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**Breakdown of governance: A critical analysis of New Zealand's climate change response**

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## Abstract

This thesis critically analyses the organisation and practice of climate change governance in New Zealand. Grounded in neo-Marxist state theory, the research identifies and deconstructs the political and economic structures that have shaped New Zealand's policy response to climate change from 1988 to 2012. The fourth Labour Government, acting in response to the emergent threat of anthropogenic climate change, initiated New Zealand's Climate Change Programme (NZ CCP). Subsequent governments persevered with the NZ CCP; effecting a relatively continuous pattern of minimal interventionist and least cost policy change. This culminated in late 2008, with the passage of the New Zealand Emissions Trading Scheme (NZ ETS) – a comprehensive, all sector economic instrument that would impose a price on domestic greenhouse gases. Despite this policy change, the NZ CCP has failed as an ameliorative response to climate change. Between 1990 and 2012, New Zealand's gross emissions increased by 21 percent. Furthermore, there has been little evidence to suggest that the response has encouraged either afforestation or greater investment in renewable energy. To this point, little progress has been made in decarbonising New Zealand's economy. Using Marxian systems-analysis, the research treats this pattern of policy change as a case study of policy breakdown and dysfunctional governance. The predominant (and ineffectual) mode of governance practiced in New Zealand is argued an outcome of the contradictory structural dynamics of New Zealand's capitalist state. In the first instance, the state is functionally obliged to develop remedial climate change policy in response to the existential threat of climate change. This involves the formulation of policy that directly intervenes in New Zealand's productive sources of greenhouse gas emissions. However, in the second instance, the state is constrained in its policy-making activities by the systemic logic of capital. This precludes the formulation of authoritative interventionist policy capable of effecting behavioural changes in carbon-intensive actors. Moreover, the capitalist biases of New Zealand's climate change response precipitate legitimisation crises, further undermining the state's ability to drive mitigation and adaptation efforts. Policy change wrought between discordant systemic imperatives is invariably subject to policy breakdown. As this dysfunction is structural in nature,

the thesis argues that modern capitalist states cannot practice a meaningful politics of climate change.

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## Abbreviations

AAU	Assigned amount units
CER	Certified emissions reduction
CH <sub>4</sub>	Methane
CO <sub>2</sub>	Carbon dioxide
CO <sub>2</sub> -e	Carbon dioxide equivalent
CP1	Kyoto Protocol first commitment period
CP2	Kyoto Protocol second commitment period
ERU	Emissions reduction unit
EU ETS	European Union Emissions Trading Scheme
GCCR	Global climate change regime
GPC	Greenhouse Policy Coalition
IPCC	Intergovernmental Panel on Climate Change
MfE	Ministry for the Environment
MOU	Memorandum of understanding
MT	Mega tonne
N <sub>2</sub> O	Nitrous oxide
NGA	Negotiated greenhouse agreement
NZ CCP	New Zealand Climate Change Programme
NZ ETS	New Zealand Emissions Trading Scheme
NZU	New Zealand Unit
ppb	parts per billion
ppm	parts per million
PRE	Projects to reduce emissions
RMA	Resource Management Act

RMU	Removal unit
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
VA	Voluntary agreement
WMO	World Meteorological Organisation

## Introduction

*Climate change is a diabolical policy problem. It is harder than any other issue of high importance that has come before our polity in living memory. Ross Garnaut (2008, p. xviii)*

*I have been fortunate to have held many portfolios during my 20 year Parliamentary career [...], but none get close to the complexity and difficulty posed by anthropogenic climate change. Nick Smith (2009h)*

A fundamental incongruity underlies modern climate change governance. This notion of climate change governance refers to the constellation of political activity, conducted at the local, national, and international levels, concerned with the development of a social response to anthropogenic climate change. The incongruity or paradox becomes apparent when one considers the near universal acceptance of climate change as a long-term existential threat, and the palpable difficulty in implementing an effective social response. Barriers to meaningful climate change action, whether they are political, economic, or cultural, should be surmountable relative to the enormous risk posed by climate change. And yet, every day, we are presented with evidence demonstrating the widespread breakdown of social responses to climate change, as well as the persistent dysfunction of those concerned governance institutions. Simply put, why has it been so hard to effect meaningful climate change policy, at a time when there is widespread acceptance of the climate change crisis and the urgent need to respond?

Certainly, this question can be asked of New Zealand's climate change response. It is difficult not to be frustrated and puzzled with the wholesale regression of the New Zealand Climate Change

Programme (NZ CCP) over the last two decades. Acting in response to both the emergent scientific consensus regarding climate change and the growing call for collective international action, the fourth Labour Government (1984-1990) proposed a remarkably progressive policy response from which consequential climate change mitigation and adaptation could occur. The plan called for aggressive action to reduce greenhouse gas emissions, as well as collaboration with other countries in tackling the impending environmental crisis. New Zealand's nascent response promised enlightened and comprehensive environmental policy – at a time when “global warming” and “climate change” were terms largely unknown outside academia and the core of the environmental movement.

And then everything went horribly wrong. The incoming fourth National Government (1990-1999) abandoned their predecessor's progressive climate change response. A package of token measures was implemented instead, offering little hope of meaningful emissions abatement. Determined to rescue the NZ CCP from its languid state, the incoming fifth Labour Government (1999-2008) renewed New Zealand's approach to climate change governance. However, this was also systematically frustrated. An attempt to introduce a broad-based carbon tax was thwarted, while an alternative policy instrument – the New Zealand Emissions Trading Scheme (NZ ETS) – was weakened by concessions to New Zealand's heaviest emitters. Making mitigation even less likely, the current fifth National Government (2008-present) further emasculated the NZ ETS, twice amending the legislation and, in effect, shielding corporate and industrial actors from the cost of reducing their emissions. The NZ CCP, in its current settings, socialises the costs of New Zealand's mitigation efforts.

In assessing the state of the NZ CCP, it is hard to avoid the conclusion that New Zealand's policy response to climate change has been largely ineffective. In the last two decades, New Zealand's total anthropogenic greenhouse gases have increased by 21% (Ministry for the Environment [MfE], 2015b, p. iv). Without question, the promise of New Zealand's nascent response remains unfulfilled. This is despite a clarion call for action from such diverse organisations as the United

Nations (2016b), the International Monetary Fund (2015), Greenpeace (2016), and the Royal Society of New Zealand (2015).

This thesis explores the historical development of the NZ CCP, conceptualising New Zealand's policy response and related politics as a case study of policy breakdown and dysfunctional governance. In doing so, the research will attempt a novel interpretation of climate change governance and the socio-structural impediments to an effective politics of climate change.

Both political science and sociology have variously explained the incongruity at the heart of climate change governance, what Gardiner (2009) has described as "political inertia" and Boston (2015, p. 485-486) "massive governmental failure". However, contemporary scholarly works on the politics of climate change are, at best, partial and conceptually limited. This body of research is inadequate in two respects: 1) more often than not, a reductive liberal/pluralist interpretation of the state and policy process is adopted, and 2) explanations that recognise the hard, structural limitations on the state's policy-making capacities are eschewed. Climate change scholarship tends to conceive the state as a neutral arbiter, balancing opposing societal interests, and developing climate change policy in accordance with the general interest of society. Fundamentally, this literature has failed to *critically analyse* how political and economic structures inform the capitalist state in the practice and organisation of climate change governance.

This thesis develops a critical policy analysis of the NZ CCP – focusing on the systemic political and economic arrangements that shape climate change governance in New Zealand. The purpose of this thesis will be to describe and critically analyse the historical progression of the NZ CCP from 1988 to 2012. It will be argued that the contradictory structural dynamics of the New Zealand state contribute to the pattern of policy change demonstrated by New Zealand's climate change response. New Zealand's contradictory state apparatus generates ineffective and

incoherent climate change policy that fundamentally serves the interests of capital, rather than effecting desired environmental outcomes. In addition, given that the breakdown of domestic climate change governance is systemic in nature – i.e. the product of crisis tendencies within New Zealand’s capitalist political economy – the state is structurally precluded from practicing a meaningful politics of climate change.

This thesis will also consider the role of organised interests within the domestic policy debate. It will examine how powerful sectorial interests captured the policy debate and, subsequently, shaped the NZ CCP. This supreme influence was especially evident during the formulation and implementation of the NZ ETS, where business and industry gained extraordinary concessions in the policy’s design. It will be argued that New Zealand’s capitalist power elite reinforce and exacerbate the state’s contradictory policy-making dynamics – ensuring the passage of climate change policy that prioritises the private accumulation of capital over environmental outcomes.

The focus and scope of this thesis is intentionally broad. Nevertheless, owing to the extensive history of climate change political activity within New Zealand, it is essential that some effort be made to delimit the scope. Firstly, the research will focus on a fixed period of policy activity – beginning in 1988 with the formation of the NZ CCP, and ending in late 2012 with the decision of the fifth National Government to withdraw New Zealand from the Kyoto Protocol. The coverage of the NZ CCP will be divided into five distinct, yet interconnected periods. Each stage correlates with specific governance arrangements: 1) 1988-1990: the fourth Labour Government, 2) 1990-1999: the fourth National Government, 3) 1999-2005: the fifth Labour Government (part one), 4) 2005-2008: the fifth Labour Government (part two), and 5) 2008-2012: the fifth National Government.

Secondly, the research will focus on climate change governance occurring at the nation state level – that is to say the policy formulated and implemented by New Zealand’s central

government. Although significant climate change governance occurs at both the international and local (regional) government levels, this thesis has focussed on national-level politics for two reasons. Firstly, climate change responses are invariably constituted at the nation state level (the international governance regime largely facilitates and coordinates national-level responses, while local governments tend to implement national policies). Secondly, the state represents the key political structure within the advanced capitalist political economy. This would suggest that capitalist political and economic structures (and their effect on climate change governance) are primarily mediated through the state. Naturally, the thesis will address those instances of international and local climate change governance that substantially affected the development of the NZ CCP.

### **The essential science behind climate change**

It is difficult to analyse the social dimensions of climate change without an initial grounding in the physical science of the phenomenon. Climate change broadly refers to any observed changes in long-term weather patterns, which have been driven by specific forcing mechanisms. It is important though to differentiate natural and artificial (i.e. human made or anthropogenic) forms of climate change. Typically, natural forms of climate change are a function of the earth's carbon cycle. Conversely, anthropogenic climate change is derived from human economic activity, or more specifically, modern industrialisation and the use of fossil fuels as an energy source. Within this research, and in general, the term "climate change" refers to the contemporary anthropogenic form.

The core science behind climate change is actually quite simple (see Farmer, 2015; Intergovernmental Panel on Climate Change, 2014a, 2014b; MfE, 2015c; Reisinger, 2009). The Earth has a delicate energy balance responsible for maintaining its relatively stable temperature. The vast majority of this energy comes from the Sun in the form of visible light. The Earth, a

smaller and much cooler body than the Sun, also emits energy, but in the form of infrared radiation or heat. As the Earth radiates heat a significant portion, around 70%, is reabsorbed by greenhouse gases in the atmosphere. Amongst these gases are carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), methane (CH<sub>4</sub>), ozone (O<sub>3</sub>), and water vapour. These greenhouse gases act as a blanket, keeping the heat on earth and preventing its escape into space. This process is widely known as the greenhouse effect (Reisinger, 2009, p. 39).

Changes to the atmospheric concentration of greenhouse gases can disrupt or unbalance the Earth's energy budget. Increased levels of anthropogenic greenhouse gases in the atmosphere enhance the greenhouse effect. In turn, this disruption raises global temperatures. Scientists have observed a warming trend in average global temperatures, correlating with the emergence of industrial societies. According to the Intergovernmental Panel on Climate Change (IPCC) (2014a, p. 2) the globally averaged combined land and ocean surface temperature has increased by 0.85°C over the period 1880 to 2012. Over the past 150 years, the global average temperature has increased by 0.045°C per decade. However, since the 1980s global average temperatures have been increasing by 0.177°C per decade. The question then becomes as to whether increased global temperatures are attributable to greenhouse gases derived from human sources. As the greenhouse effect is an essential component of the natural climatic system, and susceptible to physical (non-human) forcing mechanisms, it can be hard to ascribe observed temperature changes to natural or artificial sources. Certainly, climate change sceptics have pointed to a range of factors that could be responsible, from the inaccurate measuring of temperatures, to phenomena like unusual sunspot activity (Van Rensburg, 2015). The most common source of doubt articulated by sceptics is that the climate is dynamic and subject to periods of natural warming and cooling. Sceptics contend that if we are in a period of warming (which they dispute), then it is a natural occurrence and not necessarily human made (Upin, C, 2012).

However, these claims from sceptics have been thoroughly debunked. The scientific community have pointed to unprecedented concentrations of greenhouse gases in the atmosphere since

industrialisation. Using ice core samples, scientists have shown that greenhouse gas concentrations are the highest they have been in the last 650,000 years. The last 200 years saw a significant spike in greenhouse gas concentrations (Reisinger, 2009, p. 40). Prior to modernity, the approximate concentrations of atmospheric carbon dioxide, methane, and nitrous oxide were 280 ppm, 715 ppb, and 270 ppb respectively. In 2008, these concentrations had increased to 384 ppm, 1758 ppb, and 321 ppb (Reisinger, 2009, p. 40-43). The scientific community has been able to pinpoint the anthropogenic source of these emissions from their distinct isotopic fingerprint (Reisinger, 2009, p. 42). Lastly, concentrations of greenhouse gases are higher in the northern hemisphere, supporting the hypothesis that population and industrialisation (which are greater in the northern hemisphere) are responsible for the observed increases in atmospheric greenhouse gases (Reisinger, 2009, p. 43).

There is now widespread agreement<sup>1</sup> that anthropogenic greenhouse gases are responsible for changes in the Earth's radiative forcing. Variations in solar activity have been suggested as a variable altering the Earth's radiative forcing. However, long-term solar activity has remained relatively constant throughout the 20th century and cannot account for increasing temperatures (Reisinger, 2009, p. 47). Other natural forcing mechanisms, such as the reflective properties of some of the planet's surface, volcanic eruptions, aerosol gases, and cloud cover, all have a slight cooling effect, and would thus not account for the observed warming (Reisinger, 2009, p. 48). Confirmation of the warming effect of anthropogenic greenhouse gases has also been gained with advanced climatic modelling (Nuccitelli, 2014). These models predict that global temperatures will continue to rise well into the 21<sup>st</sup> century, and will very likely exceed a 2°C increase by the year 2100 (Intergovernmental Panel on Climate Change, 2014a).

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<sup>1</sup> The IPCC (2014a) have stated with 95% probability that changes in the climate are the result of human interference. Furthermore, a significant number of national and international scientific organisations have taken positions on climate change that are consistent with the IPCC, including the Academy of the Royal Society of New Zealand (2015) and the National Institute of Water & Atmospheric Research (2013). It is estimated that 97% of climate change scientists accept the existence of human made climate change (NASA, 2015).

Moreover, 2°C is typically regarded as the ceiling for an increase in global temperatures (relative to pre-industrial levels) if catastrophic climate change is to be avoided (Intergovernmental Panel on Climate Change, 2015b; New Zealand Climate Change Centre, 2011, p. 1). An ever-increasing global temperature affects the wider climate (including levels of precipitation and the intensity of storms), and the levels and acidification of seas and oceans. Climate change greatly increases the risk of extreme weather events. The IPCC (2014b) has projected that the catastrophic impacts of climate change could undermine food security, intensify competition for water resources, increase the prevalence of heat-related diseases, cause habitat inundation and critical infrastructural damage, and lastly exacerbate or even cause conflict. Furthermore, the risks associated with climate change increase disproportionately as temperatures rise. The physical and social impacts of climate change will not be gradual and predictable, but rather non-linear and unpredictable (Boston, 2015, p. 484). And because anthropogenic greenhouse gases are persistent i.e. remaining in the atmosphere for centuries, some degree of damaging climatic change will continue to occur, even if emissions were significantly curtailed today (Boston, 2009, p. 205).

### **The social response to climate change**

Diverse forms of human action have manifested in response to climate change, with efforts to develop a remedial social response a major form of activity. There are two dimensions to climate change policy: adaptation and mitigation (Adger, Lorenzoni & O'Brien, 2009). Adaptation involves the modification of social systems to improve their resilience to hazardous climate change impacts. Mitigation, on the other hand, involves the development of policy that can reduce the rate and magnitude of climate change, and thus attenuate the phenomenon's harmful impacts. The key to mitigation is the reduction of anthropogenic greenhouse gases. By reducing greenhouse gas pollution and in turn its concentration within the atmosphere, increases in global temperatures can be minimised. According to the influential *Stern Review* (2006b, p. vii) into the economics of climate change, a successful global mitigation response, one that prevented

dangerous climate change, would need to stabilise atmospheric greenhouse gases below 550 ppm CO<sub>2</sub>-e. Other organisations have argued that adhering to a maximum of 350 ppm is necessary to avert catastrophe (350.org, 2015). However, meeting these goals would require significant collective mitigation. Stabilising atmospheric greenhouse gases at 450 ppm would require a 70% cut by 2050. Even maintaining a more modest level of 500 ppm would require, at least, a 50% reduction by 2050 (Boston, 2009, p. 204).

While there are certainly costs associated with reducing emissions, the irreversible damage done to the Earth's biophysical systems would likely be far greater (Boston, 2009, p. 205). Stern (2006b: ix-xii) described climate change mitigation as a necessary investment, one which would stave off profound damage to both natural and social systems. His estimate for achieving deep cuts in emissions was a cost of around 1% of the global GDP by 2050. This is opposed to a 5-10% loss in global GDP under business as usual conditions. For Stern, the economic benefits of mitigation outweigh the costs of inaction. There are also appreciable co-benefits to mitigation – particularly the economic opportunities arising from the decarbonisation of society (better public health from fewer pollutants in the atmosphere, the development of efficient, renewable technologies etc.) (Intergovernmental Panel on Climate Change, 2007a).

A range of policies have been employed to effect climate change mitigation (Helm & Hepburn, 2009). By reducing societal dependence on carbon and facilitating non-carbon forms of energy and production, these measures are intended to bring about a general decarbonisation of society. The suite of mitigation policies can include the development and use of alternative, non-carbon energy sources; terrestrial carbon capture and storage; the removal of government programmes and subsidies that sustain carbon-intensive practices; energy efficiency programmes that reduce the reliance and exploitation of fossil fuels; state regulation and control of carbon-intensive practices; and economic instruments that impose a price on carbon. Most responses, including the NZ CCP, do not rely on one or two policies. Rather, a portfolio of

complementary measures is employed. However, the overall effectiveness of these policies is dependent on their design, stringency, and the degree of compliance from polluters.

Interestingly, climate change governance is often framed within economic terms. Prominent economists such as William Nordhaus (1991, 1993) and David Pearce (1991) defined the economics of climate change, shifting the policy problem from environmentalism to economic development. For Nordhaus (1991, p. 923) “[the] economics of the greenhouse effect [are] a classic case of a public good, in which emissions of GHGs involve a global externality”. The atmosphere is conceived as a non-excludable and non-rivalrous public good, resistant to the imposition of individual property rights. Greenhouse gases produced through economic activity represent a negative externality – an effect or cost that is incurred by agents outside an economic action. As the atmosphere cannot easily be protected through market activity or government regulation, businesses and industries are able to emit greenhouse gases without penalty (Wilson, 2011, p. 139). Climate change embodies Garrett Hardin’s (1968) notion of the “Tragedy of the Commons”. When individuals, occupying a shared resource environment (such as the atmosphere), act solely in accordance with their own rational self-interests, and behave contrary to the common good of all users, that environment is gradually depleted or degraded.

For environmental economists negative externalities constitute a form of market-failure – an occurrence where goods and services are not efficiently allocated within the marketplace. They further argue for the development of remedial mechanisms that can correct these failure conditions (Grantham Research Institute & Clark, 2012; Stern, 2006a, p. 4-5). While a number of approaches have been articulated within environmental economics to remit the climate change market-failure, the most prominent method involves the imposition of a price on carbon (Stern, 2006a, p. 7-9). By internalising the social cost of the greenhouse gas externality, an incentive for polluting firms to undertake emissions abatement is created. It is reasoned that business and industry, once exposed to a price on carbon, will develop least cost means to reduce emissions and thus lessen the policy’s imposed financial burden. A price on carbon rewards economic

activity that is not carbon-intensive, while penalising carbon-intensive activity. In terms of macroeconomics and effecting the wider decarbonisation of society, it is argued that a carbon price signal gradually makes mitigation financially attractive. Investing in and developing cleaner forms of energy and production becomes more economical in light of an appropriate price on carbon (Groosman, 2000; Helm, 2005; Helm & Hepburn, 2009; Stavins, 2001). Crucially, economic instruments are designed to achieve mitigation that would otherwise not occur.

These are the contours of the economistic climate change problem. Founded in the science of mainstream, orthodox economics (of which environmental economics is a reputable subfield), the problem definition accounts for climate change as a market-failure and then prescribes market-based, economic instruments to ameliorate the undesirable market inefficiency responsible for the enhanced greenhouse effect. Economic instruments – in the form of carbon taxes or tradeable emissions permits – are recognised as an efficient and cost-effective means of effecting mitigation. The NZ CCP has variously experimented with economic instruments and a price on carbon – the NZ ETS being a prime example. Moreover, domestic climate change governance rests entirely on the assumptions, theories, and principles of the economistic climate change problem. This framing of climate change, within the cold logic of mainstream environmental economics, colours the perception of the policy problem. The predominant conception of climate change informs the modes of governance that are pursued by policy-makers.

### **Interpreting the breakdown of the social response to climate change**

The science of climate change is beyond reproach. The threat is clear. There are well-recognised actions that could be taken right now to mitigate climate change. However, something still prevents an effective social response to climate change. This thesis draws on environmental sociology and critical policy analysis to develop a novel explanation of the paradox of climate

change governance. Environmental sociology considers societal-environmental interactions, placing special emphasis on the political economy of environmental problems (Bell, 1998; Buttel, 1987, 2002; Dunlap & Catton, 1978, 1979; Heinrichs & Gross, 2010). Critical policy analysis, on the other hand, scrutinises the forms of structural domination and injustice that pervade contemporary policy-making. Applying critical social theories, critical policy analysis confronts conventional positivist and technocratic interpretations of public policy, while promoting a radical emancipatory agenda (Barrett, 2015; Dryzek, 2008; Fisher, 2007). This thesis will undertake a critique of New Zealand's political economy. It will focus on the systemic forms of domination that shape the organisation and practice of domestic climate change governance, and which have generated the policy breakdown demonstrated by the NZ CCP.

The critique conducted in this thesis will be grounded in neo-Marxist political theory. While a diverse body of Marxist political theory exists, *Marxian systems-analysis* (Barrow, 1993, 2000; Gorz, 1982; Habermas, 1976; O'Connor, 1973; Offe, 1972, 1978, 1984, 1985,) will be used to describe and explain both the policy change and breakdown demonstrated by the NZ CCP. Systems-analysis is concerned with deconstructing trends in contemporary state activity and governance. The state is conceptualised as being embedded within the advanced capitalist political economy, rendering it subject to mechanisms of economic determinism. Contradictions occur between the state's democratic form and its capitalist functions (Barrow, 1993, 2000). In a neo-pluralist sense, the modern state is actually a "dual state" (Dunleavy & O'Leary, 1987; Smith, 1990). The first form is democratic, serving the public and general interests of society. The second capitalist form, however, attends to the interests of capital, maintaining the accumulation process and ensuring the reproduction of capitalist relations of production. However, these state dynamics are inherently incompatible. Public policy wrenched between the state's democratic form and capitalist function inevitably becomes incoherent and un-strategic.

Within the context of Marxian systems-analysis, this thesis will describe the historical progression of New Zealand's climate change response, interpreting the breakdown of domestic climate

change governance. This framework provides the critical and state-centric analysis of climate change governance missing from sociological and political science governance literature. It will be argued that the failure of the NZ CCP, as a social response to climate change, can be traced to the contradictory, capitalistic arrangements constituting New Zealand society.

### **Outline of the thesis**

The thesis will be structured as followed. The first chapter will review the scholarly literature related to climate change governance. This review will have two foci: 1) the major sociological interpretations of climate change governance, and 2) the body of governance literature directly concerned with the NZ CCP. Throughout this review, it will be demonstrated that the domestic literature implicitly adopts a positivist, liberal/pluralist conception of governance and the state policy process. It will be argued that this approach is both conceptually and epistemologically problematic, as it misrepresents the organisation and practice of climate change governance in New Zealand. The literature's limitations justify a more critically orientated analysis of domestic climate change politics.

The second chapter will outline the design of the thesis. It will begin with an extended methodological discussion – justifying a critical and state-centric analysis of climate change governance. The methodology section will also outline and defend the use of Marxian political theory. It will conclude with a discussion on the methods of data collection and analysis employed in the thesis. The third chapter will thoroughly explicate Marxian systems-analysis. This discussion will address the political and economic constraints that shape the state's policy-making activities and cause policy breakdown. This chapter will conclude by concisely overviewing a Marxian systems-analysis approach to climate change governance.

Chapters four, five, six, seven, and eight will apply Marxian systems-analysis to describe and explain the historical progression of the NZ CCP. Each chapter correlates with a distinct phase of the NZ CCP. Chapter four will discuss the incipient NZ CCP (1988-1990) introduced by the fourth Labour Government. The fifth chapter will cover the fourth National Government's iteration of the NZ CCP (1990-1999). Chapters six and seven will address the fifth Labour Government's NZ CCP (1999-2008). Lastly, chapter eight will discuss the first years of the fifth National Government's NZ CCP (2008-2012). From these five chapters a largely continuous pattern of policy change will be identified. New Zealand's Climate Change Programme has invariably developed least cost and minimal interventionist policy instruments. This pattern fulfils many of the state's core capitalist functions – but particularly the maintenance of the political and economic conditions necessary for private capital accumulation. However, the measures adopted within the NZ CCP have proven largely ineffectual in reducing New Zealand's anthropogenic greenhouse gases. The final discussion chapter will address the state of climate change governance in New Zealand, as well as the potential for an impending crisis of legitimation.

## **Chapter One**

### **The sociology of climate change governance: a literature review**

This chapter outlines the sociological literature on climate change governance. In doing so, the conceptual basis of the thesis will be outlined and considered. Sociology and the wider social sciences (with perhaps the exception of economics) have been slow to engage with the climate change phenomenon, ceding responsibility to the hard, natural sciences (Dunlap & Brulle, 2015; Goodall, 2008; Leahy, 2008; Lever-Tracy, 2008, Wilenius, 1996; Yearley, 2009; Zehr, 2015). Although this has been slowly addressed, the body of climate change sociology remains fragmented and heterogeneous. Accordingly, the sociology of climate change governance – the body of research concerned with the organised social response to climate change – is also substantively undeveloped and disparate. Nevertheless, this literature represents an ideal resource from which the critical analysis of the NZ CCP can proceed.

This literature review chapter will consist of four parts. The first section will outline the sociology of climate change, identifying three main areas of research: the social causes of climate change, the social impacts of climate change, and the social response to climate change. Following this, the third area of research – the social response to climate change – will be explored. Although a number of approaches have been pursued in understanding climate change governance, this review will focus on political sociology and the central role of the state in policy-making. Such research would seem particularly relevant to the study of the NZ CCP, as it specifically addresses the state's role in developing climate change policy. Following this, the limited scholarship regarding climate change governance in New Zealand will be reviewed. Scholarship will be drawn from sociology, political science, policy analysis, social geography, law, ecology, and public health – provided it is sociological in nature. The final section of this chapter will analyse New Zealand's governance literature. It will be demonstrated that this research, in tacitly adopting a positivist,

liberal/pluralist interpretation of the state and policy process, unwittingly fails to recognise the structural forms of domination and injustice that affect climate change politics. A critical approach would seem preferable, as it would emphasise New Zealand's capitalist political economy – drawing attention to how capitalist arrangements and the state inform climate change governance.

### **The sociology of climate change**

Much of the sociology of climate change falls within the rubric of environmental sociology. At its core, environmental sociology is concerned with the deepening relationship between social and natural environments (Buttel, 1987, 2002; Dunlap & Catton, 1978, 1979; Heinrichs & Gross, 2010). Climate change provides a self-evident example of the inextricable social-nature relationship, and an unsurprising focus for contemporary environmental sociology (Urry, 2010). Nevertheless, sociologists have generally expressed frustration at the lack of high-quality research on climate change conducted within their discipline. Sociology has been resigned to playing a secondary role in understanding global warming, in spite of the phenomenon's apparent social ontology (Lever-Tracy, 2008). According to Steven Yearley (2009, p. 390):

[...] the focus of analyses of the debate over climate change has – understandably – been fixed on the natural scientific aspects of the issue [...]. In many ways, these aspects have been the more epistemologically and technologically interesting ones, but it has often been the case that the social science side of the equation [...] has outweighed in its implications the natural science side.

This reticence to engage with the problem of climate change lies within the very norms of sociology. Wilenius (1996, p. 39) suggests that sociology tends to avoid probing social-environmental interactions, preferring instead to support social explanations to naturalistic ones. Moreover, the predominance of social constructivism within contemporary sociological inquiry reinforces the aforementioned preference for social explanations. For Lever-Tracy (2008),

modern sociology's antipathy for teleological theorising has been deleterious to the prospects of climate change research. As climate change is itself a social phenomenon<sup>2</sup> that widely extends throughout society, a certain degree of teleological analysis is necessary. However, the move against "grand-narrative" type theorising has hindered an extensive climate change research project. Finally, Rosa and Dietz (1998) propose an alternative explanation, suggesting that the sheer ubiquity of climatic processes – the climate as an ever-present background character – has contributed to its exclusion from the sociological imagination. The omnipresence of the climate causes it to be overlooked within the social sciences as a variable warranting consideration.

A compelling argument can be made for greater sociological engagement with the problem of climate change. Fundamentally, environmental sociology must overcome the false dichotomy between society and the natural environment (Beck, 2010a; Hulme, 2010; Urry, 2011), and recognise what Rosa and Dietz (1998, p. 422) describe as the "recursive relationships between climate and society" or Beck (2010b, p. 171) the "new kind of synthesis of nature and society". The anthropogenic form of climate change is inexorably a social process, which demands systematic analysis. The natural sciences are ill equipped to consider the important social aspects of the phenomenon. Environmental sociologists argue that the social sciences (and particularly sociology) must take a greater role in interrogating the climate change crisis (Trumbo & Shanahan, 2000, p. 200). For Rosa and Dietz (1998, p. 432):

Defining the global climate change problem as one whose roots are in human activities, in effect [will] relocate the arena of expertise from the traditional sciences to the social sciences. We believe that sociology (and the social sciences more generally) have

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<sup>2</sup> Posing climate change as an exclusively social phenomenon is problematic. Obviously climate change has a distinct material ontology – climate change as a physical process characterised by statistical variation in global weather patterns. The forms of *climatic* change can either be conceived in terms of social processes (industrial activity, the use of fossil fuels for energy etc.) or natural processes (variations in solar activity, tectonic/volcanic activity etc.). However, the notion of "climate change" almost universally refers to the anthropogenic form, synonymous with global warming. The UNFCCC (United Nations, 1992, p. 7) explicitly defines climate change as: "[the] change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods."

developed the substantive expertise and analytical sophistication to take on this challenge.

For Lever-Tracy (2008), the impact of climate change on society, combined with the production and use of scientific knowledge, are the exact issues that should concern sociology. She believes that climate change research must develop a multidisciplinary approach that offers a synthesis of natural and social scientific research.

The sociology of climate change broadly covers three analytical categories: 1) the social causes of climate change, 2) how climate change affects societies, and 3) how societies respond to climate change. On the social causes of climate change, the pertinent research can be largely divided into two approaches: environmental impact models and the political economy of climate change. The first approach – environmental impact models – attempts to explain the social causes of climate change through the identification of specific patterns of consumption, affluence, population, technology, and resource distribution, on the production of greenhouse gases (Liddle & Lung, 2010; Nagel, Dietz & Broadbent, 2009; Rosa & Dietz, 1998; York, Rosa & Dietz, 2003a, 2003b).

The second approach – the political economy of the environment – addresses the causative relationship between global capitalism and climate change. Heavily influenced by Marxian political economy and eco-socialism, climate change is conceived as a crisis of the capitalist mode of production (Bellamy Foster, 2015; Clark & York, 2005; Koch, 2012; Leahy, 2008; O’Hara, 2009; Soron, 2010; Timmons, Grimes & Manale, 2003). Expansionary capitalist production relentlessly surmounts the earth’s biophysical limits, including the absorptive capacity of natural carbon sinks. Climate change is symptomatic of the progressive degradation to the material preconditions of capitalist production. Consequently, there is an unceasing tension between the reproduction of the capitalist system and the sustenance of ecological systems.

On the second category of climate change sociology – how climate change affects society – the literature has widely considered the vulnerability of individuals, groups, and societies in light of global warming (Adger, Huq, Brown, Conway & Hulme, 2003; Chatterjee, 2010; Leichenko, Thomas & Barnes, 2010; Terry, 2008, 2009); issues of social and environmental justice in relation to climate change (Adger, Huq, Brown, Conway & Hulme, 2003); the effect of climate change on global security and conflict (Parenti, 2011), and climate change and social inequality (Beck, 2010b; Roberts & Parks, 2008a, 2008b). Central to this literature is the idea that the impacts of climate change are tied to globalised social inequality. The negative impacts of climate change will not be equally distributed. Developing countries with the lowest greenhouse emissions will suffer disproportionately (Nagel, Dietz & Broadbent, 2009).

### **The sociology of climate change governance**

As this thesis examines climate change governance in New Zealand, it would seem wise to focus this review on the sociology of climate change governance. Climate change governance refers to the organised political response by both nation states and international organisations to develop mitigation and adaptation policies. This review will address five major sociological contributions to climate change governance, with a substantive focus on the state: 1) climate change governance, uncertainty, and risk society; 2) reflexive modernisation and the cosmopolitisation of climate change politics; 3) anti-reflexivity and the climate change countermovement; 4) post-political climate change governance; and 5) the political economy of climate change governance. These are certainly not the only approaches to climate change governance. Indeed, there have been a number of sociological works that have considered public attitudes to climate change (Kahan, Peters, Whittlin, Slovic, Ouellette, Braman & Mandel, 2012; Norgaard, 2006; Stoddart, Tindall & Greenfield, 2012; Wilenius, 1996), the media analysis/manipulation of climate change (Antilla, 2010; Brulle, Carmichael & Jenkins, 2012; Carvalho, 2007; Corbett & Durfee, 2004; Dispensa & Brulle, 2003; Zehr, 2000), and feminist interpretations of climate change governance (Bee, Rice & Trauger, 2015; Macgregor, 2010, 2011; Terry, 2008, 2009).

## 1. Climate change governance, uncertainty, and risk society

Giddens (2008, p. 5) starts his analysis of climate change governance with a rather startling claim:

[...] at present, we have no effective politics of climate change, especially at a national level where much of the action must happen. That is to say, there is no developed analysis of the political changes we have to make if the aspirations we have to limit climate change are to become real.

Although the climate change phenomenon is unquestionably a mainstream political issue, Giddens argues that modern society lacks a coherent political framework in which the long-term social challenge of climate change can be addressed. Giddens (2008, 2009, 2015) reflects on how an appropriate politics of climate change can be developed, particularly at the nation state level. It is his view that genuine progress on climate change needs to occur predominantly at the state level, from which global action can be subsequently undertaken. The current state of paralysis affecting climate change governance is due to the self-described 'Giddens paradox'. Because climate change is an unprecedented crisis with diffuse effects, the public are unable to evaluate or accept climate change risk. Comprehensive climate change governance will only become possible when climate change risk becomes apparent – however by that point the social and environmental damage may be irreparable. A new paradigm of climate change politics is required to overcome both public apathy and the dysfunction of current domestic and international governing regimes.

Giddens' understanding of climate change governance appears to be founded on his conception of "risk society". For Giddens (2009, p. 7), "climate change politics is all about risk and how to manage it". Modernity encourages greater awareness of the future and, consequently, concern about the hazards generated by modernisation itself. In terms of climate change, risk society stimulates long-term thinking in relation to the organisation of the economy and state, as well as society's relationship with the environment. This especially occurs in regards to the production and management of greenhouse gases and the adaptation to climate change. However, the assessment of climate change risk is imprecise and very often contested. Uncertainties in the

science complicate the calculation of risk, which consequently undermines popular acceptance of the climate change phenomenon. Giddens (2009) proposes the development of a detailed risk assessment process and the need of the state to embed a greater concern for climate change within the citizenry. He argues that the state must develop a regulatory framework that can manage climate change risk.

Giddens' focus on the state and the recognition of its central role in responding to climate change risk is appreciated. His largely prescriptive approach to climate change governance appropriately recognises the need for state interventionism and the regulation of greenhouse gases. However, it seems undeniable that this account of climate change governance is thoroughly informed by Giddens' well-known political philosophy: third way politics<sup>3</sup>. Throughout the argument, Giddens (2009, p. 12) defends the current global capitalist order, promoting "political and economic convergence" in policy-making (the notion that effective climate change policy should complement economic competitiveness and growth). To this end, Giddens' explicitly supports market-based policy instruments to undergird the social response to climate change. Giddens also goes to great lengths to criticise the environmental movement, and the left in general, claiming that their efforts have ultimately harmed the chances of an appropriate response to climate change. According to Giddens (2009, p. 50):

As a political issue, responding to global warming [...] appeals to those on the left in a different way – it offers the chance to recover the radicalism that disappeared with the

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<sup>3</sup> "Third way" refers to a political ideology/agenda in which the macroeconomic outlooks of the social democratic left and the neoliberal New Right are reconciled (see Giddens, 1998; Maharey, 2003). Third way has been practiced by several countries, including New Zealand under the fifth Labour Government. While third way rejects socialism, it tends to accept much of the neoliberal policy regime. Roper (2005, p. 229) summarises the key principles of the third way: a commitment to the private ownership of public assets, a lightly regulated economy, flexible labour markets, lower rates of personal and corporate taxes, a smaller provision of state welfare, and fiscal austerity. In practice, third way politics appear substantively akin to neoliberal forms of governance – particularly in its support for a free market economy to promote social good and prosperity. Roper, for instance, describes the fifth Labour Government as having a social democratic veneer, but actually being neoliberal. However, third way regimes acknowledge that the state does have a limited, but important economic role to play. The envisaged role of government is to stimulate the conditions where the private economic sphere can flourish (through the investment in education, technological development, the cultivation of open labour markets etc.).

dissolution of revolutionary socialism. It might be seen as a means of renewing the critique of capitalism, regarded by them as the sources of the troubles we face.

This is arguably both an unfair reflection on the contribution made by progressive environmentalism to climate change governance, and a dismissal of critical approaches to the political economy of climate change – in particular the view that climate change and global capitalism are inexorably interconnected. Giddens' research does not really work as a forceful sociological analysis of climate change governance, but rather an orthodox justification of third way environmental politics and policies. There is no penetrating insight of the political challenges created in light of climate change, or critique of the capitalist origins of the climate crisis. Instead, we are left with an appeal to political centrism and more free market capitalism to guide climate change governance.

## 2. Reflexive modernisation and the cosmopolitisation of climate change politics

For Harriet Bulkeley (2001), Ulrich Beck (2010a, 2010b), and Mike Hulme (2010), the politics of climate change are all about reflexive modernisation – the establishment of a second stage of modernity, where the basic concepts and institutions of industrial and nation state modernity are radically reassessed and reformed. McCright and Dunlap (2010a, p. 103) succinctly define reflexive modernisation as a “form of critical self-evaluation – a self-confrontation with the unintended and unanticipated consequences of modernity's industrial capitalist order”. While in first or early modernity, nature is seen as an exploitable resource and pollution an unavoidable by-product of production, reflexive modernisation compels society to become conscious of ecological risks. In second modernity, climate change governance becomes the management of environmental risk, or more pointedly the regulation of society's “organised irresponsibility” (Beck, 2010, p. 259).

Interestingly, Beck believes that climate change presents an opportunity for the creation of a second “green modernity” (2010a, p. 257), provided the politics of climate change undergoes a

cosmopolitan transformation. That is to say, a rejection of politics organised solely in relation to a system of nation states, and a wholehearted acceptance of a global cosmopolitan society, where extensive social mobility, global openness, social reflexivity, a global civil society, and a global public sphere exist (Urry, 2011, p. 101). Like Giddens, Beck couches his analysis of climate change politics within the language and theory of risk society. Climate change risk – the present anticipation of future climatic disasters – has, according to Beck, triggered profound social change. Climate change risk creates a “cosmopolitan imperative” for international collective action. As the global public becomes aware that the current system of nation states cannot adequately respond to climate change risk, a new cosmopolitan order will be made possible. Furthermore, because climate change risk “entails being confronted with the global other” and reveals the innate interconnectedness of the world’s peoples, this process creates momentum for a genuine global response to the climate crisis (Beck, 2010a, p. 259). Beck et al anticipate the emergence of “cosmopolitan communities of climate risk”, where new political, economic, and cultural, climate change responses become possible (Beck, Blok, Tyfield & Yueyue Zhang, 2015, p. 2).

Beck’s insistence of the cosmopolitisation of climate change politics effectively relegates the nation state to an ancillary role in global climate change governance. According to Beck et al (2015, p. 2):

Climate change alters society in fundamental ways, entailing new forms of power, inequality and insecurity – together with new forms of cooperation and solidarity. Moreover, since national boundaries do not limit climate change, national responses are insufficient.

Dismissing the nation state and elevating a cosmopolitan vision of global society, as the locus of future climate change politics, appears tenuous. While collective international action is certainly an essential prerequisite for effective climate change governance, political power – that is to say the power to effect emissions reductions and implement adaptation programmes – still resides with the state. It seems unlikely that any sort of cosmopolitan community could supplant the

state as the basis of climate change governance, particularly at a time when states are asserting greater control and independence over social responses to climate change. New Zealand, for instance, has retreated in recent years from the global climate change regime, having redeveloped aspects of the NZ CCP in isolation of other countries and narrowly in line with its own self-interests. While Beck's cosmopolitan imperative may very well exist in some form, there is little evidence to suggest that the world's citizenry are uniting, or even beginning to unite in response to the common threat of climate change. Indeed, it would appear that national views on climate change are becoming polarised and actually hardening along state lines.

### 3. Anti-reflexivity and the climate change countermovement

While Beck and Giddens have argued that reflexive modernisation forces society to respond to climate change, McCright and Dunlap (2010a, 2011b) see the political opposition to climate change policy as agents of "anti-reflexivity". They contend that organised resistance to climate change governance essentially protects the capitalist order of first modernity from either critical analysis or meaningful change. The forces of anti-reflexivity employ two strategies in their opposition to climate change governance: delegitimising environmental science and mobilising as a counter-social movement to environmentalism. In elucidating climate change anti-reflexivity, McCright and Dunlap (2000, 2003, 2008, 2010b, 2011a, 2011b) extensively document the ongoing campaign by the U.S. counter-climate change movement to obstruct a comprehensive policy response. They demonstrate the extent to which the American policy debate has become increasingly politicised, with stark ideological divisions emerging between political elites (Republicans and Democrats) and the public (conservatives and liberals). For McCright and Dunlap, the countermovement's activism has been predominantly in defence of conservative political interests and in support of energy and carbon-intensive corporate actors. It has also been largely successful in determining America's isolationist stance on climate change governance.

Modern climate change denial has developed into a highly organised and well-resourced social movement (Brulle, 2014; Grundmann, 2007; Jacques, P.J, Dunlap, R.E & Freeman, M, 2008), what Monbiot (2006, 2007) has described as the climate change “denial industry”. Climate change scepticism exploits uncertainty within climate change science (King, 2011, p. 5), using it as evidence of the flawed global warming thesis. Policy founded on unreliable climate science is then argued by the countermovement as being unfounded or even ideologically motivated. Giddens (2008), Lahsen (2008), and Dunlap and McCright (2010a) point to the tactic of attacking climate change science by supplying contrarian scientific evidence. They suggest that a small number of sympathetic academics, who are financially supported by corporate interests and conservative think tanks, disseminate climate change scepticism. Sceptical scientists are employed to authoritatively refute climate change science and weaken its challenge to the dominant capitalist social paradigm.

