For example, **how narrowly or broadly does the new policy frame define the challenge and hence motivate a smaller or larger group of actors?** Benford and Snow note that the wider the range of problems covered by a frame, the larger the range of actors that can be addressed with the frame and the greater the mobilisation capacity of the frame. This hypothesis only holds to the extent that the various issues covered by a frame can be plausibly connected to each other. Similarly, how flexible or rigid is the new policy frame? **Collective action frames may be more or less elastic, and thus more or less easily elaborated on over time** in terms of 'the number of themes or ideas they incorporate and articulate' (Benford and Snow, 2000: 618). From the examples of climate action frames reproduced above, *disaster risk management* and *compliance* would seem narrower and more rigid motivational frames than, say, *transition* or *resilience*.

New policy frames to motivate collective action can be either limited to the interests of a particular group or problem, or be wide in terms of scope, 'functioning as a kind of master algorithm that colours and constrains the

orientations and activities' of a wider group of actors (Benford and Snow, 2000: 618). Framing climate action in Ireland as a *(tame) technical problem* or a *(wicked) governance problem* appears more limited than, say, an *adaptation* or *vulnerability* frame.

Another key consideration at this point is the resonance of the new frame, a factor that is central to 'the effectiveness or mobilising potency of proffered framings'. **To maximise its resonance and effectiveness, a new policy frame must be both credible and salient**. Most obviously, the frame has to fit with events of the real world to be credible.

In addition, if, for example, the government were to strategically frame climate action and propose a new frame and narrative, credibility may rest on congruence with articulated beliefs, claims and actions. The credibility and resonance of the new frame will be diminished by apparent or perceived contradictions in the framing and (tactical) actions—i.e. between what the government says and what the government actor does. The credibility of the frame articulator is thus important; 'variables such as status and knowledge about the issue in question have been found to be associated with persuasiveness. Hypothetically, the greater the status and/or perceived expertise frame articulator and/or the organisation they represent from the vantage point of potential adherents and constituents, the more plausible and resonant the framings or claim' (Benford and Snow, 2000: 621).

Finally, the new frame's effectiveness will be affected by how salient it is: how essential to the agenda are the values and ideas associated with the frame? How congruent or resonant is the frame with the personal, everyday experiences of the targets of mobilisation? And how culturally resonant is the frame in terms of cultural factors, myths, assumptions, ideology, etc? From the examples of climate action frames reproduced above, is *compliance* or *green growth* a concept that resonates more or less with Irish decision-makers than, say, *human security*? Resonance with society, as opposed to decision-makers, is also an important consideration.

Assuming that a strategic frame and narrative can be devised in the context of these considerations, it will need to be successfully diffused across decision-makers to be impactful. Strategic reframing may see the frame articulator act as the frame transmitter, or the transmitter may be another actor. Either way, the strategic frame and narrative must be diffused to potential adopters. Again, credibility is important (Benford and Snow, 2000: 627–628).

3.3 Cautionary Lessons from the Literature on Framing

At the outset it was made clear that any strategic policy reframing of Ireland's climate action policy should be in parallel with knowledge generation and the continued pursuit and analysis of actions to narrow the gap between ambition and trajectory. Additional lessons can be derived from the literature.

First and foremost is the issue of timing. Bounded rationality, complexity and the limited *pools of worry* make **identifying a window of opportunity** a key early consideration. A suitable opportunity has to be created and/or taken for both the framing process and any frame that might emerge.

The considerations identified in the previous section **(frame breadth, flexibility, scope and resonance) challenge those engaging in strategic policy framing** to make undoubtedly subjective and difficult calls. How would the alternative climate action frames of *transformation*, *global equality* or *just transition* 'perform' if judged by these criteria, for example? Judging efficacy in advance argues against rushing into a strategic reframing initiative for climate action. Chapter 2 outlined the task facing such a process, and the previous section also suggests that careful analysis of the breadth, flexibility, scope and resonance of any new policy frame and narrative is needed at an early stage.

As discussed in the first chapter, Béné *et al*'s work highlights that **the way in which a frame is used will affect how effective it is, how it is interpreted, what it is expected to achieve, what issues are at stake, and what characteristics of the frame are important**. In strategic policy reframing, frame articulators and/or transmitters must assess the implications of the new frame being 'no use', a buzz word, a metaphor, an analytical tool, a goal or an indicator. This assessment and response will likely affect the new frame's effectiveness.

There appear to be **few studies on the contribution of strategic framing processes**, though Benford and Snow note one that has found that robust diagnostic and/or prognostic frames were most associated with the attainment of goals. 'While a single study such as this hardly demonstrates conclusively the importance of framing to outcome attainment for movements in general, it certainly suggests that for some movements, framing processes are critical to the attainment of desired outcomes. As well, it calls for further investigation of the relationship between and the goal attainment efforts of different varieties' (Benford and Snow, 2000: 632).

Benford and Snow warn that 'the development, generation, and elaboration of collective frames are contested processes... This means that **activists are not able to construct and impose on their intended targets any version of reality they would like**; rather there are a variety of challenges confronting all those who engage in framing activities' (Benford and Snow, 2000: 623–627). Such challenges include 'macro factors' such as political opportunity and cultural context:

- Political opportunity shapes the institutional structure and/or informal relations within the decision-making system where the framing takes place. Active, strategic framing occurs when it is assumed that an opportunity to affect change exists, and of course it may not. That said, if actors interpret the political context in a way that emphasises opportunity rather than constraint, they may stimulate that change opportunity, making their opportunity a self-fulfilling prophecy.

- Cultural context (e.g. the extant stock of meanings, beliefs, ideologies, practices, values, myths, narratives) can be expected to constrain and facilitate actors' active, strategic framing. These elements constitute the cultural resource base from which frames are constructed, as well as the lens through which policy frames are interpreted and evaluated.

(see Benford and Snow, 2000).

Further, frame articulators and/or transmitters must be aware that '**the impact of a framing strategy is not necessarily immediate even if it is successful**. Scientific evidence may prompt a lurch of attention to a policy problem, prompting a shift of views in one venue or the new involvement of actors from other venues. However, it can take years to produce support for an 'evidence-based' policy solution built on its technical and political feasibility (will it work as intended, and do policy makers have the motive and opportunity to select it?)' (Cairney and Oliver, 2018: 401). Such lurching of attention can make it difficult for those engaged in strategic policy framing to judge if and when the new frame is having any impact, and whether to alter or abandon the process.

The sometimes **contradictory lessons from the reviewed literature are worth debating** in advance of embarking on any strategic policy reframing exercise. For example:

- Multiple frames can form a barrier for mutual understanding and can evolve into protracted controversies about 'what the issue is really about', delaying or impeding effective decision-making (Dewulf, 2013: 327).

- Multiple and different framings, as expressed through different disciplines, concepts, language and normative world views, continue to be problematic for achieving coherent approaches to climate action (McEvoy *et al.*, 2013: 280).

- Given the variety of possible ways to frame climate change, reliance on a one-sided framing of the issue is unlikely to bring climate action processes to fruition (Dewulf, 2013: 328).

Then there are contradictions such as:

- The friction generated by the variety of ideas, worldviews and norms embedded in diverse frames also provides the potential for crafting innovative solutions,

granted that the participants are able to deal with this variety (Dewulf, 2013: 327).

- Initiating a competition between frames carries risk as 'actors may get trapped in a frame contest, where different actors strategically try to have their frames prevail. This can result in policy controversies, intractable conflicts, or paralyzed decision-making, which can severely hamper the achievement of adaptation outcomes' (*ibid*: 328).

Furthermore, before embarking on any strategic policy framing process, policy-makers should **consider the general criticisms of so-called nudging** (libertarian paternalism, choice-architecture).

Box 3.2:   Framing as Libertarian Paternalism (Nudging)

Libertarian paternalism, more commonly referred to as *nudging*, is a public policy approach suggested in Thaler and Sunstein's bestselling book from 2008. The book provides 'prescriptions that 'nudge' us back to what we would rationally want ourselves to do' (Hargreaves Heap, 2016: 64). The book, *Nudge*, states that 'frames are powerful nudges, and must be selected with caution' (Thaler and Sunstein, 2008: 37). The authors explain that framing works as a nudge because decision-makers tend to be passive, and because our decision processes do not do the work necessary to interrogate whether an alternative frame would affect the outcome or choice. They add that 'one reason they don't do this is because they wouldn't know what to make of the contradiction' (*ibid*.). Interestingly, the public policy example of nudging that they provide is in the area of energy policy, a sphere closely related to the issue at hand in this paper. It presents two alternative government information campaigns, and goes as follows:

(a) If you use energy conservation methods, you will save $350 per year.

(b) If you do not use energy conservation methods, you will lose $350 per year.

'It turns out that information campaign (b), framed in terms of losses, is far more effective than information campaign (a). If the government wants to encourage energy conservation, option (b) is a stronger nudge' (*ibid*.)

Thaler and Sunstein recommend caution when employing framing, given its power as a nudge. Criticisms of libertarian paternalism highlighted by Gill and Gill (2012) include:

- whether governments can be trusted to implement nudging policies (such as strategic framing) appropriately;

- inherent judgments about what is good/bad, normal/abnormal, or optimal/suboptimal;

- lack of evidence that deviation from rational behaviour correlates with negative outcomes (e.g. lower earnings, lower happiness, impaired health, shorter lives, etc);

- freedom to take risks and make mistakes has importance;

- real-life human choices are often contradictory or opaque;

- individual-centred solutions may not always be appropriate;

- inadequate attention is given to context, culture and locality;

- potential for abuse when employed by for-profit, private interests;

- whether policies that are not beneficial to the individuals they target can be justified within a libertarian paternalist framework, even if they contribute to the social good; and

- the potentially adverse consequences of poorly targeted libertarian paternalist interventions.

Not all of the critiques of nudging could or would be levelled at the strategic framing of climate action, but it would be a mistake not to apply the list above (or similar) to ensure that the process is appropriate and in order to head off any unwarranted criticism should it arise.

Overall, as strategic as any policy framing process is, **it appears that different framings 'just have their political moment**, just as particular metaphors may fit the circumstances and quickly become embedded in everyday discourse' (Paschen and Ison, 2014: 1089). No government or agency is likely to propose, let alone undertake the challenge of strategically framing climate action without engaging in intensive preparatory work. The suggestions and lessons in this chapter could feed in to such preparatory work, as could undertaking a review of how similar processes have been progressed abroad. By way of example, the following chapter provides a cursory look at climate action framing processes in two countries: the Netherlands and Australia.

Chapter 4
Climate Action Reframing in Practice

4.1 The Netherlands

4.1.1 Background to the Dutch Case

An attempt to bolster national climate action policy via strategic policy framing has been made before, with some success. In the 2000s, a *transition* frame was adopted for climate action in The Netherlands. Prior to the frame's adoption, the Dutch policy was orientated towards observing international agreements (e.g. the Kyoto Protocol) but, given the consequent focus on certain GHG emissions, reliance on incremental reform, and the absence of associated structural change, this approach was deemed inadequate (Rotmans et al., 2001: 29; Hendriks: 2008: 1014). Smith and Kern (2009) examined the decision of the Dutch government in 2001 to adopt the transitions management approach. Here, transition provided something of a new frame and narrative for its fourth National Environmental Policy Plan in 'an attempt to reinvigorate ecological modernisation' (Smith and Kern, 2009: 78). Although the adoption of the approach might not on the face of it appear to be an explicit example of strategic policy framing, it has many of the qualities of one. The transitions management approach saw the Dutch government adopt 'a distinct new language', a 'language [that] promotes sustainable reconfigurations of entire socio-technical systems of provision for energy, housing, agriculture, transport and so on'; 'shifts in storyline, like the new transitions approach, drive policy development and are an important factor explaining policy change' (ibid: 79)

Smith and Kern state that the adoption of the approach 'provides an opportunity to analyse the role discourse plays in policy development', where 'different discourses compete to occupy the same policy terrain' (*ibid*.). This aligns with the purpose of this paper in assessing the impact of strategic policy framing in the climate action sphere. Smith and Kern:

> … use the concept of policy storylines as a device for analysing how policy actors construct meanings around problems and act upon them. Policy storylines simplify components from broader discourse and integrate them into meaningful and compelling accounts of a public issue. Storylines frame issues by arguing how they should be understood and tackled: they represent intentional mobilisations of discourse. Coalitions of actors adhere around storylines, add to their

>development, and contribute towards their institutionalisation in changed policy practices. (Smith and Kern, 2009: 79)

Under the transition frame, the government of the Netherlands pursued long-term reform to achieve greater environmental sustainability by generating new institutional arrangements and alternative modes of policy development (Hendriks, 2008: 1010). This was in response to poor progress in decoupling the Dutch economy from negative environmental impact, an increasing recognition across the policy system that a new approach was required to deliver meaningful change, and a growing acceptance that 'existing policy was insufficient to the social and economic drivers of the problem' (Smith and Kern, 2009: 87).

4.1.2   The Opportunity

In Chapter 2, the importance of the 'window of opportunity' to strategic policy framing was discussed. The opportunity to reframe national climate-change policy in the Netherlands did not present itself without important prior groundwork by researchers and policymakers. Smith and Kern also note the importance of windows of opportunity that allow 'policy entrepreneurs' to selectively draw upon discourses and insert new storylines into policy agendas (Smith and Kern, 2009: 82). Policy entrepreneurs may have to make an opportunity, and certainly take it as it emerges. Policy entrepreneurs must take advantage of windows of opportunity that open irregularly and briefly, and deal with randomness and unexpected closure (Baumgartner, 2016: p.59).

In the Dutch case, the proposers of the new frame recognised that, if it was to stand a chance of becoming policy, it needed cross-government support (Smith and Kern, 2009: 85). There came a moment when the desire and willingness of members of the research and policy-advice community, and the interest of policy-makers in exposure to new ideas most closely aligned. The original transitions narrative was constructed by a small network of university researchers and policy consultants, and in 2000 the window of opportunity opened when both the environment and economy ministers convened an interdepartmental working group (*ibid.*: 84). Whether the window of opportunity emerged by coincidence or otherwise is a matter of debate. On the one hand, policy-makers describe it as a 'lucky coincidence' that the demand for the transitions frame 'came together with the supply of one' (*ibid.*: 86). On the other hand, this so-called coincidence is described as having been carefully developed, with the frame 'negotiated through extensive dialogue, drawing upon longstanding research-policy engagement, and an entrepreneurial adaptation to policy agendas' (*ibid.*: 86).

Whether the introduction of the new policy transition narrative was the result of luck or design, the Dutch experience suggests that the theoretical assumption that the window of opportunity is important is borne out in practice. This must be considered in any efforts to invigorate climate action through a new policy frame.

4.1.3 Transition as the New Frame

> A transition can be defined as a gradual, continuous process of change where the structural character of a society (or a complex sub-system of society) transforms. Transitions are not uniform, and nor is the transition process deterministic: there are large differences in the scale of change and the period over which it occurs. Transitions involve a range of possible development paths, whose direction, scale and speed government policy can influence, but never entirely control. (Rotmans *et al.*, 2001: 16)

The *transition* frame refers to socio-technological changes or innovations involving multiple forces and actors, and typically spanning one to two generations—i.e. 25 to 50 years (Hendriks: 2008: 1014). It replaced the *incremental reform* frame which emphasised targeted, incremental improvements in environmental performance negotiated with business sectors (e.g. firm-level processes and improved environmental management). In the Dutch case, the *incremental reform* frame fostered a shorter-term orientation towards incremental reforms in business practice (e.g. environmental management). Longer-term scenarios for systemic change 'were considered insufficiently meaningful or enticing…, were uninteresting for businesses', and actors would not invest in that process (Smith and Kern, 2009: 84).

In contrast, the transition frame sought to invoke the goal of steering society towards a vision, to promote experimentation, and to require leading stakeholders to work collaboratively. It was to simplify and present a 'meaningful and compelling' account of the climate-change challenge, becoming the frame policy actors used to construct meaning around the problem and respond to it. The new frame also signalled a shift away from a centralised, top-down approach to a more decentralised, networked and cross- institutionalised form of governance, to facilitate reform in a multi-actor context. Framing the challenge in terms of transition was 'aimed at steering networks and, ultimately, society through transitions towards sustainability' (Hendriks: 2008: 1014). It is not an outright rejection of incrementalism (or rigid planning, for that matter), rather 'perhaps transition management constitutes the third way that policy scientists have been looking for all the time, combining the advantages of incrementalism (based on mutual adaptation) with the advantages of planning (based on long-term objectives)' (Kemp *et al.*, 2009: 78).

In constructing a frame that would reassure those presenting the concept for ministerial approval, components from existing policy were repackaged, creating 'a formula for reinvigorating policy without having to dismantle it' (Smith and Kern, 2009: 87). Although such policies were insufficient, the transition frame provided co-ordinated integration in a longer-term framework.

Notably, the reframing in the Netherlands relied on the frame's interpretative flexibility in relation to prevailing institutional priorities. The Dutch encountered a

challenge that can be expected wherever strategic policy framing is proposed: convincing influential ministry/ministries with their own commitments (e.g. energy liberalisation, a competitive knowledge economy) to get on board. The success of this reframing, such as it was, lies in such interpretative flexibility in relation to prevailing institutional objectives, providing a 'politically successful storyline… by transcending the economy versus environment debate' (Smith and Kern, 2009: 79). While decision-makers need not hold identical meanings around the same policy frame ('interpretive flexibility is essential for coalition formation'), at some stage the new frame needs to be institutionalised in order to be impactful; 'flexible meanings have to be arbitrated into binding norms' (*ibid.*: 80).

Thus, the new frame had to 'work with the grain' of the commitments of other ministries by speaking 'a similar language', 'allowing ministries to pursue their own agendas within the overall approach' (*ibid.*: 88). For example, the transition frame placed a focus on innovation, which appeared market-friendly while simultaneously seeking progressive aims.

