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Changing the Record: Narrative policy analysis and the politics of emissions trading in New Zealand

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Abstract

Despite extensive debate on the influence of discourse on environmental politics, research has yet fully to reveal how discursive processes affect policy change on issues like climate change. Discourse-related approaches are also often criticised for critiquing current policy situations but paying limited attention to utilising communication studies to enable policy change. This article explores how narrative policy analysis – a linguistic technique for analysing policy issues where uncertainty and complexity have bred polarisation – can be utilised to recast disputes over climate policy in ways that facilitate compromise and policy change. As a focus, we examine disputes surrounding the New Zealand Emissions Trading Scheme, drawing on elite interviews and documentary analysis to analyse contrasting narratives about the scheme's effectiveness in reducing greenhouse-gas emissions. The first portrays New Zealand as a trade-exposed country that makes only minor contributions to global emissions to defend cautious and low-cost policy. Its rival advocates stronger domestic action even if this entails higher costs. Mapping the contentions, assumptions and characterisations in these narratives, combined with analysis of recent policy developments, reveal important insights on how narrative policy analysis can be used to enhance understandings of policy change, particularly: the difficulties of attacking opponents' 'anchoring narratives'; how analysing minor narratives and differences in narrative alliances can assist in overcoming barriers to policy change; how narrative changes and 'narrative diplomacy' prepare the ground for policy change; and the importance of examining issues neglected in polarised debates on climate policy.

Keywords: discourse, policy change, narrative policy analysis, emissions trading, New Zealand

Introduction

The influence of discourse on political responses to environmental problems has long been debated by environmental politics scholars (Feindt and Oels, 2005). Dryzek (1997) and Hajer (1995), among others, first established the importance of discourse in environmental politics, but recent years has seen a wealth of studies examining linkages between discourse and policy change on issues such as climate change, energy policy, ozone-depleting substances, biodiversity and water pollution (Christoff, 2013; Eckersley, 2016; Gillard, 2016a; 2016b; Gillard & Lock, 2017; Hovden & Lindseth, 2004; Kurki, Takala & Vinnari, 2016; Shin & Choi, 2014). In parallel, branches of the policy-change literature also have a rich pedigree of investigating how policy change is enacted through ideas and language, including work on value frames, actor coalitions, and actors' construction of their interests (Sabatier & Jenkins-Smith, 1993; Pemberton & Oliver, 2004), issue streams (Kingdon, 1995), and iterations between policy stability and change (Hall, 1993; Bailey & Wilson, 2009).

Despite the contributions of these works to understanding the relationship between discourse and policy change, Gillard (2016a) argues that many analyses still treat ideas and discourse as ancillary influences compared with power and interests, and only partially reveal how discursive processes alter institutional preferences and policy. Studies have utilised discursive institutionalism to explore how discourses affect actor strategies and normative alignments (Lorenzoni & Benson, 2014; Gillard, 2016a), but their authors still argue for greater attention to how ideas and discourse operate as distinctive forms of power. Another common criticism of discourse analysis is that they remain preoccupied with 'exposing ideological manipulation that shapes and perpetuates power imbalances through discourse' and pay limited attention to how unequal power relations and unbalanced policies can be overcome (Breeze, 2011: 516). Whether prompted by methodological uncertainty or concerns about advocacy, this has muted discourse analysis as a transformative force in environmental politics, a difficult situation to justify given discourse analysis' concern with challenging unjust power relations (Hajer, 1995) and the potential for discourse approaches to develop alternative ways of discussing and managing contentious environmental issues.

One branch of linguistic analysis more forthcoming in this regard is Narrative Policy Analysis (NPA), a technique that applies literary theory to debates where complexity and uncertainty have created polarisation and hostile conditions for policy change (Hampton, 2009; Roe, 1994). Like other linguistic approaches, it sees issue framing and communication as central to political debate (McBeth, Shanahan, Arnell & Hathaway, 2007). However, its emphasis on analysing narratives to identify ways of engineering political space to solve policy problems creates possibilities for using discourse-related approaches more actively to address environmental issues (Epstein, Farina & Heidt, 2014; Roe, 1994).

To elaborate, how policy issues are formulated usually follows a narrative structure involving: a beginning (current situations), a middle (issues associated with the problem), and an end (solutions); a plot (reasoning to defend preferred actions); and heroes, villains and victims (those championing or opposing certain narratives or affected by decisions) (Stone, 2002). The first step in NPA entails constructing the narrative currently dominating a topic to clarify its reasoning, values, assumptions, evidence and supporters (Jacobs & Sobieraj, 2007). The next identifies 'counternarratives' challenging the dominant narrative (Epstein, Farina & Heidt, 2014); the two are then compared to seek a new 'meta-narrative' as 'a superordinate frame that joins two otherwise incommensurable positions' (Bridgman & Barry, 2002: 142) and 'underwrites and stabilizes the assumptions for decision making on an issue where current policy narratives are so conflicting as to paralyze decision making' (Roe, 1994: 4).

NPA has been applied to: climate adaptation (Paschen & Ison, 2014); landscape change (Thiha, Webb & Honda 2007); conservation (Lawton & Rudd, 2014); pesticides (Hirsch, Baxter & Brown, 2010); sustainable consumption (Berg & Hukkinen, 2011); transportation (van Eeten, 2006); public involvement in environmental decision-making (Hampton 2009); and fracking (Heikkila, Weible & Pierce, 2014). However, aside from Roe (1994) and Fløttum & Gjerstad (2017), NPA of climate mitigation policy remains sparse, despite long-running controversies over climate policy in many countries, and the challenges of meeting national emissions reduction commitments agreed under the 2015 Paris Climate Agreement.