While the anti-reflexivity thesis provides an insightful counterpart to Beck’s approach to climate change governance, it remains to be seen if it can be applied outside the U.S. political context. The focus of McCright and Dunlap’s analysis is exclusively directed to American climate change politics. Although they claim that similar movements operate in other countries, there is little equivalent research (in terms of comprehensiveness or analytical vigour) to support this. In New Zealand, there are certainly opponents to climate change policy – arguably practising the same anti-reflexivity as their American counterparts. However, as few systematic analysis of New Zealand’s opposition to climate change governance exist, the notion of an anti-reflexivity countermovement, as a persistent feature of climate change governance in late modernity, remains untested.

#### 4. Post-political climate change governance

Swyngedouw’s (2010, 2011) conception of the post-political condition of climate change governance significantly departs from the preceding reflexive modernisation/risk society approach. Within political philosophy, the notion of a “post-political” or “post-democratic”

reworking of society accounts for the putative de-politicisation of contemporary democratic governance. In the post-political phase of modern society, ideological struggle has been substantively replaced with technocratic governance, managerialism, and consensual policy-making. Swyngedouw draws attention to the problem of climate change, which is itself a highly politicised issue, and thus seemingly in contradiction with the post-political condition. For Swyngedouw, though, climate change actually contributes to the post-political reconfiguration of society, as the dominant and populist framing of the global warming phenomenon undermines and delegitimises radical dissent (Urry, 2011, p. 90). Environmentalism has shifted from being a socially progressive, ideologically based movement practising the “politics of contestation”, to a highly integrated stakeholder in the state policy process. However, in eliminating the political space for disagreement and the contest of ideas, post-political climate change governance weakens the potential for alternative climate change policies, and indeed divergent “socio-natural arrangements” (Swyngedouw, 2010, p. 228).

For Berglez and Olausson (2014) the post-political condition, which deprives climate change of its political nature, is empirically observable. Their research demonstrates the extent that Swedish climate change politics has been denuded of radical political discourse, and replaced with consensual governance:

Citizens do get involved in fighting climate change, but they do so in a rather non-political and socially “harmonious” fashion that does not challenge the socio-political status quo. Climate consensus thus protects the capitalist order from critical questioning. (Berglez & Olausson, 2014, p. 68-69)

The emergence of a “true” and honest politics of climate change has been prevented by a consensual climate discourse, which reinforces a “particularization of climate change causes, [a] lack of passionate emotions, and “neurotic” micro-political action” (Berglez & Olausson, 2014, p. 69)

At the core of Swyngedouw's (2010, p. 215) argument is the acceptance of the post-political state of politics:

[The] elevation of climate change and its consequences onto the terrain of public concern and policy has unfolded in parallel to the consolidation of a political condition that has evacuated dispute and disagreement from the spaces of public encounter to be replaced by a consensually established frame [...] defined as post-democratic or post-political.

The post-political frame embeds free-market capitalism as the inevitable and only conceivable organisational structure of modern society. While this is an intriguing way to explain how capitalism and neoliberalism have become givens in late modernity, the general premise of post-political climate change governance is unconvincing. The suggestion that the climate change debate is de-politicised and purged of ideology is patently absurd. McCright and Dunlap (2010a, 2010b) clearly demonstrate the extent to which U.S. climate change governance is politicised and ideologically charged. And even a cursory glance at New Zealand climate change politics would defy any claim of a post-political condition. Furthermore, there is clear evidence of ideologically based contestation from both environmental and corporate/industrial stakeholders. According to Urry (2010, p. 91):

[Swyngedouw] seems unaware just how [climate change] politics in recent years involves many kinds of environmental movement, protest and discourse. [...] In many cases these involve major critiques of the workings of capitalism and its consequences for most aspects of the environment.

The array of organised groups that challenge the relationship between capitalism and global warming, and that develop alternative policy prescriptions to market-based remedial instruments, contradicts the assertion of de-politicised climate change governance.

## 5. Political economy of climate change governance

While political economy research attributes climate change to the contradictions of global capitalism, this literature also considers the inextricable link between the capitalist system and climate change governance. The research conceptualises the state's capitalist disposition – examining how the formulation of climate change policy is influenced by the organisation and function of the state. Of particular concern are the socio-structural impediments to effective climate change governance and the dysfunctionality of existing policy responses.

The basis for much of this research surrounds policy-making in the neoliberal state. The hegemony of neoliberalism has resulted in a policy framework in which comprehensive social responses to climate change are untenable (Cléménçon, 2010; Klein, 2014; Koch, 2012; Parr, 2014; Soron, 2010). For Naomi Klein (2014), neoliberalism acts as an “ideological roadblock” to climate change policy, obstructing collective action at both the national and international level. Neoliberalism ensures path dependency within climate change policy-making as it embeds government privatisation, economic deregulation, and low corporate taxation, within the state's policy agenda. Klein considers comprehensive reductions in greenhouse emissions to be incompatible with economic growth and capital accumulation.

The state's policy apparatus empowers an elite corporate minority that control the economy, politics, and the media. This power elite use institutionalised privilege to undermine climate change policy, as it conflicts with their short-term, profit maximising interests. Parr (2014) suggests that the climate change response has been appropriated and restructured within the capitalist political-economic system. This has allowed climate change policy – such as emissions trading systems, carbon markets etc. – to be turned to the advantage of business and industry. Bachram (2004), Hodder (2009), and Lohmann (2008) share this view of the innate capitalist bias of market-based measures. In Koch's (2012) view, there remains an irrevocable disconnect between the long-term nature of a meaningful climate change response and the short-term interests of politics. Climate change policy imposes immediate costs on society, while its benefits

are diffuse and accrue over the long-term. It remains in the interests of politicians and state managers to delay or diminish climate change responses, if doing so maintains the political support of elites and the public.

Lohmann (2011) draws specific attention to the extraction and exploitation of fossil fuels in the capitalist economy. The economic centrality of carbon promotes climate change governance that must fundamentally protect fossil fuel use. On top of this, the mainstream social response to climate change has developed in line with market finance – creating a system of carbon markets, tradeable emissions units, and offsets, which primarily enrich corporate actors and governments, without actually addressing climate change. Lohmann (2011, p. 651) asserts:

The idea has been to turn climate benefit into small, measurable units that can be exchanged in a market, and then distribute and create demand for those units through government regulation. Presto — a new economic sector, enhanced GDP, new opportunities for profit-taking by banks and other financial institutions, and the appearance (at least) of global warming action into the bargain.

Böhm, Misoczky, and Moog (2012) provide a similar Marxian critique of emergent carbon markets. They suggest that carbon markets:

[...] rather than transforming capitalism, are reproducing and deepening unequal relations between North and South, and benefiting Northern and Southern elites while perpetuating uneven development and dispossessing non-elites.” (Böhm, Misoczky & Moog, 2012, p. 1633)

Carbon markets (and attendant emissions trading policies) are an outcome of the capitalist logic, commodifying greenhouse gas pollution and facilitating new forms of capital exchange and accumulation. However, carbon markets, like traditional capitalistic market processes, exacerbate existing inequalities, subsidise environmental destruction, and unequally redistributes the exposure of climate change hazards across the global economy.

Newell and Paterson (2010) take a far less critical perspective on global capitalism as a problematizing agent to climate change governance. Nevertheless, they fully acknowledge that climate change is derived from the capitalistic organisation of the global economy. Where Newell and Paterson depart from other political economic perspectives is the potential for social change that would bring about “climate capitalism” – the planned decarbonisation of capitalist production and exchange. The foundations of climate capitalism are economic instruments, which would price carbon and incentivise emissions reductions. For Newell and Paterson (2010, p. 10):

Against the backdrop of recalcitrant industries and reluctant consumers, [climate capitalism] creates the possibility of economic winners from decarbonisation. What’s more, those winners – financiers – are rather powerful, and can support you as you build the policies which might produce decarbonisation overall.

Those proposed measures that would ban or significantly diminish the use of fossil fuels are considered politically and economically unfeasible. This, in turn, increases the popularity of economic instruments, like carbon taxes and emissions trading schemes.

The real strength of the political economy literature is its analysis of how the state, class, and ideology shape the politics of climate change. This literature situates climate change within the policy environment created by contemporary, neoliberal capitalism. In doing so, the manner in which various climate change responses exist as artefacts of the current capitalist system are expounded. The assertion, however, that climate change represents an intrinsic and inevitable outcome of global capitalism is contentious (Castro, 2004, p. 213-314). Historically, socialism – a qualitatively distinct political and economic system – like capitalism exploited and degraded the environment, generating massive environmental problems. Consider the Soviet Union, which had a significantly injurious relationship with the natural environment as its industrial base expanded (Feshbach & Friendly, 1992). Human made environmental damage has been recorded throughout history – occurring because of non-capitalist forms of production and consumption (Magdoff & Foster, 2011, p. 11).

There is some question then as to whether climate change occurs as a direct result of the specific political and economic arrangements constituting capitalism, or more broadly from modernity and industrialisation. Proponents of ecological modernisation, for instance, would argue that capitalism and environmentalism are in fact inherently compatible. All that is required to address climate change is a greener, more sustainable form of post-industrial capitalism (Bell, 1998, p. 276; Fisher & Freudenburg, 2001, p. 702). Environmental economists would also unreservedly accept the congruence of nature and capital. Climate change and other environmental issues are conceived as fixable market failures. Free markets are not the problem per se, but rather correctable distortions in those markets that result in environmental hazards. Thus, within environmental economics, market-based tools are proffered (Castro, 2004, p. 203-206). Although climate change political economy literature assumes that capitalism directly causes climate change, more liberal theories would strongly resist this claim.

### **New Zealand's climate change governance literature**

Sociological literature on climate change governance in New Zealand is scant. There are few examples that expressly utilise sociological theory or methods. Indeed, much of this literature originates from political science, policy analysis, human geography, law, and public health. However, this research could still be considered sociological, in that it variously explains the interactions and patterns of social organisation that constitute domestic climate change governance. When one considers the significance of climate change, as well as New Zealand's long history of climate change politics, this paucity of New Zealand climate change sociology is concerning. For the sake of coherency, this review will separate the domestic governance literature into three categories: 1) the general state of New Zealand climate change governance, 2) governance related to the Kyoto Protocol and Labour's proposed carbon tax, 3) and governance related to the New Zealand Emissions Trading Scheme (NZ ETS).

## 1. The general state of New Zealand climate change governance

There are only a handful of sources providing historical overviews of climate change governance in New Zealand. To begin with, Buhrs and Christoff (2006), in their comparative analysis of environmental policy in Australia and New Zealand, analysed the political, economic, and ideological structures that shaped the NZ CCP. It is their contention that New Zealand's adversarial political culture, combined with the specific institutional arrangements of the state and governance process, and lastly the neoliberal ideological disposition of successive New Zealand governments, framed the domestic climate change response. Rive (2011) outlines the statutory and policy instruments related to climate change mitigation in New Zealand. His review also considers the Resource Management Act (RMA) and its role in the NZ CCP, as well as the key non-regulatory measures associated with climate change governance. Rive's piece concludes with a discussion of the effectiveness of the NZ CCP, although he accepts that limited information available on recent policy instruments (such as the NZ ETS) has made it difficult to accurately assess their efficacy. Rive and Weeks (2011) provide a methodologically similar account of climate change adaptation policy. Finally, the documentary *Hot Air* (Barry & King-Jones, 2014) provides a thorough exploration of the political landscape of climate change governance in New Zealand. Attention is given to the struggle between proponents of greenhouse gas mitigation policy (the fifth Labour Government, scientists, and environmental activists) and its opponents (represented by corporate interests). The documentary asserts that New Zealand's corporate and industrial lobby were instrumental in domestic climate change politics, effecting policy change and blocking key remedial policy measures.

Jonathan Boston (2006, p. 43, 2009), in exploring the political challenges of climate change, identifies several important characteristics of climate change governance in New Zealand. These include a limited public understanding of the climate change problem, persistent policy change and reversals, a lack of consensus amongst stakeholders on the direction of the NZ CCP, inadequate cooperation between government and business, the inaccurate calculation of

domestic emissions, government indecision and prevarication, and finally extensive lobbying from opponents. These qualities undermine public confidence and support for an ameliorative response.

This final dimension – the influence of oppositional lobbying efforts to the NZ CCP – has drawn significant scholarly attention. Taylor (2013, p. 20) describes the climate change policy debate as an “extreme polarisation of interests” that has proven to be “perhaps the most divisive environmental debate of our time”. Bertram and Terry (2010, p. 48-50) provide a concise history of the role of major emitters in obstructing New Zealand’s response. They argue that from the outset of the NZ CCP, industrial users of energy and natural resources have opposed any policy intervention that would increase the costs of production. Several major firms and corporate lobbying organisations are identified (including the Major Electricity Users Group, the Greenhouse Policy Coalition, and Federated Farmers), which have influenced successive New Zealand governments and either delayed or blocked climate change action. Both Basher (2000, p. 130-131) and Hamilton (2000, p. 149-151) in their respective discussions of the early NZ CCP (c. 1990-1995) recognised the systematic efforts by the corporate/industrial lobby to obstruct meaningful climate change policy.

Juliet Roper (2011) also considered the significance of New Zealand’s organised corporate opposition, in her analysis of the discursive construction of “sustainability” within the climate change policy debate. Roper reflects on the competition between the fifth Labour Government and the corporate lobby to redefine the discourse of sustainable development. New Zealand’s corporate lobby was able to resist Labour’s push for sustainability in relation to climate change policy, and was even able to colonise the discourse with neoliberal principles. The transition to very weak sustainability underpinning the NZ CCP was completed under the more conservative fifth National Government. Bührs (2008) identifies a similar weakening of the principles of sustainable development within domestic climate change governance. According to Bührs (2008, p. 60), New Zealand’s interpretation of sustainable development is “circumscribed more by

economic than by environmental concerns and imperatives". This imperative, to protect economic interests, has become rooted within New Zealand's response to climate change. The effect of this has been:

[an] approach to climate change [...] that prescribes a narrow, technological, managerial and economic interpretation of 'the climate problem' and ignores wider issues and factors that underlie climate change as well as other environmental problems. (Bührs, 2008, p. 68)

Bührs accepts that New Zealand's response may lead to reductions in emissions, but it will not contribute to a long-term goal of sustainability as long as the economic drivers of ecological degradation remain unaddressed.

While Roper and Bührs have questioned the compatibility of the NZ CCP with sustainable development, for Parr (2000) the issue of equity takes precedent. Although New Zealand's least cost response may be domestically beneficial, when applied internationally significant issues of non-equity arise. In Parr's view, the "net approach"<sup>4</sup> adopted within the NZ CCP and strongly advocated for by New Zealand in international governance negotiations, privileges a small number of nations blessed with large forestry resources. The net approach allows intensive-emitting countries, like New Zealand, to achieve international emissions reduction targets without actually practicing carbon mitigation. Parr (2000, p. 78-9) believes that this renders New Zealand's climate change response inequitable:

Quite simply, the least-cost approach does not offer other nations the same benefits it offers New Zealand. An approach predicated upon economic strategies designed to maximise any advantage New Zealand may have or could be construed to have, surely

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<sup>4</sup> The "net approach" in climate change governance refers to: 1) policy that relies heavily on carbon sinks to effect emissions mitigation, and 2) a method of calculating national levels of emissions, which includes the sequestering effects of carbon sinks and land use change (as opposed to the gross measure, which solely refers to the total emissions proposed by a country). The net approach is discussed in greater detail in chapter five.

does not have as its primary objective equity and the interests of other nations, nor the interests of the environment.

Ultimately, New Zealand's least cost response contributes to the unequal distribution of climate change costs and impacts between the global North and South.

In a similar vein, Hadley (2015) considered the question of ethics with respect to domestic climate change governance. Grounded in the concept of "climate ethics", Hadley analysed the historical development of NZ CCP and how governments addressed ethical issues in the policy debate. Between 1990 and 2008, New Zealand governments adopted a standard self-interest approach in practicing climate change governance. Citing the failure to incorporate principles of sustainable development in the formulation of domestic climate change policy, he argues that successive governments have operated under a "standard self-interest" ethical frame (Hadley, 2015, p. 488). This has produced highly ineffective, parsimonious, and unjust climate change policy. The current fifth National Government is particularly guilty of "[holding] back on [climate change] policy development/implementation and operating under a [...] narrow, highly unethical, and unjust form of self-interest" (Hadley, 2015, p. 488).

The inequities of New Zealand's net approach were also discussed by Hamilton (2000, p. 156-160) and Gillespie (1997, p. 49-56, 2000, p. 169-179). Gillespie draws attention to how socio-economic and historical context can affect the comparative equity of the net approach. Quite simply, it is relatively inexpensive for New Zealand (as a wealthy and high per capita emitting country) to rely on forestry, but on the other hand prohibitively expensive for developing nations to reduce emissions, particularly without the luxury of forestry sinks. Chapman and Gray (1998) defend New Zealand's net approach, pushing back against the claim of its inherent inequity. They contend that a least cost response is appropriate, as to be successful, climate change policy must make sense within New Zealand's environmental, economic, and social context. Moreover, the response must be compatible with the international governance regime – where the net approach is accepted.

Besides the crucial role of New Zealand's corporate and industrial lobby in undermining the NZ CCP, attention has been given to the complicating dynamics of the climate change policy problem. The "wickedness" of the climate change policy problem (Levin, Cashore, Bernstein & Auld, 2007; Palmer, 2015a, 2015b), what Fatu Lefale (2008, p. 11) describes as a "perfect political dilemma", speaks to the supreme challenge of developing and implementing effective adaptation and mitigation policy. Taylor (2013, p. 20) and Boston (2006) share this view of climate change as an extraordinarily complex policy domain, which renders long-term regulatory action problematic.

Boston (2011, 2015) draws attention to the political asymmetries that problematize climate change governance. The first is a voting asymmetry, where those future generations with a stake in meaningful climate change governance are naturally unable to participate. The second is the cost/benefit asymmetry, where mitigation costs are incurred immediately, while benefits are felt over the long-term. These two initial asymmetries relate to intergenerational equity and the difficulty in a democracy of effecting policy change that conflicts with people's short-term interests. The third, interest group asymmetry speaks to the costs of mitigation being concentrated on powerful interests groups, providing an incentive for their opposition. Finally, an accounting asymmetry exists, where there is no requirement for firms or governments to include environmental impacts in financial accounts or public records. Boston also identifies a number of governance issues unique to New Zealand, which compound the difficulty of collective action. These include New Zealand's unique emissions profile (a high proportion of agricultural emissions that are difficult and expensive to abate), the already heavy domestic reliance on renewable energy sources, the importance of forestry to the New Zealand economy, and the inaction of New Zealand's major trading partners.

In a similar vein to Boston's asymmetries, Chapman (2006) identifies six policy narratives that undercut climate change governance. Firstly, the New Zealand policy debate has suffered from

information overload. Conflicting data is used by opponents of climate change policy to justify delays and deferrals. Secondly, governments cite competing priorities to excuse climate change inaction in lieu of other problems considered more pressing. Thirdly, other nations, are argued to be in a better position to reduce emissions, or are more liable than New Zealand in contributing to climate change. According to Chapman, this narrative is popular as the international system of climate change governance provides a framework in which New Zealand can legitimately rely on the efforts of other countries, instead of effecting domestic reductions (free riding). Fourthly, technological solutions will invariably be developed, which will spare New Zealand from the requirement of substantial economic decarbonisation. Fifth, the private sector will anticipate climate change and take appropriate remedial action. Finally, reducing emissions is too costly an exercise. For Chapman, an ideal policy framework would set challenging emissions reduction targets, signalling New Zealand's commitment to a comprehensive ameliorative response. Furthermore, New Zealand must learn from the governance experiences of other countries, and pursue broad-based action in response to climate change.

The social implications of decarbonising New Zealand's economy have also been considered by Chapman and Boston (2007). They (contentiously) suggest that the most profound economic impacts of climate change will come from its social response, and not the actual physical or material impacts of the phenomenon. Because policies must be implemented immediately to remedy the climate crisis, the short-term costs of action will be high. The physical impacts of climate change, on the other hand, are incremental and cumulative. This would suggest that related costs would accrue over the long-term. Moreover, the costs of the climate change response will very much depend on the resilience of New Zealand's governance institutions and economy, as well as the nature and extent of the selected policy measures.

Macey (2014) identifies recent domestic and international pressures, which have profoundly affected New Zealand's climate change response. These include the general stagnation of the international climate change governance framework, the twin recoveries from the global

financial crisis and the Christchurch earthquake dominating New Zealand's economic and political agenda, and the incompatible policy priorities of the fifth National Government (including efforts to increase New Zealand's agricultural exports and the promotion of oil and gas exploration). Macey (2014, p. 50) bluntly suggests that in light of these pressures "climate change policies have [in New Zealand] been more or less parked".

Alternatively, Palmer (2015b) asserts that New Zealand's policy response has suffered because of a lack of political will. The domestic climate change programme is described as "lamentable" and "low-key", exhibiting "an indifference to the phenomenon of climate change both at the international and domestic level" (Palmer, 2015b, p. 17). He also suggests that climate change governance is undermined by: 1) the short term focus of New Zealand politics, where decision-making is primarily based on political expediency; 2) an intellectually shallow policy debate; 3) the opposition of powerful vested interests to remedial policy; 4) a lack of consensus between New Zealand's major political parties; and 5) an inconstant and changeable approach to climate change between governments (Palmer, 2015b, p. 23).

A number of sources have touched on the neoliberal framing of the NZ CCP. This has included Bührs (2008) and Roper (2012) in relation to the discursive framing of sustainable development within the domestic policy response; Basher (2000), Hamilton (2000), and Gillespie (2000) in relation to the fourth National Government and the early NZ CCP; and Barry and King-Jones (2014) with respect to the policy change of the NZ CCP. Birchall's (2014) analysis of policy change under the fifth National Government also recognises the ideological effect of neoliberalism. Using "termination theory" – a framework within public policy analysis used to explain the purposeful ending of government policy – Birchall considers the cessation of two minor climate change initiatives ("Communities for Climate Protection—NZ" and "Carbon Neutral Public Service") by the fifth National Government. Rather than the financial justifications articulated by National, Birchall found that political ideology precipitated the programmes' end. Citing the modest emissions reductions and cost savings initially gained from the programmes, Birchall argues that

the Government's rationale of economic efficiency does not necessarily explain or justify the policy change. National's decision to terminate the programmes was really informed by its neoliberal disposition and its intent to "get beyond [the fifth Labour Government's] unrealistic [emissions reduction] aspirations and to give New Zealand's climate agenda a reality check" (Birchall, 2014, p. 55). Indeed, the Government's statements around climate change suggest the broad acceptance of neoliberal market environmentalism.

## 2. The Kyoto Protocol and Labour's proposed carbon tax

Significant occurrences of policy change generate scholarly debate. Indeed, New Zealand's participation in the Kyoto Protocol negotiations stimulated academic interest. Kyoto has been extensively discussed by Basher (2000), Hamilton (2000), Gillespie (1997, 1998, 2000), and Parr (2000) in their respective works on the early NZ CCP. Richardson (1998) provides a comprehensive review of the Kyoto Protocol and the implications of New Zealand's ratification of the treaty. His analysis draws attention to New Zealand's highly self-interested negotiating stance – particularly its insistence on the inclusion of forestry sinks within the Protocol, and the development of an international emissions trading system.

Mason (2013) outlined the key modes of thinking introduced by the Kyoto Protocol, and their effect on policy-making in New Zealand. He argues that Kyoto encouraged policy-makers to accept an irrational understanding of "carbon neutrality", where polluting actors were able to claim carbon neutrality by acquiring carbon offsets, while still emitting significant quantities of greenhouse gases. This approach informed future policy change within the NZ CCP, including the formulation of the NZ ETS.

Ward's (2006) specifically addresses the abandonment of Labour's proposed carbon tax and, more generally, the role of economic instruments in New Zealand's climate change response. He suggests that the interdepartmental policy review of the carbon tax (MfE, 2005) stranded the

measure in a “policy no man’s land”, where the design of the tax could not meet the Government’s objectives. According to Ward, the very place of economic instruments within the NZ CCP was undermined by government indecision and contradictory policy objectives.

### 3. The NZ ETS

The formulation and implementation of the NZ ETS generated significant scholarly analysis. Moyes (2008), Jiang, Sharp, and Sheng (2009), Cameron and Rive (2011), Cameron (2011a, 2011b), and Wilson (2011) provide orthodox accounts of the NZ ETS. Each piece offers a comprehensive schematic of the NZ ETS legislative framework, a summary of the policy’s key objectives, and the fifth Labour Government’s rationale in formulating the instrument. Moyes (2008), for instance, extensively analysed the design parameters of the NZ ETS, as well as the likely implications of the policy on both the agriculture and forestry sectors. She described the NZ ETS as an ambitious and pioneering policy in the management of greenhouse gas emissions. Both the scope and comprehensiveness of the NZ ETS made New Zealand’s response internationally unique. Accordingly, Moyes suggests that other countries might consider the example of the NZ ETS in developing their own climate change policy. Also of note was the extent to which New Zealand’s emissions trading scheme represented a “relatively pure translation of economic theory into policy practice” (Moyes, 2008, p. 913). While the NZ ETS has the potential to be successful, Moyes accepts that its more ambitious provisions (its coverage of all economic sectors and greenhouse gases) could produce negative effects – undermining the policy’s effectiveness, and raising the costs of its implementation. Jiang et al arrived at a similar conclusion. They describe the NZ ETS as “laudable in terms of design principles” (Jiang et al, 2009, p. 77). However, the scheme’s inclusion of agriculture may diminish the sector’s long-term profitability, particularly if other countries fail to adopt a similar price on agricultural emissions. Jiang et al predicted that New Zealand farmers would be at a competitive disadvantage under the NZ ETS.

Cameron and Rive (2011) and Cameron (2011a, 2011b) broadly address the legal aspects, design features, sector-specific provisions and regulations, and operation of the NZ ETS. Wilson (2011) expounds on the economic theory that informed the NZ ETS. According to Wilson, the NZ ETS has remained relatively faithful to the principles and theory of emissions trading. However, several of its core provisions – including the lack of an emissions cap, the coverage of the scheme, the permit/unit design, and the transitional assistance programme – take liberties with the conventional emissions trading design. These unconventional or idiosyncratic design features, as well as the relatively short time in which the NZ ETS has been in operation, have made it difficult to predict the policy's long-term success.

A second grouping of governance literature offers a far more critical interpretation of the NZ ETS. By far, Bertram and Terry (2010) provide the most in-depth and capable analysis of the NZ ETS design and its probable outcomes. Their work considers the problematic application of emissions trading (as a policy instrument primarily conceived in economic theory) within New Zealand's fraught political environment. In their view, regulatory capture by corporate and industrial interests significantly influenced the development of the NZ ETS. Regulatory capture facilitated a pattern of policy change, whereby the NZ ETS was systematically prevented from efficiently imposing a price on carbon emissions across the New Zealand economy. It is their assertion that the NZ ETS, as a market-based economic instrument, falls into a grey area between emissions trading and carbon taxation. The measure could not be truly considered an emissions trading scheme, as there was no emissions cap. For participants, the NZ ETS would function more like a carbon tax, albeit with the price on carbon determined by the fluctuating international carbon market. However, unlike a carbon tax, the revenue generated would not go to the government and would not be recycled back into climate change action. For Bertram and Terry (2010, p. 16):

The ETS, in short, is neither a regulatory cap on the nation's emissions, nor a tax in the usual sense. There is to be trading, with a pseudo-market mechanism performing the function of distributing money extracted from one group in the community into the pockets of another; but trading like this in a policy vacuum is not to be found in the

standard economics textbooks as an efficient way to deal with an environmental externality.

In practice, the NZ ETS works as corporate welfare, as free emissions permits are allocated by the government to business and industry, releasing them from the responsibility of paying for their emissions. As this type of emissions trading instrument demonstrably benefits carbon-intensive firms, an incentive exists for New Zealand's corporate lobby to push for its implementation.

Bullock (2012), Mason (2013), and Palmer (2015b) provide similar critical evaluation of the NZ ETS design and the extent to which sectorial interests (particularly agriculture) have influenced the formulation process. They attribute the ineffectiveness of the NZ ETS to the flaws in its formulation and design. Mason identifies the exclusion of agriculture from the NZ ETS and the unrestricted access to international carbon credits, as the policy's two significant design flaws. For Palmer, the NZ ETS, in its original formulation, constituted a meaningful response to climate change. It was only after the fifth National Government moderated the policy that it became substantively weak.

Macey (2014) argues that in its current settings, the NZ ETS fails to achieve its core objectives (reducing emissions, promoting investment in clean technologies and renewable energy, and afforestation). It is Macey's (2014, p. 52) view that "the most important features of the ETS which should advance the long-term transformation of the New Zealand economy are prejudiced by the cheap carbon price, since they reduce incentives to close to zero". The main culprit undermining the NZ ETS is the provision that allows unfettered access to the international carbon market and, in turn, cheap and environmentally dubious carbon credits. This provision reduces the exposure of New Zealand emitters to a price on carbon.

Richter and Chambers (2014) have also assessed the development and performance of the NZ ETS. Their research surveyed stakeholders in the performance of the NZ ETS and the achievement

of its core policy objectives. The results indicated that regulatory uncertainty undermines stakeholder confidence in the NZ ETS. They suggest that persistent regulatory uncertainty would likely delay low-carbon investment necessary to accomplish the objectives of the NZ ETS. Furthermore, participant's reliance on international offsets has hampered the decarbonisation of the economy, and contradicted New Zealand's Kyoto obligations. Hood (2010), on the other hand, specifically addressed the gifting of emission permits under the NZ ETS. For Hood, the allocation of free units under the fifth National's moderated NZ ETS provides a weak incentive for emissions mitigation, which not only over-compensates polluting firms, but also burdens the economy with New Zealand's Kyoto debt. The policy's uncapped design and the slow phase out rate for sectorial assistance were identified as its major design flaws. A new form of allocation, underpinned by robust cost/benefit analyses and bipartisan Parliamentary support, was urgently needed to make the NZ ETS tenable.

Lastly, Hosking, Connor, Metcalfe, Laking, Forde, and Phipps (2009) have considered the public health implications of the ineffectual NZ ETS. In a similar fashion, Wilson, Chapman, and Howden-Chapman (2011) assert that the response to climate change has been deficient and economically wasteful, and that the NZ ETS has not contributed to domestic emissions mitigation.

### **Critique of domestic governance literature**

Several important themes/arguments can be extrapolated from the domestic governance literature. Firstly, the organisation and practice of climate change governance is complex and labyrinthine – characteristics that invariably contribute to the formulation of ineffectual and contradictory response strategies. Secondly, the uncertainty surrounding the science of climate change, the nature and extent of its physical and social impacts, and the costs/benefits of remedial political action, problematize traditional forms of rational policy-making and overwhelm the state's governance institutions. Third, business and industrial actors have

successfully opposed the implementation of meaningful climate change action. By resisting the enactment of climate change policy or coercing governments to develop insubstantial remedial measures, corporate opposition contributes to the dysfunction demonstrated by the NZ CCP. Fourth, neoliberalism has profoundly influenced the domestic practice of climate change governance. As an ideology, it shapes the formulation of response strategies. Fifth, it is difficult to assess the efficacy of the NZ CCP, owing to incremental and long-term effects and outcomes of the Programme's constituent policies. Nonetheless, most research suggests that the NZ CCP and its attendant policies are poorly designed and have been ineffective.

The strength of this research is its comprehensive analysis of the NZ ETS, including the policy's design and expected outcomes. Indeed, the breadth and thoroughness of this research provides an excellent foundation for further research, where more novel and critical interpretations of climate change governance can proceed. Alas, the wider NZ CCP has not received the same degree of scrutiny. Significant occurrences of policy change, such as the 1994 Comprehensive Strategy on Climate Change or Labour's proposed carbon tax, have not undergone the same meticulous consideration. This blank space within New Zealand's governance literature reflects an unfortunate truth, in that the social sciences and its interest in the climate change phenomenon, is a recent occurrence. The early years of the NZ CCP were likely undertheorized because climate change did not command scholarly attention. There is, thusly, a need for sociologists and political scientists to revisit the earlier years of the NZ CCP, and consider the initial policy change that informed the development of the NZ ETS and other contemporary policies.

In addition to the gaps found in the research corpus, there exist certain conceptual and epistemological limitations in New Zealand's governance literature. One could argue that this research, in its analysis of climate change governance, implicitly adopts an orthodox liberal/pluralist interpretation of the state and policy process. While such an approach undoubtedly offers some insight into climate change governance, it is nonetheless limited in two

crucial respects. First, a positivist, liberal/pluralist framework provides a reductive account of political power and the state. Second, the liberal/pluralist model reifies institutions like the state, obscuring the structural forms of domination and injustice that pervade governance in Western polities. A compelling argument can be made for a critical analysis of climate change governance, one that overcomes the inherent limitations of the liberal/pluralist model and that radically reconceives the NZ CCP.

We need to begin by briefly considering the liberal/pluralist model of the state. This term references two fundamental dimensions commonly associated with modern states: governance based on the principle of liberal democracy, and the pluralistic arrangement of political power. In its classical liberal conception, the state operates as a neutral political apparatus – balancing competing societal interests, and acting in the common good and public interest. Heywood (2002, p. 90) identifies two core assumptions of the liberal state: 1) conformity to the principle of public service and accountability, and 2) representative democracy that operates under the principles of classical liberalism. Political pluralism, as conceived by the likes of Truman (1951) and Dahl (1961), recognises the innate polyarchical structure of Western polities. For pluralists, power is widely distributed amongst individuals and groups, representing diverging interests and beliefs (Smith, 1990). Public policy reflects the balance of competing social interests. Liberal democracies create the institutional preconditions in which political pluralism can exist. Hence, there exists a conceptual synthesis between these two understandings of the state and politics.

It should be unsurprising that domestic governance literature falls back on the liberal/pluralist model, considering that positivist theory and technocratic policy analysis remain the dominant positions within political science and policy analysis (Barrett, 2015, p. 440; Fisher, 2007, p. 98-99). Brian Roper (2011, p. 14) has argued that within New Zealand political studies exists a founding “central heuristic thrust of liberal pluralism”. Arguably, within most traditional forms of political and policy analysis, liberal/pluralism is tacitly accepted. Although this often leads to comprehensive and insightful scholarship of politics and policy, there are certain conceptual

inadequacies within the liberal/pluralist model that can taint the analysis. A prime objective of critical policy analysis is to draw attention to the limitations of conventional political and policy analysis, and deconstruct the shortfalls of positivist theories and concepts.

Four recent pieces on domestic climate change governance – Macey (2014), Palmer (2015b), Chapman (2015), and Boston (2015) – succinctly demonstrate an implicit positivist, liberal/pluralist model of the state and politics. Although these examples do not develop thorough accounts of the state and policy process, a general acceptance of the liberal/pluralist model can be inferred from parts of their arguments. All three pieces variously assert that the NZ CCP is subject to political influence from various organised interests. Moreover, the lack of support (and outright opposition) from business groups has shaped New Zealand’s response and policy debate. Boston (2015 p. 489- 490) specifically attributes the absence of political support from the business community (what he describes as a “political asymmetry”) and civil society for the general governmental malaise regarding climate change. Palmer (2015, p. 22-23) concisely establishes his liberal/pluralistic conceptual framework:

The New Zealand system of democratic politics concentrates remorsefully on the short term. General elections occur every three years. Increasingly, [climate change] decision-making is based not on facts but upon political considerations concerning what focus groups and public opinion polls suggest are the preference of the public at any given time.

For Palmer, the dysfunction associated with domestic climate change politics can be partially explained by the pluralistic nature of New Zealand politics and the liberal state (with attendant democratic elections). Political pressure and lobbying from vested interests has resulted in a state of political polarisation – impeding progress on climate change policy. Chapman (2015, p. 27-28) acknowledges New Zealand’s pluralistic political process, while also defending the capitalist economic system:

Capitalism [...] is not only damaging when unguided but is also highly responsive if the conditions are right. *If and when* it is guided by sufficiently strong democratic pressure

and policy [...] and forced to deal with its own shortcomings, it can undoubtedly respond remarkably quickly and positively. Under these conditions, the necessary rates of emissions reductions [...] might just be achieved.

This literature implicitly accepts an uncomplicated and uncontroversial view of the state, where climate change governance benignly reflects the balance of competing societal interests.

Furthermore, the research often provides technocratic and abstruse policy analysis, relying on an empiricism and methodological positivism to interpret the NZ CCP and its policy change. Palmer (2015, p. 20-23), for instance, extensively discusses the legal and constitutional aspects of New Zealand's policy response, while Macey (2014, p. 51-54) provides a highly technical analysis of the NZ ETS. The analyses are predominantly descriptive and substantively positivist, merely recounting the practices and organisational patterns that constitute climate change governance. There is no overt attempt to confront the state and address the institutional arrangements and features that potentially structure climate change politics in New Zealand. This is the cardinal sin of New Zealand's governance literature – particularly when considered from a critical perspective.

For the critics of pluralism, the advanced, industrialised, and essentially capitalist state represents a qualitatively new social arrangement – one that directly contradicts the popular liberal/pluralist model. They point to the disjuncture between the theory of liberal/pluralism and the actual reality of contemporary political phenomena. Neither the liberal state nor political pluralism genuinely reflects the practice and organisation of modern governance. Accordingly, critical interpretations of the state radically reconsider the nature and distribution of power, in an effort to more accurately represent contemporary political arrangements. For critical theorists, it has become empirically indefensible to claim power is widely distributed in advanced capitalist societies. Rather, power is understood to be fragmented and structural in nature (Held, 1987). For neo-pluralists (Lindblom, 1977), business groups are able to dominate the policy process because of structural forms of privilege. Neo-Marxists (Althusser, 2004; Miliband, 1969;

Poulantzas, 2000) take this a step further, insisting on the a priori class nature of the state. Such a notion of structural power contradicts a neutral state, one that serves the common good and rationally and impartially develops public policy. Critical political theories demonstrate that the state, more often than not, acts in accordance with the beliefs and preferences of select societal interests – usually powerful business and industrial factions.

A second limitation of liberal/pluralism – its positivist epistemology – can be directly drawn from critical theory. Critical theories oppose positivism, rejecting the position that scientific knowledge reflects an objective, static, and ahistorical world, structured by natural rules and immutable logics (Agger, 2013; el-Ojeili & Hayden, 2006; Stanford Encyclopaedia of Philosophy, 2005). Positivist attempts to describe social phenomena in terms of eternal laws and fixed historical outcomes reifies social structure and society. In its reification of society, positivism reduces social relations and societal arrangements to inert processes that appear natural and frozen, and therefore unchangeable. An exploitative and unequal class structure, for instance, would be portrayed as an inevitable, logical, and entirely reasonable consequence of a capitalist economy. A large working class, forced to sell their labour to an elite capitalist class who solely own the means of production, would appear wholly natural and uncontroversial parsed in the language of positivist, neoclassical economics. Positivism becomes a source of hegemony, as its ideological representation of society obscures forms of structural domination. A positivist social science manipulates class-consciousness and reproduces false consciousness.

Critical theorists, rather, would strongly emphasise historicity – the historical fluidity of social, political, and economic arrangements, and the extent to which society can be reshaped through the political action of the oppressed (Agger, 2013, p. 6-7). While history and social structure may constrain the possibilities of social change, past and present does not fully determine its nature or course. Hence, critical theory adopts a postpositivist metaphysic – that social phenomena cannot be satisfactorily explained in relation to natural, rational laws, unmoored from human history or the subjective experiences of individuals. In doing so, critique facilitates the popular

recognition of historicity and, in turn, the impermanence of hegemonic social structures (class, patriarchy etc.) and the chance for emancipation from dominating structures. The critical position does not mean the abandonment of objectivity in its description and analysis. It is a reasoned reflection on how knowledge is produced, one intended to engage with ideological structures, dogmatism, and even common sense and ubiquitous systems of rationality that constitute society.

Furthermore, critical theories stress that those positivist paradigms (which pervade the social sciences) tend to affirm existing social structure and political orders, despite claims of neutrality and objectiveness. Horkheimer (1982) argued that traditional (non-critical) social theory is not neutral or reflective insofar that these discourses contain naturalised values, perceptions, assumptions, ideological interests, and even overt political and economic purposes. These hidden discursive structures – the values and beliefs of the existing political and economic order – despoil positivist political philosophy or social theory. As mainstream, positivist theories support the status quo and promote false consciousness, they effectively act as barriers to emancipation and a liberated society. Critical theory, then, acts as an alternative to mainstream theory, aimed at “illuminating hidden sources of repression and neglected transformative possibilities” (Bronner, 2011, p. 100).

In employing liberal/pluralism, and engaging positivist theory to frame their analysis of climate change governance, Macey, Palmer, Chapman, and Boston (and the wider body of domestic governance literature) unintentionally reify the New Zealand state and aspects of the policy process. Their scholarship seems to imply that the policy change demonstrated by the NZ CCP is merely the product of the balance of societal interests within the pluralistic policy process. Furthermore, the state is presented as being nominally neutral, and a body that formulates climate change policy in accordance with the common good. Consequently, this literature fails to address the structural forms of domination that are inherent in policy-making, and which potentially shape the organisation and practice of climate change governance. Macey et al do

not confront the capitalist political and economic arrangements that have unquestionably informed the NZ CCP – at least not in a critical sense. I would suggest that reification within this literature undermines the possibility of imagining alternative and radical forms of climate change governance, as it inadvertently obscures historicity – that modes of climate change governance are impermanent as they are themselves the product of changeable political and economic arrangements.

The omission of critical interpretations of the state from the domestic governance literature is significant, but not egregious. Any reification assumed within the research does not fatally weaken the arguments and observations made about the NZ CCP. Indeed, Macey et al develop highly cogent and insightful analyses of New Zealand's climate change response, which vitally contribute to climate change sociology. Perhaps the value of critical policy analysis is simply to offer a heterodox account of climate change governance, one that is mindful of reification and emphasises structural forms of domination. From a critical perspective, the New Zealand state is not neutral or benign. Rather, the power of the state is used purposefully and strategically in the service of select political actors and groups. There has yet to be a dedicated critical analysis of the political economy of New Zealand climate change governance. An ideal critical approach would attempt to satisfy the core objectives of critical social theory, including illuminating structural forms of domination, emphasising historicity, the impermanence of hegemonic modes of climate change governance, and promoting greater class-consciousness with respect to the climate change problem.

## **Conclusion**

While the sociology of climate change has provided significant insight into climate change governance, there remains a need for greater critical analysis of the phenomenon. To this point, the policy analysis conducted in this thesis will be grounded in critical social theory – particularly

the core critical assumptions and principles enumerated in this chapter. Thus far, the body of governance literature has ably demonstrated the social ontology of climate change – drawing particular attention to the complicating political and economic dynamics that undermine national policy responses. Ultimately, this thesis will add to this literature by demonstrating that the organisation of the advanced capitalist state shapes the social response to climate change. The dysfunction of climate change governance is precipitated by the structure of the state – an insight only gained through a critical interpretation of the state’s policy-making activities. This thesis will use the NZ CCP as a case study of policy breakdown, identifying and critically explaining how the structure of the New Zealand state informs, and invariably undermines the governance process.

The following research design chapter will provide an extensive methodological discussion regarding the utility and potential weaknesses of the political economy of climate change governance. Chapter Two will justify the use of Marxian systems-analysis as a critical framework to interpret the organisation and practice of climate change governance in New Zealand.

## Chapter Two

### Critical policy analysis and climate change governance: the research design

Within the sociology of climate change, significant attention has been given to the phenomenon's political economy. This research has variously analysed the political and economic structures that inform the practice of climate change governance. However, there exists room within this body of literature for a more dedicated analysis of the capitalist state as the locus of climate change governance. As indicated in the preceding literature review chapter, the crucial role of the state in climate change politics has yet to be sufficiently considered from a critical perspective. Accordingly, a critical analysis of the NZ CCP – as an example of climate change governance – would contribute to the sociology of climate change politics. The question remains as to what such a critical approach would look like.