4.1.4   What the Reframing Meant

Importantly, institutionalisation of the new frame into policy practice meant action within and beyond the policy system. Within the system, the Dutch government tasked an interdepartmental group, comprising 30 civil servants from six ministries, with improving the 'fit' between ongoing strategies and the policy conditions implied by the transition frame: experimentation, collaboration, and a focus on the longer term. These interdepartmental groups were to identify and overcome cross-ministerial issues (Hendriks, 2008: 1010). Beyond the policy system, new networks were created to manage transition for collaboration and innovation (transition arenas). These arrangements were not to replicate neo-corporatist arrangements, and participants were not to be representatives of interest groups but rather be 'autonomous and creative thinkers' (*ibid.*: 1014).

Groups of key stakeholders were convened under six strands (transition platforms) to develop pathways towards stated, ambitious goals and to suggest experiments to explore practical ways to make progress. The stakeholder groups under each of the six strands were chaired by government-appointed business leaders, who then appointed other stakeholders. Businesses made up the majority on each grouping and the structures worked to place 'pressure on government to re-organise policies and combine them' (Smith and Kern, 2009: 93).

According to Hendriks, 'hundreds of stakeholders' were involved in collaborative arrangements, and concrete projects funded to experiment with energy innovation, beginning in 2001 with the Dutch Ministry of Economic Affairs cautiously progressing transition management via the sponsorship of novel energy projects at large research institutions: this tentative start 'grew into a comprehensive Energy Transition Program which now encompasses numerous network arrangements and

alternative modes of policy development… and has even absorbed (some say colonised) various existing initiatives' (Hendriks, 2008: 1015).

4.1.5   Limits of the Approach

In broad terms, grappling with the complexities of necessary change through a transition frame has the inherent problem of situating climate action 'within historical trajectories and structured socio-economic and political systems' (Kirby and O'Mahony, 2018: 43). This may not be conducive to the type of radical, structural change that many believe climate action must entail.

Although the reframing did not result in the full reinvigoration of the agenda that was hoped for, it did deliver many positive outcomes. Crucially, as Smith and Kern note, coalitions of actors (research, bureaucratic and political) adhered around the transition frame, adding to its development, and contributed to its institutionalisation via changed policy practice. The approach had to win consent from nine ministries to become policy. Policy-makers could ignore or reject the new approach, reverting instead to a neoclassical approach centred on market-based incentives. Such incentives were included in the transitions frame, as was the importance of innovation. The transition frame *extended* earlier policies by introducing language that promoted system-wide reconfiguration across sectors. Positioning transition as a framework for policy thinking rather than as a replacement for existing policy helped overcome one of the big threats facing the approach.

Although the new transition frame communicated a necessity for structural change, its subsequent manifestation failed to 'induce institutional change with sufficient reach and depth' (Smith and Kern, 2009: 95). The limits of reframing 'in shifting actual policy practice' were evident in the extent and rate of impact in the Dutch energy sector' (Smith and Kern, 2009: 79). A number of explanations are offered:

- The **interpretative flexibility** needed to secure the supportive coalition simultaneously built in limits by making subsequent institutionalisation susceptible to capture by incumbent interests.

- The **narrow base of the supportive coalition** meant more influential support had to be drawn in, with detrimental consequences for the interpretation of the transitions frame in policy practice.

- The **new frame was light on detail** so that it could suggest structural change without threatening key interests. This left it open to capture by those same interests at implementation.

- The implementation phase has been described as **missing any civic debate** about the goals and pathways.

- The reframing approach **was not accompanied by complementary policies** that placed incumbent systems under concerted pressure to restructure, and open niche opportunities.

- Contrary to the objective of the transition frame, **ensuing policy did not reconfigure institutions** into pro-sustainability forms.

- The new **institutional arrangements had to compete with more established and more powerful entities** for market regulation and infrastructure investment.

Another critique emphasises the **exclusive nature of the network governance** as a problem, noting that the energy transition arrangements were not inclusive of small and medium-sized enterprises or diverse societal groups (e.g. NGOs), and bemoaning the fact that the transition arrangements bypassed the broader community, reducing the role of citizens in energy policy to that of consumers (Hendriks: 2008: 1018-1019). The analysis did note, however, that some relevant groups 'self-excluded' due to a perceived lack of knowledge or competencies necessary to participate, adding that such groups must be empowered to engage; otherwise 'their perspectives will remain outside the energy transition process, making it difficult to gain their support for, and participation in, policy solutions' (*ibid.*: 1020).

In light of these limitations, it is perhaps unsurprising that some early advocates are described as being 'troubled by transition policy diluting the original intent of their storyline' (Smith and Kern, 2009: 89).

4.1.6   Lessons from the Dutch Reframing

> Five years later (2001-2006), the notion of socio-technical transitions and their management has been capturing the imagination of Dutch administrators, politicians, business leaders, innovators, scientists and the media. While transition management has not replaced more conventional modes of governing in The Netherlands, it has shaped recent reform programmes in the energy, agricultural, transport, health and spatial planning sectors. (Hendriks: 2008: 1014)

In their analysis, Hoppe *et al* identify eleven lessons from Transition Management (TM) practice in the Netherlands:

- It should be noted that TM fits well in the corporatist tradition of the Netherlands.

- Transition management has been able to provide an alternative mode of governance for sustainable development in the Netherlands.

- The all-encompassing, integrated approach and the linkage with wider societal developments is both a strength and a weakness of TM.

- The concepts of TM have found realisation in Dutch sustainable development.

- Transition management should not be considered an alternative to sustainable development policies and regulations.

- The Dutch practice of TM has shown the risk of initiating an innovation and change-oriented process that becomes dominated by status quo-oriented incumbents.

- TM not only needs the right participants but also, above all, good resources, in particular time and money.

- Governments are important for financial resources and for providing the political legitimation of TM.

- The best translation of the system's reference in TM in practice is an economic sector.

- Experiments should be socio-technically oriented.

- Do not concentrate too long on agreeing about concepts, visions and pathways; instead, concentrate on exploring good innovative ideas and practices.

(Hoppe *et al.*, 2012: 25-28)

Policy frames are important, yet expendable, pointing to the need to frame and reframe in a reflexive way. It is clear that framing is not immune to politics, or the forces it is trying to help decision-makers overcome (see Chapter 2). The flexibility afforded to the strategic policy frame by an absence of detail was necessary to ensure a supportive coalition could be assembled, but it also left the transition policy open to exploitation by the more powerful interests and institutions. Nor could the frame overcome absolutely the dominant ideological forces. For example,

assessments refer to radical components of the transition frame losing out to ones more accordant with the existing, neo-liberal frame (Smith and Kern, 2009: 94).

There are also conflicting assessments of the inclusivity afforded by the transitions policy frame:

> Reports to Parliament suggest that 'society' is being involved in this extensive energy reform programme. However,… in-depth analysis finds that in this case, network arrangements are colonised by elites [to] the exclusion of many potentially affected groups and individuals (Hendriks, 2008: 1010).

As a result, Hendriks proposes eight strategies for improving inclusivity:

   i.   Anchor network governance to elected officials.

   ii.   Pluralise elite institutions.

   iii. Stimulate issue politics.

   iv.   Empower public debate and citizen engagement.

   v.   Encourage discursive inclusion.

   vi.   Make nodal points inclusive.

   vii. Reframe the debate.

   viii. Monitor the substantive equality of outputs.

It is perhaps most noteworthy that this 2008 review of the Dutch transitions framing includes a recommendation to 'reframe the debate'. Hendriks writes:

> In relation to the Energy Transition Program, this strategy might involve shifting the transition discourse from one of technological innovation to one of social responsibility. This could heighten the awareness and willingness of citizens and politicians to enter the energy debate. However, if inclusive ideals are unable to 'speak to' the dominant discourses then promoting inclusive network governance will not be easy. What the empirical research here suggests, in line with that of others, is that policy networks remain relatively closed in contexts where elite or techno-corporatist ideals persist in political practice. (Hendriks, 2008: 1010)

This implies that **there is a danger in strategic policy framing where the frame that is intended is not the one that manifests itself**, or at least is not perceived to be in place. In the Dutch case, it could be argued that the intention was to replace an *incremental reform* framing with a *transitions* policy frame. However, Hendriks'

review suggests that a *technological innovation* frame emerged, although a *social responsibility* frame would have been preferable.

Given that Smith and Kern appraised *transitions* specifically as a policy-framing device, this section has relied heavily on their view. Their overall assessment is summarised here to close the summary of the Dutch experience. Smith and Kern conclude:

> [From] the perspective of transition champions in government, and given the relatively short time since inception, much has been achieved. One should not diminish the effort required to institutionalise compromise. policy-makers have had to be pragmatic. The new Dutch government is persisting with transitions policy, but is under pressure to deliver short-term success in order to justify the approach. That means marketable technology. From the perspective of a transition to sustainability, however, much work remains. **The challenge is for shallow institutionalisation to deepen, extend and challenge existing institutions, and, given the goals, do so in a way that is more democratic than current platforms**. Transitions policy has yet to unsettle incumbent interests and institutions… This is an important point for theory: the original support base influences the process and content of coalition formation, with consequences for just how malleable the storyline must become in order to gain policy assent. (Smith and Kern, 2009: 94 and 95, emphasis added)

The repeated reference to institutional problems, despite the best intentions and efforts of the *transitions* frame, speak to the challenges that spurred the Dutch Energy Agreement 2013-2023, which has been the subject of a recent NESC Secretariat analysis (Moore, 2012). The Dutch experience of transitions management, insofar as it represents an exercise in strategic policy framing, provides useful insights. The lessons from the reviewed literature might be summarised as follows:

- Interpretative flexibility may be needed but it can build in limits and serve incumbent interests.

- Broadening the base of the support can be detrimental for interpretation.

- Being light on detail leaves a frame open to capture.

- Implementation must be inclusive.

- Framing may need complementary policies to see incumbent systems restructure.

- A frame must reconfigure institutions and create new institutional arrangements to compete with powerful entities.

- The frame that is intended may not be the one that manifests itself or is perceived.

The transitions concept has reframed Dutch discussion of climate change, albeit at a largely surface level. It provided a way of shifting emphasis from the problems of climate change to the future direction of society. These summary points, and those of Hoppe *et al.*, should be considered alongside the lessons set out in Chapters 2 and 3, and in conjunction with any learnings from the next international example, Australia.

4.2   Australia

4.2.1   Background to the Australian Case

Changes in sea level, river discharge and weather extremes, combined with increasing potential impacts due to population growth and increasing value of capital, will enhance the need for cities to become 'climate-proof'. In this context the concept of resilience has emerged as a particularly prominent policy narrative. (Béné *et al.*, 2018: 116)

The climate and climate events experienced in Australia differ greatly from those in Ireland, the Netherlands, or northern Europe. This has shaped policy and responses there for decades: 'from cyclones, storms and flooding in the north of the continent to conditions of drought in the central and southern reaches, and natural vegetation that has evolved to often propagate itself through fire episodes, climate impacts have long been an enduring feature of the Australian environment' (McEvoy *et al.*, 2013: 287). These experiences have created a particular stoicism among individuals and communities in Australia in response to harsh climate impacts. In the mid-2000s, the prevalent practice of 'repeated coping' was deemed an insufficient form of climate action in the longer term by government at federal and state level; for communities to be sustainable a new response was needed to 'the projected escalation in the frequency and intensity of hazards, as well as an increasing exposure to them' (*ibid*: 287).

Scientific data and real-life events were increasing awareness of climatic stressors' expected impact on social, economic and ecological systems (Fünfgeld and McEvoy, 2011: 24). This included data on rising temperatures, sea levels, GHG emissions scenarios, and impact studies on the consequences for coastal and low-lying areas. Australian research examined the potential impact of climate change on the flooding of agricultural land and the breakdown of transport infrastructure due to flooding. Research was suggesting that an increase in extreme summer

temperatures would manifest itself in 'more frequent and prolonged summer heatwaves, which may lead to significant indirect impacts on human health/comfort, vegetation, and critical infrastructure such as energy and transport systems' (*ibid*.) The 2009 Victorian bushfires are cited as an example of cascading, concurrent and compounding climatic stressors, where 'a period of prolonged drought coincided with extreme heat and strong winds, led to widespread damage to infrastructure, natural environment and human health, including the loss of lives' (*ibid*.). In February 2009, 173 people lost their lives in the 'Black Saturday' bushfires in Victoria. In light of these developments, the concept of a new resilience frame emerged at the end of the decade:

- 2008: A high-level council of emergency management ministers from the Australian federal government, states and territories, and New Zealand agree on a new climate action policy direction, 'based on achieving community and organisational resilience' (Australian National Emergency Management Committee, 2009: ii).

- 2009: Australia adopts a 'whole-of-nation resilience-based approach to disaster management, which recognises that a national, coordinated and cooperative effort is needed to enhance Australia's capacity to withstand and recover from emergencies and disasters' (*ibid*.).

- 2010: The *Framing Adaptation* project begins. Funded by the State Government of Victoria, the 18-month project is a collaboration of universities, government departments, local authorities, and local stakeholders (Fünfgeld and McEvoy, 2011).

- 2011: The National Strategy for Disaster Resilience is formally adopted by the Council of Australian Governments.

The communique that announced the adoption of the 2011 strategy referred to natural disasters which 'had a profound effect on the Australian community. All Australians have been affected by the tragic loss of life and widespread devastation experienced in many communities'. It went on to state that the government recognised the challenges facing many communities and the need to improve Australia's ability to withstand and recover from disasters, and so had adopted the National Strategy for Disaster Resilience and agreed to take immediate steps to implement it (COAG, 2011: 1).

The 2011 strategy is considered to be 'the first step in a long-term, evolving, process to deliver sustained behavioural change through new forms of partnership workings'. Community and organisational resilience or self-reliance was 'central to the new framing of disaster resilience'. The adoption of the framing strategy is thought to have been assisted by domestic narratives, but had some international reach: 'Driven by contemporary political agendas in Australia, there has been significant promotion of the resilience frame in recent times. This focus is mirrored

internationally, as evidenced through funders' encouragement of 'climate resilient' development as a key form of adaptation' (McEvoy *et al.*, 2013: 288). Australia's resilience frame 'is a rapidly emerging concept (in the socio-ecological arena) that has been strongly embraced by policy communities and is the one that is now having considerable influence on evolving agendas, including that of climate-change adaptation. The introduction of the National Strategy for Disaster Resilience in 2011 is one high-profile product of this new thinking in Australia' (*ibid*: 290).

4.2.2   The Opportunity

As evident from the brief timeline set out above, the emergence of the resilience framing occurred in the second half of the 2000s, and was **firmly focused on climate impacts (disasters) as opposed to climate change *per se***.

More specifically, the year 2009 is thought to be a turning point. For example, in 2009 the non-profit company Australia 21 published *Brighter Prospects: Enhancing the Resilience of Australia*, building on its work since 2007, explicitly setting out the links between Australia's resilience, risk-assessment, mitigation, policy formulation and implementation. In relation to framing, that research into resilience called for further work 'to change the stories or narratives by which Australians define themselves, their lives and their goals (including making better health (in the broadest sense), not greater wealth, the nation's defining goal' (Australia 21, 2009: 11).

In August 2009, the Australian Strategic Policy Institute produced a special report on climate change and national resilience, calling for an assessment of the impact of climate change on risks, and for government to develop a National Partnership Agreement on Disaster Resilience and associated funding.

There was a 'recognition by Federal Government that responses need to be more holistic, consider all hazards and reach beyond the emergency management community to involve a whole of Government approach' (McEvoy *et al.*, 2013: 287). This led to 'a discernible shift towards new 'multi-hazard' and 'multi-agency' approaches that place greater emphasis on the prevention and preparedness side of the emergency management spectrum, and notably away from a predominant focus on disaster recovery' (*ibid*).

The year 2009 saw the 'rapid emergence of the resilience frame in the Australian context, i.e. from a mindset of protection to one which promotes community preparedness and resilience' (McEvoy *et al.*, 2013: 287). On 7 December 2009 the Council of Australian Governments (COAG) agreed to 'adopt a whole-of-nation resilience-based approach to disaster management, which recognises that a national, coordinated and cooperative effort is needed to enhance Australia's capacity to withstand and recover from emergencies and disasters' (Australian National Emergency Management Committee, 2009: ii). This was a key step in building the necessary political support for strategic policy framing:

> [The] political appetite for a resilience approach can be traced to the actions of the COAG in 2009. As an intergovernmental council tasked with policy reforms of national significance, it initially commissioned a working group to broker agreement around actions that would lead to a 'more disaster resilient' Australia. Then, building on these whole-of-nation foundations, a National Emergency Management Committee went on to develop the National Strategy for Disaster Resilience, which was formally adopted by COAG in February 2011. (McEvoy *et al.*, 2013: 287 and 288)

At the same time, the *Framing Adaptation* project got underway, with four key elements:

- the development of an overarching framework for adaptation (the 'roadmap');

- preliminary economic analysis of climate-change impacts and adaptation;

- an exploration of local narratives; and

- testing of these research outputs in three case-study locations.

(Fünfgeld and McEvoy, 2011: 7)

4.2.3   Resilience as the New Frame

The broad concept of resilience (from the Latin root *resi-lire*, meaning 'to spring back') is viewed as being 'highly influential in a range of social science disciplines such as psychology, disaster studies, economic geography and environmental planning' (Davoudi *et al.*, 2012: 301). The scientific usage of the resilience concept can be traced back 'to the definition of the 'modulus of resilience' used in the context of 19th century warship design… [and] assessing the ability of materials to withstand severe conditions. In the 1940s and 1950s the concept emerged in psychology in the context of the negative effects of adverse life events such as exclusion, poverty, and traumatic stressors on vulnerable individuals and groups—in particular children' (Béné *et al.*, 2018, 118).