This article contributes to addressing these concerns by examining how NPA can assist in rendering controversial debates on climate policy more amenable to conventional policy-making, both to help address political difficulties facing mitigation policy and to strengthen connections between the discourse and policy-change literatures. As a focus, we examine disputes surrounding the New Zealand Emissions Trading Scheme (NZ ETS), an emissions pricing scheme introduced in 2008 as New Zealand's primary mechanism for climate mitigation which has been criticised by some for failing to create meaningful emissions reductions but supported by others for offering low-cost and flexible ways of meeting New Zealand's international mitigation targets (Bailey & Jackson Inderberg, 2016; Bertram & Terry, 2010; Motu Economic and Public Policy Research, 2018; New Zealand Government, 2016; New Zealand Productivity Commission, 2018).

In the following sections, we discuss linkages between NPA and policy change, and explain the NZ ETS and our research methods. We then explore two key narratives on the NZ ETS, the first arguing that New Zealand is making a fair contribution to global mitigation relative to its size and trade exposure through a policy geared towards cost-effective emissions reduction, and the second advocating greater action to reduce domestic emissions through reforms to, or replacement of, the ETS. Following this, we analyse opportunities for bridging divisions on climate policy in New Zealand before reflecting on the wider contribution of NPA to addressing obstacles to climate mitigation policy.

Policy Narratives and Policy Change

Discourse and narrative approaches are both concerned with how issue framing reflects and constructs perceptions of environmental issues. However, whilst many discourse approaches emphasise macro-contexts, scrutinising meta-discourses like ecological modernisation (Dryzek, 1997; Hajer, 1995), NPA's primary interest is 'the more immediate effects of the use of language in political debate' (Hermville, 2016: 238). Roe (1994) argues that this proximate approach provides key advantages in understanding and addressing the dynamics of disagreement in specific debates. The mechanisms through which narratives affect institutions and policy nevertheless merit further discussion, in particular how narrative construction influences power relations between ideas and actors, and the factors driving narrative and policy change.

Turning first to narrative construction, most political narratives possess two main dimensions: storylines used to justify preferred policies and stories rebutting counter-narratives that might de-legitimate policy choices or political actors (Jacobs & Sobieraj, 2007). This underscores that although narratives are important policy-making variables, they express both ideas and interests, and that a key motivation for storytelling by policy-makers is to build alliances and undermine sources of opposition (Carstensen & Schmidt, 2016). Additionally, understanding the nature of conflicts in policy debates (which and whose ideas are being legitimated or alienated) aids in identifying narratives for reducing polarisation (Hermwille, 2016). The connection between narrative must be seen as legitimate by influential actors to gain influence (Czarniawska-Jorges & Jacobsson, 1995).

Another feature of narrative construction is the hierarchical structuring of arguments. Drawing on the logic of anchoring practices (Swidler, 2001), the term *anchoring narratives* encapsulates the contentions and assumptions that provide the supporting logic that enables subordinate arguments to cohere into a fully-fledged storyline. This hierarchical relationship between anchoring and constituent narratives may have implications for narrative memberships where anchoring narratives form an important part of a group's beliefs. For example, the assumption that carbon emissions are best controlled through carbon pricing may be crucial to economists or industry and may constitute anchoring narratives where they enable sub-narratives on policy instrument selection and/or design (Roe, 1994). The further importance of anchoring narratives stems from the potential to destabilise opposing narratives or encourage defections among opponents by targeting anchoring narratives.

In addition to considering linkages between narrative construction and policy change, attention is needed to how the dynamics of policy change affect narrative competition. Howlett (2014) notes that major policy innovations are rare, sometimes because decision-makers ignore developments that conflict with the status quo, and sometimes to avoid failures for which they can be held accountable (Schmidt, 2010). Risk management also encourages decision-makers to craft narratives to defend choices and where these become

institutionalised in key areas of government and society, advocates of change face uneven challenges in fashioning narratives to challenge the status quo (Bailey & Wilson, 2009). Radical shifts in narrative dominance and policy can occur, however, where gaps between policy and reality trigger 'tectonic plate-like readjustments to existing policies' (Howlett, 2014: 397; Jacobs & Sobieraj, 2007).

Drivers of change in narrative logic and balances of power between narratives can be broadly exogenous or endogenous, though the two often operate concurrently and in mutually constitutive ways:

Exogenous change: originating outside the policy debate in question. These are difficult to categorise but Gillard (2016a) charts how government austerity in the UK was accompanied by discursive shifts in climate policy from narratives emphasising leadership and moral responsibility towards risk management and the justification of initiatives on the basis of cobenefits rather than standalone climate benefits. Exogenous drivers may equally involve gradual changes or abrupt incidents, including elections and or actions by other countries. They may also undermine or strengthen dominant or competing narratives depending on which side assimilates the exogenous factor more successfully into its narrative logic, though again challenging narratives often require greater momentum to trigger change (Pemberton & Oliver, 2004).

Endogenous change: in interests, influence, or storylines related to the policy being debated, encompassing changes in the narrative itself or in allegiances among influential groups that alter the power of incumbent and challenging narratives (Jones & McBeth, 2010). Endogenously-driven change commonly operates through the tactical co-optation of opponents' narratives, where arguments are integrated into a counter-narrative (Jensen 2012), or the debunking of adversaries' anchoring narratives.

Changes in narrative memberships can also have implications for narrative stability and policy change. Diverging interests within a group may trigger narrative defections and create new coalitions, particularly when highly influential actors decide their interests are better served elsewhere. For example, in 2010, the chief executive of BHP Billiton precipitated a shift in business and political debate on carbon pricing in Australia shortly after the government had abandoned proposals for carbon pricing by arguing that carbon pricing would promote Australian leadership in low-carbon investment (Bailey, MacGill, Passey & Compston, 2012).