This chapter will outline the design of this thesis, explicating and justifying a critical policy analysis of the NZ CCP. To begin with, it will be prudent to articulate research hypotheses from which a critical analysis of the NZ CCP can proceed. To accomplish this, the key arguments emerging from the governance literature will be briefly reiterated. Following this, an extended methodological discussion on a state-centric, critical policy analysis of domestic climate change governance will proceed. This methodology section will argue for a Marxist analysis of the state as the conceptual basis of the research. Neo-Marxist state theory provides the vital critical lens missing from the predominant liberal/pluralist approaches to climate change governance. Marxism also speaks, with greater authority and insight, to the essential material nature of climate change, i.e. climate change as an expected material consequence of prevailing capitalist socio-economic arrangements. In order to justify the selection of Marxian systems-analysis, this methodological discussion will succinctly outline the breadth of Marxist state theory. This discussion will remain cognisant of the limitations of Marxist theories of the state and the attendant risks in designing

this thesis around the Marxian systems-analysis framework. Lastly, this chapter will detail the methods of data collection and analysis used in this research.

### **Formulating the research hypotheses**

In the literature review chapter, several important arguments emerged. First, there is an inescapable link between the political economy of modern society and the organisation and practice of climate change governance. Capitalism informs the disposition of the state and, consequently, its performance of climate change governance. These scholarly works suggest that the capitalist organisation of the state – as an arrangement of governmental institutions that utilise political power in support of the hegemonic capitalist class, as well as the systemic requirements of capital – impedes an effective politics of climate change. Secondly, corporate and industrial interests, representing the private capitalist class, exercise significant influence over climate change governance. More often than not, private capital has strongly resisted meaningful climate change policy, deploying its resources accordingly. Thirdly, ideology plays a significant role in shaping the politics of climate change. This is particularly true of neoliberalism – the de facto ideology of contemporary finance-driven capitalism. In sum, the political economy literature identifies capitalism as the underlying driver and logic of modern climate change governance. It also indicates that capitalist arrangements are a major cause of the dysfunction inherent to climate change governance. New Zealand's governance literature would largely argue that domestic climate change politics are dysfunctional and that policies like the NZ ETS are ineffectual.

From this governance literature, an initial explanation of climate change governance in New Zealand can be hypothesised. Firstly, it is likely that the political economy of New Zealand's capitalist state affects the organisation and practice of domestic climate change governance, and therefore the constitution of the NZ CCP and the design of its attendant policies. Secondly, the

dysfunction that has characterised the NZ CCP is partly attributable to the contradictory political and economic arrangements of New Zealand's capitalist state. A Marxist conceptual framework could be successfully used to test these two statements. The following methodological section will justify a critical policy analysis of the NZ CCP grounded in neo-Marxist state theory.

### **Methodology and a Marxist approach to climate change governance**

What is the utility of a state-centred, Marxist analysis of climate change governance? As indicated in the previous chapter, most governance research (but particularly New Zealand research) eschews the political and economic configuration of advanced capitalist societies as the causal driver of climate change governance. Instead, a positivist, liberal/pluralist understanding of the state and political power is adopted. This conventional approach is flawed in two respects: 1) the reductive and empirically tenuous conception of state power and the organisation of the political process, and 2) the tendency to reify social structures and obscure structural forms of domination and injustice.

Marxism, on the other hand, satisfies the vital critical condition of the research design. At its core, Marxism provides a potent critique of capitalist society. In addition, strands of ecological Marxism offer an invaluable interpretation of climate change that speaks with greater clarity and authority to the essential materialist nature of ecological crises (see Box 1). This understanding of climate change, as an expected material outcome of expropriating capitalist production and accumulation (Soron, 2010, p. 78-79) can be successfully paired with Marxist theories of the state.

**Box 1: Materialist conception of environmental crises**

Founded in Marx's materialist ontology, a materialist conception of environmental crises considers the causative relationship between the modern, capitalist political economy, and anthropogenic environmental hazards (Foster, 1999, 2000). Ecological Marxists identify the inner logic of capital, particularly the notion of a "growth imperative of capitalism", as the fundamental source of human made ecological crises (Magdoff & Foster, 2011, p. 37). Attention is drawn to the relentless accumulation of capital (wealth) as the basis for the growth imperative. For ecological Marxists, capitalism is not simply a system of exchange, where goods and services are bought and sold in discrete economic interactions. Rather, capitalism functions to expand endlessly, providing an opportunity for the limitless private accumulation of money and wealth. Magdoff and Foster (2011, p. 43) argue that:

Capitalism [...] recognises no limits to its own self-expansion – there is no amount of profit, no amount of wealth, and no amount of consumption that is either "enough" or "too much". [...] the environment exists, not as a place with inherent boundaries [...], but as a realm to be exploited in a process of growing economic expansion.

However, this ceaseless accumulation of capital eventually encounters barriers that impede unremitting economic growth. The physical, material world (nature or the environment) represents a fundamental boundary that capitalism must negotiate with and invariably accommodate. Consider what capitalism requires of the material world to sustain production, consumption, and the accumulation of capital. Productive processes require the extraction of raw material resources to create commodities. Furthermore, a degree of general environmental damage caused as a by-product of industrial activities must be absorbed by the material world.

The problem, according the ecological Marxist frame, is the environment, which is comprised of finite resources and has a limited capacity to absorb pollutants and degradation (Juniper, 2013). The growth imperative (the endless pursuit of capital accumulation and the concomitant expansion of industrialisation) compels capitalism to greatly exceed the earth's "planetary boundaries" – meaning the extraction and eventual depletion of natural resources, as well as the production of pollution well-beyond the absorptive capacities of the material world (Magdoff & Foster, 2011, p. 12). As capitalism experiences other systemic crises, including a tendency for the rate of profits to decline in mature economies and class struggle, the system responds by increasing its expropriation of the material world, in an effort to offset

stalling growth. This is the basic political and economic origins of human made environmental hazards, as conceived by ecological Marxists.

James O'Connor's (1996) notion of a "second contradiction of capitalism" speaks directly to the disjuncture between the material world and capitalism. Capitalism's first contradiction occurs between capital and labour. The second contradiction, however, occurs when capitalist activities undermine the conditions of production necessary for capital accumulation. In other words, the damaging environmental effects of capitalism weaken the material base of capitalist society, to the very point where the wider system cannot function. This second contradiction, therefore, threatens capitalism's very existence.

An overt focus on the state, as the site of climate change governance, would also appear to be a sound methodological assumption. To this end, I agree with Giddens' (2008, p. 7) assertion that the politics of climate change are primarily constituted at the level of the nation state. In support of this, Macey (2014, p. 50) argues that domestic climate change governance is, inexorably, the foundation for implementing international commitments to mitigate climate change. Because of this, the most fundamental and important instances of climate change governance always occur at the level of the nation state. Although the centrality of the modern nation state has been increasingly questioned, especially with respect to globalisation, it nonetheless remains a key structure within the global capitalist system. According to Hay (1999, p. 156):

[...] Insofar as capitalist social relations are reproduced [...] such functions must indeed be performed by some institution, apparatus, or combination thereof. It is not a particularly large step to suggest that many (if not all) of these institutions are either state apparatuses themselves or are heavily regulated by the state.

If we accept that the state represents the principal mediating institution within capitalist society, fulfilling a critical role in the system's reproduction and continuity, it is reasonable to infer the state's extraordinary prominence within climate change governance. Any Marxist approach to

climate change governance would obviously need to lean on its political theories to develop an appropriate conceptual framework. Finally, Hay (1999, p. 152) suggests that a focus on the capitalist state can facilitate an analysis of diverse phenomena outside Marxist orthodoxy, including global environmental degradation.

Marxist theories of the state are advantageous in comparison to their liberal/pluralist counterparts, precisely because they are critical. Theda Skocpol (1980), in her analysis of the American New Deal, eloquently described the superiority of neo-Marxist theories of the state over pluralism. For Skocpol, pluralism is unable to explain credibly how capitalist political-economic arrangements affect the practice of state governance. Neo-Marxist theories of the state:

[...] at least raise the right order of issues and establish some of the analytical terms necessary for understanding [...] periods of institutional change. At the very center of neo-Marxist analysis is the relationship of political processes and state actions to the capitalist economy and to basic class relations in capitalist society. According to neo-Marxists, a period of economic crisis such as the Great Depression is certain to spur socioeconomically rooted political conflicts and to create pressures for unusual degrees and kinds of state action. (Skocpol, 1980, p. 158)

Pluralism fails because it does not emphasise the impact of changing economic conditions, class, and ideologies on state governance.

Climate change has brought about the kind of unusual state action referred to here by Skocpol. This notion of unusual state action speaks to the contemporary social policy that is uncertain, contradictory, and largely ineffective. Indeed, much of the sociological governance literature has delineated the very same uncertainty and pervasive dysfunctionality within climate change politics. In Soron's (2010) view, the dominant liberal interpretation of climate change governance is deficient because it has an innate bias for individualism and accommodating free market

capitalism. Liberal explanations also tend to universalise climate change responsibility (i.e. climate change as a phenomenon that transcends class, nationality, race, and gender, and that affects humanity as a whole), drawing attention away from the power structures and inequalities that underlie the crisis. Finally, Smith (2007) and Turner (2010) have criticised the hypocrisy of liberal interpretations of climate change governance in recognising the existential threat of the crisis, but balking at the systemic changes necessary to abate greenhouse gas emissions.

### **Marxist state theory and the selection of an appropriate analytical framework**

There should be little doubt that Marxism offers a worthy interpretation of climate change governance. The preceding methodological discussion has argued in favour of Marxian state theory, in general, as the conceptual basis of the thesis. However, a multitude of Marxist political theory actually exists, offering quite divergent explanations of the state and its governance processes. An ideal analytical approach would critically interpret the organisation and practice of modern climate change governance, while tempering the real conceptual and methodological limitations of its adopted Marxist theory. Certainly, Marxism has been accused of being reductive, anachronistic, economic determinist, anti-humanist, historically and empirically inaccurate, and finally unscientific (Fukuyama, 1989; Giddens, 1995; Popper, 1989; Singer, 2000). Arguably, all Marxist theories of the state are predisposed to these shortcomings, at least to some degree. Even if we just start with the two big Marxist theories of the state – instrumentalism and structuralism – significant conceptual and methodological problems invariably arise. The selection of a suitable Marxist theory of the state, one in which domestic climate change governance can be appropriately analysed requires a concise review of these competing theories. It is well beyond the scope of this methodological discussion to attempt an exhaustive evaluation of Marxian state theories. Rather, a précis will be sufficient to review the respective theories and, in turn, guide the selection process.

Neither Marx nor Engels provided a definitive theory of the state. At various points in their work, Marx and Engels tangentially considered the state and its role in capitalist society (Jessop, 1977, p. 354; Wetherly, 2005, p. 1). However, the classical Marxist state is generally consistent with the process of historical materialism and tends to conform to an instrumentalist model (Hay, 2006, p. 67). *The Communist Manifesto* (Marx, Lukes, Isaac & Engels, 2012, p. 76) describes the executive of the state as “but a committee for managing the common affairs of the whole bourgeoisie” – implying a vacuous institution that mechanically serves the interests of the capitalist class. This instrumentalist approach – which was prominently taken by Lenin<sup>5</sup> and later adapted by the neo-Marxists, including Ralph Miliband (1969) – asserts that the state is capitalist because positions of power within its apparatus are occupied by members of the dominant capitalist class. Governance and policy-making are simply expressions of capital’s subjective class interests. This wholesale reduction of the state to an instrument wielded by the bourgeois presents a rather crude and empirically questionable view. Critics have argued that in its reduction, the instrumentalist approach is unable to adequately explain prevailing forms of governance and public policy (particularly the provision of social welfare), which are inconsistent or entirely contrary to the interests of capitalists. If the state is really controlled by the bourgeoisie why then do numerous examples of policy exist that conflict with private capital’s subjective interests? The instrumentalist approach has also been faulted on methodological grounds for solely ascribing the capitalist nature of the state to the disposition of the ruling state elite – i.e. those people who hold positions of power in the government (Barrow, 1993, p. 45). For the likes of Poulantzas (2000), instrumentalists recognise nothing inherently capitalist in the state structure, and incorrectly attribute its “capitalist nature” (the degree to which the state governs in accordance with the interests of capital) to contingent and external factors. More must be at work than just conscious class agency to explain what makes the state capitalist.

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<sup>5</sup> Lenin in *The State and Revolution* (2014) described the state as a repressive apparatus of the capitalist class and an organ of class rule. Because the state is by nature a coercive organisation, it was incapable of progressive political or social change, and hence needed to be smashed. In many respects, Lenin’s view of the state embodies instrumentalism.

Throughout the 1960s and 1970s, neo-Marxism was credited for a renewal of interests in theorising the state (Marinetto, 2007, p. 20). This return to Marx was prompted by the perseverance of the Keynesian welfare state (which contradicted classical Marxism and its view that the state would wither away over time), as well as an unshakeable methodological conviction that the state form remained innately capitalist. A structuralist strain of Marxist state theory emerged in competition with the instrumentalist paradigm. Unlike instrumentalism, which largely derived its conception of the state from early Marx, the structuralist approach stemmed from his latter, more functionalist works, particularly *The Eighteenth Brumaire of Louis Bonaparte* (Marx, 1978) and the *Grundrisse* (Marx, 1971). Here, Marx began to describe the state as a protector of the dominant capitalist class, and not necessarily their instrument (Hay, 2006, p. 67). For Jessop (1978, p. 62), Marx actually conceived the state as a “system of political dominance whose effectiveness [was] to be found in its institutional structure”. Gramsci (1971) also contributed to the structuralist approach to the state, viewing it as a mechanism that perpetuates capitalist ideology and hegemonic domination. The state, according to Gramsci, influences the beliefs, values, and perceptions of the subaltern class, as to convince them of the legitimacy and immutability of the capitalist system. In doing this, the state participates in the continued reproduction of capitalism (Hay, 2006, p. 69-70).

Structural Marxism proposes a state that occupies a fixed position within the capitalist social arrangement, and that principally functions to reproduce the capitalist relations of production and maintain capital accumulation. While there is an interdependence between economic and political social structures, the state remains relatively autonomous. Crucially, the state within the structuralist schema operates in the service of capital, and not necessarily the ruling class (Kelly, 1999, p. 109). For the likes of Althusser (1971) and Poulantzas, contemporary Marxism needed to account for how capitalist societies remained stable and reproduced despite the fracturing presence of the contradictions of capitalism – this is where the state came in (King, 1986). The state in structural Marxism is substantively comparable to the derivationist approach of Holloway and Picciotto (1979). According to derivationists, the form and operation of the state can be derived from examining the requirements of capitalist production. The state acting as an “ideal

collective capitalist” essentially performs those tasks necessary for the maintenance of the capitalist system. In doing so, the state acts in the general and long-term interests of the dominant class.

Structural Marxism, and its conception of the state, has also been criticised (Barrow, 1993, p. 70-71). In practical terms there appears to be little different between structural Marxism and orthodox structural functionalism. Knuttila and Kubik (2001, p. 200) suggest that structural Marxism, in describing the state in purely functionalist terms, “merely substitutes the “dominant class” for “society” and develops a new functionalism”. In addition, the notion of “function” is severely overused within structural Marxism to explain the multitude forms of state institutions. For structural Marxism, whatever occurs within the state must do so because it is functional to the overall system. This has the substantive effect of inoculating the theory from any contradiction when periods of state activity appear demonstrably inconsistent with the systemic imperatives of capitalism – as it can be indiscriminately described as being “functional”.

Secondly, because structural Marxism, and by extension its conception of the state, emphasise the macro elements of society, it has been criticised for being thoroughly “anti-humanist” – i.e. indifferent to voluntarism and the micro interactions and agency of individual human actors. Such a restricted approach to the state discounts the fullness and intricacy of social life. It particularly underestimates the capacity of individual political actors to influence the governance process. Further criticism has been directed at the often convoluted and highly abstract explanatory relationships between the state apparatus, state institutions, and the state’s systemic functions. The structuralist conceptual scheme often “lacks analytic rigor [...] because of a confusing criss-cross of sub-apparatuses and multiple-function institutions” (Barrow, 1993, p. 71). Lastly, structuralist accounts are often guilty of discounting the “historical variability” of the state and the different forms it takes in modern capitalism (Jessop, 2001, p. 150).

The fraught Miliband-Poulantzas exchange of the late 1960s and early 1970s epitomised the polemic between instrumentalist and structuralist theories of the state. This debate represented more than just a conceptual disagreement about the nature of the capitalist state. According to Barrow (2002, p. 4), the dispute was symptomatic of a greater epistemological break over the “true” Marxist methodology. Ultimately, this impasse proved insurmountable. Unable to overcome the epistemological/methodological disjuncture, Marxist state theorising gradually became sterile and waned by the late 1970s. By the 1980s, the supposed crisis of Marxism (Barrow, 2000, p. 101) had resulted in the widespread repudiation of both the instrumental and structuralist approaches (Jessop, 2001). Marxism conceded its role in political sociology as an authoritative perspective on the state. Interpreting the state either in an essentialist manner or in terms of grand theories fell out of popularity within the social sciences. Modern political sociology became more interested in conceiving the historical variability of the state, as well as the differentiation of its form and power. Moreover, contemporary sociological state theory focused largely on those concrete, meso-level institutions, assiduously avoiding Marxism’s macro outlook in favour of middle-range theorising (Marinetto, 2007). Aronowitz and Bratsis (2002, p. xiv) suggest that the decline in state theory led to an overall “conceptual regression within social inquiry”. The dominance of globalisation theory and institution-focussed research relativized the state, reducing it to either “an impotent and irrelevant international agent or to an inconsequential and derivative domestic institution” (Kalyvas, 2002, p. 106).

Jessop (2001, p. 150-151), however, suggests that a number of insights from neo-Marxist state theory remain salient. Firstly, neo-Marxist state theory (particularly the structuralist strands) recognises that the contradictory form of the state threatens its overall functionality. Indeed, the prospect of the state successfully attending to the needs of capital or the ruling class was now seen as being less and less likely. A second insight, according to Jessop, was the increased preference for conceiving the state as a complex social relation (Jessop, 1990). In this sense, the institutional arrangement of the state shapes not only its strategic capacities but also its relations with political actors – particularly class-based groups. State form has a differential effect on various political actors and groups, and their ability to harness the state’s capacities and pursue

their own subjective class interests. Because of this, class struggle is actually reproduced through the structure of the state.

For Jessop, the state is best conceived as an ideal type. As state form is historically contingent and variable by nature, any definition must take into account the exceptional circumstances in which the state is situated. Jessop (1977, p. 353-354) proposes a general criteria for an adequate Marxist theory of the state. The criterion include an explicit focus on the capitalist mode of production, an acknowledgement of the principal role of class struggle within the state, a conception of the relationships between the state and the economy without reducing one to the other, recognition of the historical and national variability of the state in capitalist society, and a recognition of the influence of non-economic variables on the state.

Despite the decline of Marxist state theorising, the instrumentalist/structuralism divide remains the point of departure and frame of reference for contemporary attempts to critically interpret the state (Aronowitz & Bratsis, 2002, p. xii). Barrow (1993) identifies two post-Marxist theories of the state that developed after the instrumentalism/structuralism polemic: *systems-analysis* and *organisational realism*. Systems-analysis broadly argues that because the state must encourage capital accumulation while maintaining its democratic appearance – two incompatible systemic imperatives – it gradually becomes contradictory and internally dysfunctional. This dysfunction causes un-strategic governance and policy breakdown. The systems-analysis approach is thus consistent with Jessop's (2002) view that the modern state form undermines its function. The principal theorists behind systems-analysis include Claus Offe (1972, 1978, 1984, 1985), Jurgen Habermas (1975), Andre Gorz (1982), and James O'Connor (1973).

Organisational realism, on the other hand, represents a greater departure from Marxist state orthodoxy. This theory conceptualises the state as an autonomous political organisation, which purposefully acts to increase its power over territory and its citizenry. State actors work to

maximise their own political power, and hence must be considered “real historical subjects in relation to social classes” (Barrow, 1993, p. 125). These state managers particularly seek to increase their autonomy from the capitalist class and to exert greater control over the economy. Organisational realism thus challenges the assumption held by both instrumentalist and structuralist theories that the state is inexorably capitalist and a class-based body. However, state actors in their efficient pursuit of greater power and autonomy, effectively preserve capitalist economic arrangements and class structure, in what Poggi (1990) describes as a convergence of interests between the state and private capital. It is only during periods of crisis that the state will deviate from its largely incidental maintenance of capitalism and govern against the interests of the capitalist class. The leading contributors to organisational realism include Theda Skocpol (1979) and Fred Block (1980, 1986, 1987).

As suggested earlier in this chapter, an ideal critical analysis of climate change governance would consider the political economy of the modern capitalist state, and thus take a substantively macro-level focus. Most of the preceding theory could certainly accomplish this. However, I would suggest that there are strands of Marxist state theory better suited at explaining contemporary climate change politics. The task of conceiving the political economy of climate change governance, and addressing how socio-economic structures shape and influence policy-making requires a conceptual framework with a broader systemic perspective. It would follow that a structural Marxist theory of the state – with its emphasis on systemic arrangements and phenomena – offers a more fitting analytical framework than say an instrumentalist approach. Having said that, it would be sensible to reconsider aspects of the structuralist conception of the state, in light of its flaws – especially its anti-humanist/voluntarism disposition. Softening the deterministic conception of political actors as mere functionaries of the capitalist system is an essential reformulation in my opinion. Indeed, a softer form of structuralism would recognise that state managers and powerful political actors/groups are very often influential in the state governance process.

Marxian systems-analysis adopts this softer form of structuralism. In many ways systems-analysis attempts something of a rapprochement of instrumentalism and structuralism. This involves a structuralist conception of the state that nonetheless recognises individual political agency as an essential force within the capitalist state apparatus – a force that facilitates the maintenance of capital accumulation and the reproduction of the capitalist class structure. Berger and Pullburg (1965, p. 56) describe the “strange objectivity” which social institutions (like the state) can display. While an institution, like the state, is certainly an embodiment of human social activity, it also has an existence that is external to political agents, providing coercive and socialising controls over political activity. I would argue that systems-analysis grapples with voluntarism and determinism at the deep structural level of the state more effectively than other Marxist theories.

It should also be eminently possible to minimise Marxian systems-analysis’s convolution by only focussing on the fundamental assumptions that the framework makes about the state and the capitalist political economy. A basic or essentialist reading of systems-analysis would avoid most of the denser and more obscure theoretical propositions that over-complicate the framework. This reformulation of systems-analysis, based around the main arguments of Offe, Habermas, and O’Connor, could be done without undermining the framework’s internal logical.

Moreover, systems-analysis, as a theory of the state, is superior to the other post-Marxist approach: organisational realism. Organisational realism, while intriguing, is limited in that it devises a conceptual framework effectively severed from Marx’s theoretical repertoire. The organisational realist methodology is too far removed from a macro, society-centred analysis of the state and is therefore not conducive to a systemic analysis of climate change governance. Because the approach sees the state solely as a concrete political organisation, autonomous from the economy, it rejects much of the Marxian orthodoxy as theoretical abstractions.

For these reasons, Marxian systems-analysis will be adopted as the research's conceptual framework. Systems analysis provides: 1) a novel and sophisticated critical interpretation of the state and its governance processes, and 2) a Marxist theory of the state that attempts to overcome the limitations of both the instrumentalism and structuralism paradigms. A simplified and essentialist reading of Marxian systems-analysis theory will be undertaken – focussing on those primary systemic relations that constitute the capitalist state. This framework will explore how the capitalist form of the New Zealand state, and its inherent contradictory disposition, shapes the organisation and practice of domestic climate change governance. Particular attention will be directed at class-based actors and their impact on climate change politics in New Zealand. Crucially, the patterns of policy change identified from within the public and private discourse related to the NZ CCP provides an empirical representation of the modes of climate change governance practiced by the New Zealand state. It is logical to suggest that a mode of climate change governance leads to a specific pattern of policy change. By observing a pattern of policy change, and interpreting said pattern within the context of Marxian systems analysis, this research will define and deconstruct the predominant mode(s) of climate change governance practiced by the state. The following chapter will flesh-out the Marxian systems-analysis framework, while also providing a preliminary discussion of the theory's interpretation of climate change governance. However, before that can occur, it is necessary to outline those methods of data collection and analysis amenable to systems-analysis, and in turn this thesis.

### **Methods of data collection and analysis**

A critical approach to climate change governance – one based on Marxist state theory – would naturally inform the design and selection of research methods. It is important, however, to recognise that Marxism does not necessarily correspond to a fixed body of prescriptive research doctrines to guide its inquiry (Dunleavy & O'Brien, 1987 p. 216). Often an eclectic approach is taken in regards to the selection of research methods within Marxist scholarship. What is important is the core methodological priority of Marxian critical analysis – that is the necessity

of going beyond the way social phenomena are superficially presented in data, as to identify their true, underlying reality. Marxism derives its “scientific” character from its materialist conception of history, presupposing the existence of a “dialectical correspondence [...] between the material processes of nature and the process of the historical development of human society” (Azad, 2005, p. 503). Marxian analyses emphasise their objectiveness, based on an epistemological claim, where society, history, and subjective human consciousness are seen to obey the same dialectic laws as the material world. The effects of these laws on society can be observed and understood. Such an epistemology allows Marxists to assert a degree of conceptual and analytical superiority over other theories. For Marxists, their analyses are truly able to interrogate and deconstruct data. This claim is not without controversy though. Singer (2000, p. 88) rejects the notion that Marxism is a science, arguing that it is better conceived as a philosophy. On the other hand, Burawoy (1990) defends Marxism scientific claims. Even within Marxism there is widespread division regarding the nature of Marx’s “true” epistemology (Gouldner, 1980).

Theory-driven research – informed by this Marxian epistemological conviction – accepts with certainty the various conceptual statements that comprise a framework, such as Marxian systems-analysis. However, this certainty often leads to assertions in research that would otherwise be considered too forceful or deterministic in other pieces. Sometimes Marxian orientated research veers into polemical territory. Obviously, this can be problematic. Marxism is not unimpeachable, and other, alternative theories exist and have explanatory value. The analysis in this research will be sensitive to the limitations of the Marxian epistemology. It will apply Marxian concepts with nuance and care, hopefully tempering any polemical tendencies. Although certain assertions within this thesis may appear more strident than what is usually considered appropriate in scholarly research, I would argue that their presence is acceptable within the context of Marxian-orientated works.

For Marxists, the empirical method of scientific analysis is insufficient in understanding human social relations (Ferdinand, 2008). The Marxist method can be understood as:

[...] a process of theoretical labour in which the analyst abstracts from a mass of empirical observations in order to detect the underlying order beneath the appearance of bewildering variety, and works out the fundamental causal processes in operation. (Dunleavy & O'Brien, 1987, p. 217)

Qualitative methods of research, capable of perceiving the underlying organisation and practice of climate change governance, such as content analysis, will be used in this thesis. The extant empirical and historical data pertaining to the NZ CCP will be deconstructed. Relevant materials will be drawn from public and private sources to construct an historic overview of climate change governance in New Zealand. Naturally, the interpretation of this data will be informed by the Marxian systems-analysis.

#### Sampling/data collection

The design of this research is qualitative in nature. Data sampling will be informed by the empirical demands of the Marxian systems-analysis theoretical framework. Such an approach will allow initially for a broad sampling of materials, which will gradually become more focussed as theoretically relevant data becomes apparent. Effectively this research will widely collect public and private materials broadly related to the politics of climate change in New Zealand. It is within this mass of discourse that exists a record of New Zealand climate change governance and the historical progression of the NZ CCP. As a general impression of domestic climate change governance is rendered and familiarity with the discourse is attained, the method of sampling will become more deliberative – selecting data germane to the systems-analysis framework and its conception of climate change governance. This will continue to occur until a point of theoretical saturation<sup>6</sup> is reached, and a concise empirical account of domestic climate change governance has been produced.

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<sup>6</sup> Theoretical saturation refers to the phase in qualitative data sampling and analysis, where a researcher finds no new data and the concepts and theory become well developed. At this point, no new data is required as conceptual boundaries have been established (Sandelowski, 2008).

This thesis will collect materials from two sources: the New Zealand Government (public discourse) and private interests (private discourse) involved in domestic climate change politics. In terms of the public discourse, several state actors/institutions were identified from the domestic governance literature as being directly involved in, or pertinent to climate change governance. These major actors included the Ministry for the Environment, the Environmental Protection Authority, the New Zealand Treasury, Ministry for Primary Industries, Ministry for Business, Innovation, and Employment, the Ministry of Foreign Affairs and Trade, Ministry of Agriculture and Fisheries, the New Zealand Carbon Registry, and the New Zealand Climate Change Office (defunct). It should be noted that periodic restructuring of the state has resulted in both the creation and cessation of government ministries/departments, and the renaming of others. The research will clearly identify those state bodies connected to climate change governance that are now defunct. The Ministerial positions germane to domestic climate change governance include the Prime Minister, the Minister of Finance, the Minister for the Environment, and the Minister of Climate Change Issues.

The various Government Cabinets represent important sources of public discourse. The four Cabinets include the fourth Labour Government, the fourth National Government, the fifth Labour Government, and the fifth National Government. Focussing on these four governments is logical, considering that the NZ CCP has only existed under their tenure. The views of government cabinets on climate change issues are invariably expressed by individual Ministers of the Environment and Ministers of Climate Change Issues. In researching the history of the NZ CCP, several individual Ministers were identified as being influential in domestic climate change governance, including Geoffrey Palmer, Simon Upton, Pete Hodgson, David Parker, Nick Smith, and Tim Groser.

The various select committees tasked with considering climate change legislation was a further source of public discourse. The Climate Change Response Bill (2002) fell under the purview of the Foreign Affairs, Defence and Trade Committee, while the Climate Change Response (Emissions

Trading Forestry Sector) Amendment Bill (2009) was considered by the Emissions Trading Scheme Review Committee. The Climate Change (Emissions Trading and Renewable Preference) Bill (2008), Climate Change Response (Moderated Emissions Trading) Amendment Bill (2009), and Climate Change Response (Emissions Trading and Other Matters) Amendment Bill (2012) were considered by the Finance and Expenditure Committee. Each of these committees produced reports outlining the legislation and the views of both the Government and other political parties. Not only do select committees provide crucial information on the individual pieces of climate change legislation, they also represent an important part of New Zealand's parliamentary process. Select committees are sites of climate change governance – making them an important source of public discourse to draw from.

Government sources represent an extensive resource, which include discussion documents, policy reports and reviews, select committee reports and commentaries, cabinet minutes and reports, Hansard documents, and press releases. The vast majority of this public data is freely available online. The Ministry for the Environment website actually compiles a significant portion of this data, while the New Zealand Government's climate change website provides additional access to governance discourse. Press releases and ministerial speeches are available from the New Zealand Government website. Other materials were taken directly from ministerial websites. However, materials relating to the earlier periods of the NZ CCP are not necessarily available online. Much of this dated discourse was sourced from the Massey University Library and the National Library of New Zealand.

There are, however, limitations with this form of public discourse. Firstly, there is no great depth or detail in government documents. Because of this, it is impossible to gain any sense of the micro-interactions that occur between policy actors. This is problematic as there is an important micro-dimension to climate change governance. Secondly, government documents are constructed in advocacy of specific policy narratives. This discourse is not neutral – and is produced, in part, to support and argue for the government's policy agenda. Being sensitive to

this fact and not uncritically accepting what is being put forward in public discourse is important when using this material. Nevertheless, this public discourse is sufficiently accurate and comprehensive to derive both the empirical record of policy change and the reasoning behind the state's actions. This research only needs to describe the macro-level patterns of policy change related to the NZ CCP. This can be accomplished by looking at the public discourse. Moreover, relying on public discourse appears to be a reasonable choice of the research design, considering that the thesis analyses the state and its role in climate change politics.

Discourse collected from those private actors who have participated in climate change governance will include organised interest groups, corporations/industries, the media, think tanks/consultancies, academia, and individuals from civil society. This data represents the subjective beliefs and values of private policy actors, their analysis and perceptions of the NZ CCP and its constituent policies, and finally their motivations and interpretations of the domestic politics of climate change. From the New Zealand governance literature, several actors were identified as being significant in climate change politics. The key actors included Federated Farmers, Business New Zealand, Greenhouse Policy Coalition, the Major Energy Users Group, the Sustainable Business Council, and Greenpeace New Zealand. Moreover, New Zealand's major political parties – including the National Party, the Labour Party, the Green Party, New Zealand First, the ACT Party, and United Future – represent important policy actors outside the state apparatus. The collection of this discourse focussed on the advocacy of private actors with respect to important moments of policy change in the NZ CCP. What did Federated Farmers say about the fart tax? What were Greenpeace's actions in relation to the review of the carbon tax? Policy change generates private actor discourse. The thesis also identified additional actors as the history of the NZ CCP was rendered. Specific occurrences of policy change revealed the impact of unique actors, warranting the collection of their individual discourse.

The wide ranging discourse includes press releases, reports and policy analysis, select committee submissions, newspapers and television stories, online resources (such as websites), and various

forms of grey literature (research materials produced outside traditional commercial or academic organisations). Like the public discourse, much of the private discourse is freely available online – particularly from the policy actor’s own private websites. Private select committee submissions going back to 2002 are available from the New Zealand Parliament website. A small amount of this material (particularly dated discourse) was collected from public libraries. Lastly, periodicals provide an invaluable source of discourse. This is especially true for private participants in the early NZ CCP, who have not made dated materials available online. Often the more irreverent and colourful forms of policy actor discourse can be found in media sources. Periodicals were obtained from the Newztext database, which includes access to many of New Zealand’s largest newspapers and magazines. Key words derived from specific occurrences of policy change were used to search the database – emissions trading scheme, carbon tax, Kyoto Protocol etc.

This private discourse presents similar problems to public discourse, including its limited depth and partiality. However, this second limitation – partiality and bias – can be managed. Employing an overtly critical conceptual lens will allow this thesis to deconstruct the ideological disposition of private discourse (and state discourse for that matter). Marxian systems-analysis offers the kind of critical framework in which the discourse produced by private actors can be interpreted. Ultimately, this form of data was selected to provide insight to the actions and beliefs of non-public, policy actors. Alternative sources of data were deemed superfluous, as written private discourse offered sufficient information to delineate the actions and beliefs of major policy actors within the NZ CCP. Moreover, seeking out every single policy actor and reporting on their advocacy was considered unnecessary, in explicating the role of private actors within domestic climate change governance. Covering the core actors identified in the domestic governance literature offered a sufficiently comprehensive outline of interest group activity and the policy beliefs of the respective advocacy coalitions. The collection of data is relatively straightforward. In most cases, documents can be simply saved to the computer in PDF format, and then stored in folders based on the respective period of the NZ CCP. Sources that could not be converted into PDFs can be copied into Word documents and then stored in folders relating to periods of the NZCCP. This kind of public data presents very few problems in storage.

## Analytical approach

Content analysis will be used to analyse the relevant materials related to New Zealand climate change governance. Content analysis refers to an array of analytical approaches that can be used to deconstruct textual data. It can range from systematic and quantitative forms of analysis to more interpretative and qualitative approaches. This lends content analysis flexibility, allowing for its application in a wide variety of research projects. Hsieh and Shannon (2005) delineate three forms of content analysis: conventional, directed, and summative<sup>7</sup>. As this research is founded on Marxian systems-analysis, a directed approach to content analysis would seem appropriate. Directed content analysis refers to a deductive and theory-driven form of analysis. This approach is more structured than conventional content analysis, as it is guided by pre-existing research or theory. Researchers identify important concepts and variables to derive a basic coding scheme. Theory is also used to establish relationships between coding categories.

The Marxian systems-analysis framework will be used to generate an interpretative schema, from which the empirical and historical materials on New Zealand climate change governance can be deconstructed. Public discourse provides a record of both the modes of governance employed by the state, and the policy beliefs of state managers. In terms of modes of governance, systems-analysis prescribes a set arrangement of social relations and practices that constitute state intervention in modern capitalist society. The content analysis will be directed to identify instances of these state social relations and practices represented within the discourse. The principal systemic relations that shape and constrain policy-making will be utilised as key analytical categories, informing the analysis of the materials.

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<sup>7</sup> Conventional content analysis is used to describe social phenomena, where existing theory or research is partial or non-existent. As an inductive research method, conventional content analysis does not rely on defined analytical categories. Rather, categories are allowed to emerge from the data itself. Summative content analysis involves the counting of words or variables within a set of data. Unlike conventional and directed content analysis, which interprets meaning from the text, summative analysis explores the usage and frequency of word and specific content (Hsieh and Shannon, 2005).

A similar approach will be taken with the subjective policy beliefs of state managers. Systems-analysis broadly suggests that state managers are motivated to act in accordance with the general interests of private capital. This would most likely entail an articulation within public discourse of policy beliefs favourable to capitalist fractions – although not necessarily fully aligned with the beliefs of private capital. Remember, as a structuralist interpretation of the state, systems-analysis sees the state as the ideal collective capitalist that serves the systemic needs of capitalism. This means that the state is not bound to the bourgeois and their interests. Nevertheless, the policy beliefs of state managers should be nominally consistent with those of dominant class fractions. Therefore, content analysis will be used to elucidate the consistency of policy beliefs held by state managers with those of private capital.

Content analysis will also be applied to the discourse of private policy actors. In doing so, the policy beliefs and preferences of these actors can be identified. Private policy actors can be divided along class lines, with their subjective beliefs aligning with particular sets of class-interests. Climate change governance literature has already recognised the extensive role of corporations, industries, and business lobby groups in influencing the climate change social response. These actors broadly represent the capitalist class. Although there is certainly a degree of variability within this capitalist coalition of policy actors, their beliefs still largely conform to climate change policy that is restrained, economically efficient, and amenable to capital accumulation. A second coalition of actors, who prioritise robust climate change policy over economics, is also prevalent – although ascribing class disposition to this environmentalism coalition is more problematic. Indeed, their policy beliefs are not necessarily in line with the interests of either class. However, as the environmental coalition is mostly populated by progressive environmental lobby groups, their wider beliefs are often consistent with the interests of the subordinate working class. Content analysis can also be used to identify the discursive strategies and the resources used by private actors in the governance process.

## **Conclusion**

This chapter has outlined the intended research design of the thesis. Marxian systems-analysis has been selected, as a critical interpretation of the state and policy-making, to analyse the NZ CCP. Any research design that is heavily informed by a specific theory will present some unavoidable analytical limitations. The potential for drawing specific conclusions, which uncritically reflect the assumptions of the theory, or that bias the interpretation and analysis of data, certainly exists. In fact, this potential for partiality is likely greater with a Marxist theoretical foundation as it can be so polemical and dismissive of other theory. This does not mean that a Marxist theory of the state cannot provide insight into the organisation and practice of climate change governance. Indeed, this chapter has already explored the value of Marxian state theory (particularly systems-analysis) as a means to critically analyse the political economy of climate change governance. It will be essential to undertake an honest appraisal of the research and identify those potential methodological and analytical weak points in the argument. The following chapter will outline the thesis's interpretation of Marxian systems-analysis and how it can be applied to understand climate change governance.

## Chapter Three

### Contradictions of the modern state: an overview of Marxian systems-analysis

Understanding the breakdown of New Zealand's Climate Change Programme requires a conceptual framework capable of not only theorising the state's dysfunctional policy-making dynamics, but also the unique political and economic dimensions of climate change governance. Marxian systems-analysis provides such a framework. Although this approach has traditionally been concerned with the welfare state and its intervention in the labour market, its underlying conception of the systemic limitations of state policy activity is certainly applicable to the more contemporary problem of climate change governance. This thesis will adapt and reinterpret Marxian systems-analysis to elucidate modern climate change politics. By focusing on *policy breakdown* – the instances where states actively fail to remedy or ameliorate conditions responsible for systemic crises of capitalism – systems-analysis provides an invaluable critical interpretation of the state's policy process. Considering the political and economic structures that have shaped the NZ CCP, the array of class-based interests and stakeholders involved in New Zealand's climate change debate, the putative failure of the domestic climate change response, and the value of conceiving climate change as a crisis of modern capitalism, a Marxist interpretation of the state seems entirely relevant and appropriate.

This chapter will begin by outlining the Marxian systems-analysis framework. Barrow (1993), in identifying a common methodology and conceptual logic within the neo-Marxist, state-centred scholarship of Jurgen Habermas (1976), Claus Offe (1972, 1975, 1978, 1984, 1985), James O'Connor (1973), and Andre Gorz (1982), described the systems-analysis approach. For the purposes of this thesis, the systems-analysis framework will be simplified, as to plainly identify the principal political contradiction of the capitalist state, as well as the important secondary constraints, which contribute to policy breakdown. This chapter will only address the substantive

features of systems-analysis<sup>8</sup>, including its structural Marxist methodology, the formation and effects of the principal political contradiction of the state, and the formation and effects of secondary constraints. At its most basic level, contradictions occur because of systemic interference between the political subsystem (the state) and the economic and socialisation subsystems within capitalist society. Consequently, the ability of the state to maintain and regulate the economy progressively weakens, particularly in light of persistent crises of capitalism. Policy intervention becomes ineffective and incoherent, and unable to effect desired social change.

The second part of this chapter will reframe contemporary climate change governance with reference to Marxian systems-analysis. Climate change policy will be conceived as the state attempting to perform its general maintenance function in response to the existential threat of climate change. However, as the state attempts to intervene in the productive sources of greenhouse gas emission, it violates the systemic boundaries of the capitalist system – generating political contradictions and legitimisation crises. Consequently, the capacity of the state to command modifications to carbon-intensive productive practices and effect climate change mitigation is diminished. The inevitable result of this policy breakdown is the state’s failure to reduce emissions and adequately respond to climate change.

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<sup>8</sup> Systems-analysis or “systems theory” refers to a general analytical approach common to both natural and social sciences. It is concerned with describing and explaining the patterns of structure that constitute a system (Blalock & Blalock, 1959). A system refers to any patterned relationship between elements that forms a larger whole or unity (Marshall, 1998, p. 659). For systems-analysis, understanding the arrangements and relationships between elements (persons, groups, or any other unit) provides an indication of the system’s structure. There is also an assumption that systems generally strive for, and attain, a state of equilibrium. In sociology, systems analysis is commonly associated with Talcott Parsons (1937) and structural functionalism. Having said that, a number of approaches within sociology conceive society as a system – particularly within structuralism (Abercrombie, Hill & Turner, 1994, p. 422-424). Marxian systems-analysis, however, inverts systems-analysis, in its dismissal of axiomatic systemic equilibrium for systemic dysfunction. Certainly, the Marxian form of systems-analysis plainly conceives capitalist society as a system comprised of patterned relationships between subsystems and other elements. However, Marxian systems-analysis recognises incompatibilities and conflict between systemic elements (contradictions), which progressively disrupt the system’s equilibria. When applied to the state, these contradictions account for policy breakdown.

## **The structuralism foundation of Marxian systems-analysis**

As indicated in the preceding chapter, Marxism has traditionally been dominated by two theories of the state – instrumentalism and structuralism (Dunleavy & O’Leary, 1987, p. 209-211). Marxian systems-analysis is predominantly informed by the second, structuralist strand, and thus retains a functional conception of the capitalist state. The central thesis of structural Marxism (see Barrow, 1993, p. 97; Benton, 1984; Creaven, 2015, p. 20-30; Dunleavy & O’Leary, 1987, p. 249-258; Hay, 1999, p. 164-167; Layder, 1994, p. 34-55; Skocpol, 1980, p. 169- 171) is that a mode of production can be analysed with reference to the functional relationship between its economic, political, and ideological structures. While each structure constitutes a relatively autonomous subsystem, they are still mutually dependent on one another to sustain the wider social system. As expected from a Marxist framework, the economic subsystem – concerned with the social relationships that arrange the production and exchange of commodities – comprises the dominant structure within the capitalist mode of production. This implies that the political and ideological systems are subject to mechanisms of economic determinism. The economic subsystem, however, is simultaneously dependent on the support of the political and ideological subsystems to reproduce and maintain the conditions necessary for sustained economic activity. This is a crucial point in structural Marxism, in that the economic subsystem alone is unable to ensure its own perpetuation and stability or the appropriation of surplus value. The maintenance of the capitalist systems requires harmonious interactions between its three subsystems (Barrow, 1993, p. 51-52).

In structural Marxism, the constitution of the state normally includes the government, the parliament and other policy-making institutions, the judiciary, coercive institutions such as the military and the police, and those institutions responsible for the provision of welfare. The state can also be conceived as a network of “institutions and personnel through which the state function is executed” (Barrow, 1993, p. 57). This state arrangement acts as a locus of political power, imparting social policy with authority and resources.