By the 1960s, resilience had 'entered the field of ecology where multiple meanings of the concept have since emerged, with each being rooted in different world views and scientific traditions' (Davoudi *et al.*, 2012: 300). The defining principles for its use in ecology are commonly attributed to Holling in 1973 (McEvoy *et al.*, 2013: 284). Holling 'made a distinction between *engineering* and *ecological* resilience'—i.e. the ability of a system to return to an equilibrium or steady state after a disturbance, versus the magnitude of the disturbance that can be absorbed before the system changes its structure (Davoudi *et al.*, 2012: 300).

The precise definition is important because, as will be discussed later, resilience can become synonymous with 'bounce-back-ability', the engineering and equilibristic view of resilience. For example:

- A UK Intelligence and Security statement defines resilience as the 'capacity to absorb shocks and to bounce back into functioning shape, or at the least, sufficient resilience to prevent . . . system collapse'.

- The *Scottish Resilience* strategy launch referred to taking 'all practicable steps to… respond and cope with major shocks so we can bounce back quickly'.

(Davoudi *et al.*, 2012: 301)

In addition, Nassim Nicholas Taleb has introduced the concept of *antifragility* as an alternative to resilience, based on the idea that certain things not only gain from chaos but need it in order to survive and flourish; where resilient things can resist shocks and stay the same, antifragile things continually improve (Taleb, 2014).

In Australia's reframing project, started in 2010, resilience was defined as 'the ability of groups or communities to cope with external stresses and disturbances as a result of social, political, or environmental change' (Fünfgeld and McEvoy, 2011: 5). However, the final National Strategy for Disaster Resilience, adopted by the COAG in February 2011, 'interestingly and deliberately' did not define resilience, and 'the term is also absent from the glossary' (McEvoy *et al.*, 2013: 288). Instead, the strategy set out key attributes of what it considered to represent resilience in the Australian context. Overall, the emphasis on climate impacts, risk and disasters over climate action was a continued feature and is reflected in what the new frame meant in practice.

4.2.4   What the Reframing Meant

These key attributes of the resilience approach in Australia included:

- a new policy landscape shaped by a devolution of responsibility from federal and state governments towards households, businesses and communities;

- a recognition that a new focus on 'shared' or 'collective' responsibility would need to be underpinned by enhanced partnership working, a better understanding of risks and impacts (including communication);

- the enabling of an adaptive and empowered community;

- the engineering resilience of Australia's 'hard' infrastructure and a critical infrastructure resilience strategy; and

- an institutional dimension, including organisational resilience (and partnership working between business and government), and the development of a Trusted Information Sharing Network (TISN) for Critical Infrastructure Resilience (see McEvoy *et al.*, 2013).

The seven themes and case studies associated with the resilience frame as applied in Australia further reveal the emphasis on climate *impact* as opposed to climate change/action:

- *Leading change and coordinating effort*: Case study 'Flood response measures in the Rural City of Wangaratta';

- *Understanding risks*: Case study 'Better understanding risk on the Clarence Coastal Areas';

- *Communicating with and educating people about risks*: Case study 'Communicating information about risks through emergency management-zones';

- *Partnering with those who effect change*: Case study—'Partnerships through the Trusted Information Sharing Network';

- *Empowering individuals and communities to exercise choice and take responsibility*: Case study—'Community partnership projects with culturally and linguistically diverse communities';

- *Reducing risks in the built environment*: Case study—'CSIRO research—Urban flooding'; and

- *Supporting capabilities for disaster resilience*: Case study—'The NSW Government's approach to building capabilities'

Overall, while the resilience framing process in Australia emphasised disaster and risk management, this was most pertinent to them, and it had a tangible impact in these areas. The resilience frame led to change, 'evidenced by an increasing role for risk-based approaches and a much greater emphasis on self-reliance. This shift to community risk management is favoured as being more flexible and cost-effective than a predominantly top-down approach' (McEvoy *et al.*, 2013: 289).

4.2.5   Limits of the Approach

It could be argued that the most obvious limitation of the Australian strategic policy framing exercise was the absence of even a broad definition of the frame, *resilience*: 'It is evident in the Australian context that what is meant by resilience is particularly nuanced, being understood by different communities of practice in different ways

according to their own particular frame of reference' (McEvoy *et al.*, 2013: 289). One reason for this may have been the desire for interpretative flexibility in order to help build support and buy-in (see the discussion of the Dutch case above). It was recognised that resilience needs to accommodate a broad range of situations (ecological, infrastructural and organisational) but its precise meaning gets 'further diffused' as the diversity of stakeholders (individuals, communities, organisations, etc.) apply it to their primary concerns. This will have consequences for the actions that emerge from the frame and narrative. For example, in the business environment, resilience 'can relate to innovation and the capacity to use disruptive events to slingshot an organisation forward' (*ibid*.).

As introduced in Australia, a 'fuzzy concept of resilience, as currently articulated, faces the prospect of becoming a rubric which replaces sustainability as the new 'catch-all' term that acts as all things to all people'. It has been argued that one suitable definition could have been 'the ability of groups or communities to cope with external stresses and disturbances as a result of social, political, and environmental change', or similar (McEvoy *et al.*, 2013: 285). That being said, McEvoy *et al.* note that 'some commentators argue that this lack of conciseness of definition may not necessarily be a negative attribute—in the political context at least—as it encourages a diversity of ideas to address complex socio-ecological relationships and prompts decision-makers to assess new challenges using system-based approaches. Others suggest that narrowing the scope of the resilience concept risks losing the robustness of the concept as a whole' (*ibid*: 288 and 289). Looking beyond the broad definitional concern, and despite resilience-thinking proving to be 'popular with this particular community of practice', three related challenges with this particular framing have been identified.

i.   The limits of 'bouncing back': The notion of 'bouncing back' (e.g. after a weather-related perturbation) to the normal functioning of a system may be an inadequate adaptation response or in some cases may actually constitute maladaptation. Contentious and politically sensitive decisions may remain inadequately addressed.

ii. Applicability of resilience frame to complex system of actors: Climate-change adaptation is strongly characterised by a myriad of socio-institutional processes that involve a complicated web of multilevel and multi-actor relationships. Although the concept of resilience is increasingly found in climate-change adaptation discourse, it is not without a need for critical reflections and debate.

iii. No agreed consensus on what resilience actually means in practice: For example, a recent discussion paper lists sixteen different conceptualisations of resilience that were identified from a review of international literature on climate-change and disasters. These include disturbance as opportunity, resilience as process, persistence of systems, five capitals, social infrastructure, survival and recovery, self-organization, preparation and performance, stability, self-organization and learning, disaster resilience of

place, convergence, resilience spectrum, migration and social resilience, four components of resilience, resilience and adaptation, and components and characteristics of resilience.

(McEvoy *et al.*, 2013)

On the first point, the emphasis on bounce-back-ability in the resilience frame 'shapes the type of responses that are planned by the relevant institutions. That is why much of the resilience-building literature is dominated by post-disaster emergency planning, where the focus is on sudden, large and turbulent events, at the expense of gradual, small and cumulative changes' (Davoudi *et al.*, 2012: 302).

> With its roots in the natural sciences, the idea of bouncing back to an original form (or even resisting change) is not necessarily appropriate when considering societal well-being under a changing climate. Admittedly, this limitation is recognised in policy documentation; however, the introduction of terminology such as 'bounce forward' will remain little more than sound-bites until more solid conceptual underpinnings are developed and applied. (McEvoy *et al.*, 2013: 290)

This issue is discussed further in the next chapter.

4.2.6   Lessons from the Australian Reframing

McEvoy *et al*'s review concluded that 'the concept and language of resilience (with more positive connotations than climate-change impacts and vulnerability) is being embraced by the political community in Australia, and with this support is increasingly acting as a magnet for other related issues and agendas' (McEvoy *et al.*, 2013: 288). In this context, a number of lessons present themselves for those considering strategic policy framing:

- Framing can increase appeal to political communities due to the more positive use of language (McEvoy *et al.*, 2013: 288).

- Framing needs to be viewed as an important influence on climate action, influencing not only our perspectives of climate risks but also how we assess them and ultimately how we respond, with consequent implications for the roles and responsibilities of different actors (*ibid*: 289).

- If groups of actors (researchers, government, civil society organisations, households, individuals, etc) persistently **lack shared understanding of what the frame means and its relationship to the climate action, this will lead to inefficiencies** in planning processes that seek to adapt to a changing climate as people will often talk unknowingly at cross-purposes without a common frame of reference (*ibid*.).

- Political arrangements are not always conducive to integrated, multi-level/regional policy. National **exercises and understandings related to the frame may not be replicated at regional levels** (*ibid*.).

- **Fragmentation of frame definitions and methodologies is not only pervasive in the public realm but** also affects private operations (*ibid*.).

- Strategic framing/the shift towards a 'resilience' perspective requires **a governance system that promotes monitoring of decision outcomes, re-evaluation, and a willingness to experiment and innovate** (McDermott and Surminski, 2018: 15).

- There are political challenges implied by such strategies, because of **the difficulty of communicating to the general public the need for revision and re-evaluation** (*ibid*.).

More generally, the reframing project in Australia included some advice regarding the '**potential for inadvertently framing climate-change adaptation in preconceived ways**'. Strategic policy framing is not free from the implicit 'framing' of climate action. Implicit framing occurs, for example, through the inclusion of some topics and examples while excluding others, and in the use of particular language throughout the strategic framing activity (Fünfgeld and McEvoy, 2011: 12).

Chapter 5
A New Climate Action Frame for Ireland?

5.1   Introduction

> [The] success of policy on energy efficiency, and the operational measures put in place to give effect to it, is dependent on a great many individual people making their own decision to make their homes or places of work more energy efficient. So, while it is very important that the measures in place are technically robust, how they are communicated to those people whose decision to act policy makers depend on, is just as important (National Mitigation Plan, 2017: 64).

Ireland's climate action policy recognises the importance of framing, and reframing climate action has been suggested in a number of studies. The opening chapter highlighted the 2012 analysis undertaken by the NESC Secretariat which identified the dominant, linear framing of the climate challenge and concluded that Ireland should widen this frame. The conclusion was reached because the existing frame placed the decision on *how much* adjustment ahead of consideration of *how to* achieve it, placed a strong focus on high-level political actors (governments acting together), and conveyed a preoccupation with international negotiations, targets and timetables, and on emissions-trading schemes as a central policy approach or instrument (NESC Secretariat, 2012).

That first chapter also noted the recommendation in a recent report for the EPA for a new climate action narrative for Ireland, framing decisions in a manner which goes beyond compliance with externally imposed targets, takes seriously the need to protect those who will lose out as a result of the transition, reflects an important spatial dimension, and—perhaps most importantly—helps secure buy-in. Securing maximum political and social buy-in is at the heart of the EPA publication's call (Torney, 2018: 12). For others, the need for a new frame in Ireland centres specifically on shifting the approach taken by political decision-makers: 'Our political representatives need to move from rhetoric of entitlement and compensation to a narrative of responsibility and solidarity' (O'Neill, 2018: 18).

The literature examined in this paper broadly suggests that the reframing of climate action in Ireland can aid decision-makers in the governance sphere overcome the forces of ideology, interests, irrationality and institutions, as well as make a shared understanding more likely. Whatever the motivation for considering reframing, there is dissatisfaction in some quarters with the existing frame or frames for policy

action in this area. What that existing climate action frame *is* is examined briefly in Section 5.2.

5.2   Ireland's Current Climate action Frame

The scope of this paper does not allow a comprehensive analysis of Ireland's current climate action frame, but some high-level observations based on the reviewed literature are possible. The decision-makers of interest in this analysis are actors in the climate action policy area where they are involved, either directly or as onlookers and stakeholders, with an emphasis on the political governance sphere. In this context, focus should centre on the stimuli to which they must attend, making official national policy documents related to climate action of most interest here—i.e. *National Climate Policy Position* (2013), *Energy White Paper: Ireland's Transition to a Low Carbon Energy Future* (2015), *National Mitigation Plan* (2017), *National Planning Framework* (2018), *National Development Plan* (2018), *Sectoral Planning Guidelines for Climate Change Adaptation* (2018), and *National Adaptation Framework* (2018).

In these seven national policy documents, there are many climate action frame possibilities including adaptation, mitigation, transition, resilience, compliance, transformation, global equality, just transition, green growth, hazards/disaster risk management, pollution, vulnerability, technical problem (tame), governance problem (wicked), state security, human security and ideological clash. Section 1.5 sets out why and how these different framings can affect decision-making and policy action. Of these listed examples, the NESC Secretariat (2012) and EPA publication (Torney, 2018) suggest that *compliance* is an important, perhaps dominant, climate policy frame in Ireland:

> … the dominant framing of the climate-change challenge has emphasised the search for a ***top-down binding international agreement on emissions-reduction targets and timetables***, the adoption of emissions trading as a central policy approach and a predictive approach to policy analysis… The dominant framing of the climate-change policy challenge suggests a linear process running from climate science, to global political agreement on ***ambitious and credible targets and timetables***, to strong and credible carbon pricing, emissions caps and regulation, leading finally to market-based discovery and implementation of optimal carbon-reducing technologies and measures. (NESC Secretariat, 2012, 10 and 11, emphasis added)

> Low-carbon transition is a profoundly political and societal challenge. A more positive economic and social narrative that highlights not only challenges but also opportunities is required. This narrative must be about more than just ***compliance with externally imposed targets***… (Torney, 2018: vii)

In terms of the absolute number of mentions of 'targets' in key climate policy documents such as the Energy White Paper (2015) and National Mitigation Plan (2017), *compliance* appears to be important in providing the context for Ireland's response to climate change.[5]

The evoking of *compliance* is nevertheless evident in some policy documents. For example, the second chapter of the National Mitigation Plan sets the overall framework, with strong emphasis on global agreements, reducing GHG emissions and achieving associated targets. Because non-compliance with binding emissions-reduction targets and timetables brings with it the threat of fines on the State (and reputational damage), *compliance* is an especially salient frame for political decision-makers and public officials. At the same time, the further the actor is from the impact of such fines, the less impactful the compliance frame might be (see Section 2.5.3). The need to move beyond a compliance-centric approach and to 'act local' is at the heart of previous NESC Secretariat analysis and recommendations (NESC Secretariat, 2012).

With the publication of the National Mitigation Plan (2017), Sectoral Planning Guidelines for Climate Change Adaptation (2018), and the National Adaptation Framework (2018), the terms *adaptation* and *mitigation* have understandably become more prominent, while *resilience* features prominently in the Adaptation Framework (see Table 5.1). There is a recognition that usage of the various terms is not inconsequential, as the terms are explicitly defined in the Framework, with *mitigation* appearing the least passive or most action-oriented of the three terms (Table 5.2).

In 2017, the Climate Change Advisory Council signalled to government that clarity on the definition of resilience is important. It pointed to the IPCC's 2012 definition as 'a plain language starting point from which to develop robust approaches to adaptation. A common approach to defining this concept is critical to ensuring consistency across sectoral and local authority planning for adaptation' (Climate Change Advisory Council, 2017: 3).

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[5]   However, insofar as the raw number of mentions is a reflection of the importance of a particular frame, compliance is no more a dominant framing of climate action than adaptation, mitigation, transition, resilience, or as a technical issue. (Based on context-insensitive counting of the following words in seven national climate-related policy documents: *targets*, *adaptation*, *mitigation*, *transition*, *resilience*, *transformation*, *equality*, *just transition*, *disaster*, *vulnerable*, *technical*, *governance*, and *security*.)

Table 5.1:   Examples of Term Usage in Climate Policy Documents

Document/*Term*	*Adaptation*	*Mitigation*	*Resilience*
National Mitigation Plan (2017)	'The [agriculture] sector must be in a position to anticipate and adapt to the negative impacts of climate-change, as well as looking to maximise the benefits for the food production system'—p.120	'… measures are designed to ensure there are a number of overarching benefits for the rural environment, including mitigate climate-change, preserve habitats and species, maintain water quality and ensure a more balanced development of rural areas'—p.130	'… Government will pursue investment, innovation and enterprise opportunities towards building a competitive, low carbon, climate-resilient and environmentally sustainable economy'—p.15
Sectoral Planning Guidelines (2018)	'… to prevent or minimise the adverse impacts of climate-change, planned adaptation to climate-change and the impacts of these changes is urgently required'—p.1	'Due to the inertia in the response of the climate system… even if efforts to mitigate the causes of climate-change are successful, many of the impacts are locked in for many decades to come'—p.3	'Green adaptation measures seek to utilise ecological properties to enhance the resilience of human and natural systems to climate-change impacts'—p.39
National Adaptation Framework (2018)	'Substantial preparatory work has been completed that has succeeded in building the knowledge base for adaptation and in increasing awareness of the need to adapt to climate change'—p.70	'The largest unknown is the effectiveness of global climate policy in reducing emissions of GHGs (climate-change mitigation)'—p.14	'These policies frame the objective of transitioning to climate resilience and realising inherent opportunities'—p.20

The connection between *adaptation*, *resilience* and *mitigation* is explained in the Adaptation Framework as follows: the 'aim of **adaptation** is to reduce vulnerability of our environment, society and economy and increase **resilience**. Actions that bolster climate resilience are ones that enhance adaptive capacity of social, industrial and environmental infrastructures and **mitigate** the effects of climate change' (Government of Ireland, 2018a: 24, emphasis added). The National Adaptation Framework presents *adaptation* as means of improving *resilience*.