The impression so far is that narrative competition is predominantly adversarial and that change occurs mainly when one group outmanoeuvres rivals. However, compromise is central to NPA (Roe, 1994). Bailey & Compston (2012) discuss how trading political resources – such as adjusting emissions targets in exchange for industry cooperation – forms an important way of brokering compromises on contentious climate policies. Although resource exchange rather than narrative shift is the key variable in such situations, such strategies also rely on

industry groups communicating their new stance to encourage a recalibration of mainstream narratives (Weible, Sabatier & McQueen, 2009).

Summing up, analysing how narratives influence debates on environmental issues offers numerous avenues for understanding policy change and strengthening connections between discourse and policy-change analysis. NPA has nevertheless drawn criticism for not establishing testable hypotheses (Sabatier, 2000), for focusing insufficiently on power, and for paying inadequate attention to subjectivities in the meanings ascribed to narratives by analysts (Roe, 1994). Space constraints prevent discussion of these points (but see Jones & McBeth (2010) for responses to this critique) except that NPA directly scrutinises how storylines project power and recognises that controversial issues involve basic disagreements over values, evidence or actions, both of which align with the ways politics is perceived and practiced by participants. Having sketched these ideas on how narratives influence policy change, we now explore the main narratives influencing New Zealand climate policy and how NPA might help identify opportunities for policy change.

The NZ ETS

The NZ ETS was legislated in 2008 as New Zealand's flagship policy for achieving its Kyoto Protocol targets. Its supporters hailed it as the world's first emissions trading scheme to encompass all economic sectors and Kyoto greenhouse gases (Bullock, 2012). However, the scheme was introduced shortly before Labour lost the 2008 election and the incoming coalition led by the National Party, which had opposed the legislation, introduced major reforms in 2009 and 2012 that critics argue removed much of its emissions-reduction potential.

To understand these disputes, we first outline the main factors affecting the NZ ETS's design. In 2014, New Zealand accounted for just 0.17% of global gross emissions, although its emissions-intensive primary industries and relatively high transport demand meant that in 2015 (when the research was conducted) it ranked 21st globally for per-capita gross emissions (Ministry for the Environment, 2018a). New Zealand also has a distinctive emissions profile: 81.9% of electricity came from renewables in 2017, while agriculture produced 48% of national emissions, mainly biological emissions by ruminant animals (Ministry for the Environment, 2019a). Mitigation challenges for New Zealand thus included further reducing energy emissions given the high level of renewables, addressing transport emissions and reducing agricultural emissions without harming the sector's international competitiveness or producing emissions leakage overseas (Leining and Kerr, 2018).

Reflecting these issues, the NZ ETS was designed without a domestic emissions cap and instead operated within the global cap created by the Kyoto Protocol (New Zealand Government 2007). Instead of constraining domestic emissions through caps, the intention was that pricing emissions would incentivise abatement across the economy where abatement was cost-effective within a scheme that requires targeted sectors to surrender units to cover their actual emissions from prescribed activities (Leining & Kerr, 2018). In the

2008 legislation, the total allowances allocated freely to each sector was fixed and participants surrendered one allowance per tonne of CO₂-equivalent emitted (Jackson Inderberg, Bailey & Harmer, 2017). Owners of forests planted before 1990 carried unit liabilities for deforestation, while post-1989 forest owners could opt to receive units for removals in return for accepting future liability for reversals. Another provision permitted sectors to cover emissions by buying unlimited eligible overseas Kyoto units to help manage costs. However, this was criticised for exposing the scheme to low international prices and linking to the Kyoto market was discontinued in 2015 following the government's decision to take New Zealand's 2013-2020 emissions reduction commitment under the United Nations Framework Convention on Climate Change (UNFCCC) rather than the Kyoto Protocol (Leining & Kerr, 2018). The 2008 legislation also planned progressive phasing-in of forestry (2008), liquid fossil fuels (2009), stationary energy and industrial processes (2010), and agriculture and waste (2013).

In 2009, the new government established a series of transitional arrangements that included: delaying entry of some sectors (notably agriculture); allowing stationary energy, transport and industrial processes to surrender one NZU for every two tonnes of CO₂-equivalent; output-based free allocation for emissions-intensive and trade-exposed producers; and a ceiling price for units of NZD25 to protect competitiveness (Bullock, 2012). The 2012 revision introduced fewer changes but extended the transitional moderation measures indefinitely, contrary to recommendations by the Emission Trading Scheme Review Panel (2011). In 2016, the government decided to phase out the 'two-for-one' obligation in non-forestry sectors by 2019 and announced in-principle decisions to reform the architecture of the NZ ETS to make it fit for purpose under the Paris Agreement. In 2017, the New Labour-led government signalled its intention to reform the NZ ETS in line with increasing New Zealand's domestic mitigation goals (Ministry for the Environment, 2018b). We discuss more recent announcements later in the article.

Research approach

The analysis consisted of mapping the main narratives used to portray the NZ ETS, to identify their assumptions, plot and temporal elements, characters, and policy solutions and enable recording of narrative disputes, anchoring narratives, and potential points of accommodation (Stone, 2002). Establishing these narratives inevitably involved aggregating subsidiary narratives identified during the research (Czarniawska, 2004). However, the two main narratives identified captured the chief areas of contestation when the research was conducted in 2015. Further analysis linked stakeholders to narratives simultaneously, attach differing importance to individual arguments, and switch allegiances. Although the narratives reflected relatively stable interests and attitudes among protagonists at the time, such variations mean that NPA invariably entails some stylisation of viewpoints to maintain narrative clarity.

The data consisted of secondary documents and 23 expert interviews with representatives from New Zealand's main political parties, government departments, businesses, NGOs and independent analysts (Table 1). Interviewees were selected using expertise mapping from documentary sources complemented by interviewee recommendations. Efforts were made to cover all opinions identified in the secondary analysis, though limited detailed knowledge of the political processes accompanying the design of the ETS among NGO representatives was compensated by recruiting independent analysts with expertise in the scheme. The interviews included questions on the design and changes to the ETS, the main actors involved, and the political processes accompanying its development. Transcribed interviews were sent to interviewees for approval.