Instability within capitalist societies stem from pervasive internal contradictions. Claus Offe (1984, p. 132) defines a contradiction as:

[...] the tendency inherent within a specific mode of production to destroy those very pre-conditions on which its survival depends. Contradictions become manifest in situations where [...] a collision occurs between the constituent pre-conditions and the results of a specific mode of production, or where the necessary becomes impossible and the impossible becomes necessary.

Over time, capitalist societies exhaust their capacity to sustain economic growth. Systemic contradictions, including class struggle, the tendency for the rate of profit to decline over time, and the degradation of the material base, create a type of “self-paralysis” that renders capitalism powerless to ameliorate these internal crises (Barrow, 1993, p. 52; Keane, 1984, p. 13). In light of these contradictions, the political subsystem, in the form of the state, is required to intervene and safeguard the pre-conditions of capital accumulation (Barrow, 1993, p. 54-58; Poulantzas, 1978). This intervention, represented by social policy, provides the coercive mechanisms or inducements necessary to maintain the capitalist system and, in particular, the asymmetry of the class structure and unabated capital accumulation. Crucially, forms of policy intervention develop in accordance with the systemic requirements of the mode of production. At different stages of capitalism, the state is required to perform distinct functions and effect specific social change. Therefore, the needs of capital in the current, advanced phase of capitalism are qualitatively unique – demanding new forms of state intervention

Structural Marxism conceives the state as possessing a specific purpose or function in the capitalist mode of production:

Within a [structural Marxist] framework, the capitalist state is viewed as a structural system with form and function determined largely independently of the aspirations,

motivations and intentions of political actors or members of the dominant class. (Hay, 1999, p. 167)

The institutional arrangements that compose the state apparatus (but in particular the organisational structure of the Keynesian welfare state) perform structurally prescribed objectives. At its core, the state functions to stabilise the economic subsystem and resolve the crisis tendencies of late capitalism through extensive regulation and massive and directed state expenditure in the economy, i.e. through social policy (Mandel, 1978; Solo, 1978, p. 841). Poulantzas (1978, 2000) talked of the state performing a *general maintenance function* – policy intervention that acts as a cohesive and stabilising force (the “regulating factor”) within capitalist society. In performing this general maintenance function, state policy reproduces the means of labour, mediates and diffuses conflict between classes, and maintains general economic equilibrium. Often, state intervention takes the form of compromise policy, where benefits are afforded to dominant class fractions, but also, at the same time, real and tangible welfare is conferred to subordinated groups. The provision of social welfare, for instance, is a necessary activity of the state in fulfilling its general maintenance function. Intervention of this sort is vital if the conditions necessary for capitalism are to be maintained.

In structural Marxism, the state is considered “capitalist” because it recreates the capitalist relations of production. This point represents the key difference between instrumentalist and structuralist conceptions of the state. Where instrumentalists see the state as a purely coercive apparatus utilised by the dominant class to secure their hegemony (or even more simply as the “repressive arm of the Bourgeoisie” or class dictatorship), structural Marxists conceive the state as an autonomous structural arrangement, functioning to protect the long-term interests of the capitalist class i.e. the sustenance of capital accumulation and the maintenance of the capitalist relations of production (Hay, 1999). In this structuralist sense, the state acts in what Engels’ described as an “ideal collective capitalist” – an institutional ensemble that ensures the continuity of the capitalist social formation through policy intervention in the economy (Hay, 1999, p. 155).

Although systems-analysis adopts the basic structural Marxist interpretation of modern capitalist society and the state (Barrow, 1993, p. 97), the conceptual framework represents a radical departure in one crucial respect. Systems-analysis draws attention to the *limitations* of the state in the execution of its general maintenance function – what Offe describes as a “crises of crisis management” (Offe, 1984, p. 35-40). The interventionist, maintenance policies traditionally associated with the welfare state, such as minimum wage requirements, state-provided healthcare and education, superannuation, and sickness and unemployment benefits, have become less effective and more contentious over time. According to Keane (1984, p. 14):

[...] welfare states are rapidly ceasing to be a viable solution to the socio-political problems generated by late capitalist societies because the systems of economics and social life are not in harmony with the requirements of the administrative-political system. The ‘panacea’ of state intervention and regulation itself becomes controversial. Welfare state systems generate more policy failures, political conflict and social resistance than they are capable of resolving; the crisis management strategies of the welfare state themselves become subject to new forms of crisis tendency.

State intervention, as a regulating factor of systemic equilibrium, has become less effective and more incompetent over time. The object of Marxian systems-analysis is the contradictory political and economic dynamics within capitalism that precipitate this dysfunction. Systems-analysis expounds instances of policy failure, where the state is unable to perform its general maintenance function and in turn remedy the myriad crises of post-industrial capitalism.

### **The capitalist rationality of policy-making**

While the state remains an autonomous site of political power, it is subordinate to the economic subsystem by the logic of capital. This is, essentially, an argument of economic determinism, in

that economics can account for non-economic social phenomena. Economic determinism invariably remains the purpose of any Marxist analysis of the state, to demonstrate that:

[...] the state is a capitalist state in the sense that it meets the functional requirements or preconditions of the economic structure. Further, that this is so because of the way it is situated within a capitalist society and is, therefore, influenced and constrained by the nature of economic structures. (Wetherly, 2005, p. 171).

This would suggest that the state's position within the capitalist mode of production limits its autonomy, and in particular its discretion in developing social policy. As a mechanism of economic determinism, this would constitute an external and objective *structural constraint* on the capitalist state. For Miliband (1977, p. 72):

There are "structural constraints" which no government, whatever its complexion, wishes, and promises, can ignore or evade. A capitalist economy has its own "rationality" to which any government and state must sooner or later submit, and usually sooner.

Policy-making is organised by a capitalist rationality. In the first instance, the state is compelled to meet the systemic requirements or "needs" of capital to ensure the sustenance of the capitalist system. Secondly, the state is limited by the logic of capital in the types of social policy it can pursue. These two imperatives would respectively constitute positive and negative constraints on the state's actions – requirements and limitations. Offe (1978, p. 40) describes these constraints as the "selection rules" for modern political governance – in that they define the forms of social policy that are allowable within a capitalist society. What's more, these structural constraints are almost immutable, in that the state must adhere to them to secure the objective conditions required for the maintenance of capital accumulation and the class structure.

Although systems-analysis deals in structural constraints and possesses a functionalist view of the state, it nonetheless represents a softer form of structuralism. While hard, structural Marxism

see policy-makers as simply prisoners of social structure and compelled to execute the state's capitalist functions (Barrow, 1993, p. 62; Layder, 1994, p. 39-40), systems-analysis recognises a degree of agency for state managers. Systems-analysis avoids the deterministic, anti-humanist excesses of structural Marxism by denying the reduction of politicians and civil servants to functionaries and executants of the state's capitalist rationality. Rather, the state's capitalist rationality, according to systems-analysis, informs policy-making by creating dilemmas or situations where state managers are limited in their agency. Governments, for instance, are fiscally dependent on business and industry (through taxation) for their operation. This level of dependence significantly influences state managers and the range of macroeconomic policies available for implementation. Furthermore, the same rationality shapes the perceptions, policy beliefs, rationales, and interests of state managers. This inculcation is so complete and thorough that state managers are bound to effect social policy in accordance with the capitalist rationality (Barrow, 1993, p. 62-63).

The general *maintenance function* represents a positive structural constraint, in that the state is motivated to intervene in the economy to preserve the preconditions necessary for capital accumulation and the reproduction of the capitalist relations of production (Barrow, 1993, p. 100-101; Offe, 1975, p. 126, 1978, p. 39-40). This involves the development of social policy designed to correct or alleviate the crisis tendencies of capitalist exchange and production. To be effective, maintenance policy must regulate those contradictory aspects of the capitalist economic system that threaten its long-term stability. In addition, the state must be able to identify the long-term, general interests of capital and implement policies accordingly (Offe, 1978, p. 37). However, the unified interests of the capitalist class often conflict with the diverse, immediate interests of individual capitalist actors. This disjuncture requires the state, in the execution of its maintenance function, to overrule powerful class interests and appropriate a degree of control over the economy – which the state can do owing to its relative autonomy. This direct involvement in the markets and productive practices represents an unavoidably heightened form of interventionist social policy. Traditional inducements offered by the welfare state are insufficient as a means to effect significant change to economic arrangements, as

capitalist actors will strongly resist any changes or decisions that imperil their short-term profitability. Rather, effective state intervention must command economic changes, and not simply prod private capital to change.

However, state activity is equally constrained by a systemic *exclusionary imperative* to maintain the autonomous disposition of the economic and political subsystems (Barrow, 1993, p. 100; Offe, 1975, p. 126). This exclusionary imperative constitutes a negative, limiting constraint on the policy process. As the systemic logic of capital vests economic authority solely with the private owners of productive assets, the state has little power to order or control production. This means that the state cannot directly organise the economy to serve its own objectives or functions. Policy intervention proposed by the state can only induce or encourage specific decisions related to production or exchange, and never command economic performance. The exclusionary imperative, therefore, precludes social policy that would contravene the systemic separation of political authority from private economic decision-making. To violate this imperative would entail the formulation of social policy that is essentially “non-capitalist”. It should be noted that the exclusionary imperative is considered a fundamental feature of capitalist society and an inviolable structural constraint (Jessop, 2001, p. 151).

Furthermore, the state is *dependent* on the continuity of general economic prosperity, and the support of the private capital class (Barrow, 1993, p. 101; Offe, 1975, p. 126). This dependence stems from three points: 1) the state derives tax revenue for its operation from the capital accumulation process, 2) private capital is able to independently make important economic decisions with society-wide implications, and 3) the legitimacy of the state is derived from economic prosperity (Bridges, 1973). Dependency, hence, compels the state to develop social policy that promotes capital accumulation – the sine qua non of capitalistic economic prosperity. It also encourages the state to avoid policy intervention that could alienate private capital and potentially risk capital flight (the rapid flow of capital from a country following an economic

crisis). Retaining the loyalty of private capital also assists the state in co-opting the class's significant economic and political power.

The functional outcome of the exclusionary imperative and the dependence constraint is the formulation of social policy that self-limits the scope and degree to which the state can intervene in economic activity. Policy in conflict with the autonomy of the economic subsystem would violate the boundaries of the capitalist system, namely the inviolable rights of private property owners to manage their businesses and industries. State managers must capitulate to this capitalist rationality and reject measures that are inconsistent with the exclusionary imperative and the dependency constraint. Subsequently, non-capitalist measures are removed from the state's policy agenda in their entirety.

The final major structural constraint, *legitimacy*, functions both as a systemic requirement and as a limitation (Barrow, 1993, p. 101-102; Bridges, 1973; Offe, 1975, p. 127). Because the capitalist state is also democratic, it must pursue social policy in accordance with popular demands to be legitimate. Democratic pressures require the state to conceal its true structural allegiance to private capital. This is done with ideology, in which social policy is represented as being in the general interests of society (and not in the maintenance of capital accumulation). The state can also attempt to maintain legitimacy by implementing social policy (especially compromise policy) that mitigates the harmful impacts of capital accumulation and production, particularly for those vulnerable individuals and groups most exploited within capitalism. By meeting some of the demands of those negatively affected by economic growth, the state can retain mass support and loyalty. Barrow (1993, p. 101-102) describes the legitimacy constraint as the state "sustaining and yet concealing a structural disjuncture between its democratic form and its capitalist functions". Crucially though, compromise policy also provides tangible benefits to capitalists, while at the same time securing their long-term political hegemony. Systems-analysis theorists thusly argue that legitimacy, as a constraint on policy-making, impels forms of

policy intervention that reflect democratic pressures – even if this intervention is substantively ideological.

### **The principal political contradiction of the state**

These structural constraints – the general maintenance function, the exclusionary imperative, the dependence constraint, and the legitimacy constraint – constitute the fundamental systemic boundaries of the state. Combined, they impose a capitalist rationality on contemporary social policy. However, tension occurring between the four structural constraints generates political contradictions (Offe, 1984). Here, Habermas's (1976, p. 2) definition of a contradiction, as a "persistent disturbance of system integration" is instructive. This suggests that the state cannot resolve or overcome its contradictory dynamics, as they are innate. In fact, the state, as a putative mechanism of social stability and cohesion is itself unstable and internally contradictory. Policy-makers are confronted with the impossible task of formulating social policy compatible with incongruent systemic imperatives.

The principal contradiction begins with the maintenance function, where the state is compelled to intervene in the economy (Barrow, 1993, p. 102-103; Offe, 1984, p. 49-50). As the state works to enforce the general interests of capital, it appropriates economic power. Consider social policy in the form of regulation. Command and control regulation allows the state to manage economic activity to achieve an objective desired by the government. However, in order to assume greater control over capitalist production and exchange, the state must violate the exclusionary imperative. Remember, in the capitalist system the private owners of productive assets are exclusively afforded control over economic decisions. For the state to encroach on that power would entail the formulation of inherently non-capitalist social policy in which the separation of polity and the economy is eroded. The exclusionary imperative tends to filter out non-capitalist policy. Therefore, the state, in the performance of its maintenance function, is left with only

those policies that are consistent with the exclusionary imperative. The remaining “capitalist” policy options, by design, lack the authority or intervening capacity to enforce the general interests of capital. On one hand, the state is required to intervene in the economy and appropriate control in order to maintain capital accumulation. On the other hand, the state’s intervening capacity is severely limited by the logic of the capitalist system.

While the state attempts to reconcile its maintenance function and the exclusionary imperative, it also violates the legitimacy constraint (Habermas, 1976). The welfare state is threatened by legitimation crises when “[...] the state can no longer create normative loyalties among the mass population by concealing its capitalist functions with administrative secrecy and democratic symbols” (Barrow, 1993, p. 105). Typically, a crisis of legitimation occurs between the state’s maintenance and legitimation functions. While the state is fundamentally geared to the maintenance of capital accumulation and production, it must also win the support and loyalty of all class fractions and groups to remain legitimate. The welfare state secures mass loyalty by either providing the material needs of those who suffer in the capitalist system, or with ideological mechanisms. However, attempts to maintain legitimacy are increasingly obstructed by the state’s contradictory structural dynamics. The implementation of social policy that overtly favours private capital contradicts the state’s democratic form. Intervention, purely intended to support the accumulation process, is hard to disguise as being in the interests of society as a whole. A more and more extensive and sophisticated ideological apparatus can be deployed to conceal the state’s capitalist functions. However, over time, as the contradiction worsens and the mystifying ideologies become ineffective, the vacuity of the state’s democratic form is made apparent.

At the same time however, the state cannot practice a truly democratic approach to social policy without potentially violating the maintenance function (Barrow, 1993, p. 105-106; Offe, 1984, p. 50). The risk that popular policy could contradict and undermine the state’s capitalist functions obstructs the pursuit of a democratic strategy. The state is also cognizant of its own dependence

on the capital accumulation process. Dependency encourages the state to pursue social policy that prioritises economic objectives over popular ones. Furthermore, while non-capitalist policies may have broad public support, their formulation would undoubtedly foment significant opposition from private capital. Lastly, policy breakdown calls into question the efficacy of the state itself. Policy breakdown erodes public confidence in the state, and its ability to perform the vital economic and social functions expected of it. Because of policy breakdown, the state's legitimacy is further weakened.

In systems-analysis the principal contradiction of the welfare state can be framed as such: the state will either be unable to systematically meet the requirements of its capitalist function, or its legitimacy will be progressively weakened by those policies designed to fulfil its capitalist function. At its most fundamental level, the capitalist rationality of policy-making demands from the state incompatible forms of policy intervention. The resultant policy is often schizophrenic, opportunistic, and incoherent. And as systems-analysis theorists predict the intensification of systemic crises of capitalism, the state is required to directly intervene in the economic system more frequently and to a much greater extent over time. In turn, the contradictions worsen – producing more and more policy breakdown (Hinrichs, Offe & Wiesenthal, 1984-1985).

### **Secondary constrains on state activity**

Thus far, the systemic boundaries of the state have been conceived as external and objective structural constraints. Three additional mechanisms of economic determinism also influence policy-making. These supplementary or secondary structural constraints include the ideological disposition of the state/government (including the individual beliefs of state managers), the various pressures exerted by the dominant class upon the state, and the institutional logic of the state apparatus. Such mechanisms are emphasised by instrumentalists as being crucial in the operation of the state. Secondary constraints influence: 1) the timing of policy, 2) the type/nature

of policy intervention, and 3) the extent to which the state exerts power in favour of a particular actor/group/class fraction. Wetherly (2005, p. 174) reasons that external structural constraints are not automatically or directly translated into social policy. The government's ideology and the extent of business and industry's political influence determines the way in which the state ultimately responds to the requirements and boundary limitations of the capitalist system.

Let us begin with the ideological disposition of the state and state managers. A government is ideological to the extent that it is operated and controlled by ideologically driven actors. An elite political class, occupying prominent positions within the state apparatus, exercise political power. Naturally, the *state elite* (Miliband, 1969, 1989) possess their own systems of belief, which inform their policy-making activities. In a parliamentary democracy, such as New Zealand, political parties typically represent discrete ideological groupings of state elites. A governing arrangement, say for instance a National or Labour government, will subscribe to a particular set of policy beliefs. The question remains as to whether state elites (and by extension governments) are likewise class-based actors, who wield political power in support of subjective class interests. The composition of the state elite tends to be from the middle to upper classes, which might indicate a common class origin. Having said that, direct class origin is not essential for imparting a capitalist ideology within the state elite. A common, privileged social background would equally inspire ideological support for the capitalist system. Moreover, capitalist policy beliefs are inherently ideological, and are internalised within the state elite through the wider socialisation subsystem (schools, churches etc.). This ideological quality represents the narrow interests of capital as being common sense and in the general interests of society. For Wetherly (2005, p. 178):

[...] ideological dispositions that favour capitalist interests may not require class consciousness as they are rooted in 'common sense' assumptions about what constitute reasonable or sound policies, assumptions that may operate to some extent in an unselfconscious manner. The institutionalised common sense, historically developed, defines reasonableness and soundness in pro-capitalist terms. Such common sense may

also be developed and/or sustained to some extent by the very capitalist context in which state managers operate, so that the capitalist system is taken for granted, accepted as given and beyond question.

If the state elite observe (either overtly or at an unconscious level) the interests of private capital, then it is reasonable to suggest that social policy is framed accordingly. This would mean that political power in the capitalist state is ideological-orientated. There are of course limitations on the state elite, particularly electoral and legitimacy constraints that prevent unabashed pro-business policy. However, these limitations are offset by the following secondary constraints: the influence of private capital and the institutional logic of the capitalist state.

The ideological disposition of the state elite determines the state's overall susceptibility to pressures exerted by dominant class fractions. This signifies the second important secondary mechanism of state economic determination – the supreme political influence of business and industry. It is Miliband's (1989, p. 32) assertion that the partnership between state managers and private capital constitutes a relatively cohesive "power elite" in advanced capitalism. Within the dominant class, a singular hegemonic fraction usually emerges. Unity is achieved by the hegemonic fraction advancing the collective political goals and interests of private capital. Nevertheless, private capital unavoidably remains external to the state apparatus, and therefore a distinct constraint on policy-making. The relationship between the state elite and private capital is described by Wetherly (2005, p. 187) as being "mutually reinforcing". The ability of private capital to influence policy-making can be enhanced by a congruent ideological character of the state and state managers. Similarly, the pressure exerted by private capital acts to strengthen the ideological disposition of state elites.

Capitalist fractions – represented by individual actors, corporate entities, or business lobbying organisations – apply forms of economic, political, and ideological pressure. The economic form of pressure arises from the state's dependence on private capital. The state must positively respond to the demands of business and industry, with respect to private capital's economic

power. Political pressure is exerted through both the electoral and policy processes. Advocacy and monetary resources can be used to gain support for pro-business policy, or equally to attack offending measures. And finally there is ideological pressure, where private capital either exerts control over the policy debate i.e. the public policy discourse, or over the means of communication and consent (the media for instance).

The third secondary mechanism of state economic determination refers to the institutional logic of the welfare state. The organisational structure of the state apparatus, and particularly the policy process, facilitates the political influence of private capital. Offe (1984, 1985) defined the neo-corporatist logic or strategy of the state, in which the interests of private capital are formally integrated into the state's policy-making apparatus. Within a developed corporatist system, Offe (1985, p. 242) contends a "second circuit" of interest group representation exists, in which:

The institutional order of [...] periodic elections, political parties, and parliamentary government [...] is supplemented by a political arrangement consisting of major organized interest groups, their relative procedural status, and bodies of consultation and reconciliation.

This state-supervised circuit of representation utilises largely inaccessible and elite negotiations to provide private capital with enhanced access to policy-makers. This enables the state to form a consensus in relation to the nature and scope of social policy. Simply put, tripartite corporatism between the state elite, private capital, and organised labour allows for the production of social policy acceptable to all parties. This approach to governance not only pre-emptively diffuses political opposition but also effectively aligns those powerful societal interests (capital and labour) behind a specific policy. It is undoubtedly advantageous for the state to incorporate private capital into the formal decision-making process, as greater collaboration depoliticises the policy process and reduces conflict.

This conception of the corporatist model of political power resembles neopluralism. The Marxian systems-analysis framework does not preclude the pluralistic competition between organised interest groups, but rather recognises that certain groups are often privileged by the capitalist structure of the state. Roper (2006, p. 167) argues that:

[...] Marxists and pluralists share a kindred interest in the empirical study of interest groups because, despite all of the other substantial differences between these traditions, both consider that interest group activity profoundly influences government decision and policy-making.

Dunleavy and O’Leary (1987) suggest that the state is actually a “dual state” composed of one pluralistic state that responds to the multitude of groups, and another that serves the interests of business. Power over decision-making is contested between these two polities. It was Lindblom’s (1977) view that business interests obtained a privileged position in policy-making. Firstly, as governments strive for a successful economy they accommodate the demands of business and industry within policy. Furthermore, business and industry increase their influence by being disproportionately active in elections, political campaigns, and the policy process. Secondly, business interests independently possess the capacity to affect key sectors of the economy. Business decisions are made outside the control of the government and citizenry. This extensive power over a society’s economic development allows business interests to demand market stability, reduced regulation, and the commitment of public resources to private production.

### **A preliminary outline of Marxian systems-analysis and climate change governance**

This thesis will argue that the breakdown of New Zealand’s response to climate change can be attributed to the contradictory structure of the state. Exploring climate change governance requires only a modest reinterpretation of Marxian systems-analysis and its conception of the welfare state. Let us begin with the New Zealand state, which comprises the political subsystem

within our capitalist society (Roper, 2011, p. 14). Although the New Zealand polity has undergone significant changes since the 1970s, it has nonetheless retained much of its welfare state character. Major welfare programmes remain in place, albeit diminished, fulfilling their functional role in the labour market (Boston, 1999; Dalziel, 1999). However, the provisions of the contemporary welfare state extend far beyond labour crises. Indeed, the modern welfare state, possessing far greater technical and scientific capabilities, is able to identify a greater range of capitalism's negative consequences. The recognition of anthropogenic environmental problems and the development of environmental policy constitute a form of social policy<sup>9</sup>, highly specific to the modern state. As environmental crises, such as climate change, threaten the capitalist system, the state is compelled to develop and introduce a remedial policy response. However, unlike traditional compensatory and compromise welfare policies, contemporary environmental policy functions by interceding in the economy to direct production away from polluting activity. The modern welfare state has retained its substantive structural function to maintain economic stability and promote capital accumulation. What has changed are the recognised crises of capitalism, and in turn the tools deployed by the state in response.

Although few in the state elite would likely conceive an environmental problem as a crisis of capitalism (particularly in an explicit Marxist sense), there is a definite awareness of the causative link between capitalist production and anthropogenic environmental problems. Yet, conceptualising a problem like climate change as a crisis of capitalism has undeniable analytical value. As outlined in the previous chapter, a materialist understanding of climate change offers profound critical insight into the crisis – an insight that is missing from conventional scholarly interpretations. Climate change is a consequence of the same contradictory capitalist arrangements responsible for class struggle. It differs from other contradictions in regards to the specific nature of its deleterious effect, namely that climate change undermines the material

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<sup>9</sup> Chapman and Boston (2007, p. 105) adopted a broad definition of “social policy” to encompass the climate change issue. For Chapman and Boston, climate change social policy is concerned with “the human consequences of the measures taken to mitigate climate change, including economic, distributional, regional, sectorial, health-related and other impacts”. A similar conception is ideal for a Marxian systems-analysis of climate change governance.

base of the capitalist system. Climate change represents a unique contradiction of capitalism, as its harmful impacts directly manifest as physical phenomena in the material world. Climate change comes from anthropogenic sources of greenhouse gases – industry and manufacturing, energy generation, waste, and agriculture – the capitalist productive sources of emissions. As greenhouse gas pollution causes climate change, its material impacts (drought, acidification of the oceans, sea-level rises, increased prevalence of significant storms etc.) degrade the physical environment. And as capitalist production is ceaseless, expansionary, and dependent on material resources, the quantity of greenhouse gases emitted into the atmosphere ever increases – resulting in further climate change and, consequently, greater damage to the natural environment, constituting the material preconditions of the capitalist mode of production.

As global warming represents a contradiction of capitalism and thus a long-term existential threat, it then follows that climate change policy works to ameliorate the phenomenon and its disruptive impacts. However, the development of the climate change policy is subject to the capitalist rationality of policy-making. The NZ CCP is indicative of the state's performance of its general maintenance function. Climate change maintenance policy entails economic intervention by the state to satisfy the general interests of private capital i.e. the enduring abatement of greenhouse emissions to forestall the phenomenon's negative material effects. However, this policy intervention is not limited to the labour market. It is rather directed to regulate the productive forces responsible for greenhouse gas emissions. This intervention asserts a degree of state authority over the constitution of the productive forces, as a means to modify the productive arrangements that cause climate change.

However, the development of climate change policy is also constrained by the other systemic imperatives. The exclusionary imperative, the dependence constraint, and the legitimacy constraint determine the forms of policy intervention possible. It is at this point where the state's principal political contradiction becomes internalised within the climate change response. Systemic limitations on climate change policy undermine the state's intervention in the

productive sources of emission. The state cannot command the decarbonisation of New Zealand's economy without violating the exclusionary imperative and dependence constraint. The attempt to formulate climate change policy that is simultaneously consistent with the maintenance function, the exclusionary, dependency, and legitimacy constraints is highly problematic. Instead of an ameliorative response to the climate change threat, the underlying objective of the policy response invariably shifts to satisfying the structural imperatives of capital.

Beyond this principal contradiction, climate change policy responses are liable to encounter both organised resistance from private capital and legitimation problems. Climate change policy foments significant political opposition, particularly from capitalist fractions who oppose measures that require from them extensive and unprofitable production changes. And because of the state's dependence on the accumulation process, as well as the pervasiveness of neoliberalism within advanced capitalism, the state will more often than not capitulate to private capital and compromise its intervention in the forces of production. However, attempts by the state to implement moderated climate change policy with an overt capitalist bias will likely trigger a legitimation crisis. The state's legitimacy, in regards to climate change governance, is contingent on the development of meaningful and effective remedial policy. I would suggest that there exists in New Zealand (and likely other developed societies) a public expectation that governments will broadly enforce remedial climate change policy. Measures then that appear demonstrably in favour of private capital and do not reduce greenhouse gas emissions would contradict the state's expected mitigation responsibilities. Furthermore, the mounting occurrence of policy breakdown weakens the perception of the state as an effective entity, capable of responding to climate change. All up, these additional contradictory dynamics push climate change further towards policy breakdown.

## Conclusion

This chapter has outlined Marxian systems-analysis, as a framework to conceive the welfare state and the dysfunction of its policy process. According to systems-analysis, the state's functional position within capitalist society imposes a capitalist rationality on policy-making. The formulation of social policy must adhere to systemic imperatives that are inherently contradictory. On one hand, the state is bound by its maintenance function to intervene in the economy to address the crises of capitalism. On the other, the systemic boundaries of the state constrain the forms of intervention it can pursue. This incompatibility constitutes a contradiction of the modern welfare state and a source of policy breakdown.

Marxian systems-analysis offers a novel interpretation of climate change governance. Its application is aimed to demonstrate the systemic limitations of the New Zealand state and, consequently, the breakdown of the NZ CCP in each of its iterations. These periods include 1988-1990 – the fourth Labour Government, 1990-1999 – the fourth National Government, 1999-2005 – the fifth Labour Government, and 2008-2012 – the fifth National Government. Although each of these periods accord with the governing arrangements of the time, these stages also exhibit defined patterns of policy change. The analysis of the NZ CCP will show that a capitalist rationality informs climate change governance in New Zealand. Furthermore, the arrangement of systemic constraints is responsible for the incremental breakdown of the NZ CCP. The following chapter will begin the critical policy analysis of New Zealand's Climate Change Programme, starting with the incipient response developed by the fourth Labour Government.

## **Chapter Four**

### **New Zealand's incipient Climate Change Programme, 1988-1990**

The NZ CCP did not form in isolation. Climate change had already been considered at the international level a decade prior to New Zealand's response getting underway. An arrangement of supra-governmental organisations, non-governmental groups, and scientists from ecology and meteorology, had positively identified the occurrence of global warming, as well as the urgent need for collective remedial action on a global scale (Bulkeley & Newell, 2010; Gupta, 2010). This Global Climate Change Regime (GCCR) (Bodansky, 2001, 2005) assumed responsibility for international climate change governance. This chapter will argue that the Regime's articulation of climate change, as an existential social and economic threat demanding immediate remedial action, precipitated New Zealand's response. The New Zealand state's structural impulse for general maintenance, kicked into action – triggering the development of the NZ CCP.

This chapter will describe New Zealand's incipient Climate Change Programme from 1988 to 1990. However, as international policy activity significant to New Zealand's response occurred prior to 1988, the chapter will begin by briefly outlining the formation of the GCCR and New Zealand's participation throughout the late 1980s. Following this, the incipient NZ CCP developed by the fourth Labour Government (1982-1990) will be discussed. This initial iteration of New Zealand's climate change response represented a tentative attempt by the state to perform its general maintenance function and develop remedial climate change policy. Although this short period did not witness the implementation of any interventionist policy whatsoever, a remarkably progressive and comprehensive roadmap for the future of the NZ CCP was articulated. This framework promised an effective and socially equitable regulatory regime to control greenhouse gas emissions. This short chapter will conclude by delineating New Zealand's

early climate change policy community<sup>10</sup> – the network of public and private policy actors concerned with the development of climate change policy.

### **The Global Climate Change Regime**

It is difficult to pinpoint the exact moment that the Global Climate Change Regime came into existence. There was no one defining moment or event which triggered the international response to climate change. Rather, the GCCR developed throughout the 1980s, forming a piecemeal governance framework in parallel to the emerging climate change scientific consensus (Bodansky, 2005, p. 150-151). The organisation of the GCCR was built around multilateral agreements negotiated between state and non-state actors, and administered by supra-governmental organisations, such as the United Nations Environmental Programme (UNEP) and the World Meteorological Organisation (WMO). Power blocs of state and non-state actors, such as OPEC, the Alliance of Small Island States, the G77, the JUSCANZ (Japan, United States, Canada, Australia, and New Zealand) grouping, as well as the lobby group Climate Action Network, provided an additional organisational structure (Bulkeley & Newell, 2010, p. 18-19). Climate change was first discussed as a global environmental issue at the 1979 World Climate Conferences held in Geneva. Following this, similar conferences were held in Villach (1985), Hamburg (1987), Toronto (1988), and again in Geneva (1990) – all of which affirmed the scientific reality of climate change and the urgent need for collective international action (Gupta, 2010, p. 639-647). At the Toronto World Conference, an alarming description of climate change was presented to the world:

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<sup>10</sup> This thesis adheres to a basic understanding of the “policy community” concept. A policy community describes the structure of the policy process, emphasising the extra-formal or sub-governmental interactions between policy actors. Communities are defined by the common interests of its constituent members. Although this rudimentary understanding of a policy community satisfies the needs of the thesis’s analytical design, it is important to recognise that more nuanced conceptions exist. Dowding (1995), Howlett and Ramesh (2009), Miller and Demir (2007), Rhodes (1997), and Wright (1988) provide more thorough accounts of policy communities.

Humanity is conducting an unintended, uncontrolled, globally pervasive experiment whose ultimate consequences could be second only to a global nuclear war. The Earth's atmosphere is being changed at an unprecedented rate by pollutants resulting from human activities, inefficient and wasteful fossil fuel use and the effects of rapid population growth in many regions. These changes represent a major threat to international security and are already having harmful consequences over many parts of the globe. (World Meteorological Organisation, 1988)

The Conference delegates called for a 20% reduction in CO<sub>2</sub> emissions by 2005 and the development of a global governance framework to enable mitigation efforts (Bodansky, 2001, p. 27).

The 1988 formation of the Intergovernmental Panel on Climate Change (IPCC) was a significant moment in the GCCR (Rydge & Bassi, 2014, p. 3). A product of the UNEP and the WMO, the IPCC was tasked with assessing and aggregating climate change science, and facilitating the technical consensus necessary for national policy responses. The IPCC released the peer-reviewed *Climate change: the IPCC Scientific Assessment (First Assessment Report)* in 1990. Besides its coverage of the scientific basis of climate change, the report articulated several response strategies, including energy conservation and efficiency programmes, sustainable forestry management and afforestation, the use of cleaner energy sources, and the review of carbon-intensive agricultural practices. The report also favoured market-based, economic instruments over direct regulation for the long-term management of anthropogenic greenhouse gases (Intergovernmental Panel on Climate Change, 1990, p. 56-58).

The IPCC drew on two important concepts within political ecology and environmental policy: *common but differentiated responsibility* and *sustainable development*. The IPCC's articulation of common but differentiated responsibility recognised the differing contributions made to atmospheric greenhouse emissions by developed and developing nations. The principle asserts the responsibility of developed countries in assuming the majority of costs in emissions

abatement, ensuring equity within the social response to climate change. Sustainable development, on the other hand, links environmental management and economic development, describing the ideal political and economic arrangements for sustained growth and ecological protection. Central to sustainable development is the notion of “intergenerational equity” – that economic activity should maintain natural resources for future generations (Swart, Robinson & Cohen, 2003). The popularisation of sustainable development by the Brundtland Commission (1987) informed the GCCR. The *Brundtland Report* specifically framed climate change as a failure of sustainable economic development (World Commission on Environment and Development, 1987, p. 147-50). The report urged countries to enhance their own adaptive capacities, and pursue a collective international response targeting greenhouse gas reductions.

By the time of the Second World Climate Conference in 1990, a consensus had been achieved regarding the science of climate change (Information Unit on Climate Change, 1993). Parties to the Conference accepted the need to stabilise greenhouse gas emissions and establish national climate change programmes. Moreover, it was agreed that until a comprehensive international governance framework could be established, individual nations would be responsible for developing their own response. While political recognition was given to the problem of climate change, complete agreement on an appropriate response strategy remained elusive. The failure of the Conference’s Ministerial Declaration to specify international emissions reduction targets reflected the division within the early GCCR, particularly between the European Community, the United States, Japan, and the Soviet Union. The Ministerial Statement did however call for negotiations on the establishment of a framework convention on climate change, setting up the 1992 United Nations Framework Convention on Climate Change (UNFCCC) (Bodansky, 2001, p. 27-31).

## **New Zealand's participation in the early GCCR**

Right from the beginning of the GCCR, New Zealand demonstrated a commitment to the international governance project. Representatives were dispatched to the various Climate Conferences (MfE, 1988b, p. 11), while New Zealand scientists directly contributed to the *IPCC First Assessment Report* (MfE, 1989, p. 7-8). New Zealand was party to the 1989 *Hague Declaration on the Environment*, as well as the contentious *Ministerial Declaration* made at the Second World Climate Conference (Palmer, 1990, p. 68-69). The fourth Labour Government provided several rationales in justifying New Zealand's participation in the GCCR. Firstly, the Government accepted the premise established by the GCCR that climate change constituted an immediate economic and social threat, which necessitated a comprehensive and global remedial response (MfE, 1990a). New Zealand's position was concisely summarised by Prime Minister Geoffrey Palmer:

Global climate change threatens the existence of the world as we know it. Although nothing is certain except that greenhouse gases are increasing in the atmosphere, studies suggest that ecological systems could be disrupted, with major impacts on human economies and societies. If we ignore this threat, it is at our own peril. In spite of the uncertainties, it would be irresponsible not to act. If we wait for conclusive proof, it may be too late. (MfE, 1990a, p. 5)

Palmer's statement hints at two additional rationales that informed New Zealand's involvement in the GCCR. The first was a kind of utilitarian imperative. The Government justified participation in the belief that the GCCR would ultimately benefit New Zealand. This included the opportunity to influence design aspects of the proposed governance framework, in line with the interests of New Zealand and neighbouring Pacific Island nations<sup>11</sup>. Secondly, the Government acknowledged New Zealand's moral obligation to contribute to international mitigation efforts. As a carbon-

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<sup>11</sup>The Government believed that New Zealand was obliged to represent the interests of Pacific Island states within the GCCR. It was felt that the limited resources available to these nations would inhibit their participation in negotiations (MfE, 1990a). As Pacific Islands are highly vulnerable to the impacts of climate change, they have a particular interest in the development of an effective international response.

intensive economy<sup>12</sup> that had benefited from the prolonged use of carbon-based forms of energy, the development of an emissions-intensive agriculture sector, and extensive historical deforestation, New Zealand possessed a moral responsibility to lead efforts to reduce greenhouse gases. In articulating this rationale, the Labour Government accepted the principle of common but differentiated responsibilities. It was also felt that the best contribution New Zealand could possibly make to the GCCR was leadership on the issue of climate change. It was reasoned that leading by example and fully participating in the international response would encourage other nations to limit their own emissions (MfE, 1990a, p. 20-22).

### **State cognizance of climate change risk**

Although it is difficult to identify the exact arrangement of historical events or explicit rationales that triggered New Zealand's climate change response, the period of activity strongly indicates that the NZ CCP was established in light of the economic and social threat posed by climate change. With remarkable scientific literacy, the Ministry for the Environment (1990a, 1990b) and the Royal Society of New Zealand (1988, 1990), closely mirroring the findings of the IPCC *First Assessment Report*, described the anthropogenic origins of climate change. Crucially, these organisations recognised the connection between industrial activity (the burning fossil fuels, deforestation, manufacturing, agriculture etc.) and the production of greenhouse gases responsible for the enhanced greenhouse effect. Although the Royal Society acknowledged the inherent uncertainty of climate change science, as well as New Zealand's relative high adaptive capacity to climatic changes, a consensus formed recognising the unacceptably high risk of climate change to New Zealand and its long-term economic development. New Zealand's primary industries were perceived as being particularly vulnerable owing to the sensitivity of the agriculture sector to climatic variables. The possibility of climate change beyond 2050 would result in "accumulated impacts [...] so extreme that progressive adaptation – whether by

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<sup>12</sup> Between 1989 and 1990, New Zealand's per capita CO<sub>2</sub> and CH<sub>4</sub> emissions were approximately twice and five times higher than the respective global averages (MfE, 1991, p. 18).

ecosystems or human society – would become ineffectual” (MfE, 1990b, p. 27). The Government’s conception of climate change as a human made environmental crisis was suitably captured by Geoffrey Palmer, who described the phenomenon as:

[...] the most complex environmental crisis the world has ever faced. The causes are rooted deep in human industry and agricultural development, and the results may affect every aspect of life as we know it. (MfE, 1990a)

Domestic policy-makers were acutely aware of the negative material and social impacts of climate change, and the extent of New Zealand’s vulnerability. The state – represented by the Ministry for the Environment and the Labour Party Cabinet – had gradually become cognizant of the threat posed by climate change to the preconditions necessary for capital accumulation and production. Both the IPCC (1990) and the Royal Society (1988, 1990), in their extensive analysis of the physical effects of climate change, identified the destructive potential to the material base of production – which in New Zealand was acute considering the extent to which the domestic economy was (and still is) dominated by primary industries. This recognition would have prompted the state’s structural compulsion to develop remedial maintenance policy, in an attempt to arrest climate change and its latent impacts on New Zealand’s economy. Furthermore, the work of the IPCC and the Royal Society unequivocally demonstrated the causative link between climate change and specific forms of carbon-intensive industrial activity. In turn, the New Zealand state, having been provided with an account of the capitalist productive arrangements responsible for climate change, would have directed the formulation of suitable interventionist policies to correct those offending systemic deficiencies. In sum, the New Zealand state’s burgeoning awareness of the anthropogenic origins of climate change, as well as the phenomenon’s potential to threaten domestic economic activity, likely triggered its general maintenance function, i.e. the development of remedial climate change policy.

## **New Zealand's incipient Climate Change Programme**

In June of 1988, the NZ CCP was established to assess the scientific basis of climate change and advise the government on a suitable response strategy. A steering committee was formed within the Ministry of the Environment to coordinate the NZ CCP, while the Royal Society of New Zealand was charged with evaluating the phenomenon's scientific basis. The Ministry, in concert with the Royal Society's findings, outlined a set of preliminary adaptation and mitigation policy measures. The early NZ CCP called for the complete reorganisation of New Zealand's energy policy – with a focus on shifting to sustainable and low carbon sources of energy (MfE, 1988a, 1988b, 1991). The development of cost-effective and flexible mitigation instruments was also prioritised. In reaction to the 1990 release of the IPCC *First Assessment Report*, the Government adopted a more detailed response strategy. An ambitious target to reduce carbon dioxide emissions by 20% of 1990 levels by 2000 regardless of GDP growth was announced, as well as plans to reduce emissions in the transport and waste sectors (MfE, 1991, p. 27-8; Palmer, 2015; Peterson, 2001, p. 16). The Ministries of Commerce and Transport were directed to establish a national carbon dioxide reduction plan (Palmer, 2015, p. 24). Despite these proposals, the environmental lobby criticised the government's proposed plan, with Greenpeace describing it as a "paper target", lacking the actual policies needed to effect a reduction in emissions (Barry & King-Jones, 2014).

This brief period of activity represented the preliminary formulation of climate change maintenance policy in New Zealand. I would suggest that this preliminary status is apt, considering the early NZ CCP did not implement a single interventionist policy. Instead, a number of limitation and adaptation options were proposed for consideration. Four criteria were articulated to guide the selection of appropriate measures: cost-effectiveness, a quality of beneficence regardless of whether climate change occurs or not, measures that compliment New Zealand's international trade, and measures that would provide a net benefit to New Zealand society (Palmer, 1990, p. 64-65). Interestingly, a preference for carbon charges and tradeable

emissions permits was apparent, even at this preliminary stage of the NZ CCP. Both measures were seen as cost-effective means to manage New Zealand's industrial greenhouse gas emissions. Conversely, command and control regulations were described as a "cumbersome" and "generic" option (MfE, 1990, p. 24-27).

It could be argued that the early NZ CCP functioned more as a plan of action or framework for future climate change maintenance policy, rather than a substantive attempt to immediately address the climate change crisis. Certainly, the early NZ CCP failed to implement any intervening policy instruments, precluding an authoritative intervention in New Zealand's productive sources of emissions. Without the passage of tangible policy instruments to command changes to the productive forces, the state failed to perform its general maintenance function. Nevertheless, a framework was established, offering a progressive strategy for prospective climate change policy. The enlightened quality of the NZ CCP was evident, considering it readily internalised the principle of common but differentiated responsibilities and was thus committed to socially equitable abatement and adaptation policy. Moreover, the Government's commitment to assist Pacific Island Nations, the bold emissions reduction target set in the 1990 response strategy, and the thorough assessment of economic instruments as potential limitation options, indicated a promising framework for future policy. The early NZ CCP provided New Zealand with a foundation in which future policy intervention would become possible.

### **The nascent New Zealand's climate change policy community**

The formation of NZ CCP corresponded with the emergence of a distinct policy community concerned with the development of an ameliorative policy response (Basher, 2000). This nascent policy community principally included the Labour Party Cabinet, the Ministry for the Environment, the New Zealand Meteorological Service, the Department of Conservation, the Ministry of Agriculture and Fisheries, and scientists and academics concerned with the climate

change issue (principally in ecology, meteorology, hydrology, and physical geography). The Royal Society and New Zealand's major universities were represented in the community. A critical feature of the early policy community was the virtual absence of private policy actors. There is little evidence to suggest that New Zealand's major business and industrial interests participated in the early policy debate. Indeed, of the 165 participants at the Ministry for the Environment Climate Change Response Workshop (held March 29-30, 1988) only eleven were private corporate actors<sup>13</sup> (MfE, 1988b, p. 183- 190). While this might cast doubt on the Marxian systems-analysis conception of the state's corporatist structure, it is probable that climate change in the late 1980s presented a far too obscure issue to concern business and industry. Those actors representing capital were, at this point, entirely disinterested and uninvolved in the climate change policy domain. At the same Climate Change Workshop, only three environmental groups were present (MfE, 1988b, p. 183- 190). The environmental lobby were primarily involved at the international level and, again, there is little evidence to suggest that it had an impact on the early NZ CCP.