Table 5.2: Definition of Terms

Adaptation	**A change in natural or human systems in response to the impacts of climate change. These changes moderate harm or exploit beneficial opportunities and can be in response to actual or expected impacts.**
Mitigation	**Action to reduce the likelihood of an event occurring or reduce the impact if it does occur. This can include reducing the causes of climate change (e.g. emissions of greenhouse gases) as well as reducing future risks associated with climate change.**
Resilience	**The ability of a social or ecological system to absorb disturbances while retaining the same basic ways of functioning, and a capacity to adapt to stress and change.**

Source: National Adaptation Framework

The term *transition* and the *technical* aspects of climate action are more prominent in the National Mitigation Plan, for example:

- 'The transition we must achieve is essential for Ireland's future and for the future for the planet. This National Mitigation Plan sets out our vision to achieve this **transition**…'.

- 'This first Plan does not represent a complete roadmap to achieve the 2050 objective, but rather is a work in progress reflecting the reality of where we are in our decarbonisation **transition**. It is intended that the Plan becomes a living document…'.

- '… it is not prudent or even possible to specify, in detail, policy measures to cover this entire period as we cannot be certain what scientific or **technical** developments and advancements might arise over the next 30 years or so'.

- 'As assumptions underpinning… scenarios are subject to change, roadmaps must also be subject to regular revision in the light of scientific or **technical** developments'.

(Government of Ireland, 2017: 5, 8, and 21)

A cursory analysis of key recent climate action policy documents for governance decision-makers in Ireland does not reveal any one dominant framing *per se* in terms of *compliance, adaptation, mitigation, transition* or *resilience*. They are all 'part of the mix', and these and others (e.g. *technical*, *governance*, *security*) are presented as being important aspects of climate action rather than being the key consideration.

The analysis also suggests that climate action policy decisions can be placed in a variety of important frames beyond those listed above. Climate action is required across sectors (energy, transport, industrial/agricultural, residential) yet the policy debate in the energy sector is prominent. The 2015 White Paper was a complete energy policy update, setting out a framework to guide Ireland's policy up to 2030, with the objective of a low-carbon system. It included another important climate-related frame that has shaped policy in Ireland in recent years: the so-called *energy trilemma*. The concept has been attributed to the World Energy Council, which describes it as a country's ability to provide energy through three dimensions: security, equity (accessibility and affordability), and sustainability.[6]

In Ireland's case, the trilemma is presented as the challenge to devise and implement policy aimed at striking a balance between three stated core objectives: sustainability, security of supply, and competitiveness (Government of Ireland, 2015: 3, 8, 13, 22, 27, 28, 36, 91, and 97). This regularly mentioned trilemma presents policy as something of a zero-sum trade-off between three competing objectives (rather than, say, a choice between three unfavourable options, or the pursuit of two options at the expense of the third).

There is a view that, at various points in Ireland's economic and policy cycle, one of the three objectives is given priority over the other two, and that this affects decision-making:

> There are complex trade-offs between the three energy pillars of security, competitiveness and sustainability; for example decisions around fuel choices may improve security of supply and environmental sustainability performance but have an adverse effect on long term cost competitiveness and vice versa. It is therefore critically important

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[6] The World Energy Council also produces a trilemma index, which ranks countries on how well they manage the trade-offs of the trilemma. In the 2017 index, Ireland ranks 20th out of 125, with Denmark at the top. See https://trilemma.worldenergy.org/.

> that the new energy policy clearly sets out what the order of priorities is for Ireland's energy policy to 2030 as this will have significant implications for policy decisions made and actions identified... The enterprise agencies are strongly of the view that Ireland's energy policy must be rebalanced to prioritise cost competitiveness. (Forfás/Enterprise Ireland/IDA Ireland, 2014: 5)

Despite calls for the order of priorities for Ireland's policy to be made explicit, this has not happened to date. The framing of climate-related policy decisions as a trilemma, a trade-off between sustainability, security of supply and competitiveness, has been an impactful and, for some, a key issue.

Revisiting this particular framing in the context of the literature reviewed here provides one example of how climate action in Ireland might be reframed, if this is deemed a useful pursuit (discussed further in the next section).

Overall, the short exercise undertaken here does not reveal any dominant climate action frame in Ireland. To recap, the dominant policy frame and connected narrative is the result of a 'policy process in which multiple frames are contesting, but where one frame prevails and characterises policies' (Dekker, 2017: 127). Based on the above, it is difficult to argue that *compliance, adaptation, mitigation, transition* or *resilience* is the general, coherent interpretation of climate action in Ireland that captures a definition and a related strategy to solve it—i.e. the dominant policy frame.

As stated in the opening chapter, this paper deals with how climate *action,* not climate change, is framed. This examination of selected literature does not allow one to draw the conclusion that climate action in Ireland is primarily an exercise in *compliance* or *resilience* or *ensuring equality*, or other obvious alternatives. That is not to say that those who call for a reframing or for the climate policy frame and narrative in Ireland to be broadened (beyond *compliance*, for example) are not correct. Indeed, the report for the EPA, which included such a call, cited a number of reasons for a new narrative, one that moves beyond compliance *and* takes seriously the need to protect those who will lose out as a result of the transition, reflects an important spatial dimension, and helps secure buy-in (Torney, 2018).

Just because there is no readily identifiable dominant climate action frame does not mean that strategic reframing should not be considered. An earlier section noted that multiple frames can present a barrier for mutual understanding and develop into protracted controversies regarding 'what the issue is really about', with negative consequences for effective decision-making (Dewulf, 2013: 327). Strategic reframing of climate action could seek to replace the multiple frames present in Ireland's case with a more facilitative or effective dominant frame.

Such a course of action must not, however, ignore the potential, if not immediately obvious, value of ambiguous framing noted in an earlier chapter, in contexts of complexity and controversy—i.e. the strength of weak framing. It may not be 'the

most efficient in steering policy action, but can be sensible in situations of uncertainty and successful in compromising between competing information and interests. Weak frames enable policy-making in a deadlock' (Dekker, 2017: 141). It could be that the existence of multiple/weak climate action frames in Ireland has been necessary to make the progress which has been made, as the counterfactual is not knowable. If, having weighed these issues, it was decided that strategic reframing of climate action should be undertaken to replace the multiple frames present, what dominant frame might deliver more effective decision-making? The following section considers this question with reference to recent developments in enterprise policy.

5.3   Resilience, Enterprise Policy and Climate Action

5.3.1   Starting Point

This section is based on the premise that strategic reframing of climate action should be undertaken to replace the multiple frames present in Ireland. It suggests a concept of *resilience*, broadened to encompass how it has been recently employed in enterprise policy, as a potential new climate action frame. Ireland already uses resilience to frame climate policy, as illustrated in the previous section, though it could not be viewed as the dominant climate action frame. Resilience is a concept that has also featured in recent transport policy (Department of Transport, Tourism, and Sport, 2017).[7]

The term is most prominent in the National Adaptation Framework and hardly features in the remaining six national climate-related policy documents examined here, and to which our decision-makers of interest must attend. A unifying of climate action and enterprise policy through a shared resilience frame could be beneficial in terms of narrowing the gap between Ireland's climate ambition and its trajectory. As with many if not all such strategic shifts, **questions emerge regarding 'why, what, how, when and who?'**. These questions are addressed in the sections below, along with an assessment against the lessons which emerged from the reviewed literature. **Before that, the recent emergence of resilience as an important element of Irish enterprise policy is examined** briefly.

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[7]   Resilience is defined there as "the capacity of social, economic and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganising in ways that maintain their essential function, identity and structure, while also maintaining the capacity for adaptation, learning and transformation"—Department of Transport, Tourism, and Sport, 2017: 87.

5.3.2 Emergence of the Resilience Frame in Irish Enterprise Policy

Ireland's enterprise policy was renewed in 2018, just three years after its previous iteration. *Enterprise 2025 Renewed* presented an update on the *Enterprise 2025* document and carried the subtitle: 'Building resilience in the face of global challenges' (see Figure 5.1), while the opening chapter was titled 'Refocusing on resilience'. This refocusing on resilience is in response to 'winds of change in relation to Brexit, international tax developments, US policies, and technological advances [which] represent a culmination of events that will have a direct impact on Ireland's prospects' (Government of Ireland, 2018b: i). The open shift of emphasis in enterprise policy to a focus on resilience saw the prominence of *competitiveness* reduced relative to the 2015 policy.[8] There are a number of explanations possible for this.

First, the 2018 document makes clear that enterprise policy was reviewed to ensure it was robust to a number of global changes, specifically the UK's decision to leave the EU, potentially significant policy shifts by the US on trade and investment, developments in the sphere of international tax, and disruption and opportunity presented due to the speed of adoption of technological advances. As a result, the national strategy states that 'we intend to make changes to our policy emphasis, refocus on building *resilience* and accelerate the speed at which we implement change' (Government of Ireland, 2018b: iii, emphasis added). Where vulnerability is recognised and is the impetus to review strategy, resilience as opposed to competitiveness understandably becomes a focus.

Secondly, the response of national governments to the global financial crisis and unsustainable sovereign debt has been characterised as austerity in the form of expenditure/service reduction coupled with increased taxation. This was often at times of rapidly increasing unemployment, declining incomes, asset-wealth destruction (e.g. property, pensions, shares), and increased demand for public supports such as welfare, education/skills, and health services. These economic issues generated societal and political challenges as globalisation and the economic model are seen to be—and in many cases are—failing to deliver improved living standards for large sections of the community.

In Ireland, crises in housing and healthcare provision persist despite a return to economic growth. Overall, competitiveness as a concept has taken several knocks in the post-crash era and is more synonymous than ever with a perceived 'race to the bottom', 'corporate welfare', and diminished power of individuals/workers, and can become entangled in debates about global corporate taxation and the treatment of personal data. This is in parallel with a rise in political populism. Framing policy in terms of resilience as opposed to competitiveness does not carry the same risks.

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[8] For example, there were over six times as many references to 'competitiveness/competitive' as there were to 'resilience/resilient' in the 2015 document. In 2018, mentions were about even.

Thirdly, policy-makers often encounter calls for 'something new or different' when reviewing or updating strategies. Where the policy context is deemed to have altered to such an extent as to warrant the call for an update, some expectation that the revised strategy will look or be different is understandable. In this instance, Government decided that Brexit especially (but also US policy and international tax developments, and technological change) presented such a challenge to enterprise policy that it should be reviewed seven years early. Once that review is complete, it is natural to ask how national enterprise policy has changed in response to these significant events. In reality, the 2018 enterprise policy review leaves the core activities and approach untouched (helping indigenous firms to export and grow, while maximising foreign direct investment, through direct support and the pursuit of enhanced national competitiveness). The language used in *Enterprise 2025 Renewed* reflects this: 'Our enterprise policies are delivering... While some areas have taken on greater import in today's challenging and changing external environment, we continue to deliver on a range of complementary and mutually reinforcing actions that build on our strengths while deepening resilience... While the framework and areas for action in *Enterprise 2025* [2015] remain valid we intend to make changes to our policy emphasis, to refocus on building resilience and to accelerate the speed at which we implement change... The fundamentals of our enterprise policy remain valid—with a focus on export-led growth underpinned by innovation and talent to deliver increased competitiveness and productivity' (Government of Ireland, 2018b).

By validly placing an emphasis on resilience (over competitiveness, which previously was the most prominent theme), the updated national enterprise policy presented a clear response to any question of how it had changed in the face of events. This is not to say that the adoption of resilience as the key frame for enterprise policy did not produce tangible outcomes. *Enterprise 2025 Renewed* includes a number of responses to build both firm and system resilience:

- increasing the level of Brexit preparedness in enterprises;

- providing supports to develop and execute firm sustainability and growth plans;

- deepening collaborations between enterprises and research centres;

- accelerating efforts to diversify source markets for FDI; and

- embedding a more systematic and comprehensive approach to horizon scanning.

Whether the result of the threat posed by external events such as Brexit, or the declining popularity of the competitiveness frame, or the desire for 'something new', or a combination of all three, resilience has emerged as the dominant enterprise policy frame. **Unlike competitiveness, resilience is a frame used in climate action policy, and unlike other climate action frames (such as adaptation, mitigation, transition, compliance, transformation), it is a frame that can resonate with enterprise policy actors (firms, networks, enterprise bodies/agencies)**.

Figure 5.1: Example of Prominence of *Resilience* in Enterprise Policy 2015 and 2018
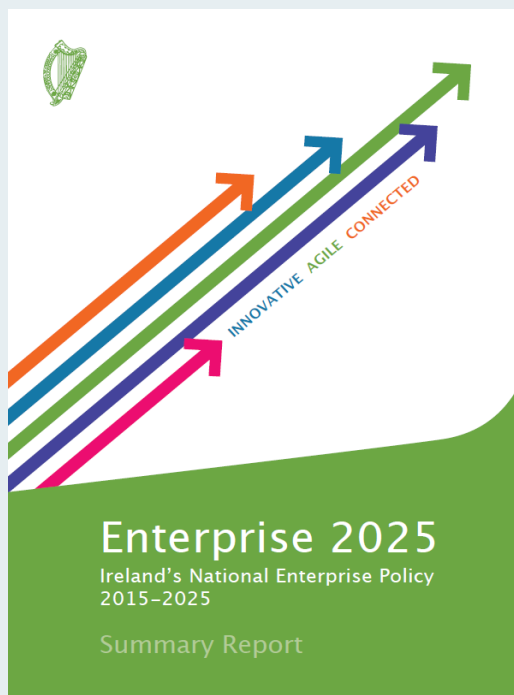
2015, cover
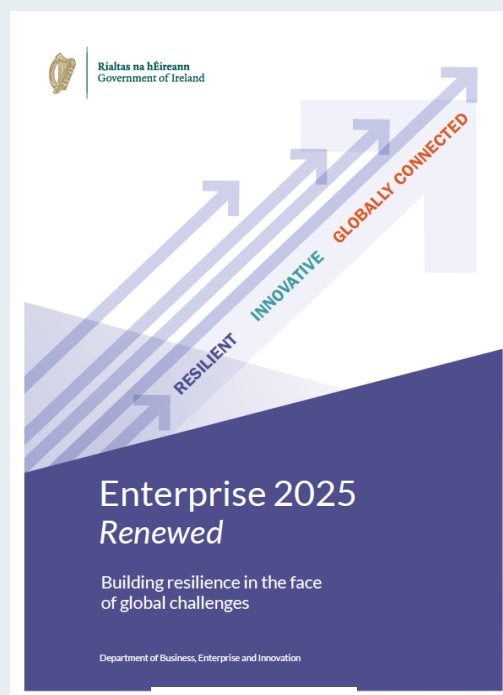
2018, cover

2018, inside cover

5.3.3   Why a new Resilience Frame Might Drive Climate Action

Animating enterprise policy actors

In their 2011 work on policy and practice for framing climate action, Fünfgeld and McEvoy argue that policy developers and decision-makers should pause and query why a particular type of framing should be adopted, and ascertain the relevance of the underlying concepts. It is important to ask 'what type of guidance would be most useful for assisting policy developers, decision-makers and practitioners in the choice of adaptation approaches?' (Fünfgeld and McEvoy, 2011: 58-59). According to their research, 'triggers' for selecting a particular approach include complying with a requirement or recommendation (e.g. under a new policy or legislation), setting sectoral standards, arising from prevailing strategies, or aligning climate action with existing processes or objectives.

Where the trigger is seeking a frame to align climate action with existing processes, decision-makers with a strong focus on a frame in one policy area may bring that approach (or similar) to another. For example, decision-makers with a focus on well-being in health policy might adopt a *vulnerability* frame for climate action, or decision-makers with a focus on corporate risk in one area might tend towards a *risk management* approach to climate policy. A climate action frame that aligns with a frame that decision-makers employ in another successful policy area is likely to be most useful in assisting them in climate action policy decisions. The resilience frame has emerged as key in enterprise policy, a policy area that—despite being imperfect and depending on your metric of success—has been relatively successful in Ireland, certainly compared to climate action policy.

Ireland experienced a financial crash where the economic growth rate 'fell sharply to minus 2.1 per cent in 2008, with a further steep decline to minus 5.5 per cent in 2009. The unemployment rate in Ireland peaked at 15 per cent in Q1 2012. In terms of jobs, 330,000 jobs were lost in the period 2008-2012, down from a peak employment of 2.16 million' (DJEI, 2015b: 3). During this period, innovative enterprise policy, a refocusing on national competitiveness, and enterprise innovation and performance saw modest recovery in economic activity from 2011, then better than expected export-led growth from 2013. Ireland continued to outperform its budgetary targets, and brought the budget deficit, which hit a peak of 11.5 per cent in 2009, to 0.3 per cent in 2017. Most recently, enterprise policy objectives articulated in 2015 have largely been realised or on track to be achieved on time:

> Considerable progress has been made in achieving the objectives set out in [2015]. There are 141,001 more people now at work and at over 2.2 million people working, we are approaching full employment. All sectors of the economy and all regions are experiencing growth. In agency-supported enterprises, with 64,700 net jobs already created over the period 2014-2017, we have achieved 85 percent of our 2020 ambition. Exports continue to grow, reaching €260bn in 2016.

Indigenous exports have reached €21.6bn and are well on track to achieve the ambition set out in [2015]. There is solid progress in implementation across the majority of strategic actions. (Government of Ireland, 2018b: iii)

A frame for climate action aligned with the frame that decision-makers employ in this successful policy area (enterprise) could be effective in assisting them in climate policy decisions. Looking back over Ireland's economic performance, the role of the enterprise base—from entrepreneurs, SMEs, multinational corporations, the work of the enterprise department and development agencies (DBEI, Enterprise Ireland, IDA Ireland, Science Foundation Ireland, Local Enterprise Offices), and the impact of enterprise policy as a whole, should not be underestimated. It is unsurprising that a recent assessment of priorities for Ireland's move to a low-carbon economy states that 'failure to closely align transition to a low-carbon economy with the jobs agenda would be a missed opportunity', and includes a call for more research and evidence on 'the link between decarbonisation, low-carbon transition and economic development' (Rogan, 2017). Similarly, the 2018 report for the EPA, which calls for a new climate action narrative in Ireland, states that:

> All the institutional tinkering in the world will not deliver decarbonisation without support from society. A more positive **economic** and social narrative is required that highlights not only the challenges but also the opportunities of the transition. **The business sector could play a stronger role**, such as the Confederation of British Industry (CBI) has done in the UK. (Torney, 2018: 12, emphasis added)

The role of business in the UK, mentioned above, refers to positioning business at the heart of delivering necessary change, embedding climate action in national industrial strategy, and harnessing the innovative practices, networks and new technologies present in the enterprise sector to drive climate action (CBI, 2017). One of the potentials of unifying climate action and enterprise policy through a shared resilience frame is that it would enlist and mobilise the option-generating and problem-solving networks of enterprise policy and enterprise actors.