TABLES 1 and 2

The secondary analysis utilised official reports, party, cabinet and parliamentary papers, public reports and independent academic analyses (Table 2). Stakeholder documents yielded most sources because the design and reviews of the NZ ETS involved input from several multi-stakeholder groups that operated during these processes, including the Climate Change Leadership Forum and other advisory groups. Company and sector-association analyses were also scrutinised, using content analysis to identify themes corresponding with the main NPA components identified above, while data triangulation and discussion within the research team were used to interpret each narrative.

New Zealand climate narratives

Two main narratives around the actions New Zealand should take on climate change emerged from the analysis. Before reviewing these, it should be restressed that both narratives contained variations in the logics and arguments employed, the emphases placed on arguments, and the motivations underpinning actors' standpoints. Two broad classifications of preferred policy approach could nevertheless be identified. The *Global Emissions Narrative* contended that the NZ ETS was achieving its objectives provided it met its international responsibility target, even if domestic emissions rose, and that New Zealand was making a fair contribution to global mitigation relative to its size and economic circumstances. The *Domestic Efforts Narrative* argued that stronger action was needed to reduce domestic emissions and rejected the suggestion that New Zealand was too small to contribute to tackling climate change. Although these 'compound narratives' involved some conflation of arguments and views, the following section also explores commonalities and divergences within and between narratives to assist in investigating opportunities for narrative shifts and policy change.

Global Efforts Narrative (GEN)

The GEN has historically dominated debates on the NZ ETS, and although aspects of its approach were criticised by Labour and Green Party politicians, activist groups and many independent analysts, many of its contentions were shared by representatives from business and centre-right political parties, including the National Party, New Zealand First, and ACT

New Zealand. Aspects of the narrative were also expressed by some members of the public administration, particularly the Treasury and Ministry for Primary Industries, but also by some in the Ministry for Environment and some academics and forestry representatives. The GEN accepted anthropogenic climate change but argued that policy should focus on reducing emissions at least cost globally rather than forcing countries with high efficiency and mitigation costs to shoulder unaffordable burdens. Accordingly, the view was that developed-country targets should reflect national circumstances but give flexibility to allow least-cost compliance by meeting part of targets through the Kyoto flexibility mechanisms and ETS linking. Cost effectiveness thus formed the GEN's first anchoring argument, but another contention to justify avoiding adopting 'reckless' targets (industry representative) was that New Zealand is too small to influence climate change through its actions. An appropriate contribution to global mitigation by New Zealand thus consisted of participation in international negotiations, pricing carbon to incentivise domestic abatement where New Zealand possesses cost advantages, and purchasing international allowances.

Another anchoring narrative in the GEN was the need for economic safeguards because of: limited options for low-cost abatement in stationary energy and transport; technical and economic barriers to reducing biological agricultural emissions; and trade exposure among key sectors, including agriculture (Pastoral Greenhouse Gas Research Consortium, 2014). Several interviewees argued that New Zealand is a 'price-taker' on international markets, so pricing biological agricultural emissions would damage the sector's competitiveness unless other countries introduced similar measures. Economic arguments were further legitimated by assertions about carbon leakage: 'If agricultural activities move overseas to reduce emissions, this makes New Zealand poorer but makes no difference to global emissions because they simply occur elsewhere... Taking sheep off the land just devalues an economically efficient activity' (agriculture representative). However, interviews also revealed interest-led differences of opinion. Meat producers claimed they had fewer mitigation options than dairying, where controls could be created for slurry and feedstuffs, whereas reducing emissions from extensive grazing necessitated de-stocking. Both sectors nevertheless emphasised efficiency gains per unit of product ('the beef and lamb sectors' emissions are 17% lower in 2015 than in 1990 for similar production' (industry representative)), leading to suggestions that New Zealand should actually contribute to reducing global emissions by increasing its emissions-efficient agricultural exports.

GEN exponents used such reasoning to stress the NZ ETS's suitability for New Zealand's circumstances and making a fair contribution to international emissions reduction. One official argued: 'the policy has performed as intended... it has enabled New Zealand to meet its targets at least cost.' Similarly, an independent analyst stressed: 'we were the first to try an all-sectors, all-gases approach and proved it can be done, although agriculture has never moved into implementation', while another official highlighted the cost-effectiveness of forestry offsets: 'Forests were important, and they are a manifestly different proposition from anything Europe was trying to achieve... the EU limits on offsets were not in line with the goals

of the NZ ETS.' One industry representative likened the ETS to a machine, claiming the critical element was its legal structure because 'the machine has the right cogs but the dials are turned down. Labour set the dials to three, but National turned them to one and zero for agriculture... [but] this made it politically acceptable'.

Another subsidiary aspect of the GEN mentioned by interviewees for managing administrative costs was a preference for streamlined regulation, including self-reporting of emissions with the threat of audit (similar to the New Zealand tax system) and placing the point of obligation as far upstream in the supply chain as possible so that most businesses are not required to participate in the ETS (Leining and Kerr, 2018). Interviewees related this to neoliberal traditions created during the 'Rogernomics' economic reforms in the 1980s, which have propagated an ethos of light-touch, market-led regulation. An ETS (especially without limits on importing international units) was consistent with the view that market forces, not government, should decide where emissions reductions should occur. Allied to this was a belief that NZ ETS prices would incentivise action across the economy. As one official noted, 'the ETS is the main instrument for achieving New Zealand's target, so there is less inclination to have complementary measures (e.g. renewable energy targets) for reasons of double regulation.' Experts argued that the ETS had familiarised companies with incorporating carbon prices into business models and stressed the importance of testing the ETS's functioning while retaining the option to strengthen settings if economic and political circumstances allowed.