From this composition, two important structural characteristics of the early policy community can be inferred. One, the policy community was technocratic. Actors drawn from state institutions and academia would have possessed a high degree of technical expertise in relation to conservation, ecology, meteorology, economics, and social policy. Consequently, the mode of climate change governance practiced within the community would have also been technocratic. Two, it is likely that relations between constituent actors were highly regulated – resulting in a closely integrated and ordered policy community.

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<sup>13</sup> It would be interesting to explore, in greater depth, the advocacy of these private actors and to assess their respective influence over the early climate change programme. Certainly, under the right conditions, individuals and groups can shape policy change. However, to do so would go beyond both the scope and conceptual boundaries of this thesis. At this point of the analysis, describing the general structure of New Zealand's climate change policy community was considered key. A more focused piece of research, with a narrower scope, could spend the time weighing the respective influence of interest groups, within the context of broader patterns of policy change.

It is likely that the lack of significant attention paid by the corporate and industrial lobby contributed to the progressive framing of the early NZ CCP. A policy community dominated by technocratic state managers, and largely free from the influence of private capital, would have had greater discretion in the formulation of a response strategy. Unrestrained from its dependency on private capital, the state would be less inclined to incorporate the demands and immediate interests of big business and industry. In turn, the Government would have been far better positioned to develop a response strategy without an obvious class-bias.

### **Labour's ideological disposition and climate change governance**

The commitment of the fourth Labour Government to resolving climate change through policy intervention may appear somewhat incongruous considering its legislative zeal for economic liberalisation and governmental reform (Gleeson, 1996; Kelsey, 1995; Roper, 2005). Labour's neoliberal restructuring systematically eroded the state's capacity to respond to economic crises through interventionist policies. This would seemingly contradict the development of authoritative climate change maintenance policy, which directly prescribed interventionist measures to modify carbon-intensive productive practices. On the other hand, Labour was relatively progressive on environmental issues in general. The passage of the *Environment Act* (1986) and the *Conservation Act* (1987) created the Ministries for the Environment and the Department of Conservation respectively. Furthermore, the Resource Management Law Reform process was initiated under this Labour Government. The ideological disconnect between Labour's economic reforms and its environmental policy might account for the contradictory character of the early NZ CCP, i.e. the formulation of a progressive policy framework, but little tangible action. We obviously had a Labour Government concerned about the environment and receptive to developing a policy response to climate change. Certainly, Geoffrey Palmer's keen interest in climate change facilitated the NZ CCP's initiation. According to Basher (2000, p. 126):

[...] Palmer wanted a sound scientific basis for the development of New Zealand's policy response on climate change, and as a politician he wanted it quickly. Mr. Palmer was

well placed as Deputy Prime Minister, and then Prime Minister after David Lange's resignation, to ensure that his objectives on climate change policy were pursued.

It is however far more difficult to qualify the influence of Labour's neoliberal attitudes on the NZ CCP. It is likely that the Government's adherence to laissez faire capitalism, helped prevent the consideration of highly interventionist mitigation and adaptation response strategies. As earlier indicated, command and control regulation (which is inherently interventionist) was dismissed as being economically unsuitable. Moreover, the Government's preference for economic instruments, which devolve the responsibility for mitigation to the private sector, might indicate an initial aversion to state interventionism. Pervasive neoliberalism would render policy-makers amenable to measures perceived to be capitalist, and that maintained private property rights, promoted a minimal state, and diminished traditional welfare policies.

Bühns and Bartlett (1993, p. 92-112) and Gleeson (1996, p. 1910-1911) argue that the neoliberal reforms of the fourth Labour Government shaped its general approach to environmental policy-making. At the behest of New Zealand's Treasury department, the newly created Ministry for the Environment and the Department of Conservation introduced greater corporate and market efficiency to New Zealand's management of environmental resources. Accordingly, the organisational structure of these institutions became highly rationalised and corporatized. At the same time, a proliferation of State Owned Enterprises (SOEs) occurred – many of which held direct responsibility for environmental management (such as the Coal Corporation, the Electricity Corporation, Land Corporation etc.). Overall, there was a decisive shift to “market-led environmental policy”, which reduced the role of the state in the allocation and management of natural resources, and concomitantly encouraged market-driven environmental governance. It is unsurprising that within such an institutional environment, one so receptive to neoliberal principles and theory, that the immature NZ CCP would also embrace these beliefs, and develop a response strategy accordingly.

## Conclusion

Following the wave of collective international action in light of the emergent climate change problem, New Zealand's fourth Labour Government tentatively initiated a domestic policy response. The recognition from both the IPCC and the Royal Society that climate change presented a real social and economic threat precipitated the NZ CCP. While there were certainly moral and ideological motives underlying the nascent domestic response, the likely causal driver of the NZ CCP was the identification of the climate change problem and, in turn, the recognition of New Zealand's manifest vulnerability. This cognizance of climate change as an economic threat triggered the state's general maintenance function. Although the Programme failed to implement any specific measures to reduce New Zealand's greenhouse gas emissions, the budding policy community still managed to produce a remarkably progressive framework for future policy action. Considering Labour's undeniable adherence to neoliberalism and aversion to state interventionism, the Government's efforts to formulate a comprehensive policy response was remarkable.

This does not mean that Labour's policy framework was an ideal response strategy. Without question, it established much of the neoliberal foundation in which ensuing governments would construct their own climate change responses. Nevertheless, the progressive elements of Labour's policy framework promised both an effective and socially equitable mitigation response. The following chapter will consider the NZ CCP under a far more right wing and business friendly National Government – resulting in a climate change response more aligned with the interests of private capital.

## Chapter Five

### A decade of inaction: climate change governance in New Zealand, 1990-1999

The fourth National Government (1990-1999), in their approach climate change governance, radically departed from the previous Labour Government. While Labour's incipient NZ CCP mapped out a progressive climate change response, the incoming National Government disregarded this framework, advancing instead an underwhelming *Comprehensive Strategy on Climate Change*. Throughout the 1990s, National failed to implement interventionist policies capable of modifying New Zealand's productive sources of greenhouse gases. Consequently, domestic emissions increased over the decade<sup>14</sup>. The only accomplishment of this iteration of the NZ CCP was the 1993 ratification of the United Nations Framework Convention on Climate Change (UNFCCC). Even the "progress" of New Zealand becoming a signatory to the Kyoto Protocol was debatable, considering both the Government's failure to ratify the treaty and its systematic efforts to weaken the binding emissions targets. This period of the NZ CCP unquestionably signalled the start of an enduring trend of policy breakdown.

National's *Comprehensive Strategy on Climate Change* failed to introduce mitigation policy necessary to transform the productive sources of New Zealand's greenhouse gas emissions. This was not an indication of the state's indifference to climate change as an economic and social threat. Arguably, the very perpetuation of the NZ CCP demonstrated the sustained performance of the state's general maintenance function. Rather, the instruments comprising National's response were insufficiently authoritative, as forms of policy intervention, to command changes to the forces of production and compel emissions abatement from polluters. Although the

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<sup>14</sup> By the year 2000, New Zealand's gross greenhouse emissions were 5% higher than their 1990 levels, with a significant 20% increase in CO<sub>2</sub> and 5% in N<sub>2</sub>O (MfE, 2002, p. 26). In 1999, the NGO Climate Action Network awarded New Zealand the "fossil of the day" for its failure to reduce emissions over the decade (Green Party of Aotearoa New Zealand, 1999).

formulation of the Comprehensive Strategy was constrained by the state's capitalist rationality – precluding the passage of non-capitalist measures – this alone would not explain the indecisive and overtly pro-capital pattern of policy change. I would suggest that in addition to external structural constraints, secondary constraints, chiefly the pervasive neoliberal ideology of the fourth National Government, ensured the implementation of weak policies. In its wholehearted rejection of state interventionism and its promotion of a least cost policy response, the National Government enacted policies in contradiction to its general maintenance function. This policy change devolved mitigation responsibility to the private sector, repudiating the state's own authority to regulate carbon-intensive production. It was also, however, completely ineffective at reducing New Zealand's greenhouse gases.

This chapter will account for the NZ CCP under the fourth National Government. It will begin by describing National's Comprehensive Strategy on Climate Change – New Zealand's first and arguably least-effective attempt at climate change policy. Following this, the progress of the NZ CCP from 1995 to 1999 will be addressed. This period was epitomised by policy stagnation, as the Government failed to implement the Comprehensive Strategy's low-level carbon charge or develop an alternative emissions trading scheme. Finally, this chapter will consider the changing role of New Zealand's corporate and industrial lobby in the policy debate, and the instrumental effect of the state's capitalist rationality on the period's pattern of policy change.

### **The Comprehensive Strategy on Climate Change**

The NZ CCP was significantly affected by changes to New Zealand's governing arrangements following the 1990 General Election. The new National Government proceeded with a legislative agenda that expanded Labour's macroeconomic reforms (Kelsey, 1995; Larner, 1997; Roper, 2005). In terms of environmental policy, National was far more neoliberal than their predecessors. National belatedly continued the Resources Management Reform process,

enacting a watered-down and business-friendly Resource Management Act in 1991 (Oram, 2007; Palmer, 2013; Upton, 1995). Funding for environmental departments also decreased, with the Department of Conservation experiencing a 30% cut in funding between 1987 and 1995 (Gleeson, 1995, p. 1911).

The NZ CCP also suffered from National's general disinterest in environmental matters. Although New Zealand ratified the UNFCCC in September 1993, and significantly contributed to the IPCC *Second Assessment Report* (MfE, 1994, 1997a, 1997b), the Government delayed domestic climate change action until the 1994 Comprehensive Strategy on Climate Change (Hamilton, 2000). What little progress was made on the climate change issue was shepherded by the Minister for the Environment, Simon Upton. Upton was often recognised as the lone voice within the fourth National Government driving climate change policy (Barry & King-Jones, 2014). According to Basher (2000, p. 126):

[...the] Minister for the Environment Simon Upton [...] demonstrated an excellent grip on the climate change issue, and [was] able to bridge the gulf between the scientific and technical arena on the one hand, and the societal and political concerns of the community and the Cabinet on the other. In public speeches he [could] equally well chide the head-in-the-sand attitudes prevalent in industry and the more rabid pronouncements of some environmental organisations. He [was] a strong supporter of scientific research and of the IPCC, recognising the critical need for a solid and expanding international scientific base for policy formation on climate change.

It would appear that the New Zealand state remained concerned with the climate change issue, even if the National Party Cabinet appeared ambivalent. Prime Minister Jim Bolger, with his allegiance to business and farming interests, was sceptical of environmentalism and apprehensive in enacting policy that could endanger New Zealand's fragile economic recovery (Basher, 2000, p. 129). Nevertheless, Upton's efforts to implement some form of climate change policy was not completely obstructed by his Cabinet colleagues, suggesting that the Government recognised, on some level, the threat of climate change as well as the value of an ameliorative

response. Meaningful policy activity also continued at the Ministry for the Environment, including advising policy-makers on the climate change threat, articulating and assessing mitigation options, and compiling the domestic greenhouse gas inventory. Lastly, the National Government invested in climate change research and emissions reduction sciences. In 1991, the National Science Strategy Committee for Climate Change was established to identify gaps and coordinate the climate research agenda. Significant public expenditure was devoted to climate change research, with annual funding increasing from \$14.1 million in 1993/1994 to \$16.4 million in 1996/1997 (MfE, 1994, p. 58; 1997, p. 102). This policy activity demonstrates the state's interest in climate change, even if certain powerful state managers were ambivalent to the phenomenon.

In the foreword to New Zealand's 1994 report to the UNFCCC, Simon Upton and Minister for Foreign Affairs and Trade Don McKinnon stated:

Climate change has emerged in recent times as an environmental issue, which could have dramatic and permanent impacts on the planet. Tackling climate change presents unique challenges, given our dependence on fossil fuels for economic activity and the need for governments to seek to maintain and improve the quality of life for present populations while taking account of the needs of future generations. (MfE, 1994, p. 5)

In acknowledging the social and economic hazard of climate change, the National Government executed its general maintenance function, developing a remedial policy response. This was duly done with the 1994 Comprehensive Strategy on Climate Change. The response included:

- voluntary CO<sub>2</sub> emissions reduction agreements (VAs) negotiated between the state and carbon-intensive industries (see Box 2);
- deregulation of New Zealand's energy sector to encourage energy efficiency and conservation (see Box 2);
- reform of the RMA, requiring local governments to consider CO<sub>2</sub> emissions during the resource consent process;

- a low-level carbon charge to be implemented by 1997 if emissions had not been reduced (MfE, 1994, 1997a).

Crucially, the policy package looked to achieve a majority (80%) of New Zealand's required emissions reductions through the enhancement of forestry sinks – an option that represented to the Government the lowest cost option for emissions abatement (Gillespie, 2000, p. 170). The Government did acknowledge, however, that the use of forestry sinks could not be a direct substitute for actual emissions reductions (Upton, 1994). Methane and nitrous oxide emissions, predominantly derived from agricultural sources, were not covered by the Strategy, effectively sheltering farmers from the cost of reducing their emissions (MfE, 1996, p. 35).

**Box 2: Voluntary agreements and energy reform measures**

The Comprehensive Strategy on Climate Change's Voluntary Agreement policy created non-binding agreements between the state and carbon-intensive firms to reduce emissions. Participating firms would be required to specify changes to productive practices, as well as the likely emissions savings achieved in relation to business as usual levels. Although reductions would be subject to independent government validation, the agreements would not be legally binding, and no penalties would be imposed for failure to abate emissions. Rather, the incentive for participation would be relief from the Comprehensive Strategy's proposed carbon charge, which would impose a direct price on carbon for private capital. The Government reasoned that a successful VA policy would ultimately remove the need for the carbon charge. Between 1996 and 1997, twenty-one voluntary agreements were signed. Negotiations focused on major industries and energy-intensive firms, which accounted for 40% of New Zealand's CO<sub>2</sub> emissions (MfE, 1997a, p. 50-1). The Government acknowledged the difficulty in assessing the success of the policy. It remained unclear if measures implemented by companies to reduce emissions would have occurred without the presence of the agreements. However, it was evident that firms deliberately set conservative targets that would only require minor and inconsequential abatement to achieve (MfE, 1994, 1997a).

The Strategy's energy sector reforms included the implementation of the Energy Efficiency Strategy and changes to the energy production and wholesale sector. The Government argued that a deregulated and more efficient energy sector would produce less greenhouse gases. Measures employed by the Energy Efficiency and Conservation Authority (EECA) were intended to promote greater energy efficiency throughout the industry and to further encourage the development of renewable sources of energy. The framework also removed traditional franchise areas and required energy companies to separate line and energy charges, as part of wider efforts to deregulate the sector. The Government also sought greater competition in the electricity generation industry, primarily through the separation of the state-owned enterprise the Electricity Corporation of New Zealand (ECNZ or Electricorp) into Transpower and Contact Energy. The corporatisation and privatisation of these entities, was again an attempt to introduce market forces into the energy sector, in the belief that such an endeavour would promote efficiency and renewable energy projects (MfE, 1994, 1997).

An argument could be made that the Comprehensive Strategy on Climate Change represented a fervent normative commitment to neoliberalism on behalf of the fourth National Government. According to Gillespie (2000, p. 169) the response adopted two fundamental precepts: 1) minimal intervention in the markets, and 2) "least" or "lowest" cost policy to society. The Government's definition of a least cost approach included:

[...] the broadest possible range of opportunities to reduce emissions across the full range of greenhouse gases; flexibility over where emission reductions occur through mechanisms such as international emission trading; and [...] flexibility over when emission reductions occur, including recognition of early action. (Upton, 1997e)

The instrumental structure of the least cost approach was framed as:

[...] a preference for measures estimated to be the most cost effective and to provide the greatest range of benefits regardless of whether or not climate change occurs; not

to reduce New Zealand's competitive advantage with its trading partners; and to have a net benefit for New Zealand society. (MfE, 1991, p. 27-28)

This least cost approach devolved mitigation control and responsibility to the private sector. The VAs, for instance, limited the Government's intervention in the productive sources of emissions. Through the VAs, the onus and control of developing methods of industrial emissions abatement was solely assumed by private firms. In turn, the VAs denied the New Zealand state control of emissions targets, production practices, and energy use practices. Similarly, the regulatory reform of the energy sector embodied neoliberal tenets of deregulation and privatisation, signalling the Government's intent for market forces, and not the state, to dictate emissions reductions. This neoliberal paradigm was deceptively simple: government over-regulation would impede an efficient free-market system. Business alone possessed the expertise to manage economic activity and regulate negative externalities like greenhouse gases.

National's climate change response was consistent with *market environmentalism* – a neoliberal approach to environmental management, whereby market forces and property rights are utilised as opposed to state regulation (Gleeson, 1996, p. 1911). According to Bakker (2010, p. 543):

[...] market environmentalism offers hope of a virtuous fusion of economic growth, efficiency, and environmental conservation. Through establishing private property rights, employing markets as allocation mechanisms, and incorporating environmental externalities through pricing, proponents of market environmentalism assert that environmental goods will be more efficiently allocated if treated as economic goods, thereby simultaneously addressing concerns over environmental degradation and inefficient use of resources. Markets will be deployed as the solution rather than being the cause of environmental problems.

At the core of market environmentalism is an assumption that the state's regulation of the environment is invariably ineffective and contrary to economic prosperity. Adherents to market environmentalism generally favour governance founded in the free markets and subject to neoclassical microeconomic principles. For that reason, market environmentalism adopts the

principles of privatisation, commercialisation, marketization, and commodification. It is argued that such an approach leads to more efficient and cost-effective environmental outcomes (Bailey, 2007, p. 531-534; Bakker, 2010, p. 543-546).

Gleeson (1996, p. 1911) argues that New Zealand's acceptance of market environmentalism was a direct outcome of the domestic neoliberal policy regime. The fourth National Government vociferously advocated for market environmentalism, as a "marriage of the market and nature" that would offer streamlined and liberalised management of New Zealand's natural environment. Indeed, the Government's own 1995 strategic environmental statement underscored the centrality of deregulated environmental governance, where the state "[would] not have direct control over environmental outcomes" (MfE, 1995, p. 10). It is reasonable to suggest then that market environmentalism guided the fourth National Government in its formulation of the Comprehensive Strategy on Climate Change. The remedial policies selected by the state accorded with the logic of neoliberalism and, in particular, the principles of minimal state interventionism and a least cost response.

While the Comprehensive Strategy on Climate Change conformed to market environmentalism, embodying the principles of deregulation, minimal state intervention, and the prioritisation of economic objectives, as general maintenance policy it was ineffectual (Richardson, 1998, p. 261-262). The VAs offered a weak inducement for firms to reduce emissions, while the energy reforms package rested on the spurious assumption that a deregulated energy market would be more carbon efficient (Beder, 2009). Compounding this ineptitude were the RMA provision and the low-level carbon change – neither of which were sufficiently employed. The RMA was used just once to regulate emissions (the 1994 Stratford Inquiry, see Box 3) with poor results, and the carbon charge was never implemented. This represented the fundamental problem with the Government's response strategy. The Comprehensive Strategy on Climate Change failed to either meaningfully incentivise or directly command private capital to reduce emissions or to conserve energy. For Gillespie (2000, p. 186):

The [fourth National] Government [did] little to ensure that greenhouse producing sources and gases [were] priced progressively, so as to internalise the environmental costs or encourage the development of cleaner resources.

[Market intervention was] not a pleasant option for government striving to deregulate many sectors of the economy. Any suggestions of imposing extra costs or burdens upon free markets [... were] overtly unpopular, and the government [went] to great lengths to avoid them.

Without consequential climate change policy, private capital persisted with its normal, polluting productive practices. By prioritising economic objectives (minimal interventionism and least cost policy), the response strategy sacrificed environmental integrity i.e. its capacity to effect emissions abatement. The failure of the Strategy to effect the decarbonisation of the economy was evident. Gross emission increased by 5% between 1990 and 1999, placing New Zealand as the fourth highest per-capita emitter of all developed countries (Peterson, 2001, p. 32).

### **Box 3: The Stratford Inquiry**

The RMA provision within the Comprehensive Strategy on Climate Change was used just once as a tool to regulate the domestic production of greenhouse gases (Gillespie, 2000, p. 170; Hamilton, 2000, p. 156-158; MfE, 1997a, p. 59-61, 1997b, p. 50). Under the RMA, the Minister of the Environment was empowered to review (or “call in”) resource consent applications of national significance. The Comprehensive Strategy extended this power to include the consideration of greenhouse gases as pollutants. In 1993, the Electricity Corporation of New Zealand applied for resource consent to build a 400-megawatt gas-fired power station in Stratford, Taranaki. Simon Upton used the RMA to call in the consent application, establishing a review board to advise on the proposal. The call in option was justified on the basis that the proposed power station would potentially increase New Zealand’s emissions by 5% or 1.5 million tonnes of CO<sub>2</sub> per annum. Although the Board of inquiry found that construction of the plant would make it more difficult for New Zealand to meet its UNFCCC commitments, it ultimately advised the Government to allow resource consent, if the Electricity Corporation was able to offset the emissions generated by the station. A sink, sufficiently large enough to absorb the station’s emissions, would have needed to cover 3500 hectares of newly planted forests.

In 1995, Simon Upton accepted the Board's recommendations, although some of the offsetting conditions were relaxed. This decision had significant implications for the NZ CCP. The use of forestry sinks to sequester and thus offset emissions, what is commonly referred to as the "net approach", was now seen as a legitimate response strategy. However, in 2001 it was revealed that the Electricity Corporation had failed to plant a single tree as per the terms of the resource consent. In almost every respect, the RMA failed as a regulatory mechanism to control emissions. Because the review process was subject to political interference (including from the Ministry of Commerce and Treasury), the limitations imposed on the Electricity Corporation of New Zealand and the Stratford power station were meagre.

To conclude, the formulation of the Comprehensive Strategy on Climate Change was markedly informed by the ideological disposition of the state elite – represented by the fourth National Cabinet and its adherence to neoliberal, market environmentalism. At this point, it will be useful to identify some of the main structural drivers of climate change governance – although the constraining effect of the capitalist rationality will be discussed in greater detail later in the chapter. Firstly, the general maintenance function impelled the Government's perpetuation of the NZ CCP. Secondly, the exclusionary imperative would have removed non-capitalist measures from the policy agenda. In the end though, National's ineffectual response *did not* significantly infringe on either the exclusionary or the dependency constraints. As the measures selected were substantively non-interventionist, the New Zealand state did not appropriate economic power. In addition, the policies were so benign and inoffensive to private capital (i.e. pro-business and least cost) that they did not alienate private capital and foment meaningful opposition.

### **1995-1999: stagnation of the NZ CCP**

Post the development of the Comprehensive Strategy on Climate Change, the Government failed to effect significant policy change. In 1996, a committee of government and private sector actors

were appointed to review the NZ CCP. The newly formed Working Group on CO<sub>2</sub> Policy found that market-based, economic instruments offered the lowest cost means to reduce emissions and promote carbon sequestration. A capped, tradeable carbon certificate scheme (emissions trading) was identified as the best option to effect the kind of market-driven emissions reduction desired by the Government (MfE, 1996, p. 17). For the Working Group, the superiority of a certificate scheme over a carbon charge was abundantly clear, in that it:

[...] enables the price of carbon to be set by the markets, and adjust smoothly to supply and demand, with reduced need for (and risks of) political intervention. It allows businesses to privatize their risks [...]. A certificate system which features a cap in the form of a carbon charge set by the government with the option for business to either pay the charge or purchase the certificates, means that the total cost of the scheme to the economy remains under control. (MfE, 1996, p. 16)

The review argued that traditional state intervention – including command and control regulation, incentive payments, subsidies, or penalties – would unintendedly distort normal market activity. The RMA was also dismissed as an instrument to control and mitigate emissions, owing to regional inconsistencies in the legislation's interpretation. The deficiency of the RMA justified, in the estimations of the Working Group, the implementation of a centralised emissions trading scheme as the founding instrument of the NZ CCP (MfE, 1996, p. 15).

Despite continued increases in domestic emissions (MfE, 1997a, p. 35-36) the Government deferred implementation of the Comprehensive Strategy's low-level carbon charge (Peterson, 2001, p. 17; Upton, 1997a, 1999). The carbon charge was never explicitly abandoned. Rather, it was allowed to recede from the policy agenda through a process of postponements. The Government reasoned that instability within the international governance framework justified the charge's delayed implementation. Furthermore, the Working Group on CO<sub>2</sub> Policy's support for an alternative emissions trading scheme (MfE, 1996, p. 15-17), afforded the Government political cover in not implementing the charge.

It is also conceivable that the Government's neoliberal disposition – its antipathy for demonstrable state interventionism and its intent to formulate least cost climate change policy – contributed to the eventual abandonment of the low-level carbon charge. As suggested earlier in this chapter, the Government was intent on maintaining the laissez faire regulatory conditions in which market forces, and not the state, would determine the extent and nature of emissions reductions. Arguably, the proposed carbon charge was inconsistent with this broader pattern of macro-economic governance, in addition to the core neoliberal tenets expounded within the Comprehensive Strategy on Climate Change. Considering the various powers and responsibilities that the carbon charge would vest with the state, the instrument's fundamental incongruence with the predominant mode of climate change governance is apparent. These non-capitalist powers and responsibilities of a carbon charge would include:

- the imposition of an external cost on private capital vis-à-vis a price on emissions. The proposed rate for the tax was \$10 per tonne of carbon, although a \$100 rate was also mooted (New Zealand Treasury, 1997, p. 14);
- the setting of enforceable emissions targets and standards by the state;
- monitoring of the productive sources of emissions by the state;
- the state's authority to impose penalties for non-compliance and fraud;
- the collection of revenue from the carbon charge and the discretionary right to spend the revenue held by the state.

As the carbon charge was so contrary to the prevailing pattern of minimal state interventionism and least cost policy, the decision for its *non-implementation* reaffirmed the Government's neoliberal approach to climate change governance. The carbon charge was an anomaly within the Comprehensive Strategy on Climate Change, one that was gradually abandoned through a drawn out process of deferral.

It is reasonable to ask why a carbon charge was even proposed in the first place, if it so obviously conflicted with the established pattern of policy change. There appear two possible explanations. First, there is a tendency within government to set ambitious policies and objectives (such as a carbon charge), but to delay their implementation well into the future. This would give the Comprehensive Strategy on Climate Change the appearance of ambition, comprehensiveness, and responsibility, without the immediate political difficulties that come with adhering to those qualities. The state can then appear to conform to the preponderance of policy advice supporting the carbon charge. As the implementation date drew closer, the government could fabricate any excuse to rationalise delaying the measure. This might also suggest that the inclusion of the carbon charge within the Comprehensive Strategy was ideological. While a carbon charge might provide the response with the appearance of environmental integrity, it would actually obscure the Strategy's general ineffectualness. Second, it was possible that the Government really had no intention of proceeding with the carbon charge at all, and instead used the proposed instrument as a threat to encourage participation in the Comprehensive Strategy's VA policy. Considering that the VAs explicitly offered relief from the planned carbon charge, it would seem likely that the charge was the stick used to ensure compliance from carbon-intensive firms. This threat proved to be reasonably effective in encouraging firms to undertake VAs, as twenty-one agreements were reached between private capital and the Government (MfE, 1997a, p. 51).

As the Government's commitment to the carbon charge waned, the stock of emissions trading gradually began to rise. This renewed preference for emissions trading was evident at the 1997 Kyoto Conference of Parties – the UNFCCC conference where the Kyoto Protocol was developed. New Zealand's negotiating team explicitly advocated for the incorporation of cap and trade provisions within the Kyoto Protocol framework (Upton, 1997b, 1997c, 1997d). It was argued that an equitable and sustainable international governance framework should recognise the differing capacities and adjustment costs of nations reducing emissions, and equalise the costs of abatement across the global economy. A country like New Zealand, with high marginal abatement costs, would require a flexible policy response, which would allow actors to pursue

lowest cost abatement opportunities. Cap and trade was argued as the optimal policy to achieve these objectives. Simon Upton (1997d) stated:

[...] New Zealand's advocacy of tradeable emission permits does not involve worship at some obscure intellectual shrine. It stems from a vital appreciation that, since we face one of the highest marginal abatement costs in the world, least cost mechanisms are vital if we are to participate.

[...] only a market mechanism will provide the incentives to seek out the as-yet-unknown emission reduction technologies and alternative energy sources that provide the only real hope of a solution.

It was New Zealand's position that its participation in the collective effort to control greenhouse gases was contingent on the implementation of such an international cap and trade system:

Tradeable emission permits are, in our view, vital to any real progress under the Protocol. Until we know whether the rules on trading are sensible ones, we won't be signing up to a more ambitious target. (Upton, 1997b)

Following Kyoto, it appeared that the NZ CCP would inexorably move to a system of emissions trading. Indeed, much of the post-Kyoto activity was in anticipation of an emissions trading scheme (MfE, 1999; Peterson, 2001; Upton, 1998b). In spite of the advice from the Working Group on CO<sub>2</sub> Policy, as well as the post-Kyoto momentum gained for an international emissions trading system, the Government allowed the NZ CCP to stagnate. The period between 1995 and 1999 was marked by inactivity, where the Government failed to realise any meaningful instruments to control domestic emissions – including the implementation of a suitable cap and trade policy. It would seem that the turbulent political environment<sup>15</sup> of the late 1990s pushed climate change from the policy agenda. Considering that environmentalism was already a low-

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<sup>15</sup> In 1997, Prime Minister Jim Bolger was ousted by Jenny Shipley in a contentious leadership battle, while in 1998 the National-New Zealand First Coalition Government effectively disintegrated when Deputy Prime Minister Winston Peters was fired from Cabinet (James, 2015, p. 219; Joiner, 2015, p. 254-255). This would certainly constitute the "distracted environment" observed by Simon Upton.

priority within the National Cabinet, the general state of political turmoil would have undermined the perceived importance of climate change. Simon Upton described the governing conditions of the time, as they related to climate change policy, as a “distracted environment” and that:

[Climate change] simply got pushed to one side. No one had a stomach for getting into something like that, when they were much more focussed on how on earth are we going to survive the next election? (Barry & King-Jones, 2014)

### **The Kyoto Protocol and the formalisation of New Zealand’s “net approach”**

In the aftermath of the UNFCCC, there was a general expectation that additional multilateral agreements would be needed to create a functioning governance framework. A systematic review of the UNFCCC was undertaken at the United Nations Conference of Parties 1 and 2, identifying the need for concrete greenhouse gas reduction objectives, and the provision for emissions targets beyond 2000. At the Berlin Conference of Parties (COP 1), participants agreed to the Berlin Mandate, which recognised the necessity of emissions reductions objectives, applied over a designated period. Parties to the Berlin Mandate also agreed that a draft of the governance framework would need to be adopted by the Kyoto Conference of Parties (COP 3) in 1997. However, negotiations at Kyoto were fraught, with considerable disagreement amongst states regarding key provisions within the draft Protocol. This combined with the rushed and largely shambolic negotiation process, raised questions around the quality of the Kyoto Protocol, and in particular the extent to which the Protocol ultimately conformed to the progressive principles originally enumerated by the UNFCCC (Richardson, 1998). Despite this, New Zealand still signed the Kyoto Protocol in May 1998 (Upton, 1998a).

The Kyoto Protocol’s core provision was a formal obligation for developed nations to reduce greenhouse gas emissions. Under the Protocol, wealthier, developed countries were permitted to generate a fixed quantity of greenhouse gases within a defined commitment period. They

would then be obligated to limit or cut emissions produced in excess of the assigned amount. This obligation would require the enactment of significant mitigation policies – although individual nations would be freely able to design climate change policy in accordance with their own economic and political circumstances. Conversely, developing nations were exempt from the obligation to reduce emissions, although were still required to monitor their own emissions (MfE, 2016a; Richardson, 1998; United Nations, 2016b).

New Zealand, as a signatory to the Protocol and an Annex I nation, accepted the obligation to reduce emissions to 1990 levels during the first commitment period (CP1, occurring between 2008 and 2012) (Chapman & Gray, 1998; NZ signs greenhouse gas protocol at UN, 1997; NZ to cut gas emissions by 8pc under Kyoto deal, 1997). Interestingly, the Government delayed ratification until details of the agreement could be clarified at later Conferences of Parties. Simon Upton (1998a) justified the Government's non-ratification, stating:

[...] whether New Zealand ratifies the Protocol depends largely on a satisfactory international emissions trading regime being put in place. Trading will allow countries to achieve their emission reductions at least cost.

Unless we use the most cost effective means for dealing with environmental problems, the Protocol simply won't survive long term. That won't help the environment.

Kyoto established a binding obligation for New Zealand to reduce domestic emissions to their 1990 levels (pending ratification of course). This obligation necessitated a renewed effort for domestic policy-makers to develop a meaningful policy response. Failure to reinvigorate the NZ CCP and reduce emissions would risk the potential penalties now in place under the Kyoto Protocol.

During negotiations, New Zealand (alongside its JUSCANZ allies) was able to extract concessions in the design of the Kyoto Protocol. Earlier, at the Berlin Conference, New Zealand had flexed its muscle, helping to nix a global goal of an immediate 20% reduction in CO<sub>2</sub> emissions (Gillespie,

1997, p. 49). The Government argued that a uniform global emissions target, as advocated for by the European Union, would be counter-productive. Rather, it was important for the Kyoto Protocol to develop flexible emissions reduction mechanisms, which would assist the greater number of nations in meeting their own individual commitments and targets. New Zealand also advocated for the inclusion of forestry sinks in the Kyoto Protocol, as well as the progressive inclusion of developing nations within the binding emissions reduction commitment (Upton, 1997c, 1997d).

The inclusion of forestry sinks was particularly significant, as it helped formalise New Zealand's emissions reductions measurements in net terms – the net approach. An initial preference for the net approach was established within the Comprehensive Strategy on Climate Change, which relied on afforestation to effect greenhouse gas abatement. The Working Group on CO<sub>2</sub> Policy reaffirmed the net approach, arguing for its consistency with the UNFCCC and validity as a measure of emissions reduction (MfE, 1996, p. 15-16). The net calculation includes the sequestration effect of carbon offsets, such as forestry sinks and other forms of land use change, to determine national levels of emissions. This is contrasted with the gross calculation, which looks at the total quantity of emissions produced by a country. Because New Zealand possesses an abundance of natural and commercial forests, the domestic net measure of greenhouse gases is invariably lower than the gross measure. This was evidenced by New Zealand's decreasing net emissions and increasing gross emissions during the 1990s (MfE, 2002, p. 37; Richardson, 1998, p. 53).

However, the net approach has been criticised for allowing countries with large forestry resources to meet emissions targets without actually reducing greenhouse gases (Parr, 2000, p. 57-59; Richardson, 1998, p. 261-262). An over-reliance on sinks provides a disincentive for difficult yet essential economic and production transformations needed to reduce emissions. As the net approach is less costly to achieve than gross reductions (planting forests is inexpensive

compared to reorganising the economy through greater energy efficiency and a price on carbon), both state managers and private capital will choose the easier net option. The Government countered this disapproval, claiming that the net approach was a legitimate method of measuring levels of emissions. Firstly, sinks and sequestration were recognised by the UNFCCC. Secondly, for all intents and purposes, one tonne of carbon terrestrially stored equated to one less tonne emitted. Policies that result in afforestation lead to an overall reduction in atmospheric greenhouse gases and thus constitute negative emissions (Bertram & Terry, 2010; Upton, 1997c).

In the end though, the net approach provides New Zealand with a significantly more attainable emissions target than the gross measure ever would. An easier Kyoto obligation, in turn, fundamentally lowers New Zealand's cost of complying with the treaty. On this basis, environmental actors condemned New Zealand's position on Kyoto, describing it as cynical and self-serving (Bertram and Terry, 2010; Gillespie, 1997, 1998, 2000; Hamilton, 2000; Parr, 2000). Serious questions were also raised surrounding the environmental integrity of the net approach. Both Greenpeace and the Royal Society queried the science in relation to net vs gross emissions reductions:

More generally the claim [...] that 'a molecule of CO<sub>2</sub> absorbed by a tree is equal to a molecule [...] not emitted in the first place' is too simplistic and would be roundly criticised by overseas scientists. This equation is only valid if one can guarantee that the carbon stored by afforestation will remain locked out of the atmosphere for geological timescales [...] There does not appear to be any scientific basis by which the integrity of forests as carbon stores can be guaranteed for centuries. (Royal Society of New Zealand in Hamilton, 2000, p. 159)

Gillespie (1998, p. 236) suggests that the net approach is "misguided" in that, as a mechanism of emissions reductions, it is fundamentally "predicated upon scientific uncertainty". Methodological problems undermined the net approach, particularly differing interpretations amongst Kyoto signatories about what precisely constituted a sink, and the amount of carbon

sinks actually remove from the atmosphere. For Gillespie (1998, p. 248), Simon Upton's stance, that the Kyoto negotiations were ultimately a success for New Zealand, was dubious:

[...] New Zealand is a country with the fourth largest per capita greenhouse gas emissions in the world, which may now be set to obtain a net financial benefit from the processes, which are scientifically uncertain, and make no further reductions than initially promised in 1992. Whether this is really successful given the multitude of uncertainties, quagmires and political traps it has created in the face of what may be the foremost environmental threat for humanity in the third millennia is open to question.

Lastly, when commercial forestry sinks are eventually harvested they become a net source of greenhouse pollution. The Ministry for the Environment has acknowledged that by 2020 much of the carbon stored in New Zealand's forestry sinks during the 1990s and 2000s will be returned to the atmosphere (MfE, 2013b, p. 100). Arguably, the net measure obscures the impermanence of the sequestering effects of forestry sinks.

### **Organised opposition to the NZ CCP, 1990-1999**

Scholarly analysis of the early NZ CCP has tended to attribute significant influence to private capital in effecting the pattern of policy change (Barry & King-Jones, 2014; Bertram and Terry, 2010; Bullock, 2012; Hamilton, 2000). That is to say, New Zealand's established corporate lobby significantly shaped the NZ CCP in the 1990s, ensuring the passage of pro-business measures that accorded with their subjective policy preferences. I would suggest that this analysis perhaps overstates corporate influence during this particular stage of the response, and fails to recognise the autonomy of the state in directing the early NZ CCP. Certainly private capital became far more involved in the policy debate and lobbied hard against the state's intervention in the productive sources of emissions. However, their power and influence was nominal at best.

Well into the 1990s, the domestic policy community remained technocratic and dominated by state managers. Consequently, policy change was directed by state managers and institutions: the National Party Cabinet (predominantly Simon Upton), with Ministries of the Environment, Commerce, Foreign Affairs and Trade, and Treasury, providing policy advice and analysis. Cabinet, in the fourth National Government, wielded substantial power with respect to climate change governance. Its neoliberal disposition (particularly during the early years of the fourth National Government) proved an irresistible force shaping the NZ CCP.

Although policy development was still primarily situated in the Ministry for the Environment, other government departments began to play a greater role in the design of the NZ CCP. Both Commerce and Treasury<sup>16</sup> appeared to support National's neoliberal agenda and its minimal interventionist and least cost approach to climate change policy. Firstly, the deregulation of New Zealand's energy sector – a cornerstone of the Comprehensive Strategy's attempt to induce energy efficiency and conservation – was managed by Treasury and Commerce, with both institutions "singularly focussed on economic efficiency" over environmental outcomes (Hamilton, 2000, p. 151). Under the direction of Treasury, the restructuring of New Zealand's energy generation and retail services became more about establishing competitive markets and state-corporatisation than actual emissions reductions. Secondly, both Treasury and Commerce openly opposed the call-in option for the 1995 Stratford Inquiry, preferring instead to believe Electricorp's claim that CO<sub>2</sub> emissions would not increase before 2000, and that New Zealand's achievement of its UNFCCC target would not be jeopardised by the plant's construction (Hamilton, 2000, p. 157). Thirdly, the costing analysis for New Zealand's UNFCCC commitment and the Comprehensive Strategy on Climate Change was undertaken by Treasury and Commerce. Hamilton argues that economic costs were substantially exaggerated or even misrepresented by these institutions, in an attempt to colour Cabinet's perception of the cost of emissions

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<sup>16</sup> New Zealand's Treasury has long been a proponent of economic liberalism and minimal state interventionism. Goldfinch (1997) and Roper (2005) provide excellent analyses of Treasury's influence within New Zealand politics. Essentially Treasury, as the central institution within the state apparatus is able to propagate new right economic theory, and shape much of the state's policy activity.

reductions. Fourthly, the design of the proposed carbon charge was handled by Treasury. In articulating design principles for the carbon charge, Treasury emphasised those features (low-level and uniform coverage across the economy) that would increase the instrument's economic efficiency, while decreasing its overall costs (New Zealand Treasury, 1997, p. 6). Little actual consideration was given to designing a tax that would achieve significant emissions reductions.

The dominance of state managers within the early policy community speaks to the relative autonomy of the state from private capital. Autonomy allowed the Government to direct the NZ CCP, despite growing interest from business and industry. The very perpetuation of New Zealand's climate change response remains the best evidence of the state's independence from the power elite. New Zealand's corporate lobby (the political representation of private capital) implacably rejected state interventionism, including the Comprehensive Strategy's low-level carbon charge and the emissions trading option mooted by the Working Group on CO<sub>2</sub> Policy and the 1999 *Climate Change Policy* discussion document (Barry & King-Jones, 2014; Bertram & Terry, 2008). In reality, there was considerable dissonance between the state and private capital, with respect to the scope and methods of appropriate policy intervention.

The corporate and industrial lobby advocated for New Zealand's withdrawal from Kyoto negotiations. Both Federated Farmers (2001a, 2001b, 2001c) and the Greenhouse Policy Coalition (2001) (see Box 4) were particularly vocal in their criticism of Kyoto, and the perceived economic impacts of the treaty. Conversely, the Government faulted corporate interests for engaging in overtly ideological advocacy. Simon Upton admonished the Business Round Table for using climate change sceptics to influence the policy debate:

Flying in hand-picked scientists whose conclusions - however respectable - happen to confirm the interests or prejudices of its members, rather than any dispassionate concern with the truth of the matter, strikes at the heart of the scientific ethic.

If the Round Table were to broaden its list of invitees to those who have drawn contrary conclusions it could perhaps salvage its reputation. But its role to date has, in my view, been more akin to the sort of sectional lobbying that it has in economic matters rightly criticised. (Ward, 1996)

Even a cursory glance at the fourth National's NZ CCP reveals crucial moments where the Government did not meet the immediate interests and demands of business and industry. The Government did pursue a climate change response; it did participate in the Kyoto negotiations. This would suggest a complex structural relationship between the state and private capital, which defies crude instrumentalist notions of the state. There is little evidence to suggest that private capital exerted significant political, economic, or ideological pressure, to the extent where it could effect policy change – certainly in comparison to latter stages of the NZ CCP.

#### **Box 4: The Greenhouse Policy Coalition**

The Greenhouse Policy Coalition (GPC) was formed in 1996 to represent carbon and energy-intensive firms and coordinate lobbying efforts against the proposed carbon charge and the Kyoto Protocol (New coalition forms to fight greenhouse tax, 1996). Members included: Carter Holt Harvey, Comalco, Business New Zealand, Norske Skog Tasman, Pan Pacific Forest Products, the Coal Association of New Zealand, New Zealand Aluminium Smelters, Fletcher Building, Fonterra, Holcim, New Zealand Steel Solid Energy New Zealand, and Winstone Pulp International (Greenhouse Policy Coalition, 2005).

Although the GPC accepted the reality of anthropogenic climate change, it emphasised the phenomenon's remaining scientific uncertainties. The GPC advocated for circumspection in developing a national policy response. The organisation also asserted that its constituent members (business and industry) should play a guiding role in the policy debate, ensuring the formulation of fiscally sound policy, conducive with economic growth:

As major contributors to New Zealand's economy and major industrials affected by climate change policies, GPC members have a critical role in assisting with policy development and implementing the appropriate policies and measures designed to mitigate or reduce greenhouse gas emissions (Greenhouse Policy Coalition, 2007a).