The NESC Secretariat's 2012 analysis of the dominant framing of the climate-change policy challenge also highlighted this. In that case, the dominant frame resulted in a top-down approach, where states and international organisations are the key actors. More progress is needed on turning national and international commitments into action, giving attention to the amount of innovation in firms and public agencies, for example. The NESC Secretariat concluded that climate-change policy and the transition could only work by engaging a wide range of actors, including firms and public agencies, in exploring new possibilities and finding ways to learn from and generalise their innovations. This led to the call for the transition agenda to engage actors at all levels and in all sectors, through 'a governance system that animates, learns from, and pushes networks of firms, public organisations and communities to ever-greater decarbonisation' (NESC Secretariat, 2012: 20 and 21).

Unifying climate action and enterprise policy via a shared resilience frame for decision-makers may be an important part of a governance system in Ireland, that will see it animate, learn from, and push enterprise policy actors: firms, networks, and enterprise bodies/agencies.

The use of resilience to frame policy in *Enterprise 2025 Renewed* provides some evidence of the beginnings of such a process:

> [Economies] now need to plan for a more sustainable future in the context of climate-change and shifting demographics. The imperative for sustainability is driving behavioural change, technology development and policy as world economies seek to transition to low carbon, bio and circular economies. Ireland faces significant challenges achieving national and international binding targets, mitigating our emissions and adapting to the effects of a changing climate. Enterprise (and enterprise policy) has a role to play to develop and embrace new technologies, products and services that increase efficiencies, reduce waste and deliver a higher quality of life. We need now to place an emphasis on strategic actions that will embed resilience and shape an Ireland of the future that is prepared—an Ireland that can anticipate—an Ireland that can respond to external shocks. (Government of Ireland, 2018b: 2)

Nevertheless, there is some way to go before there is the shared understanding between climate action and enterprise policy actors and decision-makers implied in the NESC Secretariat's analysis, and before they share a definition of resilience or the resilience frame.

Promoting Shared Understanding

The short review presented in Section 5.2 did not reveal any dominant climate action frame, and showed decision-makers and enterprise policy actors referring to the zero-sum trilemma frame (security vs. sustainability vs. competitiveness). The importance of this trade-off is also clear from the latest *Competitiveness Challenge* from the National Competitiveness Council:

> Energy competitiveness is of critical importance for enterprise development and can directly affect the ability of enterprise to retain and grow output and employment, particularly in energy intensive sectors. A reliable and competitively priced supply of energy is vital for business and its ability to compete successfully in international markets. From a competitiveness perspective, the primary challenge facing Ireland is to reduce energy costs while delivering on our security of supply and environmental sustainability objectives. (NCC, 2017: 42)

The opening chapter defined policy frames as *sense-making devices*, which shape how policy issues are structured, and provide the frame of reference for decision-

makers to comprehend, conceptualise, understand, explain and respond to issues and events. When the core enterprise policy message is focused on competitiveness (as opposed to resilience), competitiveness is communicated as a multidimensional, relative concept incorporating many interlinked and interdependent factors, including costs, skills, infrastructure, tax regime and the business environment. That said, 'cost' is the most salient aspect of competitiveness for firms; changes in the cost of doing business will be immediately impactful in a way that changes in skills, infrastructure, tax, and the operating environment will not.

With competitiveness framing climate action for enterprise actors, costs become key. In trading-off the energy trilemma, there is no salient 'metric' of a firm's energy sustainability or security of supply at the end of their electricity, gas or water bill. Rather than assisting decision-makers or animating firms, networks and enterprise bodies/agencies in climate action, the current absence of shared understanding and reference to the competitiveness frame can act as a barrier. For example, at a policy event in June 2017 on opportunities for Ireland in the low-carbon economy, a poll asked participants to identify their top priority for decarbonising the energy system:

> In particular, there was surprise from some participants, that 'jobs and employment' received just 2 per cent of the vote. In the ensuing discussion, these two perspectives [decarbonisation and economic] remained far apart, with a tendency for each side to simply assert their perspective as the most important; there was little discussion on how these two priorities could overlap and have mutual benefits... we believe that this disparity in priorities represents a real barrier to effective dialogue. This divergence in perspective on economics versus decarbonisation underlines the importance for further engagement in this area, and serves as a useful input to our research. One of our takeaways from the event was a greater appreciation for how stakeholders have very different views on the primacy of economic versus decarbonisation goals. For government and government departments, economic metrics such as growth, employment, exports are paramount; for many of the non-governmental stakeholders, economic goals are secondary to meeting goals for greenhouse gas emissions. (Rogan, 2017)

Unlike resilience, competitiveness is a frame rarely if ever used in climate action policy and, as described above, commonly employed frames such as adaptation, mitigation, transition, compliance or transformation will not create shared understanding with decision-makers, firms, networks and enterprise bodies/agencies. Further, insofar as the trilemma is a key policy frame for decision-makers and/or enterprise policy actors (as suggested in the 2015 Energy White Paper and the preceding 2014 Green Paper), it is a zero sum game whereby any gains made in terms of the sustainability or security of the system result in a loss of competitiveness. This might not be the case were there a unifying of climate action and enterprise policy via a shared resilience frame for decision-makers.

It may well be that some decision-makers and enterprise policy actors overstate the cost-competitiveness impacts of climate action, for example:[9]

- National competitiveness is a relative concept, measuring Ireland's performance relative to the performance of others. Climate action tends to develop via international policy co-ordination, meaning Ireland's competitiveness is not as greatly affected as it would be via unilateral steps.

- The counterfactual to climate action is not 'business as usual'. Arguments against climate action based on increased costs and risks to national competitiveness must be open about the economic costs and risks from future climate impacts.

- The concept of national competitiveness and hence enterprise policy has expanded to include less tangible qualities such as place-making (see *Enterprise 2025*). As such, climate action which protects or enhances the natural environment is also contributing to national competitiveness, and the achievement of enterprise policy goals.

- Energy cost as a driver of competitiveness and/or investment decisions should not be overstated. The cost of labour and access to markets, skills and materials may be more important considerations for firms.

- More and more enterprises support or demand ambitious climate action as part of efforts to maintain competitiveness enterprise development. For example, *Business in the Community Ireland* state that sustainability priorities must be addressed to maintain and build Ireland's reputation as a place to do business, and attract top talent and inward investment.[10]

- The number of carbon-intensive, globally traded sectors (e.g. metals, cement, paper, and chemicals) and their contribution to Ireland's economy may be relatively small (though regionally important).

- Experience illustrates that 'propping up' sectors rather than actively managing structural transition is counterproductive and carries risks such as subsequent rapid restructuring (e.g. shipbuilding, steel and car-making in the UK). Transition can be smoothed for sectors or groups by recycling carbon price revenue for

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[9] For more discussion on this see 'Risks to competitiveness for early movers'; Chapter 5, Economics of Change in *Better Growth, Better Climate: The New Climate Economy Report* by the Global Commission on Economy and Climate, 2014.

[10] See: www.bitc.ie/join-the-network/the-leaders-group/. The Leaders' Group on Sustainability includes Accenture, A&L Goodbody, Arup, Bank of Ireland, Boots, CRH, Dawn Meats, Deloitte, eir, EirGrid, ESB, Fujitsu, Gas Networks Ireland, Janssen, KBC, M&S, Musgrave, Northern Trust, PM Group, PwC, SSE Ireland, Sodexo, Transdev, Ulster Bank, Veolia, and Vodafone.

productive use and to support fair transition policies for workers, funding research, training, phasing, communication, mobility and consultation.

In addition, there will also be some 'win-win' outcomes for enterprise from climate action, as it creates demand for new technologies, products and services, though this should not be overstated. Even if the cost-competitiveness impacts are overstated, strategic policy framing might help bring divergent perspectives on the economy/enterprise and climate action closer together. A shared resilience frame could instigate shared understanding.

However, one important lesson from the Australian case outlined in Chapter 4 is the need for shared understanding of what the resilience frame means and its relationship to climate action. The absence of such understanding leads to inefficiencies as decision-makers interact unknowingly at cross-purposes. Similarly, a UK review of evidence and practice in community resilience to climate change concluded that the 'meanings, applications and implications of the concept of resilience are contested, varied and not well understood in the context of UK climate-change action' (Twigger-Ross *et al.*, 2015: 1).

As it stands, it cannot be said that there is a shared understanding of what resilience means in Ireland nor its relationship to climate action and enterprise policy.

- In Ireland's climate action policy, resilience refers to 'the ability of a social or ecological system to absorb disturbances while retaining the same basic ways of functioning, and a capacity to adapt to stress and change' (Government of Ireland, 2018a: 99). The specific mention of social and ecological systems is notable as it leaves aside the resilience of the economic system, for example, insofar as the economy is not comprehended as being within 'society'.

- In contrast, Ireland's new national enterprise policy is firmly framed in terms of *economic resilience*, borrowing the OECD's definition: the 'capacity of an economy to reduce vulnerabilities, to resist shocks and to recover quickly' (Government of Ireland, 2018b: 3). Because Ireland's enterprise policy is currently framed in terms of economic resilience, it leaves aside the resilience of social and ecological systems.

Thus, while enterprise policy and climate action actors pursue resilience and employ it as a frame, they do so holding different definitions. An alternative, more unifying definition of resilience might be:

> The ability of a system and its component parts to anticipate, absorb, accommodate, or recover from the effects of a hazardous event in a timely and efficient manner, including through ensuring the preservation, restoration, or improvement of its essential basic structures and functions. (IPCC, 2012: 563)

Such a definition, by not specifying a social, ecological or economic system, is applicable to all three and captures essential attributes or resilience for them: the ability to absorb shocks, as well as anticipate and prepare for them. It also demonstrates that separate consideration or treatment of Ireland's economy and ecology is not necessary in this context and that a definition can be shared. Enterprise policy has adopted the economic resilience frame, and further consideration could be given to whether a broad definition of resilience (such as the IPCC's above) provides the basis for a shared frame with which decision-makers can make sense of climate action, as an alternative to the zero-sum trilemma/competitiveness frame, or the many alternatives (adaptation, mitigation, transition, compliance, transformation, etc).

As well as aiding decision-makers and animating firms, networks and enterprise bodies/agencies, a shared understanding via a resilience frame could also broaden the range of messengers. Driving climate action means overcoming barriers outside the sphere of influence of a single actor, 'making synergies among actors and institutions across scales' essential. It is noted in the literature that, as climate action moves beyond being a purely scientific or environmental issue, industry leaders joining the public discourse as messengers become part of the framing, and can suggest to decision-makers how to interpret climate action (Moser and Dilling, 2007: 680 and 689). A shared resilience frame that promotes action to reduce economic, social and ecological vulnerabilities, and to help enterprises, society and our ecology resist shocks and to recover quickly, could increase the number of influential messengers communicating with decision-makers.

Further, if employment effects are not included in climate action cost-benefit analyses undertaken by or for the State for methodological/philosophical reasons, consideration will have to be given to how the economic benefits can and are to be adequately factored into deliberations.

By unifying the current enterprise policy and climate action policy frame, work could begin on a shared understanding for decision-makers, and invigorating enterprise actors in this area. The shared policy frame may be attractive to decision-makers and enterprise policy actors as it would be an example of traction for the new policy approach set out in *Enterprise 2025 Renewed* beyond enterprise policy, and has the potential to reduce the resources currently allocated to so-closely 'mark' activity in climate action policy, which can be seen as a threat to competitiveness (e.g. in the energy trilemma). A new shared resilience framing may also be attractive to climate action policy advocates as an example of traction for their policy approach, and could reduce the resources currently allocated to respond to the concerns or objections raised by actors in the enterprise policy space. However, much more detail of what a shared resilience frame looks like in practice would be necessary before resources are allocated to devising it. The next section provides some thoughts on this.

5.3.4 What a New Resilience Frame Might Mean

The purpose of this section is to examine how a resilience (as opposed to an economic resilience) frame could manifest itself in practical terms, to assist decision-makers, create shared understanding, and animate firms, networks and enterprise bodies/agencies in pursuit of climate action, in a way that current framing does not. Climate action is already an important factor for enterprises (see above) and many individual firms already understand the importance of, and adopt, sustainable practices (see Figures 5.2 to 5.4). In some cases climate action makes simple economic sense for the firm as emissions reduction through lower energy use yields savings; is an exercise in corporate social responsibility (CSR), and/or simply demonstrates 'green credentials' to customers and, of increasing importance, to workers. The Climate Change Advisory Council has also advised government of the importance of climate action to international firms and investors:

> Ireland has a small open economy which depends to a large degree on international trade and Foreign Direct Investment. Export and import of goods and services is a significant proportion of Ireland's gross national product. Therefore global developments in climate and climate policy that impact other countries will likely have an indirect impact on Ireland. In addition, many multinational companies with investments in Ireland have made pledges to act on climate change. It is likely that foreign direct investment will be influenced by Ireland's reputation in addressing climate change. (Climate Change Advisory Council, 2017: 31)

Though not calling it *resilience*, firms are pursuing climate action in the interests of their business. It may be that enterprise policy has not caught up with the climate action views and policies of individual firms. While political decision-makers might hesitate on climate action because of perceived concerns among the enterprise base, firms in the enterprise base might bemoan lack of ambition by those same political decision-makers on climate action. A new resilience frame could aggregate individual firms' strategies on climate action into Ireland's enterprise policy.

Figure 5.2: Example A—Climate Action and Firms
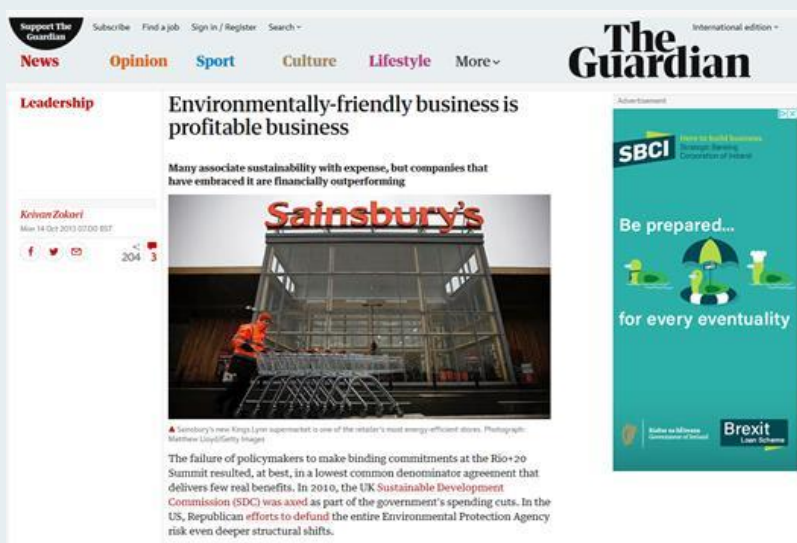
Figure 5.3: Example B—Climate Action and Firms

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[11] See www.theguardian.com/sustainable-business/environmentally-friendly-sustainable-business-profitable

[12] See https://www.ft.com/content/9e0c96bc-e602-11e0-960c-00144feabdc0

Figure 5.4:   Example C—Climate Action and Firms

Source: Independent Online.[13]

Where firm-level needs become central to enterprise—and then, overall national—policy, action is and has been taken to improve Ireland's performance. The metrics based on those enterprise needs are then used to market Ireland internationally as a place to trade from and invest in. For example, generally speaking firms *inter alia* want:

- Ireland to be a competitive location to trade and invest;

- ease of doing business;

- access to a pool of skilled labour;

- low labour costs, low tax wedge and low inflation;

- a transparent, predictable, low corporate tax regime; and

- access to innovation in key areas of research and development.

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13   See   https://www.independent.ie/news/environment/companies-could-spurn-ireland-over-lack-of-climate-policies-35972361.html

IDA Ireland is the state agency dedicated to seeking foreign direct investment (FDI) into Ireland. In its marketing literature, IDA Ireland includes the following facts:

- Ireland is the 2nd most competitive economy in the EU and the 6th most competitive economy in the world.

- Ireland is the 3rd best economy in the world for business efficiency.

- Ireland's education system is amongst the best in the world. It ranks in the top 10 globally for:

    o   Quality of the education system

    o   University education that meets the needs of a competitive economy

    o   Knowledge transfer between universities and companies.

- Ireland's tax wedge is one of the lowest in the OECD.

- Ireland's inflation has been below the EU average since 2008.

- Ireland is ranked 1st in Europe for ease of paying business taxes.

- Ireland achieved a world ranking of 10th in 2016 for the overall quality of its scientific research. Ireland ranks 10th out of 127 countries in the 2017 Global Innovation Index. Ireland ranks 1st in knowledge diffusion and 2nd in knowledge impact.

Facts About Ireland, IDA Ireland, November 2017

These properties are seen as key to enterprise and economic growth, and action to deliver on these is a common feature of national policy, budget decisions and public investment programmes, etc. Action and investment in these areas is 'easier' for (political) decision-makers as they are easily linked to economic and employment growth—i.e. 'action on skills/tax/innovation will deliver jobs'.