Economic considerations also dominated the GEN's temporal focus; interviewees stressed that overemphasising domestic emissions reduction would cause immediate damage to New Zealand's primary industries. Another temporal element highlighted the short lifespan of methane. As one industry representative argued, 'UNFCCC rules treat methane as 25 times more potent than CO₂ but if herd sizes remain constant, there is a constant atmospheric stock of methane because of its rapid breakdown.' He further contended that methane is discriminated against compared with forestry offsets because tree-carbon returns to the atmosphere with decomposition. This is incorrect because methane and other greenhouse gases are treated comparably under the scheme (Parliamentary Commissioner for the Environment, 2019). Additionally, modelling by the New Zealand Agricultural Greenhouse Gas Research Centre (NZAGGRC) indicates that biogenic emissions need to be reduced by 10-22% below 2016 levels by 2050 and 20-27% by 2100 to ensure methane from New Zealand livestock causes no additional contribution to climate change beyond that at 2016 levels (Parliamentary Commissioner for the Environment, 2018). The use of temporal 'stocks-andflows' arguments to defend excluding biogenic emissions nevertheless illustrates the selective use of evidence to support narrative arguments.

'Villain and victim' arguments expressed by GEN supporters often focused on discrimination against rural communities, reemphasising farmers' exposure to higher production costs from pricing of biological emissions (Cooper & Rosin, 2014), and competitive risks to emissions-

intensive, trade-exposed industries. One agricultural interviewee added 'why should we be taxed before anybody else acts and if we don't have meaningful alternatives. This comes from city-dwelling greenies who want to feel good.' Accusations of indifference were also directed by agricultural and industry interviewees at economists who prioritised rapid emissions reduction over livelihoods: 'Their answer is to change land use, in effect destroy export revenue and livelihoods'. Correspondingly, the narrative's *villains* were 'city-dwelling greenies' represented by the Green Party, Labour factions, and dogmatic academics. The main *heroes* were farmers, who formed the backbone of New Zealand's low-emissions agricultural sector. Forest owners were also portrayed as heroes for providing low-cost credits, while *victims* were also farmers and industrial producers whose trade exposure merited protection from unfair regulation, and taxpayers who would pay more for goods under a stronger ETS.

The GEN's preferred approach was to strengthen the ETS only where there was conclusive evidence this would not damage important economic sectors. New Zealand had demonstrated its commitment to international efforts by accepting emissions targets but could not solve climate change, so strong domestic action was senseless and economically irresponsible. Focusing on low-cost domestic and international abatement was prudent and fair, and stronger measures were only acceptable if other countries introduced comparable requirements to ensure a level playing field.

Domestic Efforts Narrative (DEN)

The main arguments underpinning the DEN were that design flaws impeded the NZ ETS from producing meaningful emissions reductions, and that New Zealand – a wealthy and high percapita emitting country with major endowments in renewable energy and flexible land-use – lacked a credible climate-change strategy (Bertram & Terry, 2010). According to this narrative, the ETS gives the impression of action while protecting business-as-usual and creating future climate and economic risks. Views among its supporters ranged from criticism of the scheme's management to outright cynicism towards the ETS. One industry representative claimed, 'the ETS' objectives have not been achieved. It's supposed to drive a low-carbon economy, not just low-cost abatement', while an academic argued, 'The NZ ETS has important weaknesses. A carbon tax is easier to defend if ministers and officials are minded. The ETS is so complicated and expert-driven that it undermines the democratic mandate.'

Another recurring theme was disbelief that international allowances produced credible emissions cuts. Accordingly, it stressed the need for domestic abatement: 'How does buying Ukrainian 'hot air' help the climate?' (politician). Similarly, interviewees criticised the scheme's approach to emissions limits and allocations. One industry interviewee noted, 'They called it cap-and-trade; now they just call it emissions trading. Leaving the domestic cap out is the biggest mistake.' Those more supportive of the Kyoto cap lamented the government's decision not to ratify Kyoto II: 'People said 'you don't have a cap'; we had the Kyoto cap until we lost that' (independent expert). Others accused the government of double standards: 'We ratified Kyoto then opted out of period two, but still want to use its allowances' (politician). 'It's a question of making a proportionate effort reflecting the country's capabilities, but the government will have a hard job selling the New Zealand target to the UNFCCC because it's done nothing' (industry representative). 'The politicians always start off talking about cost and design the scheme from there. A discussion about defining New Zealand's fair share is where you must start... then analyse what's economically feasible' (politician).

Some DEN advocates also maintained that more units should be auctioned to increase incentives and that allocations should be based on absolute emissions, not emissions intensity, because production increases may outstrip efficiency gains. Others, reflecting the scope for variation within narratives, supported output-based free allocation where genuine concerns existed about economic impacts or carbon leakage. DEN supporters were also scornful of allowing sectors to submit one NZU for every two tonnes of emissions and exempting biological agricultural emissions. Alongside pressing for action on a major emissions source, the DEN argued that 'agriculture needs to stop treating dairy as a speculative commodity with everything based on short-termism, and start thinking about the benefits of sustainable farming for water, carbon, biodiversity and recreation' (independent commentator).

The DEN's main temporal element centred on the need for stronger policies by New Zealand and other countries to prevent an imminent climate crisis. Another emphasised the competitiveness and innovation benefits of decarbonisation as other countries adopted lowcarbon technologies and consumption. Procrastination was likely to exacerbate future economic risks because carbon prices would need to increase more rapidly and New Zealand may suffer reduced demand for its goods and services unless it embraced the low-carbon agenda. Another aspect utilised historical comparisons. One independent commentator noted that, 'Industry's attitude is that the ETS adds costs, especially in export markets. But New Zealand has seen unprecedented exchange-rate rises. Did this cause mass bankruptcy? No, and neither have other price fluctuations. Businesses have adapted. It's interesting how modest carbon prices induce paranoia but other price variations are accepted.'