The GPC justified their central role within the policy debate by pointing to the economic significance of their members, who were collectively responsible for 14% of New Zealand's GDP and employed over 100,000 people (Greenhouse Policy Coalition, 2007b).

The GPC were particularly sensitive to potential competitive disadvantages occurring from an imposed price on carbon. The prospect of *carbon leakage*, where domestic production moves overseas in response to the state's regulations of emissions, was considered by the Coalition as a likely consequence of a price on carbon. The GPC dismissed carbon taxation, fearing that carbon-intensive industries would be displaced to competing nations – specifically to those countries with economies not fettered with a similar price on carbon. Under this carbon leakage scenario, a carbon tax would hurt New Zealand both economically and environmentally. First, wealth produced by carbon-intensive firms is lost overseas. Second, the actual quantity of emissions produced remains the same – just now in different country. Carbon leakage justified, in the estimation of the GPC, a supremely guarded approach to climate change policy, developed at a similar pace with the efforts of New Zealand's major trading partners.

It could be argued that those instances of policy change, where the interests of the state and private capital appeared to align (particularly the non-implementation of the 1997 low-level carbon charge), were more likely an objective coincidence, occurring from the ideological similarity of the two political blocs. As suggested earlier in this chapter, the minimal interventionist and least cost NZ CCP was entirely consistent with the fourth National Government's approach to climate change governance – and not necessarily the function of a powerful corporate and industrial lobby bending the state to its will. The National Cabinet would have likely arrived at the same Comprehensive Strategy on Climate Change with or without the lobbying efforts of business and industry, as it was predisposed to neoliberalism and market environmentalism. The decision to abandon the carbon charge was entirely consistent with the Government's preference for minimal interventionist and least cost policy. If the Business Roundtable, Federated Farmers, or the GPC had been able to effectively realise their stated policy objectives and significantly influence the Government, then the likelihood of implementing an even ineffectual policy response (as was the case) would have been remote. Private capital,

within this period, unreservedly opposed any remedial climate change policy. Indeed, a sizable portion doubted the very existence of climate change and the need for an ameliorative response (Barry & King-Jones, 2014). Fidelity, on the behalf of the state to those subjective capitalist interests would have likely resulted in no Climate Change Programme or perhaps an even more ineffectual version.

However, this objective coincidence between the state and private capital vis-à-vis aspects of the Comprehensive Strategy on Climate Change might begin to explain the lack of outright hostility and opposition that characterised the latter stages of the climate change debate. If we consider the measures enumerated within the Comprehensive Strategy, all were minimally interventionist and insignificantly costly to business and industry. We can therefore say that these policies were compatible with the exclusionary imperative (the systemic separation of the state and the economy) and the dependency constraint (the state's dependency on private capital to maintain economic growth). The VAs, the only instrument that provided some kind of intervention in the productive sources of emissions, functioned purely as a benign inducement for the decarbonisation of production. Crucially, the VAs did not attempt to command New Zealand business and industry to modify productive practices and substantially abate emissions. The agreements were non-binding, offering a facile incentive for firms to undertake mitigation. Mitigation authority was left entirely with the owners of New Zealand's productive assets, with the state forced into a reduced oversight role. On top of this, the Comprehensive Strategy's carbon charge was never implemented, while the RMA was utilised just once. This iteration of NZ CCP failed to expose private capital, the owners of the productive sources of emissions, to a meaningful price on carbon. Business and industry were not burdened with the onerous costs of mitigating their greenhouse gas pollution – something that would have negatively affected the accumulation of capital.

As the Comprehensive Strategy on Climate Change was not in violation of either the exclusionary imperative or the dependence constraint, its passage did not foment the kind of strenuous

opposition from business and industry sufficient for the state to reconsider or reverse the response strategy. While private capital protested National's climate change response (in advocacy of their short-term, profit maximising interests), the state's intervention was ultimately so inconsequential that there was no meaningful incentive to openly and forcefully resist its implementation. Considering the extent to which the response favoured business and industry, the lack of substantive political, economic, and ideological conflict is unsurprising. If private capital truly possesses a structural right of veto over the implementation of non-capitalist policies, then, at no point, would National's insignificant response have triggered this systemic entitlement.

### **The limited role of private capital and the environmental movement, 1990-1999**

If private capital were largely external to the policy community, the question then turns to their actual role and extent of influence within the early policy debate. Although their influence was limited, the increased level of corporate and industrial engagement within the policy debate was not. As climate change became an issue of national consequence, New Zealand's corporate lobby refocused on the expected implications of the state regulation of greenhouse gases. As previously indicated, private capital opposed climate change policy that afforded the state control over the productive sources of emissions, or that potentially undermined the private accumulation of capital. Groups like the Business Round Table, Federated Farmers, the Coal Association of New Zealand, Electricorp, Comalco, Carter Holt Harvey, the Cement and Concrete Association, Holcim, BHP NZ Steel, the Coal Corporation, the Employers Federation, the Major Electricity Users Group, the Natural Resource Users Group, the GPC, and the Petroleum Exploration Association, lobbied for a minimal response (New coalition forms to fight greenhouse tax, 1996; Underhill, 1994). These groups rejected the 1994 policy package, further climate change policies (such as an emissions trading scheme), and New Zealand's commitment to the Kyoto Protocol (Barry & King-Jones, 2014; Bertram & Terry, 2010: 48).

Although the corporate lobby was unsuccessful in blocking the Comprehensive Strategy on Climate Change or the Kyoto Protocol, organised opposition to the NZ CCP was established during this period. By the time that the fifth Labour Government (1999-2008) developed their iteration of the NZ CCP, a well-organised corporate lobby opposing interventionist policies was ensconced in New Zealand's political environment. Through organisations like the GPC, private capital articulated its oppositional discourse to interventionist climate change policy. Grounded in the same new right economic assumptions as the fourth National Government, the discourse would become a powerful ideological tool for business and industry. The crux of this discourse was concisely stated by the Electricity Corporation of New Zealand:

New Zealand should adopt a climate change policy consistent with other countries but only to the point of accepting an equitable burden of costs. The nature of global warming demands a coordinated global response. Costly unilateral actions should not be part of New Zealand's climate change response. (MfE, 1997c, p. 53)

It also appears that New Zealand's corporate lobby was linked to the American climate change countermovement – the collective effort by U.S. corporate interests to resist climate change policy and to de-legitimise the climate change scientific thesis. This movement, composed of major corporations and industries, conservative think tanks, right-wing politicians, business lobby groups, and the small number of sceptical climate change scientists, challenged the legitimacy of the climate change thesis, and undermined efforts to develop ameliorative policy (McCright & Dunlap, 2000, 2003). The Business Round Table invited prominent U.S. sceptics to New Zealand, including Fred Singer, Richard Lindzen, Patrick Michaels, and Robert Balling, to discredit climate change science and, in turn, the need for climate change policy. Singer et al reiterated the Business Round Table's view that the mitigation of greenhouse gases was both unnecessary and prohibitively expensive. All five sceptics were the recipients of funding from major American carbon-intensive companies. The New Zealand seminars were organised by the Australian libertarian think tank, the *Centre for Independent Studies* – whose links with the American climate change denial lobby were well-documented (Drent, 1996; Sinclair, 1996; Taylor, 1995). A small

number of New Zealand scientists agreed with the American sceptics – most notably the University of Auckland’s Dr Chris de Freitas, who argued that the economic cost of New Zealand complying with the Kyoto Protocol would be too great, in light of the uncertain existence of the climate change phenomenon (de Freitas, 1998a, 1998b).

For New Zealand’s environmental interests, opposition to National’s response strategy qualitatively differed from that posed by private capital. The Comprehensive Strategy was seen as being ineffectual – providing no means to control and reduce the domestic production of greenhouse gases. Furthermore, New Zealand’s myopic negotiation strategy at the 1997 Kyoto Conference was regarded as having impeded the development of an effective international governance framework (Hamilton, 2000, p. 144; MfE, 1997c). According to Greenpeace’s Kirsty Hamilton (2000, p. 162):

The background to New Zealand’s current [1990s] policy position reflects a major missed opportunity: to mobilise a public that was concerned about the environment and that supported solutions to rising energy-related CO<sub>2</sub> emissions. [...]

The government constrained itself by fixating on a theoretically pure ‘market’ approach. As such, it failed to address the larger question of where New Zealand was going to position itself in a world increasingly taking climate change seriously.

Prominent environmental groups held that the Government, in the formulation of its response strategy, was simply serving the interests of big business and industry.

### **The shift to a binary policy agenda**

To what extent was the 1990s pattern of policy change informed by the state’s capitalist rationality? I would submit that external and objective structural constraints were significant in determining the range of policy options available for implementation within the early NZ CCP.

The instrumental effect of this mechanism of economic determinism was the creation of a *binary policy agenda*, whereby carbon taxes and cap and trade systems (economic instruments) came to be the only conceivable policy options available for the NZ CCP. Command and control regulation, perceived as being non-capitalist and anti-growth, was largely removed from the policy agenda. This constraining process would have occurred alongside the ideological framing undertaken by the National Government and the state-dominated policy community.

The omission of command and control regulations from the early policy debate is telling. At no point was regulation seen as a legitimate option available for policy-makers. Firstly, the modest authority granted under the RMA to regulate emissions was essentially made redundant by the prevailing mode of minimal interventionist and least cost climate change governance. The National Government intentionally marginalised the RMA, despite it being a core provision of the Comprehensive Strategy on Climate Change. The failure of the Stratford power station “call in” option demonstrated the Government’s effective unwillingness to utilise the RMA to control emissions. Second, the *Environment 2010 Strategy* (1995), the *Working Group on CO<sub>2</sub> Policy* (1996), and the *Climate Change: domestic policy option statement* (1999) emphatically dismissed the use of regulation to control domestic emissions, describing it as burdensome, punitive, and an anathema to economic growth. These documents begin to reveal the state’s aversion to command and control regulation.

Considering that both the Working Group and the Ministry for the Environment were supposedly autonomous institutional actors, divorced from the kinds of political and ideological pressures facing representative government bodies, and tasked with providing objective policy advice, how can this adamant rejection of command and control regulation be explained? Were these actors and the fourth National Government responding to the systemic imperatives that render command and control regulation inappropriate and incongruous? Certainly, regulation would appear to be incompatible with the exclusionary imperative, as it would constitute the state establishing inviolable restrictions on capitalist production as a means to reduce greenhouse gas

emissions. The RMA and other potential forms of state regulation utilise a command mechanism, whereby the power of the state compels private firms to undertake cleaner productive practices or emissions abatement. This type of command policy is plainly in violation of the exclusionary imperative.

On the other hand, a price on carbon, whether by means of a carbon tax or an emissions trading system, is broadly consistent with the exclusionary imperative. A price on carbon functions as a financial inducement for capital to alter carbon-intensive production and adopt cleaner practices. When confronted with an economic incentive, business and industry will pursue least cost abatement opportunities, as a means to reduce the financial burden of a price on carbon. Crucially, the methods of abatement are left entirely to the discretion of business and industry. Interestingly though, economic instruments actually possess a command component. The price on carbon is imposed by the state, with business and industry ordered to account for emissions by either purchasing offsetting units or paying the carbon tax. It is therefore arguable that, to some degree, economic instruments also violate the exclusionary imperative. The representatives of private capital certainly contended that a levied price on carbon was tantamount to a state intrusion on economic decision-making. It is, however, still reasonable to suggest that economic instruments are a *lesser* form of state intervention than say regulation. The National Government's choice of a price mechanism (the low-level carbon charge and latter emissions trading) over a command mechanism, spoke to the desired scope of intervention in New Zealand's productive arrangements. The Government expressly limited its intervention by pursuing economic instruments. Moreover, much of the latter 1990s policy activity was premised on an eventual domestic emissions trading system. It was an option endorsed by the Working Group on CO<sub>2</sub> Policy, and it was a core demand made by New Zealand during the Kyoto Protocol negotiations.

This initial preference for economic instruments over command and control regulation could be attributed to the state's adherence to the exclusionary imperative. State managers, wary of

alienating private capital through highly interventionist regulation, and thoroughly inculcated in orthodox macroeconomic theory and technocratic policy analysis, would have been sensitive to the exclusionary imperative. The following chapters will analyse the influence of the binary policy agenda on the latter stages of the NZ CCP. Its impact on policy change was particularly significant with respect to the fifth Labour Government's proposed carbon tax and the NZ ETS. However, the primary driver of policy change during this period of the NZ CCP was undoubtedly the ideological disposition of state managers – traditionally a secondary constraint within Marxian systems-analysis. I would suggest that because climate change remained a relatively minor issue within the New Zealand polity in the 1990s, it failed to engender a meaningful political response. This general obscurity facilitated the National Government in implementing trivial policies without provoking meaningful political challenge. The substantively ideological and non-interventionist policies of the Comprehensive Strategy on Climate Change never came close to encroaching on either the exclusionary imperative or dependency constraint – and thus was not overtly shaped or affected by these constraints. Other than contributing to the emergent binary policy agenda, the NZ CCP under the fourth National Government was substantially informed by ideology. This changed in the following period of the response, when the more meaningful climate change policy enacted by the fifth Labour Government directly and patently contravened both the exclusionary and dependency structures.

## **Conclusion**

The efforts of the fourth National Government to reformulate the NZ CCP in accordance with market environmentalism profoundly affected New Zealand's social response to climate change. Throughout this period, regulation was dismissed as cumbersome, expensive, and antithetical to a productive economy – an untenable method of reducing New Zealand's emissions. Market-based economic instruments, conversely, complemented economic growth, providing a means to internalise the carbon externality and incrementally correct the climate change market failure. Policy that instituted emissions reductions through the free-market represented the optimum

least cost policy mechanism. These measures devolved mitigation authority to private firms, refusing the state's control of the productive sources of emissions.

Every single measure implemented or that underwent consideration during this period fell within the narrow parameters prescribed by the Government's neoliberal disposition. Both the VAs and the energy sector reforms relied on market forces to drive emissions reductions. Even the ill-fated carbon charge was essentially congruent with National's ideological disposition. As an economic instrument, the carbon charge was certainly worthy of consideration as a means to correct climate change. However, this same ideological frame contributed to the instrument's eventual downfall, as the carbon charge still constituted a cost on business and an excessive form of state interventionism – something that the conservative National Government was unwilling to accept.

National's adherence to market environmentalism defined its practice of climate change governance. The qualities of least cost and minimal interventionism were reproduced throughout the early NZ CCP. Through this ideological frame, New Zealand's first version of climate change maintenance policy was created. By design, however, the Comprehensive Strategy on Climate Change constituted a weak intervention within the domestic productive sources of greenhouse gas emissions. Its policies offered, at best, an insignificant inducement for business and industry to modify carbon-intensive productive practices. At worst, it shielded private capital from their responsibility to decarbonise production. Certainly, the act of devolving mitigation authority to the private sector allowed business and industry to continue energy and carbon-intensive practices, without fear of consequence or sanction. It is always in the short-term, profit maximising interests of private capital to resist costly production changes like the costs associated with reorganising production to reduce emissions. Private capital will refuse any potential disruption to the accumulation process – as would be the case of an imposed price on carbon – unless they are compelled through an external authority, such as the state, to modify productive practices. Because market forces alone were insufficient to pressure business and

industry to reduce emissions, it was incumbent on the National Government to step-in and assume some control over domestic greenhouse gases – which they did, but under protest and with great reluctance. In the end, because the Comprehensive Strategy failed to compel business and industry to decarbonise, the fourth National’s NZ CCP was unable to function as effective maintenance policy. It was the Government’s insistence on framing the NZ CCP in accordance with neoliberal principles that contradicted the general maintenance function. This contradiction saw the intervening authority of the climate change response undermined in deference to an ideological frame of free-markets and maintaining corporate profitability. The following chapter will address policy change under the fifth Labour Government, who was far more willing to develop a robust climate change response.

## Chapter Six

### Labour's carbon tax and the response of private capital, 1999-2005

Leading up to the 1999 General Election, the NZ CCP found itself in a languid state. The fourth National Government had failed to execute its maintenance function and introduce meaningful climate change policy. The Comprehensive Strategy on Climate Change failed to either incentivise or authoritatively command private capital to modify carbon-intensive productive practices. However, the Kyoto Protocol offered a small measure of hope. New Zealand was now bound by international treaty to develop a response and significantly reduce greenhouse gas emissions. All that was required was the ratification of the Kyoto Protocol and a government willing to adopt stringent mitigation policies. The incoming Labour Government appeared to accept this obligation, ratifying the Kyoto Protocol in 2002. Furthermore, an ambitious approach to climate change governance was promised from Labour, with a comprehensive carbon tax at the centre of the NZ CCP. While the environmental lobby and scientific community were satisfied with this renewed effort, private capital outright rebelled. For business and industry, both Kyoto and the carbon tax represented an unacceptably excessive state intervention in the private sphere of production. The proposed response was considered imprudent and unjustified, with the potential to severely undermine the economy and particularly harm New Zealand's vital agriculture sector. This hostile response was so palpable that it precipitated the eventual collapse of the carbon tax option. This was a crushing blow to the NZ CCP, which found itself without a viable means to reduce domestic greenhouse gases, just a few short years from the Kyoto Protocol's first commitment period.

The fifth Labour Government's climate change response would have constituted authoritative maintenance policy if it had been implemented. The proposed carbon tax would have imposed a

price on carbon capable of internalising the social cost of climate change<sup>17</sup>. However, the carbon tax option also represented a major intervention by the state within the productive sources of emissions, and thus a violation of the systemic exclusionary imperative and dependency constraint. This provoked forceful opposition to the carbon tax from New Zealand's power elite. Private capital, through its exertion of economic, political, and ideological pressure, blocked the carbon tax. Its abandonment emasculated the state's climate change maintenance function. Without a functioning intervening policy, the Climate Change Programme was incapable of modifying New Zealand's carbon-intensive productive forces.

This chapter will describe and analyse the first six years of the NZ CCP under the fifth Labour Government (1999-2008). The analysis will begin by describing the immediate policy activity following the 1999 General election. Following this, the chapter will consider the 2002 ratification of the Kyoto Protocol, as well as Labour's proposed response strategy. As indicated, the main instrument planned by the Government was a comprehensive carbon tax – although a package of supporting measures was also introduced. However, in response to Kyoto, the carbon tax, and a proposed Agricultural Research Levy, business and industrial interests mobilised in opposition. The final section of this chapter will explore the subsequent demise of the carbon tax.

### **Post-election policy activity and the 2001 McLeod Tax Review**

The 1999 General Election saw the transition to a centre-left Labour Government. Although the newly formed government was composed of three progressive political parties (the Labour Party, the Alliance Party, and the Green Party), pinning down the ideological disposition of the fifth

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<sup>17</sup> The social cost of climate change (often referred to as the "social cost of carbon") is the estimated monetary value of economic damage caused by a ton of carbon dioxide emissions. The concept is frequently used in climate change governance, where cost/benefit analyses are employed to assess response strategies. Estimates of the social cost of climate change vary, but the IPCC estimate that would limit global warming to a 2°C (if imposed by an economic instrument) range between \$60 and \$200 NZD (MfE, 2015, p. 13).

Labour Government is problematic. It appeared that the Government predominantly adopted “third way” politics – an approach to governance that attempts to reconcile right-wing economics and left-wing social policies. Third Way accepts a macroeconomic outlook closer to liberal capitalism than traditional socialism, with a concomitant expectation that the state will promote general economic stability (Roper, 2015, p. 32-33). In many ways, Labour’s macroeconomic positions were consistent with those of the previous National Government. Not only did Labour retain the fundamental economic reforms of the fourth Labour and National Governments, but it also practiced a deliberately closer relationship with business and industry. Labour believed that the state needed to be sensitive to the concerns of business, and not enact policies that would alienate private capital; what Skilling (2010, p. 98) variously described as the new partnership between Labour and business.

Despite Labour’s apparent pro-business attitude, business appeared wary of the Government’s potential approach to economic policy. The business lobby feared Labour would return to its social democratic roots, reinvigorating the welfare state and undoing the macroeconomic reforms of the 1980s and 1990s (Roper, 2006, p. 176-179). The irony of this concern was just how disconnected it was from Labour’s actual approach to governance. For Roper (2005, p. 224), the Labour Government retained much of National’s neoliberal policy regime, including tight monetarist policy, the industrial relations system created by the *Employment Contracts Act* (1991), the corporatizing reforms to the public sector, and austerity in public spending. Not only was Labour ideologically disinclined towards traditional social democratic policies, it was also, likely, concerned with the prospect of capital flight<sup>18</sup>. A progressive reform programme could potentially provoke business and industry and trigger capital flight. By largely keeping the neoliberal macroeconomic conditions in place, Labour placated private capital, attenuating its opposition. Arguably, the Labour Government’s pacification of business and industry

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<sup>18</sup> Minister of Finance, Michael Cullen described the risk of capital flight facing the incoming Labour Government stating, “[...] the indications [from business and industry] were that business investment might not continue into the future. And that would have impacts on growth, employment, and, indeed, the success of the government at successive elections. It was very concerning to the [Government]” (Barry & King-Jones, 2014).

demonstrated an approach to governance consistent with the dependency constraint – that is to say a recognition of private capital's supreme position within New Zealand's capitalist society, and the need of the state to accommodate business interests in policy-making.

However, on social issues, and especially the environment, Labour radically departed from National. Nowhere was this difference more apparent than the issue of climate change. Prior to the General Election, Dianne Yates, Labour's spokesperson for the environment stated:

Climate change can no longer be ignored. The first role of Government is defence of the realm. Today the greatest threat to our security is changes in our environment.

[...] New Zealand's abject failure to make progress on this issue is a scandal.

Unless global progress on reducing greenhouse gases is suddenly and unexpectedly improved, New Zealand will face permanent climate change. (Who'll ask the global questions?, 1999)

As early as 2000, the Labour Government had publicly indicated its intent to ratify the Kyoto Protocol by 2002. Prime Minister Helen Clark (2000) was acutely aware of the economic threat climate change posed:

For New Zealand [...] the stakes are high. We have a relatively small economy defending a very long coastline. Much of our economy is based on a moderate and reliable climate. Our nation is now vulnerable to the effects of climate change.

In addition, New Zealand thinks of itself as a clean and green nation. Many of our economic activities, such as tourism and agriculture, capitalise on that image.

Failure to move decisively on climate change issues impairs that image.

The Auditor-General had already delivered a devastating report detailing the failure of the NZ CCP to implement effective mitigation policies and fulfil New Zealand's UNFCCC obligation (Macdonald, 2001, p. 81). In response, the Government advanced New Zealand's climate change response. In May of 2000, a Ministerial Group on Climate Change was formed to oversee the NZ

CCP. The Ministerial Group, convened by the Minister of Energy; Forestry, Research, Science and Technology; Pete Hodgson (and including the Deputy Prime Minister, and the Ministers of Finance, Foreign Affairs and Trade, Agriculture, Environment, Associate Environment and Transport), provided formal representation of the climate change issue within Cabinet. In 2003, the New Zealand Climate Change Office was established within the Ministry for the Environment to coordinate climate change policy (Department of Prime Minister and Cabinet, 2002, p. 3). At this point, emissions trading, energy efficiency measures, and voluntary agreements were still the Government's favoured options (Peterson, 2001, p. 17-18).

Unsurprisingly, the climate change issue was afforded a prominent position on the Government's policy agenda. Nevertheless, Labour's approach to public policy was still very much shaped by its ideological adherence to third way politics, as well as its sensitivity to the needs of business and industry. In practice, Labour appeared just as committed to market environmentalism as the previous National Government. Furthermore, the binary policy agenda remained firmly in place, with the two big economic instruments – carbon taxation and emissions trading – considered the only acceptable options. Emissions trading maintained an edge over carbon taxation, primarily as the state had already invested significant energies in developing a national cap and trade system (particularly after the Kyoto negotiations). It also retained the perception as a cost-effective and flexible instrument in relation to blunt and unwieldy carbon taxes.

Any impetus for emissions trading, however, was halted following the influential 2001 *New Zealand Tax Review*, otherwise known as the McLeod Report (McLeod, Patterson, Jones, Chatterjee & Sieper, 2001). The report recommended that:

[...] a broad-based carbon tax, aligned to international carbon prices and including the agricultural sector, merits consideration as New Zealand's central Kyoto measure for the first commitment period.

Under New Zealand conditions, and by comparison with the alternative of emissions trading by legal entities, a carbon tax combined with government international emissions trading (to cover residual excess emissions from non-forestry sectors) is considered to offer the prospect of more efficient outcomes at lower costs of monitoring and compliance. (McLeod et al, 2001: 54)

The review's endorsement of carbon taxes was largely unenthusiastic. Carbon taxation was generally regarded as paternalistic and distortionary. For the review, the one redeeming quality of a carbon tax remained its superior ability to internalise the social cost of climate change. This legitimisation of carbon taxation went a long way in convincing the Government to develop a carbon tax over an emissions trading scheme. The review was held in high esteem by the Government, with many of its recommendations (most of which were unrelated to climate change) accepted and ultimately implemented (Cullen, 2001a, 2001b).

### **The ratification of the Kyoto Protocol and the New Zealand carbon tax**

*The Climate Change Response Act (2002)* ratified the Kyoto Protocol, codifying New Zealand's obligation to reduce emissions to 1990 levels during CP1, or account for any emissions above those levels. At the same time, the Government outlined its response strategy (Hodgson, 2002d), which included:

- a carbon tax (see Box 5);
- incentives for climate change projects, otherwise known as Projects to Reduce Emissions (PRE), which could deliver emissions reductions (see Box 6);
- Negotiated Greenhouse Agreements (NGA) for businesses and industries facing competitive risks from the costs associated with climate change policies (see Box 6);
- government retention and management of carbon credits allocated to New Zealand under the Kyoto Protocol;
- joint government and industry funding of agricultural (non-CO<sub>2</sub>) emissions research;

- the periodic review of the NZ CCP to ensure continued effectiveness and equity;
- amendment to the RMA removing the power of local governments to consider greenhouse gases during the consent process.

The *Climate Change Response Act* created the institutional framework in which New Zealand could meet its obligations under the UNFCCC and Kyoto Protocol. The Act included the powers for the Minister of Finance to manage New Zealand's holdings of Kyoto units, the accounting registry for emissions units, and the inventory of New Zealand's greenhouse gas emissions required under the Kyoto Protocol (Department of the Prime Minister and Cabinet, 2002; Hodgson, 2002a, 2002b, 2002c, 2002f, Palmer, 2015b, p. 21).

#### **Box 5: the carbon tax**

The carbon tax represented the primary policy instrument of Labour's renewed NZ CCP. The tax (applied during CP1 and not before 2007) would impose a price on greenhouse gases produced during economic activity, specifically industrial processes and the use of fossil fuels. The Government intended for the tax to approximate the international price on carbon established by the Kyoto Protocol. However, a cap of \$25 NZD a tonne of CO<sub>2</sub>-e was put in place to prevent an excessively high price on carbon. Revenue generated by the tax would be recycled back into the NZ CCP, funding further emissions reduction projects and climate change research. The possibility of an emissions trading scheme was retained by the Government if the international carbon market became functional and the price of carbon was reliably under the \$25 cap (Department of the Prime Minister and Cabinet, 2002; Hodgson, 2002a, 2002b, 2002c, 2002f).

The Government recognised that certain industries would be exposed to trade disadvantages in light of a price on carbon. "Competitive at risk" firms – high-energy users and exporting industries, accounting for roughly a third of CO<sub>2</sub> emissions – would be exempt from the tax through the NGAs. Like the VAs, participation in the NGA programme would require business and industry to develop world's best practice in emissions intensity. The general energy users group (consisting of energy and transport sectors) and most businesses and households would be subject to the carbon tax. Agriculture, however, would be exempt from the tax. The Government reasoned that the sector had few cost-effective abatement options, and applying a tax would ultimately be unfair and punitive. The

Government, however, retained the right to levy the sector to fund methane and nitrous oxide (agricultural emissions) research (Hodgson, 2002f).

*The Climate Change Response Bill* narrowly passed into law in November of 2002 with the support of the Green Party. Both Labour and the Greens qualified the significance of the Act – perhaps recognising the limitations of Kyoto and their proposed response. Pete Hodgson described Kyoto as “the only international agreement that offers any hope of progress. That progress will initially be modest, but it will be progress” (Young, 2002). Greens leader Jeanette Fitzsimons opined:

The Kyoto Protocol is all there is. It is the international agreements that will limit climate change and while we don't agree with all the provisions of it, to not support ratification would take us back to square one. There are those who say we should not ratify it until absolutely every other country has. That would make us very bad global citizens. It's really important that we add our weight, small as it is, to the global consensus to make binding measures to reduce our greenhouse emissions. (Young, 2002)

How can we account for the *Climate Change Response Act*, the ratification of Kyoto, and the proposed policy package? I would suggest that Labour's revitalised NZ CCP was the product of a more extensive historical trend of policy change, informed by aspects of the state's capitalist rationality and Labour's peculiar ideological disposition. The proposed carbon tax (very much like National's abandoned carbon charge) would have entailed greater state intervention in the productive sources of emissions. On the face of it, this might suggest a sudden and dramatic policy reversal from the fourth National Government's minimally interventionist Comprehensive Strategy on Climate Change. However, a number of factors cast doubt on this, suggesting instead that the planned package was more of a *modest policy shift*, and not altogether antithetical to the established pattern of policy change. To start with, both the fourth National and fifth Labour Governments recognised carbon taxation as a least cost economic instrument. Secondly, Labour's carbon tax was relatively benign, considering its capped \$25 rate, delayed

implementation until 2007, and the exemptions granted for the agricultural sector and other competitive at risk firms. Provisions limiting the tax's cost on private capital made the instrument least cost – an essential quality of National's response strategy. Furthermore, measures like the NGAs and the PREs (see box 6) provided additional assistance to corporate and industrial actors affected by the tax. Overall, the carbon tax would not have imposed significant costs on business and industry. Thirdly, the Government felt secure that New Zealand would benefit from being a net seller of surplus Kyoto units during CP1. Ratifying Kyoto would only expose New Zealand to minimal abatement costs. It was even suggested that New Zealand would financially benefit from ratifying the Protocol (Fallow, 2002a). In turn, the Government felt that the New Zealand economy could absorb the cost of both the Kyoto Protocol and a carbon tax.

In reaffirming: 1) a preference for least cost and minimally interventionist economic instruments, and 2) a reliance on forestry sinks (the net approach) to satisfy UNFCCC and Kyoto obligations, Labour's response strategy was remarkably consistent with the prevailing trend in policy change established by the fourth National Government. This might also suggest Labour's nominal acceptance of market environmentalism. To be sure, a key principle framing the response was "economic sustainability". For the Government, the formulation of the carbon tax needed to ensure the sustained competitiveness of New Zealand business and industry. This fundamentally meant shielding competitive-at-risk firms from the full costs of accounting for their emissions (Department of the Prime Minister and Cabinet, 2002, p. 4). Yes, Labour pursued policies that made its response strategy more meaningful than the early NZ CCP. However, Labour's response was still founded on the same neoliberal, market environmentalism normative base as the NZ CCP under the fourth National Government. This begins to account for the fundamental similarities between the two responses.

**Box 6: Negotiated Greenhouse Agreements and Projects to Reduce Emissions**

Negotiated Greenhouse Agreements and Projects to Reduce Emissions were important policies within Labour's response strategy. Both measures were intended to complement the proposed carbon tax

and support the Government's approach to emissions mitigation. The NGAs succeeded National's Voluntary Agreements, which had concluded in 2000. NGAs were made available to firms deemed competitive at risk, where in exchange for relief from the proposed carbon tax (estimated to be worth \$240 million (MfE, 2005, p. 82)), business and industry would move to world's best practice in emissions intensity (MfE, 2006b, p. 87). The purpose of the NGAs was twofold: to encourage emissions reduction, and to protect firms facing competitive disadvantages in light of an imposed price on carbon. Agreements were reached with the New Zealand Refining Company in 2003 and OceanaGold in 2005, with the Government beginning negotiations with ACI Glass Packaging, Carter Holt Harvey, Fletcher Building, New Zealand Aluminium Smelters, Newmont Waihi, and Norske Skog Tasman. However, the policy was discontinued in late 2005 before those agreements could be reached (Hodgson, 2005b).

The PRE programme was intended to incentivise greater investment in projects that would lead to reductions in emissions. These projects could, for instance, include wind farms, hydroelectricity generation, co-generation projects, geothermal electricity generation, bio-energy, and landfill gas projects. The PRE involved the state providing financial assistance, in the form of tradeable Kyoto compliant emissions units, to private capital to invest in domestic emissions abatement, particularly in renewable energy and energy efficiency projects (Hodgson, 2003f: MfE, 2006, p. 80-81). Ultimately, 41 projects were supported under the scheme, with the allocation of 11 million Kyoto units (MfE, 2006b, p. 216). However, both the NGA and PRE programmes were discontinued in 2005. It was determined that the NGAs created "unequal incentives across the economy to reduce emissions and are therefore a significant source of inefficiency" (MfE, 2005, p. 155). The PRE was discontinued on the advice that cost-effective emissions reductions had not been realised under the scheme (MfE, 2005, p. 222).

### **The organised response to the Climate Change Response Act**

Although the Labour Government intended to work with stakeholders and develop climate change policy in accordance with both business and environmental interests, the ratification of Kyoto and the carbon tax engendered significant opposition. Submissions to the Kyoto Protocol

National Interest Analysis<sup>19</sup> (Ministry of Foreign Affairs and Trade, 2002a, 2002b) and the *Climate Change Consultation Paper* (MfE, 2001), reflected the breadth of hostility to both ratification and the proposed carbon tax, particularly from private capital. Alongside a new anti-Kyoto group, the Climate Change Pan Industry Group (2001), New Zealand's corporate lobby, including the GPC (2001, 2002a), the Business Round Table (2002), Business New Zealand (2002a, 2002b, 2002c), Federated Farmers (2001a, 2001b, 2001c, 2002a, 2002b, 2002c), the Council of Trade Unions (Bosses, unions unite on Kyoto, 2002), the ACT Party (2002a, 2002b, 2002c), New Zealand First (2002), and the National Party (English says National would review Kyoto Protocol, 2002; National will consider pulling out of Kyoto Protocol, 2002; New Zealand National Party, 2002a, 2002b), vehemently opposed the *Climate Change Response Act* and the proposed carbon tax.

Opposition focused on the supposed grave economic impacts of Kyoto and the attendant mitigation policies. Business New Zealand's, Peter Whitehouse described the potential economic threat of Kyoto as being greater to New Zealand than Britain's entry to the European Economic Community. Business New Zealand argued that Labour was moving too fast in developing the policy response, creating competitive disadvantages for New Zealand (Howie, 2002). National's Agriculture spokesperson Gavan Herlihy described the Kyoto NIA as being:

[...] woefully short on definitive data or assessment of the costs to our economy of New Zealand ratifying ahead of our major competitors. There [was] no detailed analysis on the effects of New Zealand ratifying ahead of Australia. (New Zealand National Party, 2002a)

National further argued that it was incumbent on the Government to prioritise sustainable economic development over radical environmental goals (New Zealand National Party, 2002a). For ACT's Ken Shirley, Kyoto's ratification was ideological, representing Labour's "messianic zeal"

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<sup>19</sup> A National Interest Analysis is a report prepared by the Ministry of Foreign Affairs and Trade for Parliament's consideration, which outlines the advantages and disadvantages of New Zealand becoming party to a treaty (Ministry of Foreign Affairs and Trade, 2002c).

to implement a policy response to climate change “irrespective of the resulting economic damage and erosion of New Zealander's living standards” (ACT New Zealand, 2002c).

Private capital's counterassault against Kyoto and the carbon tax manifested through political, economic, and ideological pressure. It appears though that the initial response was ideological in nature. The oppositional discourse rejected state interventionism and policies that negatively affect capital accumulation. According to the lobby, the carbon tax represented an unjustifiable and punishing incursion by the state on New Zealand's productive sector. By levying a price on carbon, New Zealand firms would face significant competitive disadvantages from major trading partners unencumbered by similar costs. Federated Farmers (2002c) argued that the economic effect of complying with the Kyoto Protocol would be “potentially bankrupting”. Business New Zealand (2002c), Carter Holt Harvey (Weir, 2002), and the Canterbury Manufacturers' Association (Espiner, 2002) raised similar concerns regarding the Protocol's costs. It was important for New Zealand to be a “fast follower” and not a world leader in responding to climate change – that is to say developing mitigation policy at a similar pace to the rest of the world.

Furthermore, New Zealand's unique economic circumstances – including its emissions profile, the well-established prevalence of low-carbon, renewable energy sources in the economy, and the importance of agriculture – demanded the formulation of a circumspect policy response (Federated Farmers, 2002d). These economic conditions limited the range of cost-effective abatement options open to private capital in New Zealand. The corporate and industrial lobby emphasised carbon leakage as an unintended consequence of a carbon tax. The idea that a domestic price on carbon would drive production out of New Zealand to those countries without an equivalent price on carbon possessed a sound logic, one that the Government could not easily refute. The GPC (Howie, 2001) stated:

If [New Zealand is] not careful, [it] could unintentionally adopt policies that damage our industries which are then relocated offshore or grow more rapidly in countries not committed to reducing (greenhouse) emissions.

The lobby further argued that New Zealand should follow Australia's lead and abandon the Kyoto Protocol (ACT, 2002a; Greenhouse Policy Coalition, 2002a; Industry coalition still against Kyoto Protocol, 2002). Either way, New Zealand's contribution to global concentrations of greenhouse gases was so insignificant that it made little sense to implement a comprehensive carbon tax at the expense of economic growth. The amelioration of climate change would require mitigation efforts from large European and North American emitters, and not from small economies like New Zealand. Economic growth should remain the Government's priority, and not emissions reductions (Industry coalition still against Kyoto Protocol, 2002).

New Zealand's corporate and industrial lobby attempted to legitimise their anti-ratification, anti-carbon tax discourse with economics. In 2001, the GPC and the Petroleum Exploration Association commissioned the New Zealand Institute of Economic Research (NZIER) to assess the macroeconomic impacts of ratifying Kyoto and the attendant costs of emissions abatement. The Report's cost/benefit analysis concluded that ratification would negatively affect the economy and reduce New Zealand's living standards. GDP growth would decline by 1% per annum, from 2.5% business as usual to 1.5% (New Zealand Institute of Economic Research, 2001, p. xiv). A second NZIER report (2002), this time commissioned by the Climate Change Pan Industry Group, reached a similar conclusion. The report argued that the ratification of Kyoto was antithetical to the Government's stated economic objectives, as it would produce considerable competitive disadvantages for New Zealand firms. Delaying ratification was recommended until the potential trade disadvantages could be eliminated from the international governance framework. The report also advocated for delaying ratification pending the development of an appropriate domestic policy instrument, one that supported the Government's economic priorities. The NZIER reports became a cudgel for private capital – a means to authoritatively undermine the Kyoto Protocol and the proposed carbon tax. By using a reputable and supposedly independent source of analysis, in the NZIER, business and industry were able to attack the Government's climate change response, and particularly its underlying economics. The Government attempted to push back on the reports, claiming that the politicised and partisan analysis lacked integrity. Pete Hodgson (2002e) declared that the:

The big industry groups that have funded this [second NZIER report] have not received good value for their money. There are no facts in the report that are not already on the public record and the accompanying commentary is closer to polemic than analysis.

A Government commissioned report produced by the Australian Bureau of Agriculture and Resource Economics (Hansard, Burns & Hester, 2003) found that ratification of the Kyoto Protocol would have a slightly positive economic effect – refuting the analysis offered by the NZIER.

New Zealand's prominent environmental groups largely criticised the Government for its perceived ineffectual climate change response (Fallow, 2002b). Greenpeace New Zealand praised Labour's ratification of the Kyoto Protocol but was disappointed in the response strategy, particularly the significant delay in the implementation of the carbon tax (Greenpeace, 2002a, 2002b). It was commonly held that the Government had caved to corporate and industrial interests. The newly launched Climate Defence Network (2002a, 2002b) – a counterpart to the GPC comprised of environmental interest groups<sup>20</sup> concerned with domestic climate change politics – was scathing of the Government and its capitulation to big business:

A vocal and well-funded business lobby is waging an aggressive campaign against ratification of the Kyoto Protocol. The Climate Change Pan Industry Group has been actively lobbying Cabinet ministers and other members of Parliament with the intent of pressuring the government to back down on previous commitments to reduce New Zealand's greenhouse gas emissions. (Climate Defence Network: 2002a)

This point was reiterated by the Environment and Conservation Organisation of New Zealand (ECO), who believed that business and industrial interests had “sacrificed the future to the present” by prioritising corporate profitability over environmental sustainability (Environment

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<sup>20</sup> The Climate Defence Network (2002b) was comprised of New Zealand environmental NGOs, including ECO, Environmental Defence Society, Forest & Bird, Federated Mountain Clubs, Friends of the Earth NZ, Greenpeace NZ, Pacific Institute of Resource Management, Cycling Advocates Network, Engineers for Social Responsibility, MedEco, and the Sustainable Energy Forum.

and Conservation Organisation of New Zealand, 2002a). ECO (2002b) maintained that the proposed carbon tax and complementary measures would do little to slow New Zealand's growth of emissions.

### **The Agricultural Research Levy tumult**

Implementation of the carbon tax was not to occur before 2007, just prior to the commencement of the Kyoto Protocol CP1. This provided an extended period to review and adjust the policy mix before New Zealand required a functioning emissions mitigation instrument. This delay also provided opponents of the carbon tax with an extended opportunity to influence, or even prevent the passage of further offending measures. The first oppositional assault came in 2003, when the Government announced plans to levy the agricultural sector to help fund agricultural emissions research. The Government justified introducing the Agricultural Research Levy based on the sector's exemption from the proposed carbon tax. It accepted that there were few economically viable options for farmers to reduce agricultural emissions, and that an imposed price on carbon would not necessarily lead to emissions abatement. By raising \$8.4 million per annum through the Levy, the Government hoped to accelerate research into non-CO<sub>2</sub> mitigation technology (Hodgson, 2003a; Ministry for the Environment & Ministry of Agriculture and Forestry, 2003; O'Hara, Freney & Ulyatt, 2003).

Sensing hostility, the Government undertook a round of consultation with farmers and other interested stakeholders. Opposition, however, was immediate and widespread. Dubbed the "fart tax" or "flatulence tax", the proposed Levy incited nation-wide protests, culminating with a gathering of farmers and their political allies outside parliament to deliver a 65,000 signature petition opposing the Levy ('Fart tax' petition tabled in parliament, 2003). It was here that National MP Shane Ardern infamously drove a tractor up the steps of Parliament, in protest of the Levy (Taylor, 2003). Opposition centred on the perceived financial burden the Levy would

impose on farmers. Opponents also claimed that responsibility for funding climate change research should be held by the state, as farmers had opposed the ratification of Kyoto and that it had been the Government who had pursued the agreement. Moreover, as agricultural emissions research constituted a public good, funding for it should come from general taxation – not the productive farming community (ACT, 2003; Federated Farmers, 2003a, 2003b, 2003c; New Zealand National Party, 2003a, 2003b).

The degree of resistance to the Levy was remarkable, considering the relatively small contribution expected from farmers (\$8.4 million per annum, in comparison to the massive \$14 billion size of the wider agricultural sector). Although the sector claimed that the Levy would impose significant punitive costs, the exemption to the carbon tax during CP1 would potentially save farmers \$50-125 million per annum; a cost that the Government had accepted responsibility for when the response strategy was announced (Clark, 2003). In short, the financial benefit gained from agriculture's exemption from the carbon tax greatly exceeded the Levy's cost. It was the Government's view that Federated Farmers, in particular, were waging a disinformation campaign against the measure, by claiming that farmers were going to be taxed on emissions – a claim that was inaccurate. As agriculture accounted for nearly half of New Zealand's emissions and was still exempt from the upcoming carbon tax, it was important for the sector to accept, at least, this minimal contribution to fund research – equivalent to 9c a year for each mature sheep and 54-72c a year for each mature beef or dairy cow (Hodgson, 2003b). Furthermore, the Government claimed that taxpayers had already contributed \$40 million to climate change research, and that it was fair to expect some financial input from the farming industry (Hodgson, 2003c). Labour repeated the argument that agriculture was particularly vulnerable to the effects of climate change, making it vitally important for the sector to contribute to New Zealand's response (Hodgson, 2003d).