When it is clear that firms want improved ease of doing business, skilled labour, low labour costs, a transparent/stable/low corporate tax regime, and access to innovation *and* Ireland can market itself on solid performance in these areas, policy action follows. Performance on climate action is not viewed as being of the same, salient value to firms as skills, tax, innovation, etc. A shared resilience frame could change this.

The path from the action (e.g. investment in third-level skills) to improved outcomes, to marketable metrics, to increased FDI, to increased exports, to

increased firm profits, to increased employment does not need to be spelled out. It is seen as axiomatic and the benefits are salient. The same is not true of climate action; in fact, climate action can be seen as the opposite—as a threat to (cost) competitiveness, growth and jobs. A resilience frame might help.

As noted earlier, a climate action frame that aligns with a frame that decision-makers employ in another successful policy area is likely to be most useful in assisting them in climate action policy decisions. Firms are taking action on climate to make their business more resilient, and economic resilience is the key new frame in Irish enterprise policy, a policy area that has been consistently successful. A climate action frame and definition of resilience is available which would serve economic, social and ecological systems equally well. For example:

Climate action in Ireland is an exercise in resilience, to make Ireland a more resilient country — that is, to ensure the ability of the system and its component parts to anticipate, absorb, accommodate or recover from the effects of climate change in a timely and efficient manner, including through ensuring the preservation, restoration or improvement of its essential basic structures and functions.

A resilience frame based on such a definition might allow the near-term (financial) costs that firms are asked to bear for climate action to be 'offset' by benefits in the resilience of the system. For them, the system is the enterprise base and the economy (for others, the system is society or the ecosystem, etc; the frame definition encapsulates all of these). The enterprise sector and decision-makers must value those benefits as much as they dislike the costs; the salience of the benefits must be significantly increased, and a mechanism found to bring forward those benefits. This means 'monetising' the benefit of climate action insofar as it makes the system more resilient, contributing to efforts to win sales and investment (jobs).

A subsidy or incentive for renewable energy might precipitate a salient, immediate cost to business (e.g. via the PSO levy), absent any salient, immediate benefit. Those benefits that the policy system has deemed valuable must be employable by the enterprise policy actors and related decision-makers in their efforts to win FDI or international sales. Thus, one area for work is how to 'monetise' a more resilient energy/transport/residential/heating/agriculture sector. Monetising does not mean converting the value of climate action into 'euros and cents', rather it is about linking climate action to properties that decision-makers, firms, networks and enterprise bodies/agencies value, using 'the language of the bottom line' and the concept of loss and gain which has been found to be 'strongly motivating' (Moser and Dilling, 2007: 692). Climate policy actors are urged to build 'economic signals' into climate narratives by, for example, outlining how taking early action can be economically beneficial for firms, giving them a market advantage, protecting their

shareholders from climate-related risks, or simply saving money—illustrating that 'it can be done' without harming enterprise objectives (*ibid*.).

If decision-makers, firms and enterprise policy actors want improved resilience, newly and broadly defined, *and* Ireland can market itself on solid performance in this area, climate policy action may follow in a way it has not previously. For example, In April 2018 it was announced that emissions of greenhouse gases from Irish power generation and industrial companies had decreased by 4.8 per cent in 2017, the first overall decrease in emissions levels from these companies since 2013.[14] The progress was a result of a reduction in the use of carbon-intensive fossil fuels in power generation and an increase in the use of renewable energy. Such progress is not generally viewed by decision-makers, firms, networks and enterprise bodies/agencies—whom climate policy must animate—with the same value as progress in the areas of competitiveness, skills, tax or innovation. The path from the reduction in fossil-fuel use and increase in renewable energy use to marketable metrics, increased FDI, increased exports, increased firm profits and increased employment is not readily known.

If the dominant climate action frame was resilience as defined above—to make Ireland a more resilient country—this might make a difference. In this case, firms and enterprise policy actors could seek improved resilience, though an associated metric with which Ireland could market itself on, is still missing. This is likely to be a key component in increasing the salience of the benefits, and bringing forward those benefits. At present, *resilience* is not among the 10 main categories of metrics used to market Ireland: economy, talent and education, labour costs, cost of living, tax, connected research, property, infrastructure, utilities, and transportation (Figure 5.5).

In contrast, where resilience has been adopted as a policy frame (albeit economic resilience), metrics are in place to encourage action and monitor performance (Figure 5.6). These are: the number of indigenous companies at scale, indigenous exports beyond the UK, indigenous export market diversification, and proportion of FDI sourced in markets other than the US.

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[14] EPA press release: 'Ireland's greenhouse gas emissions from EU Emissions Trading Scheme participants decrease for first time since 2013', 11 April 2018. See www.epa.ie/newsandevents/news/pressreleases2018/name,63863,en.html

Figure 5.5:   Categories of Metrics for Marketing Ireland
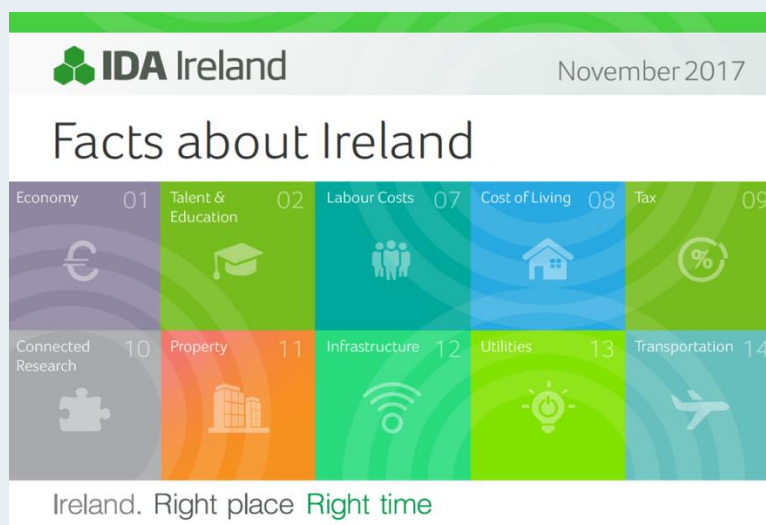
Figure 5.6:   Ireland's Enterprise Policy Metrics
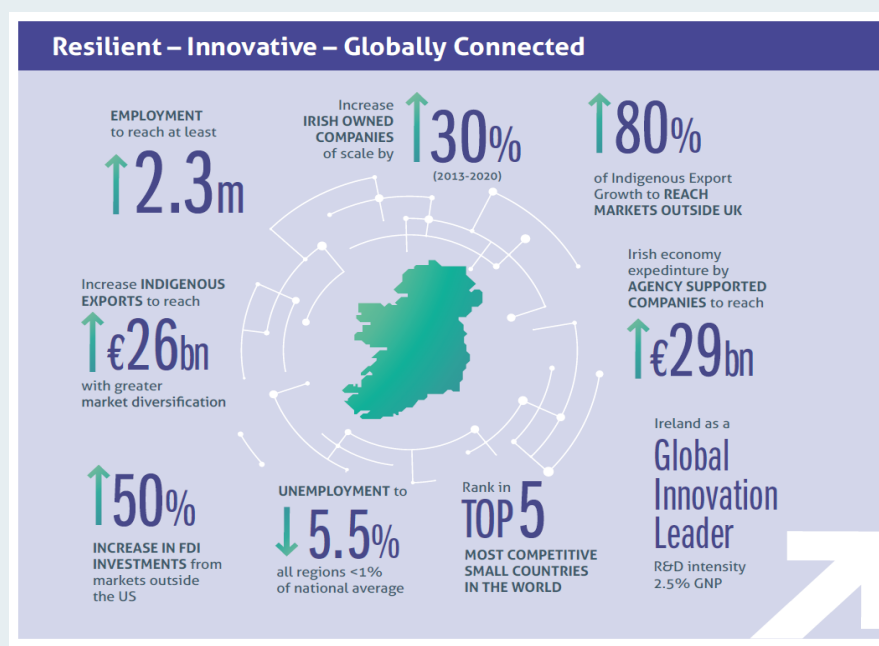
[15] See https://www.idaireland.com/newsroom/publications/facts_about_ireland_2017.pdf

Were the enterprise policy frame broadened beyond a focus on the economic system, it would make sense to add a number of new metrics linked to the resilience arising from climate action. For example, Ireland would be more resilient if energy consumption fell, if consumption of particular fuels decreased, if the share of renewable energy in energy consumption increased, or if greenhouse-gas emissions fell. The importance of relative metrics to enterprise policy (e.g. benchmarking competitiveness and performance against competitor countries) should not be overlooked, and such metrics of resilience are produced by the EU Commission and Yale University (e.g. ECO-Innovation Index, Environmental Performance Index). The key point is that success in making Ireland more resilient, as measured by these marketable and marketed metrics, is linked and is seen to be linked to increased FDI, increased exports, increased firm profits, and increased employment, in a way that over time need not be spelled out. In other words, the link between climate action and jobs becomes as axiomatic and the benefits as salient as is the case with policy action on skills, tax and innovation.

Figure 5.7: **Example of Additional Resilience Metrics for Ireland's Enterprise Policy**
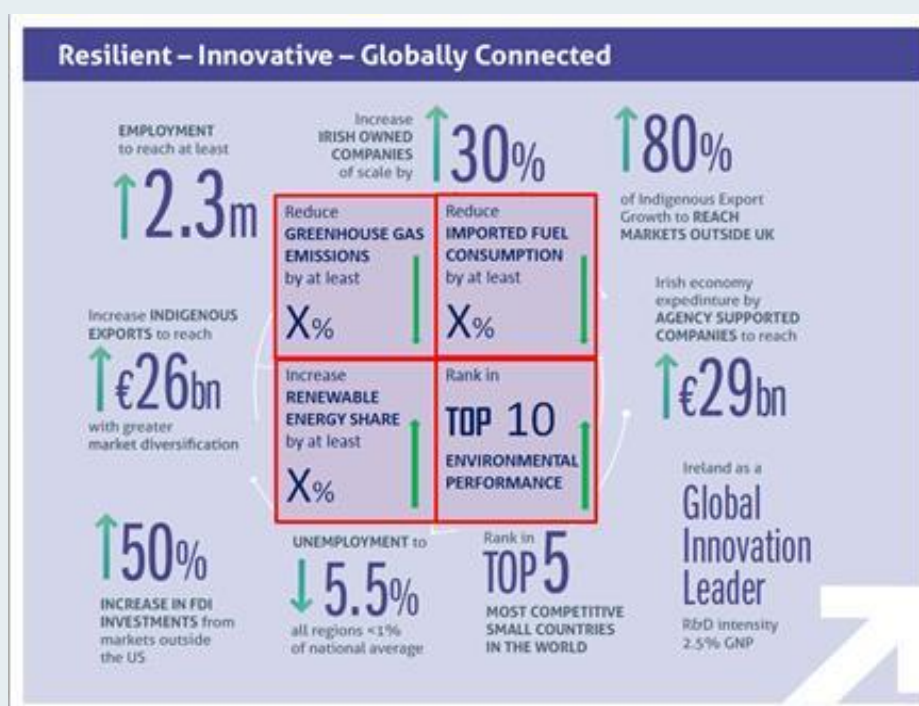
Source: Modified from Government of Ireland, 2018b.??

One ancillary benefit of this approach might be the resonance of the resilience frame with salient ideals and values in Ireland. According to one study, '…

government narratives of [climate action] should synchronise with established narratives of national character…' (Moezzi *et al.*, 2017: 5). Unlike alternative frames such as transition, adaptation, compliance and mitigation, it could be argued that resilience is viewed as a trait with value and resonance in the Irish experience (e.g. historic, sporting experiences), especially following the recent period of austerity.

If a new, unifying policy frame can be devised and established that recasts the existing narrative—which can pit climate action against competitiveness—the likelihood of reaching shared understanding and mobilising enterprise actors must increase. In a recent paper exploring the links between the economic crisis, growing inequality and climate change, Donald and Gray (2018) argue that societies face a 'double crisis': economic and environmental. The scale, scope and nature of this crisis is typically downplayed by decision-makers and more generally, it is argued, as growth and innovation are given primacy over more pressing societal issues. This matters because the 'reification of competitive consumption-led growth models' exacerbates, legitimises and celebrates the dominant narratives in public policy— i.e. economic and environmental crises can be solved together through existing narratives of economic growth (Donald and Gray, 2018: 2). The authors argue that this narrative of growth must be disrupted. A new resilience frame, as exemplified briefly above, might not disrupt that narrative but it might unify climate action and 'economic action' in a new way. Such a recasting might be more palatable to decision-makers in Ireland as the country continues to emerge from the impacts of the financial crisis.

Overall, the notion of a new resilience frame and the metrics above are intended to merely illustrate what might be involved *if* a decision was taken to strategically reframe climate action in Ireland. The goals of animating enterprise policy actors, creating shared understand and, ultimately, helping decision-makers overcome the barriers to more ambitious climate action (interest, ideology, institutions and irrationality) are challenging ones. This places a heavy burden on the framing process (discussed later in the chapter). In advance, the next section looks briefly at the practical steps that might be involved in establishing resilience, or any other frame, as the dominant one for climate action in Ireland, based on the reviewed literature.

5.3.5 Establishing a New Resilience Frame: How, When, and by Whom?

In Chapter three, the construction of policy frames was discussed with specific reference to the advice offered by Benford and Snow (2000). The example of a new resilience frame that unifies climate and enterprise policy action has elements of frame bridging, frame extension and frame transformation. The resilience frame example outlined in the previous section (i) links two congruent but structurally unconnected resilience frames (ecological and economic) regarding climate action, (ii) depicts climate action concerns as extending into decision-makers' enterprise policy interests; and (iii) alters the current understanding and meaning of resilience to generate a new one that motivates enterprise action on climate action.

Next, an important early consideration is whether any new climate action frame is intended to resolve conflict, aid problem diagnosis, articulate a solution, motivate collective action, or deliver some other objective. The outcome of that consideration informs whether the process is an exercise in conflict-resolution framing, diagnostic framing, prognostic framing or motivational framing. Based on the discussion in the second chapter, it was concluded that, for this example, a motivational collective action frame would be most useful in prompting more ambitious climate action. In that case, Benford and Snow identify four factors to reflect on:

- Frame breadth: How narrowly or broadly does the new policy frame define the challenge and hence motivate a smaller or larger group of actors?

- Frame flexibility: A collective action frame may be more or less elastic, and thus more or less easily elaborated on over time.

- Frame scope: New policy frames to motivate collective action can be either limited to the interests of a particular group or problem, or be wide in scope.

- Frame credibility and salience: To maximise its resonance and effectiveness, a new policy frame must be both credible and salient.

In this case, the definition of resilience is intentionally broader than the one currently applied in Irish climate action policy and enterprise policy to motivate decision-makers and more actors, specifically firms, networks and enterprise bodies/agencies. It defines climate action in a way that links it to their concerns by making progress on climate action part of the drive to enhance national competitiveness, grow the economy and deliver jobs.

There is the attendant risk that the new frame definition is too broad; by omitting references to society, the economy or ecology, it not only links climate action to enterprise policy objectives, it links resilience to any number of other objectives. The new frame makes climate action an exercise in resilience, to make Ireland a more resilient country. This readily brings in resilience as it is now comprehended in enterprise policy and articulated in *Enterprise 2025 Renewed*, and the responses that flow from it (e.g. the supports to develop and execute firm sustainability and growth plans; embedding a more systematic and comprehensive approach to horizon scanning). At the same time, it is so broad a frame that it does not exclude resilience being adopted as a frame by other actors in pursuit of their goal. The reference of resilience to 'the effects of climate-change' and its significance in the definition may be lost. This aspect of any strategic reframing requires careful consideration, as the literature makes clear.

In terms of flexibility, the resilience frame example could be easily elaborated on over time, especially with regard to the metrics which are central to it. Success in making Ireland more resilient—under the new resilience frame example—needs to

be measured by marketable and marketed metrics linked to FDI, exports, profits and employment. In the previous section, the suggested metrics were: measures of energy consumption, consumption of particular fuels, the share of renewables, greenhouse-gas emissions, and relative metrics prepared internationally. These can be altered depending on how climate action policy develops in the same way that measures of, say, research and innovation have changed over time (bibliographic measures, patents, graduate types/numbers, productivity, etc). In this way, the resilience frame could be seen as more (rather than less) elastic, and thus as a flexible frame.

Regarding the scope of the new resilience frame, it is focused on, rather than limited to, the interests of firms, networks and enterprise bodies/agencies. The intention, as suggested in the relevant NESC Secretariat work (2012), is for the new frame to disrupt the current top-down approach, engage a wide range of actors, including firms and public agencies, and de-emphasise states and international organisations as key actors. Motivating decision-makers and animating firms, networks and enterprise agencies to ever-greater decarbonisation does not mean that the frame is to limit climate action by other networks, public organisations or communities. The concerns over the breadth of the frame outlined above are important nonetheless.

Finally, in terms of Benford and Snow's four factors, the new resilience frame appears credible and salient insofar as it positions climate action firmly in the economy and jobs agenda. If the frame can achieve what is required in terms of the path from climate action to increased employment not needing to be spelled out, and recasting climate action as a contributor to competitiveness, growth and jobs, it would have strong resonance and could be effective. Climate action could sit alongside action on skills, tax and innovation, being viewed as key to enterprise and economic growth, and be a feature of national policy, budget decisions and public investment programmes, etc. As set out in Section 5.3.4, such action and investment is 'easier' for (political) decision-makers as it is easily linked to economic and employment growth.