Key *villains* in the DEN were agriculture, particularly dairying and industrial free-allocation recipients, for avoiding emissions and other environmental responsibilities. Fonterra, New Zealand's main dairying cooperative, was singled out by one expert: 'Fonterra's lobbying behaviour is based on being the country's largest exporter and its capacity to press trade exposure.' Some consultancies were regarded as both heroes and villains. The New Zealand Institute of Economic Research (NZIER) and Business and Economic Research Limited (BERL) were seen as belonging to opposing camps and having uneven influence: 'NZIER was more pessimistic about the ETS's economic impacts... Treasury called both to discuss their modelling... BERL won on virtually every point, but policy was informed more by NZIER modelling... The big polluters got 90% of their obligations paid for by taxpayers' (independent commentator).

The National Party was frequently portrayed as lacking the political courage to tighten the NZ ETS. One commentator noted that, 'the global financial crisis was used as a smokescreen for the fact that National was heavily populated by climate sceptics and there was no serious commitment to tackling the issue. I have my doubts whether the current climate minister believes in climate change,' and 'National completely gutted the ETS' (politician). Some academics argued that differences between the major parties were largely rhetorical, but regarded ACT and NZ First as villains for working against regulation and only recently acknowledging human-induced climate change. The DEN's *heroes* were green activists, the Green Party, parts of the Labour Party, academics who criticised the scheme, and companies involved in low-carbon innovation. Some Labour ministers who legislated the NZ ETS were even regarded as visionaries who had been thwarted by business and the National Party. Victims, meanwhile, were the New Zealand public, whose quality of life was threatened by short-sighted policies. Sympathy was also expressed for foresters because of financial risks created by the scheme.

Two main solutions were proposed under the DEN. Reformists felt the NZ ETS could form part of New Zealand's climate strategy provided its flaws were addressed and complementary policies were introduced, particularly for renewable energy and electric vehicles. This view was commonest among experts who had advised the government: 'There is scope to use the ETS to tighten action on climate change but it requires a change in mind-sets' (independent commentator). Other reforms included limiting or prohibiting international allowances; ending the 'two-for-one' scheme; changing the basis for free allocations; absolute emissions allocations; auctioning; removing the price ceiling; and adding a price floor. The alternative solution was revisiting proposals for a carbon tax, which had been rejected in 2005: 'even with amendments to the ETS, I'm still uncertain about supporting it' (politician).

TABLE 3

Discussion: Narrative analysis and policy change

Analysis of the main New Zealand climate-policy narratives (Table 3 summarises their main arguments) revealed strong polarisation and, at the time, few interviewees saw much scope for compromise. However, significant narrative and policy shifts began during 2018, when the Labour-led government initiated consultations on its Climate Change Response (Zero Carbon) Amendment Bill, which was introduced to Parliament in May 2019. The main measures in the bill include:

- An independent Climate Change Commission to provide advice and monitoring to keep governments on track towards long-term climate goals;
- Net zero greenhouse-gas emissions by New Zealand by 2050 with the exception of biogenic methane, where alternative targets were proposed to reduce gross emissions by 10% from 2017 levels by 2030 and by 24-47% by 2050;

• Emissions budgets to provide stepping-stones towards the 2050 target (Parliamentary Counsel Office, 2019).

In 2018 and 2019, the government also announced reforms to the scheme, including a framework to enable capping of New Zealand's ETS emissions to restrict the supply of units and increase incentives to reduce emissions. Auctioning is also planned to align the supply of units with New Zealand's emissions targets, while a cost containment reserve allowing units to be auctioned when a predetermined market price is reached is scheduled to replace the \$25 price ceiling when auctioning is introduced (anticipated in 2020). Another change provides for limits on the number of international units allowed into the scheme and regulations to ensure their integrity. Accessing international units will additionally be conditional on progress towards New Zealand's emissions target, adequate incentives for domestic abatement, and sound economic justifications for accessing international units (Ministry for the Environment, 2019b).

Other changes seek to improve transparency and compliance by publishing emissions and removals data for individual participants and automatic penalties of three times the market price for participants that fail to surrender or repay units by their due date, with further penalties where enforcement agencies need to amend emissions returns or assessments, or where participants knowingly misreport emissions. Finally, the government announced measures: to enable appointment of an independent auction monitor to promote fair auctions and competitive price formation; removal of the price ceiling no later than 31 December 2022 if auctioning is delayed; enablement of a price floor if desired in the future; and establishment of a programme to advise on options for market governance (Ministry for the Environment, 2019b).

The remainder of this section now re-examines the GEN and DEN, utilising our earlier discussion and primary data in conjunction with recent developments to explore ongoing and potential processes of narrative and policy change in New Zealand climate policy.

We begin with the effects of exogenous events. During the research, one interviewee identified shifts in public or institutional opinions (particularly within Treasury), and a new international climate agreement as possible 'game-changing' events. Although the causal impact of exogenous events is difficult to establish, the Paris Agreement and the 2017 election appear to have prompted a sea change in New Zealand climate policy. The Zero Carbon Bill makes direct reference to developing 'clear and stable climate policies that contribute that contribute to the global effort under the Paris Agreement to limit the global average temperature increase to 1.5° Celsius above pre-industrial levels' (Parliamentary Counsel Office, 2019). The consultation conducted prior to the bill's introduction already indicated broad support for its measures (Ministry for the Environment, 2018c), while the Intergovernmental Panel on Climate Change (2018) 1.5°C report published in October 2018 also propelled public support for greater domestic action (personal communication). The

evidence therefore suggests that focusing events can produce narrative shifts and improve conditions for policy change.