Despite its defence of the Levy, the Government eventually scrapped the measure, stating that it would instead develop an alternative funding structure (Asher, 2003; Dann, 2003; Hodgson,

2003e; Keeling, 2003). Responsibility for the funding of emissions research was given to the newly formed Pastoral Greenhouse Gas Research Consortium, which would see the farming sector voluntarily contribute to research costs alongside considerable public funding (Hodgson, 2004). This was made official with the signing of a Memorandum of Understanding (MOU) (New Zealand Government, 2003) between the government and several corporate and research bodies representing the agricultural sector (Clark, 2003; Hodgson, 2004). The MOU shielded agriculture from the costs of New Zealand's Kyoto obligation by formally exempting farmers from an emissions charge during CP1:

The Crown has decided [...] that it will bear the cost of the agricultural sector's non-carbon dioxide emissions, provided that the sector contributes to research into ways to reduce greenhouse gas emissions from agricultural activities. (New Zealand Government, 2003b: 2)

This commitment was justified by the contentious claim<sup>21</sup> that the agricultural sector possessed few cost-effective methods of methane and nitrous oxide abatement, and thus any additional cost on farmers derived from a carbon charge would be punitive and not an incentive for emissions reductions (Terry, 2007). This crucial provision in the MOU facilitated agriculture's capture of the NZ CCP and the policy debate. It enshrined the responsibility of the New Zealand state to socialise the costs of abating New Zealand's non-CO<sub>2</sub> greenhouse gas emissions – in effect shielding agriculture from the costs of mitigating its emissions. State managers were now obligated to consider the short-term economic interests of farmers when developing climate change policy. The MOU would become an important example of structural privilege, which would benefit private capital within the policy debate for years to come.

Although the Government denied its acquiescence, commentators generally agreed that the Government had capitulated to the demands of private capital (Asher, 2003; Cronshaw, 2003;

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<sup>21</sup> Although methane abatement technologies remain elusive, several methods for reducing nitrous oxide have been successfully developed, including nitrification inhibitors. The Sustainability Council of New Zealand believes that these methods could be readily implemented, with the potential to reduce nitrous oxide emissions by 70% in New Zealand (Terry, 2007, p. i).

Smale, 2003; Venter, 2003). This decisive victory achieved by the Levy's opponents demonstrated the increasing power of business and industry over the NZ CCP. Agriculture emerged as a singularly dominant capitalist fraction, advancing the wider interests of private capital. A calculated argument against the Levy (and the wider NZ CCP) was successfully articulated, eschewing an overt denial of climate change, but still advocating for the utmost restraint in proceeding with a response to an inherently uncertain phenomenon. Its most significant discursive contribution was the rejection of the "polluter pays" principle – what had traditionally been a core assumption of the NZ CCP. The lobby convinced the Government that in the interests of maintaining economic growth, society, and not polluters, should assume the costs of climate change mitigation.

This ideological pressure – the capacity to capture and reframe the terms of the policy debate – was translated into political pressure. Right-wing political parties, such as National, ACT, and the populist New Zealand First party, sensed an opportunity to attack the Government by joining the protest movement. National Party leader, Bill English, echoed Federated Farmers in suggesting that climate change research should be funded through general taxation, and not a specific tax on the productive agricultural sector (Beaumont, 2003). ACT's rural affairs spokesperson Gerry Eckhoff believed that "Labour [had] badly underestimated the depth of anger [existing] over this discriminatory tax", and that this would invariably precipitate the Levy's demise (ACT confident 'fart tax' will be dropped, 2002). Climate change was thrust into the political consciousness of New Zealanders, not as an environmental issue, but as a problem of policy development, where an intrusive government punished productive farmers and businesses. Facing a General Election in 2005, the Government undoubtedly recognised its vulnerability in pursuing comprehensive climate change policy, and began reconsidering aspects of the response.

## **Conceptualising private capital and its assault on the NZ CCP**

Opposition to the proposed carbon tax demonstrates private capital's insurgency against the fifth Labour Government and its approach to climate change governance. Unlike the earlier Comprehensive Strategy on Climate Change – which did not significantly infringe on the autonomy of private capital in directing production or undermine its accumulation of capital – Labour's response strategy would have imposed a price on carbon, constituting an additional cost on production levied by the state, i.e. a state intervention in the productive sources of domestic emissions. Whereas the fourth National's response remained an insufficient state intervention to foment a significant capitalist response, Labour's proposals triggered a full-throated offensive. Even though aspects of Labour's response strategy were reasonably pro-business (the capping of the carbon tax's price, agriculture's exemption from the tax, the NGAs etc.), it was still deemed too interventionist and costly by private capital and its political allies. Consequently, the response violated the exclusionary imperative and dependency constraint.

The opening salvo of capital's attack was ideological. Labour's response was framed as an excessive and punitive intervention within production that would ultimately harm economic growth. This was of course pure ideology, as the discourse thoroughly misrepresented the nature of the response strategy, the environmental and social impacts of the carbon tax and the Levy, and crucially the real intent and interests of New Zealand's corporate and industrial lobby. As demonstrated earlier in this chapter, the NZ CCP under Labour was entirely consistent with a minimal interventionist and least cost policy response – representing a thoroughly capitalist approach to climate change policy. Furthermore, the economic costs of Kyoto, the carbon tax, and the Research Levy were exaggerated by the lobby. The Government estimated that the carbon tax would only add:

[...] around one cent to the cost of a unit of electricity, about 4 cents to a litre of petrol, 46 cents to a 9kg bottle of LPG and 68 cents to a 20kg bag of coal. The impact on the

typical Kiwi household will total about \$4 per week for electricity, petrol, and other fuels.

(Hodgson, 2005a)

Opponents also failed to acknowledge the costs for New Zealand not ratifying Kyoto and effecting meaningful climate change policy. Not only would New Zealand be unable to contribute to global efforts to reduce greenhouse gases, but serious damage would also be done to the country's clean and green reputation – which in itself is valuable to the economy (Stewart, 2012). The Government returned to the supreme economic threat climate change posed to New Zealand as justification for the carbon tax:

New Zealand depends on an equable, stable climate for its prosperity more than other developed nations, because our economy is still grounded in primary production.

(Hodgson, 2002g)

Climate change represented a threat to New Zealand's economic wellbeing. The failure of private capital to accept this fact belied its claim that the NZ CCP was anti-business and an impediment to economic growth.

While the campaign against the NZ CCP was presented as being in the general interests of New Zealand society, in reality, it was obstructionism, designed to stop an imposed price on carbon – which for business and industry represented an unacceptable burden on private capital accumulation. What was so compelling about this inherently ideological discourse was the intent to maintain business and industrial profitability through the opposition to a price on carbon, was not at all denied by the lobby. Rather, it was asserted that the maintenance of corporate profitability *was* in the general interests of society, and opposing the carbon tax was, therefore, in the greater economic good. In this sense, private capital was able to present its subjective interests as those of New Zealand society. To make this an effective ideology and to demonstrate the deleterious economic consequences of enacting the carbon tax or Levy, the instruments were characterised as punitive and unwarranted, and which would have little effect in reducing New Zealand's emissions. Although the discourse was detached from reality, its populist quality had considerable sway with parties like National and ACT, and the public.

## **The collapse of the carbon tax option**

After the debacle of the Agricultural Research Levy, the Labour Government was unsure about the carbon tax and its future. In May 2005, the tax rate was amended, reducing it to \$15/tonne of CO<sub>2</sub>-e. The Government also sought to ease concerns that the tax would harm the economy. It proposed offsetting corporate tax cuts in the 2006 Budget, while also highlighting the benefits of the NGA programme. The carbon tax's revenue recycling mechanism was also emphasised to counter its perception of a government tax grab (Cullen, 2005; Hodgson, 2005a, 2005b). The unpopular carbon tax, nevertheless, remained an important issue in the 2005 General Election. National made defeating the tax a campaign promise (New Zealand National Party, 2005a), while other parties, including ACT (2005a), United Future (2005), and New Zealand First (2005), also advocated for the measure's abandonment. The same powerful corporate interests that had earlier opposed the carbon tax joined National's campaign. Although Labour was re-elected, the post-election political realignment, which saw New Zealand First and United Future become part of the government, impelled the full review of the carbon tax. As per the confidence and supply agreements made with New Zealand First (New Zealand Labour Party & New Zealand First, 2005) and United Future (New Zealand Labour Party & United Future, 2005), the Government agreed to halt the carbon tax until a comprehensive assessment of the NZ CCP's objectives and approach could be completed.

In 2005, Cabinet commissioned the *Review of climate change policies* (MfE, 2005). The review was completed by the Ministry for the Environment, alongside representatives from Treasury, the Ministry for Economic Development, Agriculture and Forestry, and Transport. Its objectives included re-evaluating the strategic goals of the NZ CCP; defining an appropriate balance between economic policy instruments and state regulation; assessing the carbon tax option versus emissions trading; and addressing the effectiveness of complementary measures, such as the PREs and the NGAs. The review found that the carbon tax would not sufficiently reduce

emissions for New Zealand to reach its CP1 targets. The tax was deemed inherently inefficient, costly, and unfair, as it would likely produce unequal incentives across the economy to abate emissions. It concluded that the carbon tax's significant problems justified its non-implementation. Although the carbon tax was eschewed, the report unequivocally stated that a price on carbon, implemented through a centralised economic instrument remained the best long-term approach for climate change mitigation in New Zealand. An emissions trading scheme was again proposed as an alternative policy that could be introduced after CP1 (MfE, 2005, p. 416-420).

The review's conclusions allowed the Government to abandon the carbon tax, which they promptly did in December 2005 (MfE, 2006a, p. 8). The new Minister for Climate Change Issues, David Parker publicly cited the limited effectiveness of the instrument in reducing emissions as the reason for its non-implementation (Parker, 2005). It was also very likely that an impending blowout of New Zealand's Kyoto accounts contributed to the demise of the carbon tax. New Zealand's revised emissions projections for late 2005 indicated a 36.2 MT CO<sub>2</sub>-e Kyoto deficit, which was in stark contrast to the 32.6 Mt CO<sub>2</sub>-e surplus expected just one year earlier. The Government had previously believed that New Zealand's Kyoto liability would be positive, owing to large domestic forestry sinks. Because of this, New Zealand would not be subject to the massive cost of accounting for its emissions (those emissions beyond its Kyoto Protocol assigned amount), and would actually be able to sell surplus Kyoto units for profit. However, when the methodology for calculating emissions was refined, the Government was shocked to discover a deficit in New Zealand's carbon inventory (Hodgson, 2005c; MfE, 2005, p. 412). Faced with having to account for this shortfall, the Government was forced to reconsider the real fiscal impacts of reducing emissions. The Government stated that:

[...] significant changes in the outlook for New Zealand meeting its Kyoto obligations justified an analysis of, and consideration of changes to, the current emissions-reduction goal and the climate change policy mix. (MfE, 2005, p. 10)

The carbon tax would have appeared an extraneous liability in light of the projected deficit. Pursuing an alternative policy, one without the perceived blunt impact of the carbon tax, would have become a priority – hence the review and subsequent amendment of the NZ CCP.

However, it is impossible to deny the significant role played by private capital in undermining the passage of the carbon tax. The anti-interventionism of private capital soured the policy debate, turning the general public and opportunistic political actors (namely New Zealand First and United Future) against the carbon tax. I would argue that the 2005 General Election became a referendum on carbon taxation, and in a more essential sense, the role of the state in responding to climate change. Labour's abandonment of the carbon tax was a political calculation – to proceed and likely fail with a deeply unpopular and costly economic instrument, or concede to the interests of business and industry, as well as bit political players afforded power under MMP. The Labour Government choose the latter. Major business and industrial groups celebrated the carbon tax's defeat. The New Zealand Business Round Table's Roger Kerr (2006) proclaimed that:

[...] the Kyoto approach to climate change is dead. [...] Extensive economic research has rebutted the case for early and costly action to mitigate any global warming trend. [...] It is time for New Zealand to get off the Kyoto bandwagon and align its policies more closely with those of two of its most important trading partners.

Other members of New Zealand's corporate and industrial lobby, including Federated Farmers (2005a, 2005b), the Employers and Manufacturers Association (2005), National (2005b), and ACT (2005b), also welcomed the Government's decision. Environmental interests were of course dismayed. Greenpeace (2005) believed that the decision to not implement the carbon tax reflected poorly on Labour's leadership:

Dropping the carbon tax shows a remarkable absence of leadership across Parliament on the most catastrophic problem facing the planet [...]

The Government has dropped the last meaningful policy from its package of action on climate change. Basically, Dunne and Peters said, 'jump' and Labour said 'how high?'

The Green's co-leader Jeanette Fitzsimons described the Government as "throwing in the towel" on the Kyoto Protocol (Kay, 2005), while Forest and Bird lamented the decision (Espiner & Scanlon, 2005). The New Zealand Herald's economic editor, Brian Fallow, succinctly stated the fundamental effect of abandoning the carbon tax:

[...] the Government [signalled] that it [was] not serious about reducing this country's contribution to global warming, small though it may be. Instead, [New Zealand] will pay someone else to pull our weight. (Fallow, 2005a)

### **Interpreting the carbon tax's demise**

The breakdown of the carbon tax can be explained with reference to Marxian systems-analysis. Within this period, climate change governance remained subject to the capitalist rationality embedded in the state's policy process. The exclusionary imperative and dependency constraint narrowly defined the scope of permissible maintenance policies to carbon taxes and emissions trading. This binary policy agenda, established during the early period of the NZ CCP, privileged carbon taxation and emissions trading, while removing command and control regulation from the policy agenda. It was during this period that the Government renounced the use of the RMA to control domestic emissions. In amending the RMA and removing the right of local governments to consider greenhouse gas emissions in the resource consent process, the Labour Government expunged the very last remnant of command and control regulation from the NZ CCP. A centralised policy response, built around economic instruments was now clearly the preferred approach (Palmer, 2015, p. 21). In addition, the preponderance of Government discourse continued to demonstrate the state's reluctance to include the RMA within the NZ CCP (MfE, 2001, p. 24, 2005, p. 414-416). The argument that regulation was distortionary and inflexible was emphasised. Regulation was palpably non-capitalist, anti-growth, and seen as being entirely inappropriate.

The capitalist rationality would have also contributed to the state's preference for emissions trading over carbon taxation. During this period of policy change, the Labour Government embraced market environmentalism and unequivocally accepted the value of economic instruments within the NZ CCP. The proposed carbon tax was deconstructed during the contentious policy debate, with private capital, and even state managers drawing attention to the measure's perceived non-capitalist attributes. The debate also pitted the carbon tax against a hypothetical, and almost idealised emissions trading scheme, in an effort to determine the optimum least cost and minimal interventionist response. This observed pattern of policy change clearly shows that the preference for carbon taxation waned, while emissions trading became more and more popular.

However, it is also likely that the systemic variables that established the binary policy agenda, also contributed to the selection of emissions trading over carbon taxation. The exclusionary imperative necessitates policy that is minimally interventionist, while the dependency constraint encourages policy that is both minimally interventionist and least cost. Following this logic, state managers would almost certainly pursue the type of economic instrument that best exemplifies the qualities of minimal interventionism and a least cost response. Emissions trading became the preferred economic instrument of the NZ CCP, as it was patently less interventionist and least cost in comparison to a carbon tax. This argument becomes clearer if one considers the respective designs of a carbon tax and an emissions trading scheme, and in particular the differing nature of their *price mechanisms*. Quite simply, a price mechanism refers to the specific statutory component of an economic instrument that determines its price signal – which for a carbon tax or emissions trading scheme is a price on carbon. In the case of a carbon tax, the state determines the carbon price signal – rigidly setting the tax rate and collecting generated revenue. Conversely, emissions trading schemes<sup>22</sup> utilise market forces to determine the price on carbon. Business and

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<sup>22</sup> See discussion on emissions trading in the following chapter (Box 7) in regards to the design and function of the economic instrument.

industry trade emissions permits within a carbon market, relying on the basic laws of supply and demand to efficiently set the price.

Of these two economic instruments, emissions trading schemes are unquestionably more consistent with the principles of minimal state interventionism and a least cost response. With respect to the first constraint – minimal state interventionism – an emissions trading scheme represents the far more congruent option, as its market-based price mechanism relies on competing private actors to determine the carbon price signal. Emissions trading schemes devolve the setting of the carbon price signal to private capital – in contrast with a carbon tax, where the state dictates the price signal. This makes emissions trading substantially less interventionist than a carbon tax.

In terms of the second constraint – a least cost response – emissions trading schemes are once again the more compatible option. Although, in theory, both carbon taxes and emissions trading schemes are meant to approximate the social cost of climate change (Norregaard & Reppel-Hill, 2000, p. 5), in practice emissions trading schemes reliably set a lower price than a carbon tax. This was certainly evident in New Zealand’s experience of an emissions trading scheme<sup>23</sup>, which has thus far failed to effect a price on carbon anywhere near the amounts proposed under the Comprehensive Strategy’s low-level carbon charge or Labour’s proposed carbon tax. There are a number of reasons for this discrepancy in the respective price signals – most of which relate to idiosyncratic design of emissions trading schemes and the subsequent distortion of its price mechanism. With a carbon tax, the price mechanism is not subject to the same kind of market-manipulations and distorting influences that can artificially lower the price on carbon. The state can unilaterally set the price on carbon as close to the social cost of carbon as desired. By doing so, a carbon tax invariably imposes a higher price on carbon than an emissions trading scheme – thus making emissions trading comparatively least cost. It is reasonable to argue that emissions

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<sup>23</sup> This argument – that the New Zealand Emissions Trading Scheme reliably produces a low price on carbon – will be borne out in chapters seven and eight.

trading, and not carbon taxation, accord with the exclusionary imperative and the dependency constraint. Adherence to these systemic constraints would privilege the more capitalistic emissions trading option over the unsuitable carbon tax.

The above structural constraints certainly represent a potent influence on policy-making. Perhaps alone, though, a structural explanation insufficiently explains the demise of the carbon tax. Recognising secondary constraints, including the ideological disposition of the state elite, pressure exerted by private capital in opposition to the carbon tax, and the corporatist structure of the state, can help to account for the observed pattern of least cost and minimal interventionist policy change. I would argue that the observed pattern of policy change, which saw emissions trading supplant carbon taxation as the preferred economic instrument of the NZ CCP, is attributable to a confluence of systemic variables and secondary constraints.

The first of these secondary constraints – the ideological disposition of the state – refers to the fifth Labour Government’s commitment to market environmentalism. While Labour was progressive on environment issues, they were simultaneously neoliberal in their approach to macroeconomic and environmental policy – not unlike the previous National Government. Labour’s NZ CCP was shaped by its third way ideology, which was philosophically predisposed to minimal state interventionism and a least cost response. Although Labour’s greater concern and attention to environmental issues contributed to more authoritative and meaningful climate change governance, the NZ CCP remained inexorably neoliberal. On this, environmental interests severely criticised the Government. For groups like Greenpeace, Labour’s approach to climate change was certainly an improvement on its predecessors – the Kyoto Protocol was ratified and the proposed carbon tax constituted an honest attempt to impose a price on carbon. However, the NZ CCP still fundamentally served the interests of carbon and energy-intensive firms, as it did not impose a robust regulatory framework to control domestic emissions.

The second constraint, the influence wielded by private capital within the policy debate, represented a significant driver of policy change during this period. As the passage of the carbon tax (and to a lesser degree the Agricultural Research Levy) patently contravened the exclusionary imperative and the dependency constraint, a resolute capitalist counteraction was probable. The first attack was ideological, with the economic viability, fairness, and effectiveness of the carbon tax challenged. Weight was given to these claims by supposedly scientific and objective economic analyses from the NZIER. The discourse resonated with public and political actors alike. National, ACT, New Zealand First, and United Future, all aligned with business opposition to the tax. Consequently, significant political pressure was directed to undermine the carbon tax and ensure its non-implementation. In the lead up to the 2005 election, the Government was vulnerable on the carbon tax. In the end, this political pressure made the passage of the carbon tax untenable. Political pressure also hastened the 2005 review of the response strategy. While the review provided a reason for the Government to abandon the instrument, it is quite likely that the actual decision was made much earlier (perhaps even in advance of the election). In the end, Labour's support for the carbon tax appeared nominal at best. The review was little more than a formality to justify its abandonment.

Lastly, private capital was also able to exert economic pressure in opposition to the carbon tax. The prospect of capital flight and higher energy prices would have made the carbon tax option unattractive to the Government and ultimately incompatible with their own functional duty to maintain economic growth. As the private owners of productive assets are able to make economic decisions (through investment, employment etc.) that often have significant societal impacts, the state is largely dependent on business and industry to maintain prosperous economic conditions. Policy-making involves appeasing corporate and industrial interests, to prevent either capital flight or decisions that threaten economic activity. This is the basis of the systemic dependency constraint.

An exertion of economic pressure certainly occurred in relation to the carbon tax. Firstly, power generators threatened to raise the price of energy if the carbon tax was implemented. Solid Energy chief executive Don Elder stated that coal-based power plants, like the Huntly Power Station, would become unprofitable if the carbon tax went ahead – even if companies raised energy prices. Elder also believed that dairy, steel, and the mining industry would be jeopardised by the passage of the carbon tax (Steeman, 2005a). In addition, Camalco, the owners of the Tiwai Point aluminium smelter, intimated that the carbon tax would likely force the closure of its plant. Faced with having to account for its greenhouse emissions as well as higher energy prices, Camalco feared that the smelter would become unprofitable. The carbon tax imperilled the plant's 800 staff, 200 suppliers, and the \$70 million contribution to the Southland economy (Fallow, 2005b; Steeman, 2005b). Although this posturing may have been used, in part, to secure a long-term NGA exempting the smelter from the carbon tax (something the Government had publically rejected), the explicit nature of the threat indicates the application of economic pressure to stop the carbon tax. The state's dependence on economic prosperity and the compliance of business and industry, creates a powerful incentive for the state to accommodate and acquiesce to private capital, which they surely did with the abandonment of the carbon tax.

Thirdly, the structure of the domestic policy community began to change during this intermediate period of the NZ CCP. These changes enhanced the influence of the corporate and industrial lobby. A degree of corporatisation occurred within the policy community, affording institutional forms of privilege to select representatives of private capital. An emergent class of elite policy actors, sympathetic to the interests of business and industry, and granted access and influence over policy-makers, empowered the opposition to the carbon tax.

An initial form of privilege would have developed through the Voluntary Agreements and its successor Negotiated Greenhouse Agreements. These agreements functioned as a vehicle for carbon-intensive firms to directly engage with policy-makers, and negotiate non-binding, state-assisted emissions reductions. As the agreements were non-binding, it was incumbent on the

government to consult and negotiate with business and industry on the extent and nature of the reduction in emissions. The fourth National and fifth Labour Governments were thoroughly dependent on the amicable cooperation of private capital for the success of the respective programmes. Because of this dependence, the corporate lobby would have been able to press for specific forms of policy change; a facility unavailable to policy actors outside the VA and NGA programmes. The Coal Association, for instance, were able to negotiate a separate “Facilitation Agreement” (a variation on a VA, where a number of small businesses cooperate to effect emissions reduction). This allowed the Coal Association’s smaller-scale, private members to benefit from the relief offered by the programme (MfE, 1994, 1997). As major emitters tended to be industries and large businesses, corporate interests exclusively benefited from the VAs and NGAs.

The 2004 Memorandum of Understanding between the Government and the agricultural sector constituted another potent form of institutional privilege. The MOU formalised the state’s commitment to shield agriculture from the costs of abating its emissions. In turn, the agreement facilitated agriculture’s regulatory capture of the NZ CCP. By securing an exemption from a price on carbon until 2012, the agriculture lobby effectively constrained the development of an authoritative response strategy. Moreover, the agreement legitimised the claim that farmers should be immune from a price on carbon, as to ensure New Zealand’s economic prosperity.

As suggested earlier in this section, a confluence of systemic variables and secondary constraints pushed the NZ CCP away from carbon taxation and inexorably towards emissions trading. Presented alone, a structural explanation for this pattern of policy change is inadequate. In this particular instance, there remains a degree of ambiguity as to how state managers actually respond to the exclusionary and dependency structures. Certainly, the principal structural constraints identified in Marxian systems-analysis can impel forms of policy change that are, for the state, effectively automatic and thus involuntary. The general maintenance function, for example, mandates from the state a response to the social and economic threat of climate

change. Similarly, the exclusionary imperative – the systemic division of the state and economy within modern capitalist society – necessitates state activity that is minimally interventionist. Highly interventionist policy (like command and control regulation) would violate the systemic exclusionary boundary. There are times when the state comes up against inviolable and immutable systemic boundaries, which force from it set forms of policy change. Failure to do so would constitute an abrogation of the state’s capitalist functions.

However, this may not necessarily be the case for the NZ CCP’s observed preference of emissions trading over carbon taxation. Fundamentally, both types of economic instruments accord with the exclusionary and dependency structures – economic instruments are broadly consistent with the state’s capitalist rationality. It is just so happens that the emissions trading option is significantly more congruent with these structures. We should therefore expect the state to pursue the more congruent and thus capitalist emissions trading option. However, it is difficult to definitively say that the state will always elevate emissions trading over carbon taxes – hence the uncertainty in applying Marxian systems-analysis. This is where secondary constraints come in. The ideological disposition of the state, the supreme power of private capital, and the increased corporatisation of New Zealand’s policy process, would also favour least cost and minimal interventionist policy change. It is probable that the New Zealand state, confronted with primary and secondary systemic constraints, would adopt a preference for emissions trading schemes, as the ideal capitalist response to the climate change crisis.

## **Conclusion**

What are the implications of Labour’s carbon tax – its contentious development, and eventual non-implementation? The NZ CCP under the fifth Labour Government represented a genuine effort to develop meaningful climate change maintenance policy. The attempt to implement a price on carbon to encourage changes to the configuration of productive forces responsible for

greenhouse emissions represented a significant intervention by the state to mitigate climate change. The Government initially believed that a carbon tax was an efficient means to internalise the greenhouse emissions externality, and a measure ultimately consistent with economic growth. Private capital disagreed – seeing the carbon tax as a violation of its autonomy to solely direct production, and an excessive financial burden that would undermine its accumulation of capital. Combined with the carbon tax’s incongruity to the exclusionary and dependency structures, the response from private capital was sufficiently forceful to compel from the state an abridgment of its response strategy.

The demise of the carbon tax was an initial expression of the state’s systemic contradiction. Because the carbon tax violated the exclusionary and dependency systemic boundaries, and consequently provoked strident opposition from private capital, it became untenable. In responding positively to private capital and acquiescing to its short-term interests, the state lessened its intervention in production and purposefully diminished its maintenance function. This is what happened with the carbon tax. The NZ CCP from 1999 to 2005 constituted a wasted period of policy activity, where no substantial mitigation policy was enacted. While the state failed to introduce mitigation instruments, domestic emissions continued to increase at an accelerated rate. In 2005, New Zealand’s total greenhouse emissions were 77.2 Mt CO<sub>2</sub>-e, a figure 25% higher than the 1990 level (61.9 Mt CO<sub>2</sub>-e) (MfE, 2007d, p. 3). The following chapter will address the second phase of Labour’s NZ CCP, focussing on the formulation and implementation of the NZ ETS.

## Chapter Seven

### **The troubled formulation of the New Zealand Emissions Trading Scheme, 2005-2008**

The NZ CCP, following the collapse of the carbon tax option, was in a bind. Without an obvious alternative policy to address domestic emissions, the NZ CCP was unprepared for the start of the Kyoto Protocol's first commitment period, set to commence in 2008. The fifth Labour Government scrambled to develop an emissions trading scheme. Recognised as a more palatable economic instrument, which could fulfil the state's policy objectives and satisfy the myriad demands of private capital, the formulation of the emissions trading scheme noticeably differed from the acrimonious carbon tax debate. Business and industry were more willing to engage with the Government and develop appropriate mitigation policy, if emissions trading and not a carbon tax was on the agenda. Alongside the emissions trading scheme, Labour enacted a suite of transitional assistance measures, in an attempt to lessen any negative economic impacts arising from an imposed price on carbon. Environmental interests, however, doubted the integrity of the proposed emissions trading scheme, fearing that the policy's concessionary provisions would undermine its capacity to reduce emissions. The New Zealand Emissions Trading Scheme (NZ ETS) passed into law in late 2008 – finally furnishing the NZ CCP with an instrument to control domestic emissions. The policy was internationally unique in its comprehensiveness. Even the European Union's Emissions Trading Scheme (EU ETS) did not provide the same all-encompassing coverage with respect to all greenhouse gases and the inclusion of all economic sectors (Moyes, 2008).

The formulation of the NZ ETS epitomised the constraining effect of the state's capitalist rationality. In implementing the NZ ETS, the state finally performed its climate change maintenance function. Although the NZ ETS utilised a market-based price mechanism, it still constituted a state-imposed price on carbon. Business and industry would now have to pay for its greenhouse gases – at least in theory. However, those same constraining political and

economic structures that had shaped earlier iterations of the NZ CCP, significantly informed the design of the NZ ETS. The resultant policy change, once again, shielded private capital – but particularly agriculture and heavy industry – from a true price on carbon. The transitional assistance provisions, combined with the NZ ETS’s atypical design, distorted the market-based price mechanism, consequently obstructing the imposition of a meaningful price on carbon. The capacity of the NZ ETS to incentivise the decarbonisation of the New Zealand economy was systematically enfeebled by those provisions resulting from the state’s capitalist rationality.

This chapter will address the NZ CCP between late 2005 and 2008, focussing on the development and implementation of the NZ ETS. The first section will detail how the fifth Labour Government settled on emissions trading as an alternative to the carbon tax. The Government was motivated by domestic and international factors to reconsider the emissions trading option. It is likely though that the perception of the emissions trading as a genuine least cost and minimal interventionist instrument, and its perceived acceptability with private capital, ensured its preferential status. Following this, the formulation of the NZ ETS will be considered. Unlike the rancorous carbon tax, the debate surrounding the emissions trading scheme was relatively peaceful, with New Zealand’s corporate lobby positively contributing to the policy design. The final part of the chapter will outline the NZ ETS instrument, drawing attention to the state’s capitalist rationality and the reproduction of the state’s systemic contradiction within the policy’s architecture.

### **A renewed preference for emissions trading**

The demise of the carbon tax forced the Government to rethink New Zealand's climate change response. Without intervening policy, the NZ CCP was wholly unprepared for the rapidly approaching CP1. A reconsideration of the response strategy was also merited in light of the newly operational international carbon market, which had made emissions trading both feasible

and cost-effective. The Government expected that the international governance regime would become more stringent over time, demanding New Zealand's expeditious participation. Moreover, access to the Kyoto flexible mechanism would offer New Zealand greater opportunities for least cost mitigation, if the selected domestic instrument had sufficient international linkages (MfE, 2006a, p. 10-11). Because of the Kyoto Protocol, emissions trading had become the international instrument of choice for addressing greenhouse emissions (Wilson, 2011, p. 152-153). It made sense for New Zealand to develop a response in step with the wider GCCR. Besides this, the fundamental scientific basis of climate change was now beyond reproach following *The Economics of Climate Change: the Stern Review* (Stern, 2006b) and the *IPCC Fourth Assessment Report* (Intergovernmental Panel on Climate Change, 2007a). Stern (2007, p. vi- viii) described climate change as the "greatest market failure the world has ever seen" and that the "scientific evidence [was] now overwhelming: climate change is a serious global threat [demanding] an urgent global response". In response to the Stern Review, Helen Clark (2006) declared that the denial of climate change had become "largely irrelevant" and that there was "no greater environmental issue facing us today than climate change". There could be no hiding from New Zealand's responsibility to develop appropriate ameliorative policy. For the Government, bold and immediate action was now required (Parker, 2006a, 2006b). Prominent New Zealand political scientist, Jonathan Boston (2009, p. 218), specifically identifies the Stern Review and the Fourth Assessment Report, as well as Hurricane Katrina and the documentary *An Inconvenient Truth* (2006) as transformative events, which awakened public consciousness regarding climate change.

From the outset, Labour's preference for emissions trading was evident. The 2005 review of the carbon tax had already identified emissions trading as the superior economic instrument. Emissions trading (see Box 7) was described as "potentially a very powerful policy instrument" that could "lead to innovative ways of meeting climate change objectives that would otherwise be very difficult, if not impossible, to achieve" (MfE, 2005, p. 419). The momentum gained from the review was reflected in the Government's stance that cap and trade offered a more flexible

and economically efficient option than carbon charges (MfE, 2006a, p. 30). In a speech to the Climate Change Policy Symposium held by Victoria University, David Parker (2006a) stated that:

[...] the government recognises that economy wide price-based measures for emissions are likely to form part of the mix of post 2012 policies.

The types of measures that will need to be considered are mechanisms such as emissions trading, also known as cap and trade, and offset planting of forests that sequester equivalent quantities of carbon.

[...] The world economy is moving towards the cost of reducing emissions being devolved to emitters. This is another way of saying that in the future, emissions are likely to carry a cost. This is not a New Zealand government initiative. It is an international reality.

In mid-2007, the Government clarified its rationale for favouring emissions trading over carbon taxation. The identified advantages of an emissions trading instrument included its economic flexibility and efficiency, its well-established preference within the Global Climate Change Regime, and finally the potential of emissions trading to generate business opportunities and economic growth – particularly in developing new mitigation technologies and new sources of low-carbon, renewable energy. An emissions trading scheme was seen as an ideal policy for managing emissions reductions, as it would equally redistribute the costs of mitigation across the economy. By increasing the costs of carbon-intensive products and services, an incentive for reducing emissions would be created (Parker, 2007a). Such an approach would correspond with least cost climate change governance (Parker, 2006a). Treasury also recognised the greater economic efficiency of emissions trading, with then Secretary of the Treasury, John Whitehead (2007, p. 2) stating:

[New Zealand] needs to combine a well-designed economic response – such as an emissions trading scheme – with complementary measures by households, firms and government ... a combination of measures which is cost-effective, efficient, and creates opportunities at home but, at the same time, is integrated with international action in a way which recognises New Zealand's unique interests.

Systemic variables also provided momentum for an emissions trading scheme. As argued in the previous chapter, the exclusionary imperative and the dependency constraint embed within state activity a structural preference for minimal interventionist and least cost policy change. Emissions trading/cap and trade policies are easier to reconcile with the state's capitalist rationality, as they embody minimal interventionist and least cost climate change policy. Hence, there is an incentive for the state to pursue the more capitalist emissions trading option.

#### **Box 7: Emissions trading**

Emissions trading (otherwise known as cap and trade) refers to a type of environmental policy used to manage pollution externalities, including greenhouse gases (Helm, 2005; MfE, 2015d; Parker, 2007e; Stavins, 2001; Tietenburg, 2006; Wilson, 2011). Unlike command and control regulation, where the coercive powers of the state are used to control pollution, an emission trading scheme employs a market-based approach, financially incentivising cleaner and more efficient productive practices. Emissions trading policies are categorised as economic instruments or market-based instruments, as they induce behavioural changes in actors through the introduction of a carbon price signal, i.e. a price on carbon pollution.

According to Wilson (2011, p. 147), emission trading schemes are composed of three elements: an assigned property right to pollution, the enforcement of these property rights by the state, and a marketplace where these rights can be traded. Under an emission trading system, the government allocates or sells to private actors the right to produce a fixed quantity of pollution. The state, however, also rations these pollution rights (in the form of permits, units, carbon credits etc.), creating a defined limit on the total amount of pollution that can be generated. This is known as a quantitative cap on emissions. Polluting firms, compelled to participate in the emissions trading scheme, are required to hold the necessary permits to account for their emissions. These actors are subsequently able to trade pollution rights amongst themselves within a carbon marketplace.

The quantitative cap on emissions creates a scarcity of units for participants to buy and sell. The trade of these units/permits determines their price. Moreover, the ability to trade permits ensures an efficient distribution of pollution rights throughout the economy. Those firms with high levels of

emissions would be required to purchase a large number of offsetting permits, while firms with low-levels of emissions might be in a position to sell surplus units. Industries that actually remove greenhouse gases from the atmosphere (such as forestry) earn units, which can be sold at the carbon market for profit. Importantly, individual firms are entirely free to determine how they respond to the carbon price signal. Heavier industrial emitters may simply choose to acquire carbon credits to account for their emissions. Conversely, they might very well modify productive practices and attempt to mitigate their emissions – reducing the burden of acquiring offsetting units. Forestry owners can expand and plant more trees, earning more units. Essentially, those actors capable of most cheaply reducing their emissions will do so, while those who are incapable of doing so are forced to obtain more permits. In theory, this type of regulatory approach to managing pollution externalities will be at the least cost to society, as firms will respond to the carbon price signal by exploiting the most cost-effective means to achieve mitigation.

This is essentially how the NZ ETS operates – although the Scheme’s idiosyncratic design does affect its operation in several crucial respects. In New Zealand, carbon intensive firms are required under the *Climate Change Response (Emissions Trading) Amendment Act (2008)* to participate in the NZ ETS and hold units to account for their emissions. The principal unit of trade within the domestic carbon market is the New Zealand Unit (NZU), which permits participants to emit one tonne of CO<sub>2</sub> (or equivalent amount of another greenhouse gas).

However, NZ ETS participants are also allowed to use international Kyoto units to satisfy their surrender obligation. The Environmental Protection Authority administers a national registry which banks and manages NZUs and Kyoto units. Annually, NZ ETS participants must surrender to the government NZUs or Kyoto compliant units, equivalent to the quantity of emissions they have produced during the year. Those industries that remove greenhouse gases from the atmosphere – specifically forestry – earn NZUs from the government. Participants are, at the same time, required to monitor their emissions, and subsequently, track their liability. This account is subject to government auditing processes, with penalties in place for fraud and non-compliance. NZUs can be traded, like any other equity, on the open market. NZUs can also be directly purchased from other NZ ETS participants. It is important to recognise that specific design features of the NZ ETS, as well as subsequent amendments to the legislation, have altered the structure of the policy. The NZ ETS does significantly depart from the standard cap and trade model presented in economic textbooks. The NZ ETS differs

in three respects: 1) the lack of an imposed regulatory cap on emissions that would limit the gross emissions that can be produced within New Zealand; 2) staged entry into the Scheme for different sectors of the economy, based on their respective vulnerability to competitive disadvantages; and 3) the extensive gifting of free NZUs (emissions permits or carbon credits) to business and industry.

Between 2006 and mid-2007, extensive consultation was undertaken with the public and stakeholders regarding alternatives to the carbon tax. The Government claimed broad support for emissions trading amongst stakeholders (MfE, 2007a, p. 28; Parker, 2007b, 2007f). A majority of submitters to the consultation process supported emissions trading – provided several least cost design conditions were met by the Government (MfE, 2007c, p. 14-17). However, some corporate actors persisted in their opposition to a state-imposed price on carbon. Federated Farmers (2007a), in their capacity as the dominant capitalist fraction, repeated the view that price based measures would be pointless and penalising without cost-effective mitigation options for agricultural emissions. The organisation wanted further assurance that industry would not be “taxed out of existence” or that more regulations would not be imposed on the farming sector (Federated Farmers, 2006). Although Business New Zealand (2007) initially advocated against an imposed price on carbon, it recognised and accepted the Government’s intent to introduce an economic instrument. If this was to occur, Business New Zealand supported an economy-wide emission trading scheme. The wider corporate lobby also felt that the Government had generally rushed the selection of an alternative to the carbon tax. The GPC, the Major Energy Users Group, Federated Farmers, the Business Round Table, the Land Transport Forum, Business New Zealand, and the New Zealand Chamber of Commerce (2007), in their letter to Minister of Climate Change Issues David Parker, wrote:

In respect of an emissions trading scheme, there are major issues around methods of allocation, the level of the cap, and competitiveness at risk for New Zealand industry which require careful working through before a workable, fair and equitable scheme could be introduced.

[...] In order to get durable climate change policy that achieves the government's goals and maintains a healthy economy for New Zealand we believe it is vital that the policy is developed with all stakeholders and not simply imposed to meet an unrealistic timetable.

The National Party (2007), however, provided guarded support for emissions trading. National's then environmental representative, Dr Nick Smith, described emissions trading as "the most rational way to deal with the global question of limiting emissions" and that "in many examples [emissions trading has] been found to be a flexible tool that allows the market to find an environmental solution" (Robertson, 2006). United Future (2007) also favoured the Government's move to emissions trading, while the Business Council for Sustainable Development (2007) openly chastised those in the business lobby still resisting an imposed price on carbon:

Business organisations complaining about the potential cost of emissions trading are like people deciding to attend a heavy metal concert and then objecting to the noise.

The very point of emissions trading is to expose businesses to the marginal cost of their emitting behaviour [...].

In that way they will either pay for those emissions, through buying emission units through the trading system, or cut back or stop their emissions to avoid the cost.

Overall, New Zealand's corporate lobby was supportive of emissions trading. Although segments remained concerned over the potential economic impacts of a price on carbon, the prospect of an emissions trading scheme did not pose the same perceived anti-business and anti-profitmaking threat as a carbon tax. Emissions trading appeared to be a far more amenable option for private capital, as it was generally seen as less interventionist and least cost. This may account for the relatively muted opposition to the NZ ETS from business and industry – particularly in comparison to the earlier carbon tax debate. The proposed NZ ETS (and cap in trade in general) was also largely congruent with the ideological claims made by private capital and their influential political lobby. The notion that market-forces are a more efficient means to

manage environmental resources than state regulation, comfortably squared with private capital's minimal interventionist and least cost policy discourse.

Environmental interests were largely ambivalent to the alternative emissions trading option. The environmental lobby argued that the Government was not proceeding with a policy response commensurate to the risk of climate change. Greenpeace (2006a, 2006b, 2007) was concerned that the possible postponement of a price on carbon until 2012 would undermine New Zealand's response. This view was shared by the Green Party (2006), the Climate Defence Network (2006), and ECO (2006, 2007). For the Environment and Conservation Organisations of New Zealand (2007):

The disappointing thing about the [proposed emissions trading scheme] is the delay in the application of the policies which are staged to affect different sectors of the economy at different dates, almost all after the next election.

The stand out disappointment is that agriculture, which accounts for half of the emissions in the form of methane and emissions from nitrogen fertilisers, is given a free ride until 2013. This reduces the effectiveness and efficiency of the policy and violates principles of equity.

Taxpayers will end up subsidising the agriculture sector for the first round of Kyoto commitments.

The question remains as to why the environmental lobby and its criticism of the proposed NZ ETS was unable to influence the government at all? The answer may be relatively obvious – the environmental lobby are not private capital, and they simply do not possess the same structural advantages that afford business interests power. If the state is truly capitalist, then it should be unsurprising that non-capitalist interests do not have the same influence or attention from governments.

## The NZ ETS

By September 2007, the Government had signalled its preference for cap and trade and its intention to implement an emissions trading system during CP1 (Clark, 2007; MfE, 2007a, 2007b; Parker, 2007c, 2007e). Prime Minister Helen Clark (2007) stated that:

The Government believes that an emissions trading scheme which puts a price on emissions creates the right incentives across the economy to use fuel and energy more efficiently, and to think about how we use resources and manage our land.

The core policy objectives for the NZ ETS were the reduction of net emissions below business as usual levels, and the compliance with New Zealand's Kyoto Protocol obligation. Achieving these twin objectives would also require the maintenance of economic flexibility, equity, and environmental integrity, at the least cost to the economy (MfE, 2007a, p. 14).

In September 2007, the Climate Change Leadership Forum was established to advise the Government on the design of the emissions trading scheme. The Forum drew its membership from across New Zealand's business, agriculture, and forestry sectors, as well as from scientific and environmental non-governmental organisations (Parker, 2007c). The formation of the Climate Change Leadership Forum signified the Government's intent to integrate prominent stakeholders into the state's formal decision-making processes. While the corporatization of the policy process would have certainly empowered private capital, the Government would have also been able to diffuse opposition to the NZ ETS. By directly integrating business and industrial interests into the formulation process, the ownership of the NZ ETS and its outputs would be shared between the state and private capital. Responsibility for the success or failure of the policy would be collective and not the state's alone. The consensus reached by the Forum in favour of the NZ ETS, might indicate its effectiveness in establishing collective ownership of the policy between the state and private capital.