Benford and Snow also discuss how to diffuse the frame, highlighting that credibility is important as the frame is diffused to potential adopters (Benford and Snow, 2000: 627-628). The resilience frame example used in this paper, or any alternative, needs careful examination if a strategic framing process is embarked upon. On the face of it, the key objective of assisting decision-makers and animating firms, networks and enterprise agencies suggests that the frame transmitter must be seen as highly credible to that specific audience, and engage with them in a way that resonates with their primary concerns. Even though public policy system actors might be best placed to devise and articulate the new frame, a respected private-sector actor or actors might be best placed to transmit it. A recent example of such an approach is the use of so-called Industry Partners in the Irish Government's *Action Plan for Jobs* process from 2013 on. The call in the recent EPA-published report for the business sector to 'play a stronger role' in a 'more positive economic and social narrative' for climate action is pertinent here also (Torney, 2018: 12).

Chapter three noted that timing matters for both the strategic policy framing process itself, and the specific activity to communicate the frame that emerges from that process. The context must be carefully assessed as potential adopters of a new resilience are unlikely to engage sufficiently during a period of heightened activity and attention to the policy problem. Those charged with further developing the new resilience frame may have to work on the process while waiting for the right time to present it to policy-makers during a 'window of opportunity'. The challenges of bounded rationality, complexity and limited pools of worry for decision-makers that beset climate action policy are also relevant for strategic policy framing.

Benford and Snow caution those who engage in framing activities to navigate challenges such as political opportunity and cultural context. Successfully diffusing the resilience frame is more likely if, for example, proponents interpret the political context in a way that emphasises opportunity rather than constraint, stimulating a change opportunity, making their opportunity a self-fulfilling prophecy (Benford and Snow, 2000).

There may be no 'bad time' to begin the process of *devising* a new policy frame, but identifying a window of opportunity to *diffuse* it is a key early consideration (noting that many of the same actors will be central to both). There are perhaps more obvious times *not* to try diffusing a new frame among decision-makers, such as during a crisis or perhaps an election campaign or in the immediate run-up to a budget. Significant events such as Brexit may make certain specific time periods less conducive in terms of engaging enterprise policy actors, firms and agencies. That said, given that decision-makers in the political governance sphere of climate action policy are central, it may *seem* that there is always a crisis or distraction of some sort, and hence no 'good time'—but one time will be better than another.

In the Netherlands, the opportunity did not present itself without important prior groundwork by researchers and policymakers. In that case, the proposers of the new frame recognised the importance of cross-government support. The new resilience frame might be constructed by a small network of policy actors, but they must seek out opportunities, such as the convening of new structures by government (an interdepartmental working group, in the Dutch case).

The review of the experience in the Netherlands suggests that serendipity can be developed through careful dialogue between those constructing the frame and key decision-makers. If a new resilience frame is to be devised, articulated and diffused in Ireland, early planning dialogue with key decision-makers should be undertaken. Turning to the experience in Australia (summarised in Chapter 4), the importance of supporting research and policy recommendations by think-tanks (e.g. Australia 21, Yates & Bergin, 2009) was noted, as was the tragic backdrop of extreme weather events and loss of life in 2009.

Overall, if a new resilience frame for climate action is to take hold in an impactful way in Ireland, groundwork by researchers and policymakers, scanning for opportunity, and an awareness of the heightened or lowered salience of climate

issues are important. Crises, election campaigns, budgets and events such as Brexit might not represent good opportunities, but other significant events might (e.g. the development of major relevant national policies; the establishment, proceedings, and recommendations of the new Joint Oireachtas Committee on Climate Action; climate-related consultation processes).

Finally, even though election campaigns are not a window of opportunity, the electoral (and related policy) cycle is important. National policy can often be traced back to a Programme for Government, and further back to a political party manifesto, and back again to a political party policy document, in a cycle that can run across three years or more. Proponents of strategic policy framing, including a new resilience frame, should consider when and where in that cycle the suggestion of the new frame would be ideally inserted. Throughout this process, success in establishing a new resilience frame may be more likely if articulators and transmitters remain mindful of the EAST framework, making the message of a unifying resilience frame Easy, Attractive, Social, and Timely.

5.3.6   Resilience and Lessons in the Literature and Cases

The discussion in the section above already brings to bear some of the learning from the literature reviewed in this analysis, such as on frame breadth, flexibility, scope, credibility and salience, and the importance of the messenger and timing of diffusion. In this section, lessons from the literature and the two international cases in Chapter 4 (the Netherlands and Australia) that did not emerge in the 'how, when and by whom' discussion are summarised with reference to the potential new resilience climate action frame described in Section 5.3.4.

Clarifying the Meaning of Resilience

A recurring issue with the use of resilience as a climate action policy frame is the diverse views and interpretations of what resilience means, and how it should be measured and operationalised, even after it has been adopted as a frame (Fünfgeld and McEvoy, 2011; Paschen and Ison, 2014; Béné *et al.*, 2018). Its frequent use to create a specific narrative has not settled fundamental questions: Resilience to what, exactly? Is resilience 'endurance of' or 'resistance to'? Is it about preserving the existing structure of the system? Is it (and what is the difference between) psychological, social, physical, ecological or economic resilience?

Unfortunately for this, and any literature review, answering these questions 'cannot be done by simply providing a 'static' snapshot of the current literature. The different interpretations and definitions of resilience which underpin these various narratives are themselves dynamic and 'malleable'. They have evolved—and are still evolving—over time' (Béné *et al.*, 2018: 118). The definition associated with its suggested use as a frame in this paper is:

> Climate action in Ireland is an exercise in resilience, to make Ireland a
> more resilient country—that is, to ensure the ability of the system and

its component parts to anticipate, absorb, accommodate or recover from the effects of climate change in a timely and efficient manner, including through ensuring the preservation, restoration or improvement of its essential basic structures and functions.

It attempts to maximise clarity (e.g. making clear it is resilience to the effects of climate change), while being broad enough to help decision-makers make sense of climate action and animate enterprise policy actors (e.g. by omitting references to society, the economy or ecology). This, as mentioned above, introduces the risk of the resilience frame being too broadly defined, linking resilience to any number of other objectives. Further, the lack of clarity of resilience as a climate action frame is compounded by the absence of an agreed metric:

> Based on these reflections and methodological limitations, it seems appropriate to consider resilience as an important, though non-essential, concept to help better inform local and regional climate-change adaptation processes. It can be an important reference point in communicating climate-change adaptation issues, because it provides a positive contrast to the notion of vulnerability, and because it is closely tied to adaptive capacity. However, it continues to be a fuzzy concept that is difficult to put into operational practice and to date no specific method for assessing a system's resilience has emerged that could act to operationalise the resilience concept. (Fünfgeld and McEvoy, 2011: 45)

The preceding section makes clear that that the success of the resilience frame suggested here relies very much on measuring performance using marketable (and marketed) metrics such as measures of energy consumption, consumption of particular fuels, the share of renewables, greenhouse-gas emissions, and benchmark metrics prepared internationally. One positive externality of this is that system resilience is less fuzzy, and any action to positively impact these metrics is one step towards operationalising the resilience frame.

Misuse of the Resilience Term

The reviewed literature raises concerns that, whatever the definition, the concept of resilience in climate policy is open to misuse. Béné *et al* (2018) point to how this might arise. First, if resilience is used to accommodate rather than challenge economic or political status quos, that may be harmful to society and/or the environment. In this case, a resilience frame would be employed to support 'business as usual', perhaps to 'make communities more resilient to the shocks and inequity created by dominant economic and/or political models; In these conditions resilience fails to support the process of transformation that may be necessary in the long-run…' (Béné *et al.*, 2018: 117). For example, a number of EU climate policies connected to economic competitiveness and topics such as disaster risk management and energy security have been criticised:

> Tailored to induce acceptance amongst [member states] and EU institutions, they link adaptation to widely accepted problems and promote synergies between adaptation and these other policy agendas. Consequently, the policies not only legitimise adaptation to audiences that might otherwise be critical of this emerging agenda but also downplay adaptation's novelty by suggesting it overlaps with accepted policy domains and does not differ significantly from what is already happening across the region. Aligning new issues like adaptation with established and well-accepted policy domains is a strategy commonly drawn on by acclaimed and powerful institutions to safeguard against the emergence of alternative policy visions. (Remling, 2018: 487)

The suggested resilience frame in this paper does not misuse the concept in such a manner. Rather than support business as usual or 'safeguard against the emergence of alternative policy visions', the strategic framing suggested here is an open attempt to disrupt business as usual by encouraging a shared understanding, addressing barriers to progress, and animating an increased number of actors (from the enterprise sector) in climate action.

Second, there is a danger that resilience can be misused by being employed simply to garner attention or secure funding, 'thus contributing to the uncomfortable feeling amongst others that resilience is sometimes nothing more than 'old wine in a new bottle'…' (Béné *et al.*, 2018: 129). This is self-evidently not the case in the suggested use of resilience in this paper. With reference to the categorisation of frame usage outlined by Béné *et al* (*No Use, Buzz Word, Metaphor, Analytical Tool, Goal, Indicator*—see Section 1.4), the suggestion for how resilience is used here positions it as useful, and as far more than an exercise in gaining attention, and is in no way an attempt to increase the chances of publication or to attract funding. As described in Section 5.3.4, the resilience frame is to be used 'to encourage an integrated approach to action, and to help break silos' (i.e. a metaphor), and 'as an aid to help think about and understand certain issues, and find improved solutions' (i.e. an analytical tool). Whether the suggested resilience frame becomes ubiquitous will determine if it represents a goal (the target to aim for; decisions are taken with the aim of achieving this target). Despite the use of metrics being central to how it is suggested resilience be used as a frame here, it is difficult to argue that it is an indicator of climate action.

Finally, the use of resilience to link climate action to enterprise policy and actors could be questioned in a similar manner to the way certain EU climate policy has been. Such questions include the extent to which the frame might universalise responsibility for climate change or depoliticise impacts and vulnerabilities:

- Universalising responsibility: Presenting an undifferentiated picture ('we are all partly responsible') that does not pay sufficient attention to both the geographical and economic roots of GHG emissions. Rather than frame

economic growth as a culprit, the policies instead frame it as a necessary prerequisite for any viable adaptation response.

- Depoliticising differentiated impacts and vulnerabilities: Limiting the definition of vulnerability to 'sectors' and 'regions' generalises and universalises, making questions about social, economic and political root causes of vulnerability more difficult to identify.

(See Remling, 2018)

The resilience frame suggested here links climate action to economic growth in an effort to animate firms, networks and enterprise bodies/agencies, rather than shield them from any responsibility. The use of the frame, and the suggested definition of resilience in particular (see above) is to position economic considerations alongside societal and ecological ones rather than deflect attention from the economic (or geographical) sources of climate change. The definition is deliberately broad and does not limit vulnerability to sectors and/or regions. It is linked to national rather than sectoral or regional competitiveness not to universalise but in order to motivate those who are affected by (or who market) how well Ireland performs in relation to other countries.

Resilience and Promoting Shared Understanding

Chapter two described how climate action policy has shifted from a narrow techno-scientific basis to a broad socio-political issue, and how more interpretation by more actors is taking place. This makes shared understanding by decision-makers of the problem, not to mention appropriate responses, both increasingly difficult and necessary. The resilience frame is intended to be a key sense-making device for decision-makers (expert and non-expert), shaping how climate action is broadly understood and responded to by them. The description of the frame in the earlier section provides a coherent interpretation, assuming the suggested definition or similar is agreed upon. That earlier chapter stated that the impact of the frame can be heightened if it taps into deeply held beliefs and values shared by decision-makers, drawing the highest attention to common elements, or emphasising crises or events faced collectively (Cairney, 2018). The resilience frame and definition suggested in this paper has at its core an assumption that political decision-makers and enterprise actors in Ireland believe in and value deeply national competitiveness, increased FDI, increased exports and increased employment. It could be argued that these properties are the most valued of all, particularly since the crisis post-2007, and have the potential to reshape how contested climate action issues are understood. They are beliefs and objectives that have endured over decades. A resilience frame that taps into them should have an increased chance of being sustained over the timeframes needed to adopt and implement meaningful climate action.

The new resilience frame supports a definition of climate action that can be shared by decision-makers and firms, networks and enterprise policy actors, who can then work in an aligned way to implement a strategy to solve it. A new resilience frame draws the attention of climate action and enterprise policy decision-makers to a common pursuit (competitiveness, growth and jobs), emphasising a national objective faced collectively. Further, framing climate action as an exercise in resilience presents a deliberately unifying frame, uniting the definitions of resilience used in climate policy (*National Adaptation Framework*) and enterprise policy (*Enterprise 2025 Renewed*) in Ireland. Employing mitigation, compliance or transition, etc., as the dominant climate action frame would not have these same impacts.

Resilience to Mitigate the Impact of Ideology, Interests, Irrationality, and Institutions

It has been made clear in this paper that policy framing alone can never be the solution to all decision-making obstacles, and faces a substantial task in even partially addressing the impact of ideology, interests, irrationality and institutions. That said, the previous section illustrates that the resilience frame, newly defined, has the potential to simultaneously link climate action to deeply held values shared by decision-makers, reduce complexity and increase salience.

In terms of ideological considerations and the impact of interests, defining resilience in terms of society, ecology and the economy in a manner that situates climate action within a strategy to improve national competitiveness has the potential to deflate the 'winners and losers' argument. Depending on how the frame is developed, it can present the State, enterprise policy actors, the market, firms and networks as working in pursuit of a shared objective. Insofar as the enterprise sector holds back climate action in order to preserve competitiveness, the new resilience frame can bring competing interests together, moving the debate from 'narrow' issues (costs) to 'higher' ones (national resilience, competitiveness and jobs).

Crucially, in an era when 'it's the economy, stupid' and where 'the jobs agenda' is an electoral and political priority, the suggested resilience frame can align climate action with the rational self-interest, electoral mandate and electoral success of decision-makers. Electoral support for such a strategy can provide legitimation and power to decision-makers. If successful, climate action can be framed as making Ireland more resilient, more competitive, more attractive to FDI, and more attractive to trade from, thus generating more jobs. In doing so, it can also shift the emphasis from zero-sum redistribution and a trilemma, towards positive-sum intertemporal distribution: it is not about getting a greater share of the 'pie', but about making the pie bigger. The timeframe from 'climate action' to 'jobs' must be shorter than, say, the path from 'climate action to lower temperatures'. Getting to this point obviously requires much further work on the entire strategic reframing process.

Turning to the challenges posed by irrationality, if the new frame can be successfully devised (as described in the previous section), it can simplify the chain of reasoning from the climate action decision to its consequence. The competitiveness and jobs 'pay-off' is well understood in relation to skills and tax policy, for example, and the new resilience frame has the potential to similarly place climate action. This connection is far simpler for decision-makers, firms, networks and enterprise agencies than longer-term, abstract and remote benefits. The frame also situates the complexity of climate action within a narrative that makes decision-makers care (e.g. jobs, national resilience, prosperity, etc).

The centrality of the resilience metrics is also important in this regard as they are key to influencing what decision-makers and enterprise policy actors believe there is to be 'lost' or 'gained', brings the problem 'home', and highlights progress and success. At the same time, the measures of resilience, as part of the marketed competitiveness metrics, can bring forward the pain of poor climate action decisions, and the benefits of good ones. They may also reduce the cost of decision-makers' being informed by framing complex climate action processes more saliently than they currently are. Depending on the strength of the link between climate actions taken (or otherwise), the metrics settled upon being part of the marketed competitiveness metrics, and the link to employment, the resilience frame can make the impact of (in) action detectable and the victims more identifiable. This linking of climate action with the jobs agenda may also influence the timeline across which action is needed and will have an impact.

Regarding the challenges presented by the institutional framework, the benefits of the suggested resilience frame outlined in relation to interest will also help. For example, by presenting the State, enterprise policy actors, the market, firms and networks as working in pursuit of a shared goal, and shifting the emphasis away from zero-sum redistribution.

In addition, the objective of the new resilience frame is to, *inter alia*, disrupt the climate action governance system in Ireland, to see it animate, learn from and push enterprise policy actors. In this way, the reframing necessarily reorganises the decision-making system. Depending on how integrated these enterprise policy actors and firms become in climate action decisions (on foot of the new frame), there may be opportunities to place elements of the decision in their hands and away from those more susceptible to the pressure of interests and institutional challenges.

Béné *et al* sound one note of caution regarding the impact of a resilience frame on decision-making institutions insofar as it brings in more climate policy actors. On one hand, research suggests that a resilience frame can spur 'flexible institutions, knowledge systems that integrate different sets of knowledge, the capacities of learning by experiment, creativity, and self-organisation'. It can result in decentralisation, a shift from government to governance and increased citizen participation, which should, in principle, 'allow for more adaptive governance models, as they support (in theory) greater flexibility and autonomy at the local

level'. On the other hand, alternative research suggests that 'decentralisation of decision-making and political control can create conflicts and delays between agencies, hampering the development of climate resilient programming. In certain circumstances heavily top-down decision-making structures can help to implement programmes quickly, even if they often fail to allow participation of those people they are designed to help' (Béné *et al.*, 2018, 127). This risk of conflicts and delays arising from animating enterprise policy actors should be taken seriously and guarded against.

Separately, it should be recalled that the resilience frame is suggested in part because of the evidence of multiple climate action frames for decision-makers at present in Ireland (see Section 5.2). As noted earlier, there are sometimes contradictory views in the reviewed literature of the impact of this, contradictions which are worth considering before beginning a strategic policy reframing exercise. Multiple and different frames are described as a barrier to mutual understanding and can evolve into protracted controversies about 'what the issue is really about', delaying or impeding effective decision-making; and as being problematic for achieving coherent approaches to climate action (Dewulf, 2013; McEvoy *et al.*, 2013).

Simultaneously, those considering strategic policy-framing are warned that reliance on a one-sided framing of the issue is unlikely to bring climate action processes to fruition. A new resilience frame for Ireland is based on an acceptance of the former argument, as the frame is considered 'unifying' rather than 'one-sided': the definition might bring in economic resilience considerations but does not push out societal or ecological (or any other) ones.