The next option involved undermining opponents' anchoring narratives to encourage narrative or coalition defection. Space constraints restrict this discussion mainly to vulnerabilities within the GEN, though weaknesses in the DEN and possibilities for its arguments to gain ground are also considered. The GEN's anchoring narratives can be recalled as follows:

- Climate change is an important issue but strong action to reduce domestic emissions would jeopardise New Zealand's trade-exposed economy and have negligible effects on global emissions;
- The electricity sector's low carbon footprint and difficulties reducing biological agricultural emissions without reducing production limit the options for low-cost domestic emissions reductions;
- A market mechanism with international linkages is the most cost-effective way of contributing to global emissions reductions.

The key elements of the DEN were:

- Climate change is an imminent threat to New Zealand and other countries;
- New Zealand is a wealthy and high per-capita emitting country with a moral responsibility to reduce domestic emissions;
- The country has considerable capacity to reduce net emissions in areas like renewable energy, transport, and land management;
- The NZ ETS does not incentivise domestic emissions reduction and requires substantial reform of emissions caps, allocation mechanisms, and price management.

Although each anchoring narrative had its detractors, most interviewees agreed that New Zealand climate policy must reflect the country's trade exposure and emissions profile, and there was near-universal support for carbon pricing, if not the ETS. This suggests difficulties in attacking anchoring narratives that reflect widely-held societal concerns. That said, targeting weaker elements of anchoring narratives may shift the equilibrium of debates, especially if counter-narratives resonate with other social beliefs. For example, Labour's 2017 election manifesto challenged the portrayal of New Zealand as an insignificant player on climate change: 'It is not good enough to say we are too small to matter – most countries individually could claim the same' (Labour, 2017). In so doing, Labour invoked alternative imaginaries of New Zealand as a resourceful and responsible country that 'punches above its weight' to challenge the GEN's representation of New Zealand as disempowered by its economic vulnerabilities (Driver, Parsons & Fisher, 2018).

The difficulties of challenging established narratives equally draws attention to exploring how incremental narrative shifts and 'bridging' narratives might lessen polarisation, especially where governing institutions already acknowledge gaps between policy rhetoric and reality (Howlett, 2014). One reason for the agriculture sector's reluctance to include biogenic emissions in the ETS was that the government's preference for processor-level obligations inhibited individual farms from benefitting from farm-level initiatives to control emissions or convert land-uses (Cooper & Rosin, 2014). Relaxing this requirement, by providing grants for verified types of abatement or offset schemes might enhance the sector's contribution to mitigation while remaining consistent with narratives stressing cost-effective action. Several interviewees speculated that this could also encourage wider coalition shifts if actors like Fonterra were persuaded to champion agriculture's participation. Stressing other issues like the water-quality benefits of reducing effluent discharges might also reinforce support for including biogenic emissions. Bridging narratives can, however, create new controversies. Sectors with mandatory obligations could complain about favouritism towards farmers, while converting land uses through small-scale forestry projects may clash with GEN concerns about carbon leakage. The example nonetheless demonstrates how marginal narrative shifts might precipitate larger changes in climate policy debates and illustrates the importance of narrative diplomacy, where opponents' arguments are recognised and renegotiated to reach shared interpretations of how to address problems rather than just seeking to invalidate them (Miskimmon, O'Loughlin & Roselle, 2014).

Another option involves identifying where differences in interests and arguments within narrative alliances might encourage coalition changes (Heikkila, Weible & Pierce, 2014). One example concerns disputes between dairy and meat producers on emissions baselines. Meat producers claimed they would consider entering the NZ ETS if 1990 baseline emissions were adopted because they would receive credit for improved efficiency through the presumed free allocation regime. However, dairying wanted later baselines because higher production since 1990 meant the sector would lose under absolute emissions measures and still face pressure under intensity-based measures, despite reducing biological emissions by 20% per unit of production since 1990 (Eggleton, 2017). 'Absolute free allocation' refers to distributing allowances on the basis of greenhouse gases emitted using historical emissions. 'Intensitybased free allocation' refers to emission units distributed as a proportion of production, factoring in emissions efficiency. This issue has caused intra-group frictions, as one industry representative explained: 'the feeling was that government listen more if we speak with a collective voice. However, when dairy talks about unity, they often mean other sectors should agree with them.' Although most agriculturalists drew on trade-exposure narratives, interest differences indicate some potential to disrupt this coalition by offering selective policy concessions. Again, however, coalition-splitting tactics may backfire if they fuel new narratives of unjust treatment for some New Zealand's farmers).

Another way of utilising NPA is to investigate marginalised storylines. One illustration was the limited attention given by interviewees to the economic and social consequences of climate

change for New Zealand. Although the GEN and DEN both acknowledge climate change as an important issue, and numerous impact assessments have been conducted (Ministry for the Environment, 2016), debates on the NZ ETS appeared to be dominated by technicalities and the cost implications of action rather than inaction. Christoff (2013) similarly notes how discourses emphasising weak valuations of environmental costs have diminished the influence of scientific and ethical discourses on climate policy in Australia. Although reinjecting climate-impact storylines might counteract preoccupation with the economic dimensions of climate policy, gaining traction may require coalitions of actors spanning perceived heroes, victims and villains, including economic actors like insurers and major agricultural companies, engaging in active discussion of the risks from climate change (Richter & Chambers, 2014).

A key device used by the government to reframe the climate debate has been the Zero Carbon Bill consultation conducted in 2018. The accompanying discussion document provided impetus for this reframing by presenting the government's proposals on long-term targets, domestic action and agriculture as critical to a planned low-carbon transition and New Zealand's economic, social and environmental well-being. This was supported by economic modelling which, the government argued, showed only modest economic effects provided measures were introduced to promote investment in innovation, new forestation and protection for poorer households. This was despite wide variations in average emissions prices for the period 2018-2050 resulting from differences in the coverage of the two models used and different innovation scenarios (Ministry for the Environment, 2018d).

The 2018 consultation revealed 67% support for an immediate 2050 target, 58% support for net zero emissions across all greenhouse gases by 2050, and 60% support for meeting targets only from domestic actions (Ministry for the Environment, 2018c). Despite this, the Zero Carbon Bill has still drawn criticism from Greenpeace for the 'miserly' 10% cut in methane by 2030, and the National Party which, despite supporting the bill's first reading, argued that methane targets should be decided by the Climate Commission (McLachlan, 2019). The consultation thus highlights both the difficulties in gaining consensus in polarised debates and the imperative of securing legitimation for new narratives prior to attempting major policy change.

Conclusion

One of discourse analysis' main contributions to environmental politics has been in deepening understandings of the power effects created by, and built into, discourse (Feindt and Oels, 2006). However, progress remains slower in providing clarity on how discursive processes translate into changes in institutional preferences and policy (Lorenzoni & Benson, 2014; Gillard, 2016a), and in counteracting the tendency for discourses analyses to critique existing power relations without directing similar energy towards exploring how language studies

might also contribute towards addressing political disputes on issues like climate change (Breeze, 2011).

This article contributes to addressing these concerns by examining how narrative policy analysis can be utilised to understand and mediate climate-policy disputes, based on analysis of the New Zealand emissions trading scheme. The evidence indicates that NPA offers considerable promise in illuminating the causes of conflict and opportunities for reducing policy polarisation by distinguishing the components of competing arguments, how narrative elements interrelate and use anchoring narratives to cohere storylines, the presence or absence of themes in narratives, and how combatants position themselves in relation to narrative components (Fløttum & Gjerstad, 2017).

In so doing, the study provides a number of broader insights into how NPA can be used to address polarisation in climate policy. First, it highlights the obstacles to achieving decisive victories in entrenched debates. Although actors seeking policy change might seek to destabilise opponents' policies by attacking anchoring narratives, this is likely to prompt stern resistance from state and non-government actors who see existing policies as effective in achieving their desired goals, while counter-narratives equally acquire prominence by offering plausible alternatives. Building on this, the second main lesson concerns the value of gradually transforming prevailing narratives to enable greater policy experimentation (Pemberton & Oliver, 2004). Focusing on accommodative and incremental approaches, including using bridging narratives to broker agreements, may not only prove more productive in reducing polarisation than approaches that seek narrative capitulation but may also precipitate more extensive change where subtler changes in narrative emphasis engineer space for larger shifts in actor standpoints.

Third, how individual actors' interests affect narrative allegiances may offer further avenues for encouraging change within dominant coalitions. Combative approaches might seek to erode coalitions by offering selective concessions to some actors, whereas less provocative tactics involve negotiating with leading coalition actors to encourage them to socialise new norms among their peers. Finally, analysing neglected issues may substantially alter the equilibrium of narrative contests. Absent discussions may indicate areas of agreement, topics protagonists feel uncomfortable broaching, or it may indicate where actors have become locked into certain discussions (Bailey & Wilson 2009), and where restressing overlooked storylines – like New Zealand's climate vulnerabilities or opportunities for innovation – may stimulate creative approaches to dispute resolution.

Drawing on these insights, NPA could provide important assistance in other countries where climate policy has become polarised. In Australia, climate policy remains significantly cramped by long-running disputes over the economic and social effects of carbon pricing (Bailey *et al.*, 2012), while addressing the ongoing hiatus in United States federal climate policy is made doubly important by its influence on other countries' willingness to act with greater urgency on climate change (Harris, 2013). When applying lessons from New Zealand's

climate-policy experiences, the importance of power and popular support in underwriting narrative and policy shifts must nevertheless be emphasised. It seems unlikely that New Zealand climate policy would have undergone such a radical shift after the Paris Agreement without the election of a new government and the Zero Carbon Bill consultation, but even then, the government needed to legitimate its narratives before attempting major policy change. It should also be remembered that NPA offers a methodological approach for scrutinising individual political disputes whose essential orientation is less towards high theory than towards changing policy records one track at a time.

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Table 1: Interviews by sector

Sector	No. of interviewees
Politicians	5
Departmental officials	4
Industry representatives	6
Independent experts	5
Academics	3
Total	23

Table 2: Documentary sources

Classification	No. of documents
Government publications and documents	48
Parliamentary records	25
Stakeholder groups	109
Independent analysts	36
Academic publications	22
Total	240

Issue	Domestic Efforts	International Action
Membership	Greens, Labour, ENGOs, many academics,	National, ACT, NZ First, trade- exposed industry, farmers, some
	foresters	academics
Trust in the ETS	Low trust in the ETS or its current calibration	Trust in the ETS because it achieves government goals
Kyoto Protocol	NZ applies double standards by not joining	Kyoto rules are recognised internationally and NZ contributes
	Kyoto II while using its rules	effectively to global net emissions reduction
Domestic emissions	domestic emissions must be reduced; the	NZ emissions can rise provided it contributes fairly to reductions
	economy should restructure	in global net emissions. NZ has an emissions-efficient economy
ETS performance	Does not reduce emissions and only gives	Works as intended. Sectors accept a carbon price that does not
	the appearance of action	hinder competitiveness and it is influencing behaviour
International linking	Linking weakens incentives for domestic	International links are vital for achieving targets, reducing global
	emissions reduction	emissions, and maintaining cost effectiveness
Trade-exposure	Trade exposure does not justify domestic	NZ industry is trade exposed and needs safeguards; emphasis
	inaction. NZ economy needs to decarbonise	must be on cost-effective global abatement
	to retain long-term competitiveness and	
	green image	
International	Unreliable and should be avoided or strictly	NZ should contribute to global abatement by using international
allowances	regulated	allowances. Regulation secures allowance integrity
Allocation methods	Auctioning based on absolute emissions; no	Intensity-based allocations do not constrain growth or place
	free allowances.	excessive costs on business

Table 3: Main elements of the NZ ETS narratives