It is further suggested in the literature that multiple climate action frames for decision-makers might be beneficial in terms of the 'friction generated by the variety of ideas, worldviews and norms embedded in diverse frames' which can precipitate 'the potential for crafting innovative solutions' (Dewulf, 2013: 327). This may be true, but the assumptions on which this paper is based point to it not being the optimal scenario for Ireland: there is a disconnect between Ireland's ambitions in regard to climate action and Ireland's current trajectory.

If one accepts that suggesting the new resilience climate action frame is an exercise in 'nudging', the criticisms of libertarian paternalism must be considered before proceeding further. The scope of this paper does not allow the necessary, rigorous examination but it is assumed that one will follow and that the reframing process will be sufficiently transparent to ensure that frame transmitters have the trust of decision-makers, enterprise policy actors, etc. There are inherent judgments about what is good/bad, optimal/suboptimal regarding Ireland's performance underpinning the new resilience frame, but these are overt.

The resilience frame is also suggested on the basis that deviation from rational behaviour correlates with Ireland's performance and the outcomes (see Section 2.5). The suggestion of a new frame is not intended to imply that freedom to take

risks and make mistakes has no importance, but is based on a simultaneous belief that climate policy decision-makers will not be in any way curtailed by the new frame in this regard. An adequate level of attention is given to context, culture and locality in the analysis that preceded the suggestion of the resilience frame, and there appears to be no potential for abuse (e.g. if the new frame were employed by for-profit, private interests). This may need some further exploration, as may the issue of whether adopting the frame negatively affects any individuals even if it contributes to the social good. Overall, assessment of the reframing process must be made using a lens critical of nudging, and satisfy stakeholders in this respect.

The conclusion of Chapter 2 described the potential for the strategic framing of climate action to have a positive impact (Cairney, 2018; see Table 2.3). With reference to Cairney's framework, such framing can disrupt and reshape the discussion and hence the nature of the response, can be a less costly and time-consuming alternative to institutional restructuring, and 'ticks all of the boxes' in terms of how best to influence the policy agenda. The suggested resilience frame has the potential to focus on the beliefs of decision-makers (see above), and adapts to their cognitive biases by being less complex than alternatives (including multiple frames), and by being highly salient in terms of losses via metrics linked to Ireland's competitiveness position.

One question which arises is, in the presence of loss aversion, the appetite among decision-makers to adopt marketable and marketed metrics in a policy area where performance to date has been disappointing. That said, the emphasis on metrics is an example of combining evidence with the framing strategy, and the recognition of policy-makers' use of mental short-cuts (see Figure 5.7: Example of Additional Resilience Metrics for Ireland's Enterprise Policy).

Finally, in relation to Cairney's advice, if the resilience frame achieves its objective of animating firms, networks and enterprise bodies/agencies in climate action, it will encourage relevant decision-makers to seek out more information about a preferred solution to climate challenges in Ireland.

Avoiding a 'Win-Win' Resilience Narrative

The recent call for a new climate action frame in Ireland stated that any new narrative must 'take seriously the need to protect those who will lose out as a result of the transition' in the context of securing societal buy-in (Torney, 2018: vi). While the suggested resilience frame can help deflate the 'winners and losers' argument, it is not meant to remove or gloss over it.

If a frame based on a new definition of resilience is pursued, care should be taken not to present difficult climate action as a simple win-win—i.e. 'economic growth and environmental protection are either already mutually consistent or can readily be reconciled...' (Di Gregorio, 2017: 135). This paper illustrates how a resilience frame can link climate action to the enterprise and jobs agenda but that is not to

say that the difficult steps necessary to achieve Ireland's climate policy ambition would have been pursued regardless of those ambitions.

By promoting 'win-win, low-cost and no-regret adaptation options', policy-makers can create the impression that climate action measures will 'benefit everyone, which is unlikely'; there is also a danger that the result of any win-win framing is that 'the economy becomes the metabolism of everything', including the solution to the climate-change problem (Remling, 2018: 485 and 490).

The new frame should of course acknowledge the obvious and real opportunities that climate action presents (e.g. in the circular and bio-economy), but not rest on climate action as a method of avoiding costs or being the most cost-effective business strategy regardless of Ireland's climate goals.

Limitations of resilience as 'bouncing back'

Choosing resilience as a key climate action frame brings with it a particular risk regarding interpretation and consequent action. The issue is well articulated by Fünfgeld and McEvoy:

> …despite the fact that conceptualisations of resilience have evolved from the original definition by Holling (1973), the notion that resilience is about a system bouncing back… after a shock remains a dominant principle underpinning the resilience perspective. In the context of climate-change adaptation, however, the notion of bouncing back after a climate-related extreme event and to repair all functionality the system held prior to an event may be an insufficient, or even a mal-adaptive, response. In light of a constantly changing climate, returning to the conditions before an event falls short of instigating transformative action that takes responsibility for larger scale, systemic changes which may be necessary to avoid disastrous impacts of future climatic events. (Fünfgeld and McEvoy, 2011: 45)

Any definition of resilience to be adopted as part of a strategic policy framing process must guard against that risk and emphasise 'bouncing forward' to as great an extent as bouncing back. In fact, in Ireland's case where climate events are not as frequent, severe or salient as in Australia, where a resilience approach was adopted, the greatest emphasis should be on 'bouncing forward'. A forward-looking definition that does exactly this is suggested in this paper (see Section 5.3.4), with an emphasis on, *inter alia*, the ability of the system to anticipate, absorb and accommodate the effects of climate change, including through ensuring the improvement of structures and functions. While flooding is too frequent and water shortages/restrictions highly salient in Ireland, a resilience frame that is about the system bouncing back might quickly become narrower and closer to mitigation than resilience, which would undermine the benefits associated with the frame set out earlier. Resilience should not be framed as a reaction, but should have anticipation, and improvement of structures and functions, as key objectives.

Additional Insights from Dutch and Australian Framing Processes

The part of this section addressing issues arising in the literature has also dealt with many of the lessons from the two cases summarised in Chapter 4. Clarifying the meaning of the proposed frame, taking care over the use of the frame term, avoiding a 'win-win' narrative, and being aware of the limitations of a 'bouncing back' approach, feature in the general literature as well as in the short reviews of the Dutch and Australian experience. However, there are a small number of additional lessons from these two brief case studies, and these are discussed here.

First, regarding additional lessons from the Netherlands' experience, policy framers in Ireland should be aware that the flexibility afforded by a broad definition of resilience (e.g. omitting mention of economy, ecology and society) might animate enterprise policy actors and help ensure wider support, but it may also leave the policy open to exploitation by more powerful interests and institutions. As set out in Section 5.3.5, this element of any strategic reframing requires careful consideration.

The new resilience frame must seek to, *inter alia*, disrupt the climate action governance system in Ireland, by animating, learning from and pushing enterprise policy actors. These enterprise policy actors should engage climate action interests and institutions in a way that deters them from exploiting the resilience frame in a manner that undermines its ultimate objective—i.e. encouraging climate action that makes Ireland more resilient, more competitive, more attractive to FDI, and more attractive to trade from, generating more jobs. The strength of decision-makers' beliefs and values around economic and jobs growth, invoked by the resilience frame, must bolster efforts to unsettle the more powerful interests and institutions in a positive way.

A further lesson from the Dutch experience is the importance of inclusivity afforded by any new climate action policy frame. In response to criticisms that actions flowing from their new frame were 'colonised by elites at the exclusion of many potentially affected groups and individuals', strategies for improving inclusivity are proposed (Hendriks, 2008). If Ireland does engage in strategic reframing, responsibility for monitoring inclusivity should be clearly assigned. Ensuring that engagement involves elected officials, goes beyond elite institutions, stimulates issue politics, empowers public debate and citizen engagement, encourages discursive inclusion, and makes contact points inclusive, is a difficult task. Overall, a designated structure must monitor the equality of outputs from the application of the new resilience frame. However, efforts to ensure or maximise inclusivity must not simply create a different problem.

The experience of the Netherlands also illustrates the danger in strategic policy framing of the intended frame not being the one that manifests itself (i.e. the transitions policy frame became a technological innovation frame). This is a risk to be managed rather than prevented altogether, as the core features of the suggested frame that make it work (such as the definition, the metrics, and the path from climate action to employment) must not be sacrificed to ensure buy-in.

Finally, in terms of the Dutch case, the strategic reframing process should not underestimate the effort required to institutionalise compromise and the need for policy-makers to be pragmatic (Smith and Kern, 2009). The Dutch government is reported to have come under pressure to deliver short-term success in order to justify the adoption of the new frame, generating urgency for marketable technology.

As the suggested resilience frame for Ireland is constructed around increased engagement by enterprise actors and the path from climate action to employment, frame transmitters could face pressure to deliver short-term success in this area. While the path from climate action to jobs may be shorter than the path to a better environment, it is not a short path. Those devising a new resilience frame in Ireland need to look to the mechanism and timeline for policy action on skills, tax and innovation to 'deliver' increased employment.

No policy action, except perhaps public works programmes, present a neat and obvious path to employment gains, but it should be considered a priority for those installing a new policy frame to demonstrate early examples of impactful enterprise actor engagement, if not employment gains. Overall, the additional lessons from the Netherlands demonstrate the delicate balance to be struck between inclusivity, pragmatism and adherence to core elements when reframing climate action.

Most of the lessons from Australia's experience are covered above, but some additional points are worth considering. First, the suggested resilience frame must be integrated into many levels of policy. The Irish policy system can, for example, be 'sliced' regionally and sectorally. The political arrangements in Australia were found to be less than conducive to integrating national interpretations and activities related to the frame at regional levels. For a new resilience frame to be effective, it must be replicated across many levels of policy, mindful of specific regional or sectoral needs. The typical challenges of multi-level policy implementation will surface in strategic framing processes also, and arrangements must be made to communicate to regions and sectors what the new resilience frame means and the need it creates for new practices and climate action.

Further, in adopting a resilience frame, strategists in Australia considered questions such as 'how much resilience does Australia have?' and 'how much resilience does Australia need?' as part of policy formulation and implementation (Australia 21, 2009: 6). There is no reason why similar questions would not be important should Ireland decide to adopt a new resilience frame, albeit one different from the Australian case. It was accepted there that it is impossible to say how much resilience and what kinds a country needs. No-one can say precisely, 'what shocks, challenges and opportunities [a country] might need to respond to, when and where these responses would be needed, what parts of [the] ecological and social systems would need to respond, and what mix of high resilience (to keep systems or parts of systems functioning generally as they are) and low resilience (to allow systems or parts of systems to transform if necessary) might be needed' (*ibid*). That said, their experience suggests that policy-makers should look to identify areas of

concern where answers are more likely to emerge. For example, policy-makers should look for situations 'where resilience appears to be needed but seems to be declining to levels that give the relevant system little opportunity to respond to and absorb any disturbance. Similarly, it is possible to identify areas where there is too much 'undesirable resilience that appears to be making it difficult to move systems to a more 'desirable' set of processes and functions' (*ibid*.). Looking ahead to any strategic framing process in Ireland, it is important not to get bogged down. Articulators of a new resilience frame could seek to identify and highlight climate action linked to national competitiveness where opportunities to respond seem limited, and climate actions important to enterprise development are proving difficult to move on.

In short, the additional lessons from Australia illustrate the importance for the new resilience frame to adhere across regional and sectoral policy, and to get beyond the 'unanswerable' questions to areas where impact is known to be more likely and demonstrable.

Chapter 6
Conclusion

This paper applied a behavioural political science approach to examining climate policy governance, institutional arrangements for policy analysis, engagement, decision-making and implementation. Specifically, it employed concepts and research from climate-change studies, political science, psychology and behavioural science to help reveal the impact of ideology, interests, irrationality and institutions on climate policy decision-making, and asked whether the strategic framing of climate action could help Ireland achieve its ambitions in this crucial area.

Empirical research demonstrates that decision-makers are not the rational, preference-seeking, optimising actors that we might believe, and also that how the decision is framed can alter the outcome. Policy frames are sense-making devices, shaping how policy issues are structured. They provide the frame of reference for policy-makers to comprehend, conceptualise, understand, explain and respond to choices. They install a particular narrative that envelops the decision process. Strategic policy framing is an active process, whereby policy-actors work with the specific objective of establishing an important frame that will be used by decision-makers in that policy area.

The work of NESC and the NESC Secretariat reveals how the current dominant, linear frame of the *climate-change* problem has affected policy responses, placing the decision on *how much* adjustment ahead of consideration of *how to* achieve this. This paper picks up this point and zooms in on the framing of *climate action*, 'how to what?': What is climate action an exercise *in*? The policy frame will define how we 'story' climate-change action and determine how we understand and practice climate action. The frame will influence, with consequence, how climate policy risks are defined, which actors are included in the debate (or not), and the range of options considered. For example, climate action in the context of either an *adaptation* or *mitigation* frame will differ. That said, it is not proven that a new frame can generate the necessary urgency, and this is a key challenge. Further empirical work would be valuable in this regard.

The question of 'who' climate action is being reframed for is a central one. Here, strategic framing is considered for actors in the climate action policy area where they are involved, either directly or as onlookers and stakeholders, with an emphasis on the political governance sphere; specific attention is paid to firms, networks and enterprise bodies/agencies. A summary review of a selection of relevant national policy documents suggests there are many climate action frames in play, but no single dominant framing. Frames such as *compliance, adaptation, mitigation, transition*, *energy trilemma* and *resilience* are all 'part of the mix' in

Ireland's climate action policy. Alternatively, it could be argued that climate action in Ireland is science-led, and that this provides an important or even dominant frame. There was no scope in the paper to take a definitive look, and this presents another research opportunity.

The reviewed literature establishes a good case for careful, strategic framing of climate action (and for a new narrative) in Ireland. More ambition is needed, and policy-makers are constrained by forces of ideology, interests, irrationality and institutions, as well as the need for shared understanding.

Strategic policy framing can play a positive role in addressing these challenges by, for example, linking climate action to deeply held beliefs and values shared by decision-makers, deflating the 'winners and losers' argument, simplifying the chain of reasoning from 'decision' to 'consequence', and reorganising the decision-making system.

That said, those embarking on a process of strategic policy framing have much to consider. To summarise the broad literature and the two international cases presented in earlier chapters: before devising a frame, policy-framers need to carefully identify or perhaps create the window of opportunity. Early in the process, strategic framers must work to move beyond the 'unanswerable' questions and on to areas where impact is known to be more likely and demonstrable. The frame must have appropriate breadth, flexibility, scope and resonance.

In addition, framers are not able to simply construct and impose any version of reality they would like, as the political opportunity and cultural context must be considered, as should the general criticisms of nudging. The precise way in which it is used will affect the frame's effectiveness, interpretation and critical characteristics; what it can be expected to achieve, the issues at stake, and the frame's importance. The strategic reframing process must take a realistic view of the effort required to institutionalise compromise and the need for pragmatism. There may be pressure to deliver short-term success in order to justify the adoption of the new frame, and any new frame should adhere across regional and sectoral policy.

Also, there is a danger that the intended frame is not the one that manifests itself. Inadvertent framing is an ongoing risk, and a policy's framing is important but expendable, highlighting the need to frame and reframe in a reflexive way. Further, the impact of a framing strategy may not be immediate even if it is, ultimately, effective. Finally, the reviewed literature presents sometimes contradictory lessons, which are worth debating.

One approach might be to choose a climate action frame that aligns with a frame that decision-makers employ in another successful policy area (e.g. enterprise development), and is thus likely to be most useful in assisting them in climate action policy decisions. The adoption of *resilience* as a key theme or frame in Ireland's latest enterprise policy strategy presents an opportunity to consider unifying

climate action and enterprise policy through a shared resilience frame. *Enterprise 2025 Renewed* places an emphasis on resilience over competitiveness, which previously was the most prominent theme. Unlike competitiveness, resilience is a frame used in climate action policy, and unlike other climate action frames, is a frame that can resonate with enterprise policy actors.

A potential unifying frame would be: 'Climate action in Ireland is an exercise in resilience, to make Ireland a more resilient country—that is, to ensure the ability of the system and its component parts to anticipate, absorb, accommodate or recover from the effects of climate change in a timely and efficient manner, including through ensuring the preservation, restoration or improvement of its essential basic structures and functions'. This frame has the potential to assist the climate action policy governance system, which will see it animate, learn from and push enterprise policy actors: firms, networks and enterprise bodies/agencies.

Further, a shared or unified climate action and enterprise policy resilience frame could position climate action alongside other policy areas where Ireland can market itself on solid performance, and where policy action tends to follow (e.g. ease of doing business, skilled labour, low labour costs, transparent/stable/low corporate tax regime, and access to innovation). It defines climate action in a way that links it to the concerns of enterprise policy actors by making progress on climate action part of the drive to enhance national competitiveness, grow the economy and deliver jobs—i.e. resilience = jobs.

Of course the link to enterprise does not have to be made via a resilience frame, but there are few obvious alternative frames that have a similar resonance in both enterprise and climate action policy. A *sustainability* frame may have potential, once it reflects innovation, competitive advantage and employment gains, etc. Though not covered here, it is important to learn from sectoral and bottom-up issues. Recent planning cases suggest numerous, interrelated and difficult issues where climate action and enterprise policies meet. The *Government Statement on the Role of Data Centres in Ireland's Enterprise Strategy* (2018f) identifies issues that could be considered in the context of any strategic framing process. What climate action framing, if any, would help bring a shared understanding and unifying approach to policy in these areas?

Overall, the paper provides some diagnosis of the problem (the impact of ideology, interests, irrationality and institutions; the need for shared understanding), and one prescription: strategic reframing. The reviewed literature, the two international cases, and the example of a unifying resilience frame all suggest that, while there is the potential for a strategic reframing process in Ireland to help decision-makers, it is a process that must not be undertaken without careful planning and execution, as well as determination.

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