The Government outlined a series of core design features for the proposed NZ ETS (Cameron, 2011; Cabinet Policy Committee, 2007; MfE, 2007b; Parker, 2007b):

- The NZ ETS would be an example of a cap and trade system. Participants would be required to surrender emissions permits (or units) to account for their greenhouse gas emissions. Units would be either directly allocated to participants or sold via auction. Participants would also be able to trade units within the domestic market, allowing market forces to determine the price on carbon.
- Participants in the NZ ETS would be relatively small (approximately 200 including forestry), as only larger businesses and industries at the high end of the supply chain would have a surrender obligation. For instance, oil companies would have an obligation, and not motorists. This was referred to as an “upstream” point of obligation.
- The NZ ETS would be comprehensive. All sectors of the economy would be compelled to participate, and all six greenhouse gases would be included.
- The primary unit of trade would be the New Zealand Unit (NZU). Participants would be required to surrender one NZU for every tonne of greenhouse gases produced. The quantity of emissions would be determined on an absolute historical basis.
- The NZ ETS would also operate within the international carbon market, allowing participants to acquire units from the Kyoto Protocol flexible mechanism. The NZU would be comparable to a Kyoto unit. Access to international markets was considered essential to add liquidity to the domestic market.
- Ownership of units would be recorded within a central registry. The inventory would be periodically audited and inspections would take place to ensure participant compliance.
- Sectorial entry into the NZ ETS would be staggered. Forestry would enter on January 1 2008, the transport sector from January 2009, electricity generation and industrial processes from January 2010, and agriculture from January 2013. The Government reasoned that sectors would have differing capacities to internalise a price on carbon, warranting the staggered approach.
- Those firms deemed to be competitive at risk would be eligible for a free allocation of units, equal to 90% of their emissions. Agriculture would be offered the same subsidy.

Over time, this free allocation of units would be progressively phased out, making participants fully responsible for their emissions by the year 2026.

The gratis allocation of units and the staged entry provision comprised the NZ ETS transitional assistance package. This package was designed to help participants adjust to the costs of the NZ ETS, while concurrently decreasing the overall economic impact of climate change mitigation. However, by providing these benefits, the Government effectively socialised the costs of New Zealand's Kyoto Protocol obligation. While polluter pays mandates that the costs of pollution should be assumed by those who produce it, the Government inverted this by freely gifting NZUs to industry and agriculture, and transferring mitigation costs to the public. Under the proposed emissions trading scheme, the costs of New Zealand's Kyoto obligation would be almost entirely borne by the state, thus releasing private capital from the cost of abatement.

Interestingly, the structure of the proposed NZ ETS radically departed from conventional emissions trading schemes. The NZ ETS's lack of a set, regulatory cap on greenhouse emissions demonstrated the policy's idiosyncratic design (MfE, 2007a, p. 47, Parker, 2007a). As discussed earlier in the chapter, emissions trading schemes traditionally offer *quantity certainty* – that is to say a quantifiable limit on the total amount of greenhouse gases that can be emitted within a jurisdiction. This quality of quantity certainty is achieved by the state fixing or “capping” the total number of emissions permits allocated to participating firms. This is where the “cap” in “cap and trade” comes from. By contrast, carbon taxes impose no such constraint on the quantity of emissions – instead offering *price certainty*, with respect to the price on carbon.

However, the NZ ETS did away with quantity certainty in adopting an uncapped design. The NZ ETS was to have no such domestic limit on emissions. Instead, the policy would operate within the loose international emissions cap established by the Kyoto Protocol. Participants would have access to the domestic NZU, as well as unrestricted access to Kyoto compliant units to satisfy their surrender obligation. Firms would be able to purchase an unlimited supply of units to satisfy

their surrender obligation (MfE, 2007a, p. 47-48). Moyes (2008, p. 913) defined this as a “flexible cap”, as there would be no fixed limit on acquiring units in the NZ ETS.

The absence of a domestic regulatory cap would likely have significant implications for the NZ ETS price mechanism and the price on carbon (as represented by the price of an emissions unit). Let us consider the economics. The presence of a cap creates a scarcity of permits or units. Unit scarcity determines the level of demand within the carbon market. In accordance with the basic laws of supply and demand, a small number of units available for trading within the domestic carbon market would create high demand for NZUs. Conversely, an overabundance of tradeable units would lead to lower demand. Presumably, an emissions trading instrument *without* an independent cap – meaning an unlimited supply of units available for trading – would have a distortionary effect on unit demand. Unit demand would be artificially lowered, resulting in an overall lower unit price. The Government believed that the international cap established by the Kyoto Protocol provided sufficient stringency for the NZ ETS. Although there would be no hard limit on domestic emissions, NZ ETS participants would still be exposed to a price on carbon via Kyoto units and the progressively limited gifting of NZUs. It was also anticipated that the international price on carbon would be much higher than the domestic NZU, meaning firms would be subject to a meaningful incentive to abate (MfE, 2007a, p. 45-46). Nevertheless, these assumptions proved to be incorrect. The significant departure from the normal cap and trade model ultimately contributed to the breakdown of the NZ ETS.

### **The formulation and implementation of the NZ ETS**

After establishing the basic structure of the NZ ETS, the arduous process of formulating the policy’s legislative framework began in earnest. On the 4<sup>th</sup> of December 2007, the *Climate Change (Emissions Trading and Renewable Preference) Bill* was introduced to Parliament. The Bill outlined the NZ ETS instrument, as well as the Government’s preference for new renewable

electricity generation (Parker, 2007d). Debate over the policy design primarily focussed on the transitional assistance provisions, particularly the allocation of NZUs and the entry of economic sectors. New Zealand's corporate lobby pushed for an extended allocation, whereby competitive at risk firms would receive compensation for a longer period (Business New Zealand, 2008b; Change Leadership Forum, 2008a, 2008b; Federated Farmers, 2007b; Greenhouse Policy Coalition, 2007c, 2007d). The Government appeared to agree with the concerns of business and industry. In May of 2008, it was announced that the free allocation of units would be extended by five years beyond 2013, and the entry of transport fuels would be deferred by a further two years (Parker, 2008a).

Both the Climate Change Leadership Forum (2008a, 2008b; Fallow, 2008d) and the Finance and Expenditure Select Committee (2008) recommended that the NZ ETS legislation should be passed with the proposed amendments. The Government acknowledged the concerns of business and industry (Parker, 2008a). Ultimately, it decided to retain agriculture's 2013 entry date, believing that entry before this date would be impractical and unfair (Parker, 2008b). Throughout the formulation process, the extent of stakeholder participation was emphasised:

The government has bent over backwards to give all New Zealanders the chance to have their say, and every opportunity has been provided for groups particularly affected by the Bill to have their views heard.

The legislation has already been changed to reflect some of the constructive input provided by the public and stakeholders. The select committee has the opportunity to consider whether to recommend further changes before the bill returns to the House for its second reading. (Parker, 2008c)

National, notwithstanding their historical support for emissions trading (New Zealand National Party, 2006), opposed the legislation on the grounds that it was rushed and did not adequately balance economic and environmental priorities (Gregory, 2008). ACT's Rodney Hide (2008) was far more critical of the policy, claiming that the "ETS [was not] worth the paper it's written on [as] it will do nothing to reduce carbon emission levels, but will impose a raft of increased costs

on those who can least afford it". Both United Future (Oliver, 2008; United future says people should be told the true cost of the emissions trading scheme, 2008) and the Maori Party (Maori Party says emissions trading legislation fundamentally flawed, 2008) opposed the NZ ETS. This left Labour entirely dependent on New Zealand First and the Greens to ensure the passage of the *Climate Change (Emissions Trading and Renewable Preference) Bill* through Parliament.

The formulation of the NZ ETS was informed by economic and policy analyses<sup>24</sup> conducted by a plethora of policy actors. Motu Research described the policy as "impressive" and that the NZ ETS:

[...] embodies much of the best international thinking [regarding climate change]: it responds to lessons learned from economic theory and from the evaluation of existing emissions trading systems and other environmental markets in unprecedented ways. The proposal takes significant steps towards achieving the Government's political goals without severely compromising the long-run effectiveness, efficiency or true equity of the system. (Kerr, 2007, p. 1)

The consultancy Infometrics (2008) predicted that the NZ ETS would have a modest economic impact and would not negatively affect New Zealand's growth or welfare. Furthermore, regulatory measures, other than an emissions trading scheme, would likely hurt the economy by sending a confused price signal to business and industry to reduce emissions. However, the NZIER (2008, p. 5) projected significant economic impacts resulting from the NZ ETS:

Our analysis [...] shows both that the costs are greater, and that the design proposed in the Bill is not least cost. This is primarily because the ETS, as currently designed, does

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<sup>24</sup> Acknowledging the differing methods of analysis used by these policy actors would appear prudent. The forms of analysis, the economic models, and the assumptions made about the NZ ETS vary between actors. Such differences account for the often contrasting conclusions made between reports. However, it is well beyond the scope of the research to deconstruct the analyses undertaken by these actors. At this point, it is arguably sufficient to demonstrate that competing policy analyses contributed to the formulation of the emissions trading scheme. Delving into the reports would be superfluous in showing that these groups participated in the policy debate. Greater detail here would undermine the coherency of the thesis argument, rather than illuminate.

not adequately deal with New Zealand's exposure domestically and in export markets to competition from producers in countries that do not face the costs of their emissions.

While the NZIER supported emissions trading in principle, the design of the NZ ETS was projected to shrink New Zealand's GDP (-2.1% by 2025) for little actual reduction in greenhouse gas emissions. The report recommended that New Zealand should account for its Kyoto commitments through general public funds. A report prepared by the consultancy Cawthron (Sinner, Lawrence, Sapsford, & Blaschke, 2008) found that the NZ ETS would have limited effect on emissions during CP1. It indicated that owing to the time it would take the newly established price of carbon to change fuel and energy prices, as well as the non-participation of the agricultural sector in CP1, the NZ ETS would only begin to reduce emissions after 2012. Greenpeace's (Saddler, 2008) economic analysis of the policy was comparatively scathing – asserting that the NZ ETS would not be able to effect a reduction in domestic greenhouse gases. Greenpeace pointed to the policy design – the lack of a regulatory cap, the free allocation of units, and the timing of the allocation – that would weaken the economic incentive to abate emissions. However, even Greenpeace conceded that emissions trading could be an effective mitigation instrument, provided it was appropriately designed. This seemed to be a common assumption from the assessments of the policy – that emissions trading was fundamentally sound and superior to carbon taxation. The difficulty came in constructing an emissions trading instrument suitable for New Zealand's response needs and compatible with the competing interests of stakeholders. The Government gladly took this general acceptance of the emissions trading model as proof of support for the NZ ETS (Parker, 2008g).

In September 2008, the provisions establishing the emissions trading component of the original Bill were separated into the *Climate Change Response (Emissions Trading) Amendment Bill*. The new Bill was passed on the 10th of September with support from the Greens and New Zealand First (Parliamentary Council Office, 2008). In addition to the amendments proposed during the Select Committee process, the final legislation included a provision for pre-1990 forest owners to receive a fixed one-off allocation of free units. The Greens were also able to secure a

requirement that surrendered Assigned Amount Units (AAU) would need to be “greened”<sup>25</sup> before becoming valid for use in the NZ ETS (Fallow, 2008a). This provision was much to the annoyance of groups like Business New Zealand (2008a) and the GPC (2008a), who claimed that the amendment showed the Government’s cynicism and desperation in passing the Bill. The Government, however, was satisfied with the successful passage of the NZ ETS, describing it as a “cornerstone economic tool” that would significantly contribute to New Zealand’s climate change response (Parker, 2008d).

The reaction to the NZ ETS from stakeholders was as expected. Parts of the corporate and industrial lobby continued to criticise the instrument, believing that the design was deficient and would likely imperil New Zealand’s economic performance. Federated Farmers (2008a, 2008b), Business New Zealand (2008b), the Greenhouse Policy Coalition (2008a, 2008b), the Major Electricity Users’ Group (2008), and the Business Round Table (Fallow, 2008b) all condemned the NZ ETS, seeing it as a rushed and ideologically driven policy that would have little effect on climate change. The major oppositional political parties joined with these groups in expressing disapproval of the legislation (Eaton, 2008), with National even promising to amend the NZ ETS legislation if it won the 2008 General Election (New Zealand National Party, 2008). On the other hand, organisations like the Council of Trade Unions (2008) and the Business Council for Sustainable Development (2008) praised the emissions trading scheme. Environmental interests were sanguine about the policy. Both Greenpeace (2008a, 2008b) and the Greens (2008) were pleased that the NZ ETS was passed and that a domestic price on carbon would soon be in place. However, they also believed that a more stringent policy regime would be required over time, and that alone the NZ ETS would prove insufficient.

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<sup>25</sup> “Greened” simply means that the revenue generated from the trade of a Kyoto AAU would be recycled back into further emissions reductions projects. Environmental interests feared that the value of an AAU, in terms of the actual emissions reductions that it represented, was suspect. The process of greening would ensure the unit actually represented a meaningful contribution in the response to climate change.

## Interpreting the formulation of the NZ ETS

The passage of the NZ ETS represented the culmination of the NZ CCP – the only comprehensive national emissions trading policy outside the European Union. New Zealand’s glacial progress in developing a policy response to climate change had finally produced an emissions reduction policy, albeit an economic instrument with a contentiously designed price mechanism. But how can we account for the atypical design of the NZ ETS? Continuing with the structural explanation introduced in this and previous chapters, the selection of emissions trading is consistent with the capitalist rationality of the New Zealand state. The NZ ETS constituted the first interventionist policy capable of mitigating the greenhouse gas externality. For the state to not intervene would have been entirely inconsistent with its systemic maintenance function. The Labour Government, fully cognizant of the economic threat of climate change<sup>26</sup>, would have deemed an imposed price on carbon as an essential economic intervention on the state’s behalf, necessary to transform carbon-intensive productive practices. This vital state activity would be in the long-term interests of New Zealand’s capitalist class, who would be otherwise unable to effect the decarbonisation of the economy – and thus sustain the wider capitalist system. The comprehensiveness and authority of the NZ ETS was, in one sense, undeniable, considering participation was compulsory for all sectors of the economy<sup>27</sup> and all greenhouse gases were covered. However, the NZ CCP was concurrently informed by the exclusionary imperative and the dependency constraint. The principal effects of these structural constraints were the continued exclusion of command and control regulation from the policy agenda (the binary policy agenda of carbon taxation and emissions trading) and the preference for emissions trading over carbon taxation. Both the exclusionary imperative and the dependency constraint would have directed the NZ CCP towards minimal forms of state interventionism and a least cost response, contributing to the adoption of emissions trading over carbon taxation.

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<sup>26</sup> Prime Minister Helen Clark (2004) described climate change as a “global problem” that would pose a significant threat to the New Zealand economy. This position was reiterated in 2007, with Helen Clark calling climate change “one of the most important global issues facing us” (Clark, 2007).

<sup>27</sup> Although the agriculture sector was exempt from the NZ ETS’s imposed price on carbon, it was still required to monitor emissions levels.

Furthermore, a structural preference for least cost policy change would have encouraged an idiosyncratic emissions trading scheme, one in keeping with this distinctly neoliberal design quality. Consider the intended instrumental effect of the transitional assistance package (and the lack of a regulatory cap on emissions), which was to make the NZ ETS least cost. The package, in its putative function to protect vulnerable businesses from competitive disadvantages arising from a domestic price on carbon, effectively socialised the abatement costs of private capital. The Government's free allocation of NZUs to carbon-intensive firms and the exemption of agriculture from the NZ ETS transferred much of the costs of New Zealand's Kyoto obligation from polluters to society. The design of the transitional assistance package effectively inoculated private capital from the NZ ETS's imposed price on carbon. Remember, an essential dimension to a least cost climate change response is policy that does not impose significant or punitive costs on private capital. In this respect, the transitional assistance package certainly rendered the NZ ETS least cost, and broadly consistent with the dependency constraint.

However, like the analysis of Labour's abandoned carbon tax, a structural explanation is possibly inadequate to explicate the pattern of policy change that produced the highly peculiar NZ ETS. It is important to consider the effect of secondary constraints in shaping the design of the NZ ETS. Again, a confluence of systemic and secondary variables likely produced the NZ ETS. First, the Labour Government's continued ideological commitment to market environmentalism contributed to the formulation of the NZ ETS. The emissions trading scheme satisfied many of the core tenets of market environmentalism, including:

- an intent to transfer control of mitigation exclusively to private capital, denying the state's intervention in the productive sources of emissions;
- the creation of emissions property rights through permitting;
- the creation of a domestic carbon market where emissions permits could be traded;
- the creation of financial opportunities for business and industry in the act of reducing emissions.

Adherence to these tenets would have inexorably lead the Government to implement a least cost climate change response. Labour wholeheartedly believed in shielding capital from the deleterious effects of a price on carbon – particularly so-called carbon leakage. In its attempt to impose a price on carbon, while simultaneously mitigating potential competitive disadvantages for specific economic sectors, the transitional assistance measures were introduced. These provisions subsidised the abatement costs of those firms perceived vulnerable to competitive disadvantage. It could be argued that the peculiar NZ ETS represented an inevitable outcome of neoliberal, climate change governance. Additionally, a “state elite” predisposed to limited interventionism and least cost mitigation would be unlikely to pursue policy change that could potentially alienate private capital.

Accounting for the specific provisions that comprised the transitional assistance package also requires a consideration of New Zealand’s corporate and industrial lobby. The transitional assistance package reflected the interests and advocacy of private capital. Indeed, the Government parroted groups like Business New Zealand, Federated Farmers, and the GPC, in framing the NZ ETS and the transitional assistance package. The lobby’s argument of the absolute necessity of shielding business and industry from any negative effects created by a price on carbon was shared by the Government, in its justification of the transitional assistance package (Anderton, 2008; Parker, 2008b, 2008e). The broader discursive influence of private capital was particularly apparent with respect to the perceived threat of carbon leakage, which the Government readily and uncritically accepted as true. David Parker (2008e) stated that:

Designing an emissions trading scheme which effectively reduces greenhouse gas emissions while being fair to industry is an important matter which requires careful consideration [...] The government is aware that large greenhouse gas emitters [...] are worried about facing international competition from companies without climate change obligations [...] They are correct that if these allocation arrangements are not properly designed, it raises the risk that heavy industry could move to countries without restrictions on greenhouse gas emissions.

On top of this, the corporate lobby continued the exertion of economic pressure. Firms, including Rio Tinto, Holcim, New Zealand Steel, and Gull, all threatened to move or reduce production if measures offsetting the costs of the NZ ETS were not implemented (Fallow, 2008c; Holcim, 2008; Oliver, 2008b). Again, Rio Tinto insinuated that a domestic price on carbon would force the closure of the Tiwai Point smelter (Rio Tinto, 2008). The Government acknowledged these concerns in the development of the transitional assistance package, which gifted free NZUs to competitive at risk businesses to avert capital flight (Parker, 2008e).

The formulation of the NZ ETS and the transitional assistance package were also subject to pervasive institutionalised privilege, in the form of “expert groups” – technical advisory bodies composed of private stakeholders within the state’s policy-making apparatus. Expert groups provided design advice and technical support for the emissions trading scheme. Amongst these expert groups were the *Electricity Allocation Group*, the *Climate Change Leadership Forum*, the *Stakeholder Group*, the *Working Group*, and the *Technical Advisory Group* (MfE, 2011a). There remained, however, an inherent inequality in the composition of membership with respect to the expert groups. Representatives of the forestry sector, agriculture, energy, transport, industry, and business appeared to be over-represented. Such unequal representation would be problematic, as countervailing or dissenting beliefs (like those from environmental interests) would be excluded from the policy debate, while the beliefs of private capital would be amplified. Consequently, a profound homogeneity would have characterised the advice proffered from these “expert” and insider forums. Minimal interventionism and the need for, and value of least cost policy would have simply been repeated, with countervailing beliefs excluded. It certainly appeared that environmental interests were largely excluded from the stakeholder groups. Greenpeace and the Environmental Defence Society were the only environmental group to participate in the Climate Change Leadership Forum. This contrasted with corporate, industrial, and energy interests, who comprised half of the Forum<sup>28</sup>. The dominance of private capital was

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<sup>28</sup>Other than the two lone environmental interests, the Forum was composed of representatives of forestry, agriculture (although the dairy industry had dedicated members), energy, transport, industry, general

even more pronounced in the other expert groups, which exclusively included corporate actors (MfE, 2008a, 2008b). Through expert groups, private capital presented its subjective class interests as authoritative and objective policy advice on climate change governance. And because these expert groups constituted formal, insider bodies within the state's policy process, an incentive was created for the Labour Government to mechanically accept the proffered advice, and, accordingly, to implement a generous transitional assistance package.

The Government's sensitivity to agriculture is also to be expected considering the sector's hegemony. Agriculture represented the dominant capitalist fraction within the policy community, benefiting from institutional privilege and farming's economic significance. The sector remained the single biggest beneficiary of the transitional assistance provisions – escaping any financial burden imposed by the NZ ETS. These concessions demonstrated the Government's wiliness to frame New Zealand's climate change response in accordance with agriculture's policy beliefs and preferences. In fairness to the Labour Government, there is certainly a sound logic to the state supporting New Zealand's largest and most rewarding economic sector. Failure to do so would have profound economic and political consequences for the Government. Nevertheless, agriculture remains today the largest source of domestic greenhouse gases. A policy instrument fundamentally intended to reduce greenhouse gases, which then effectively excludes the largest productive source of these emissions, would seem to be irrational and contradictory.

### **Interpreting the NZ ETS atypical design**

Explaining the NZ ETS's lack of a domestic cap on emissions and the unrestricted access to the Kyoto flexible mechanism is a more speculative task. The Government never clarified its reasoning behind the uncapped design, other than stating that the international cap established

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business/markets/finance, unions (one member), science and business, local government, central government, and Maori (Ministry for the Environment, 2008a, 2008b).

by the Kyoto Protocol was adequate for New Zealand's policy response (MfE, 2007a, p. 47). Since this design choice signified a radical departure from traditional cap and trade policies, there must have been some additional rationale underpinning the decision. It is inconceivable that the Government was simply negligent in constructing the NZ ETS and that it failed to appreciate the implications of an uncapped design. There would seem to be no legitimate reason for the uncapped design, other than to purposefully distort the NZ ETS price mechanism and curtail the resultant price signal.

So let us speculate (informed speculation though). Unrestricted access to inexpensive Kyoto units would likely discourage participants from purchasing domestic NZUs to satisfy their surrender obligation. Why would firms participating in the NZ ETS acquire NZUs if there were cheaper international units available? The uncapped design of the NZ ETS would immediately weaken the domestic carbon market and the trade of NZUs, with participants looking predominantly to the international market for units. Interestingly, the original intent of the Kyoto Mechanism was for it to supplement domestic emissions reductions (Moyes, 2008, p. 936). Arguably, the Government formulated the NZ ETS in such a way, as to inexpensively as possible satisfy New Zealand's Kyoto obligations of developing a national policy response to climate change – rather than designing a response to comprehensively regulate domestic emissions. A genuine emissions trading scheme, which restricted the number of international units available to participants, would have encouraged the trade of domestic NZUs and strengthened the domestic carbon market.

Secondly, the uncapped design would inhibit the price of an NZU, by undermining demand within the domestic carbon market. Without a hard limit on the overall supply of units, demand would be uncertain – but in all probability low. By foregoing control over a rationed quantity of units, the Government ensured that the NZ ETS would be a qualitatively different economic instrument from conventional cap and trade systems. Bertram and Terry (2010, p. 56-57) suggest that the NZ ETS operated more as a tax than an emissions trading scheme, save that a flawed market

mechanism, rather than the state, would set the price signal. Besides distorting the NZ ETS market-based price mechanism, the uncapped design precluded an imposed quantitative limit on the gross emissions produced by private capital. This meant that business and industry would be able to emit any quantity of greenhouse gases, provided they could account for those emissions with carbon credits. This provision would tend to undercut the fundamental purpose of the NZ CCP by allowing the production of unlimited industrial greenhouse gas emissions.

If the uncapped design and unrestricted access to international units distorts the NZ ETS's price mechanism, why were such contentious design choices pursued? I would submit that these provisions provided business and industry with an additional shielding mechanism from a price on carbon. Their instrumental effect, to distort and lower the NZ ETS price signal, would only really benefit the immediate, profit maximising interests of private capital, by reducing exposure to a high price on carbon. A lower NZU price, combined with greater access to cheap international units, would reduce the costs of NZ ETS participants fulfilling their surrender obligation. And considering that the objective of a least cost response is to minimise the economic impacts of mitigation, crafting an emissions trading instrument that artificially lowered the price on carbon is entirely consistent with this neoliberal, least cost principle. Fundamentally, the development of an uncapped emissions trading scheme, compatible with a minimal interventionist and a least cost response, falls well within Labour's general approach to climate change governance.

## **Conclusion**

Following the demise of the carbon tax, emissions trading became the preferred policy instrument of the NZ CCP. The Government moved to formulate an emissions trading scheme, which could satisfy New Zealand's Kyoto obligations, without offending private capital. The result was the NZ ETS – a market-based economic instrument, which, when operational, would establish a domestic price on carbon. It was envisioned that New Zealand's productive sources

of emissions would respond to the newly imposed carbon price signal by reducing greenhouse gas emissions and investing in carbon sequestration. A suite of transitional assistance provisions was implemented alongside the NZ ETS, with the ostensible aim of protecting vulnerable economic sectors from the policy's possible negative impacts. While the Government and business were relatively pleased with the NZ ETS, environmental interests and the scientific community were wary. The atypical design of the NZ ETS and the concessions afforded to business and industry would have an uncertain impact on the carbon price signal. Indeed, a very real risk existed that the design of the NZ ETS would undermine the economic incentive for firms to reduce emissions.

I would argue that the primary manifestation of the state's political contradiction was revealed in the formulation of the NZ ETS. The Government's minimal interventionist and least cost approach to climate change governance resulted in an emissions trading scheme that would reliably produce a low carbon price signal. The capacity of the NZ ETS to thus incentivise emissions reductions and intervene in productive sources of emissions became highly uncertain. Ideally, an economic instrument would impose a high price on carbon (approximating the social cost of climate change), to compel behavioural changes in economic actors. In its current formulation, the NZ ETS would be unable to do this successfully. A conventional emissions trading system would possibly constitute authoritative climate change policy, capable of satisfying the state's general maintenance function. However, the atypical design of the NZ ETS prevented it from being either meaningful or authoritative climate change policy. Without a commanding intercession within the economy, New Zealand would still be unable to impel economic decarbonisation and offer an adequate response to climate change.

A latent state of policy breakdown is the only possible outcome of a contradictory response. Truly authoritative measures, such as command and control regulation, can never be implemented as they violate the exclusionary and dependency constraints. Conversely, emissions trading, while consistent with those two structural constraints, contradicts the general maintenance function.

Robust interventionist policy can never be reconciled with provisions that curtail the state's capacity to intercede in production and shield business and industry from the costs of mitigation. This is exactly the problem with the NZ ETS. The policy must pursue two fundamentally incompatible objectives. In the first instance, the NZ ETS must intervene in the New Zealand's productive sources of emissions to induce economic decarbonisation. However, in the second instance, the NZ ETS must be limited in its economic intervention, while also shielding private capital from the true costs of climate change mitigation. In the final chapter recounting the political and economic history of the NZ CCP, the policy activity of the fifth National Government will be addressed. National exacerbated the NZ CCP's internal contradiction. Amendments to the NZ ETS and the transitional assistance package in 2009 and 2012 further distorted the price mechanism, resulting in a heightened state of policy breakdown.

## Chapter Eight

### Deepening the contradiction: the moderation of the NZ CCP, 2008-2012

The fraught passage of the NZ ETS had finally furnished New Zealand's climate change response with a mechanism to control domestic greenhouse gases. However, following the 2008 General Election, the incoming fifth National Government "moderated" the NZ CCP. The NZ ETS was comprehensively reformulated, with the Government increasing the policy's transitional assistance to private capital. The effect of this was to further distort the Scheme's market-based price mechanism. Under the moderated NZ ETS, business and industry was afforded even greater protection from a true price on carbon – that is a price approximating the social cost of climate change. On top of this, the Government unexpectedly withdrew from the Kyoto Protocol in late 2012, announcing that New Zealand would not participate in the Protocol's second commitment period (CP2) – putting into question the very future of the NZ CCP. This final period of the NZ CCP witnessed both a consolidation and entrenchment of New Zealand's least cost and minimal interventionist approach to climate change governance.

The fifth National Government dramatically reshaped the NZ ETS and the wider NZ CCP, in accordance with its more naked commitment to neoliberalism and market environmentalism. Business and industry, content with the amendments to the NZ ETS, supported the moderation of the Climate Change Programme. As these moderating amendments were consistent with the dependency constraint and the exclusionary imperative, the Government largely diffused much of the corporate opposition to the NZ CCP. However, in moderating the NZ ETS, the Government also diminished the economic incentive meant to decarbonise New Zealand's productive sources of emissions. This very act of impeding the NZ ETS price mechanism – the state's imposed price on carbon – sustained the contradiction within the NZ CCP, fatally weakening the state in the execution of its general maintenance function.

This chapter will cover the first four years of the fifth National Government and its iteration of the NZ CCP. Four major occurrences of policy change will be addressed, including the special review of the NZ ETS following the 2008 election, the 2009 amendments to the NZ ETS, the 2011 review of the NZ ETS and the 2012 amendments, and lastly, New Zealand's 2012 withdrawal from the Kyoto Protocol. The chapter will conclude with a discussion on the efficacy of the NZ ETS and the NZ CCP. This will provide an opportunity to address the state of the NZ CCP at the conclusion of the Kyoto Protocol's First Commitment Period.

### **The ideology of the fifth National Government**

National's victory in the 2008 General Election resulted in significant domestic policy change. Coalition agreements were reached with ACT, United Future, and the Maori Party, while a memorandum of understanding was signed with the Greens. National, in accordance with its confidence and supply agreement with ACT (New Zealand National Party & ACT New Zealand, 2008, p. 9), and its own publically stated concerns regarding the economics of the NZ ETS, immediately reviewed the NZ CCP (Smith, 2008). For the new Prime Minister, John Key, it was incumbent on his Government to re-evaluate the NZ CCP and better "balance [...] environmental responsibilities with [...] economic opportunities". Hence, the review would be premised on appropriately balancing economic growth with climate change mitigation (Key, 2009). The underlying neoliberal frame of the fifth National's approach to climate change governance was captured by Dr Nick Smith (Smith, 2009a) (the new Minister for Climate Change Issues), who stated that:

The Government's environmental agenda is about rolling back Nanny State regulations and achieving better environmental outcomes through financial incentives [...] our balanced approach aims for New Zealand to be both environmentally and economically sustainable.

According to Roper (2011, p. 26), the review of New Zealand's climate change policy was, in actuality, part of a wider effort by the Government to restart the neoliberal regulatory reform programme of the 1990s. What was evident, however, was that the fifth National Government not only supported neoliberal, market environmentalism, but intended to deepen and fundamentally embed this approach within New Zealand's climate change response.

The review of NZ CCP and, more broadly, National's general macroeconomic strategy, reveals profound ideological differences with its predecessor. While the fifth Labour Government effectively pursued a pro-business, laissez faire approach in managing the economy and the environment, in several crucial respects it did attempt to soften New Zealand's neoliberal regime. Arguably, Labour was not zealously committed to neoliberalism. The fifth National Government, however, was implacably neoliberal in its ideological disposition (Roper, 2011, 2015). National demonstrated a clear intent to govern in accordance with neoclassical and monetarist economic orthodoxy<sup>29</sup> - policy-making akin to that of the fourth National Government. Such an approach would naturally entail qualitatively distinct climate change governance. National heightened and intensified the minimal interventionist and least cost normative foundation of the NZ CCP, entrenching neoliberal, market environmentalist assumptions within the policy response itself.

National's *Bluegreen policy agenda* (New Zealand National Party, 2012; Smith, 2010d) perfectly captures the Government's ardent neoliberalism and commitment to market environmentalism. This ideology attempts a synthesis of environmentalism and free market, laissez faire macroeconomics – arguing that sensible environmental management can, and must go hand in hand with economic growth and job creation. Economic policy instruments are favoured, with the National Government reasoning that efficient resource management occurs when actors are

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<sup>29</sup> The major policies of the early Fifth National Government reflected its commitment to neoliberalism and, in turn, the rejection of state interventionism. The main elements of National's neoliberal policy agenda included the moderation of the NZ ETS, cuts to important social welfare programmes (Working for Families, Kiwi Saver, and student allowances/loans), the selling of state assets, further deregulation of New Zealand's labour market, the reform and corporatisation of education, and targeted fiscal stimulus following the GFC (Roper, 2011, 2015).

presented with incentives to reduce pollution. Regulation is frowned upon, as it is considered costly and inefficient. The notion of *green growth* also seemed to capture the imagination of the National Government (Ministry of Business, Innovation, and Employment, 2012; Ministry of Economic Development, 2011). Discursively similar to the Bluegreen ideology, green growth emphasises the economic value of sustainability and the greening of production and commerce. Both philosophies would have profoundly shaped National's approach to climate change governance. Indeed, the moderation of the NZ ETS could be considered an example of Bluegreen environmental policy – the continued use of economic instruments, applied with particular settings that are conducive to economic performance.

### **The 2009 review and amendment of the NZ ETS**

In December 2008, a special Emissions Trading Review Select Committee was established to evaluate the NZ ETS, particularly in light of the 2007-2008 global financial crisis (Smith, 2008). The review, perhaps controversially, was also asked to reassess the science underpinning anthropogenic climate change (MfE, 2009a; Ministry of Business, Innovation and Employment, 2012; New Zealand National Party, 2012; Smith, 2008). Significantly, the review process halted the implementation of the NZ ETS. Following a shortened select committee process, the review<sup>30</sup> reaffirmed an all-sector emissions trading scheme as the most appropriate policy instrument for the NZ CCP. It also asserted that the *IPCC Fourth Assessment Report (2007)* represented an unimpeachable scientific consensus on climate change. Other than this, no substantive amendments to the NZ ETS or the Climate Change Programme were proposed (Emissions Trading Scheme Review Committee, 2009, p. 8-10).

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<sup>30</sup>The Emissions Trading Scheme Review Committee was intractably divided on the proposed amendments. Members representing Labour, the Greens, ACT, and the Maori Party all produced dissenting minority reviews, critical of the majority's (National's) recommendations. The inability to reach a consensus was attributed to the divergent policy beliefs regarding climate change mitigation and the limited time available to conduct the review (Emissions Trading Scheme Review Committee, 2009).

Upon the review's conclusion, the Government expressed satisfaction with its findings (Smith, 2009b). The Committee's endorsement of emissions trading matched National's long-standing support for the market-based management of pollution. For National, the deficiencies of the NZ ETS were a manifestation of Labour's poor policy design, and not inherent flaws of emissions trading itself:

[There] are ETSs and ETSs. There is a whole range of critical design issues that can make an enormous difference. [...] There is much on which National and Labour agree including the importance of the problem, the need to make progress, support for an all sectors, all gases ETS, the need for transitional arrangements and allocations for trade exposed industry. The point where talks broke down is that Labour, while they could accept an intensity approach to industry, have a different and harder view on agriculture. (Smith, 2009c)

National contended that Labour's NZ ETS, in its allocation of NZUs based on historic, absolute levels, as well as the expeditious phasing out of transitional assistance, insufficiently protected the agricultural sector and small/medium businesses (Smith, 2010c). A NZIER/Infometrics report (2009), commissioned for the NZ ETS review, concurred with the Government's position on an amended emissions trading scheme (Smith, 2009b). The report supported a modified NZ ETS instrument, which excluded agriculture from a price on carbon, allocated units on an intensity basis (rather than a historic basis), and linked the phasing out of transitional assistance to the implementation of policy responses by New Zealand's major trade competitors.

In September 2009, the Government introduced the *Climate Change Response (Moderated Emissions Trading) Amendment Bill* (Smith, 2009d). A significantly more generous transitional period, extending from the 1<sup>st</sup> of July 2010 to the 31<sup>st</sup> of December 2012, was implemented, easing the economic impact of the NZ ETS. The amendments included (Smith, 2009e, 2009f):

- Changes to sectorial entry dates. Agriculture’s entry would be pushed back to 2015, while stationary energy and industry would be delayed until late 2010. The liquid energy sector would enter the scheme slightly earlier in 2010;
- NZUs would be price capped at \$25 until 2013;
- Participants in the NZ ETS would be required to surrender one emissions unit for every two tonnes of emissions. Forestry owners would now only be entitled to one unit for every two tonnes of carbon removed;
- Owners of post-1989 forests were given the option to opt into the NZ ETS and earn NZUs. Forestry owners (both pre-1990 and post 1989) must submit units for deforestation;
- An obligation to harmonise the NZ ETS with Australian climate change mitigation efforts;
- The NZ ETS would be reviewed every five years, with the first review to take place in 2011.

Labour’s emissions trading scheme gifted units on an absolute basis, derived from levels of past emissions for specific businesses and industries. The proposed legislation amended the method of allocation to an intensity basis i.e. determined by a firm’s current levels of production. Participants deemed to be “highly intensive” would receive free units worth 90% of their emissions, while those considered “moderately intensive” would receive 60%. The level of assistance would be phased out at a rate of 1.3% per annum, starting in 2013 for emissions intensive and trade exposed industries, and 2016 for agriculture (Bullock, 2012; Hood, 2010; MfE, 2009c). The Government believed that intensity-based allocation would better protect New Zealand's economic competitiveness, while incentivising industrial efficiency without affecting output (Bullock, 2012, p. 668). The “two for one surrender arrangement” of units (Bertram & Terry, 2010) and the delayed entry of agriculture and exposed industries were intended to produce a similar policy outcome, namely to moderate the impact of the carbon price signal created by the emissions trading scheme. The legislation did not significantly affect forestry, other than the two for one surrender arrangement, which reduced the entitlement of forestry owners to earn emissions units through sequestration. Finally, the Government reigned in national emissions targets, setting a mid-term goal of 10-20% reduction below 1990 levels by 2020, and a long-term goal of 50% reduction of 1990 levels by 2050 (MfE, 2009a, p. 52, 2009d).

The *Climate Change Response (Moderated Emissions Trading) Amendment Bill* passed through Parliament under urgency, leaving little time for formal submissions on the legislation (Hosking, Connor, Metcalfe, Laking, Forde & Phipps, 2009; Smith, 2009g). The expedited legislative process was deemed necessary, owing to the urgent need to moderate the NZ ETS before it came into effect in early 2010. Stakeholders critical of the amendments believed, however, that the truncated process was intended to limit debate on the contentious policy change. Even Treasury criticised the passage of the moderating amendments, suggesting that the level of analysis undertaken in the policy's Regulatory Impact Statement was not commensurate with the significant modifications being made to the design of the emissions trading scheme (MfE, 2009b, p. 2-3; Fallow, 2009a).

*The Climate Change Response (Moderated Emissions Trading) Amendment Act* (2009) was passed in November of 2009, with support from the Maori Party and United Future. The Act's regulatory impact statement (MfE, 2009b) provides insight into the Government's reasoning behind the moderating amendments. The global financial crisis<sup>31</sup> and the moderation of Australia's Carbon Pollution Reduction Scheme had created an economic environment, where the implementation of a high domestic price on carbon would have likely imperilled trade-exposed firms. This risk of significant competitive disadvantages was considered unacceptably great, demanding moderating changes to emissions trading scheme. The proposed Australian emissions trading scheme was to provide significant transitional benefits for their exposed economic sectors – far beyond the assistance originally offered by the NZ ETS transitional assistance package. This obviously would have accentuated potential trade disadvantages facing New Zealand businesses and industries. The amendments offered a more generous package of benefits, reducing the

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<sup>31</sup> Dr Nick Smith stated that the Government, in moderating the NZ ETS, “took a pragmatic view that in the wake of the global recession imposing the full cost of the ETS on households and businesses was not realistic” (Smith, 2010c). This aligns with Roper's (2011, p. 27-28) analysis of the fifth National Government and the extent to which the GFC was used as justification for the neoliberal policy regime. It was the view of the National Government that reducing costs and regulations on private capital, constituted a prudent approach to the state's fiscal and economic management.

exposure of business and industry to the price on carbon. This rationale conforms to National's neoliberal economic strategy – the intention to reformulate the NZ CCP and lessen negative impacts on private capital accumulation.

This attempt to moderate the NZ ETS was again met with support and opposition from stakeholders. New Zealand's corporate and industrial interests were publically ambivalent (see Business New Zealand, 2009a, 2009b; Fonterra, 2009; Gardiner, 2009; Holcim, 2009; Major Electricity Users Group, 2009; Petroleum Exploration and Production Association of New Zealand, 2009). The GPC described the review as a "wasted opportunity" (2009), while Federated Farmers (2009a, 2009b, 2009c) rejected the policy's continued inclusion of agriculture and the Government's 2020 emissions target. Federated Farmers President (2009a), Don Nicolson, demonstrated his organisation's true feelings towards the NZ ETS, with his incendiary description of the instrument:

If the ETS was a sheep, I'd have it put down. Including agriculture is like having a loaded gun pointed at your head, with a finger on the trigger.

The Business Round Table (2009) not only opposed the emissions trading scheme (amended or otherwise) but still questioned the underlying scientific basis of climate change. Ultimately, private capital appeared to nominally support the moderation of the NZ ETS, with Business New Zealand's (2009b) Phil O' Reilly describing the amended policy as a "more measured transition into a full trading scheme while placing a price on carbon".

We can, again, account for private capital's ambivalence to National's moderating amendments with reference to Marxian systems-analysis. The policy change resulted in provisions that benefited those carbon-intensive business and industries with an obligation to participate in the NZ ETS. The expansion of the transitional assistance package certainly complemented the short-term, profit-maximising interests of private capital, while at the same time reaffirmed their control over mitigation. National's moderating amendments entrenched those provisions that

business and industry had originally appreciated about the NZ ETS. It is understandable then that private capital generally accepted, if not modestly supported the policy change. Although, there was still some opposition to the NZ ETS, it appeared muted in comparison to Labour's proposed carbon tax. A degree of corporate opposition to any climate change policy that imposes costs on production is to be expected – and is even perfunctory. However, as the policy change was consistent with the dependency constraint, the Government appeared to diffuse the main thrust of corporate opposition to the NZ CCP.

Environmental interests (Business Council for Sustainable Development, 2009; Climate Defence Network, 2009; Environment and Conservation Organisations, 2009; Greenpeace New Zealand, 2009) deplored the changes, which they felt weakened an already inadequate response to climate change. Green Party co-leader, Jeanette Fitzsimons, described the review process as a “sham”, and felt that instead of amending the NZ ETS legislation “it would [have been] easier and cheaper if the National Party just wrote some big cheques and handed them to our largest foreign-owned companies” (Williams, 2009). Labour (2009a, 2009b) feared that the amendments would transfer the costs of abatement from polluters to taxpayers, while having little effect on reducing emissions. Significantly, the proposed amendments were opposed by Dr Jan Wright, the Parliamentary Commissioner for the Environment. Wright (2009) argued that the amendments would prevent the emissions trading scheme from reducing greenhouse gas emissions:

Putting a price on the carbon you emit, which the ETS does, nudges us towards becoming a low carbon economy. Unfortunately, the amendments almost remove the price signal altogether. And it's the taxpayer who will bear the cost of Parliament's failure to address fundamental problems with the Bill.

My major concern with the proposed amendments is the changes to allocation - or subsidies - after 2012. The allocation of free carbon credits to industry is extremely generous and removes the carbon price signal where New Zealand needs one the most.

## Further moderation of the NZ ETS

On the 1<sup>st</sup> of July 2010, the NZ ETS came into effect with only modest increases to fuel and electricity prices. The state allocation of NZUs also began in earnest. The Government expected that 11.7 million units, worth \$290 million, would be allotted to the industrial sector by the end of 2012 (Smith, 2010c). Further amendments to the emissions trading scheme were signalled throughout 2010. However, in April 2010, the Australian government announced the postponement of its own emissions trading scheme until 2013. This was hugely disrupting for the NZ CCP. The 2009 amendments of the NZ ETS were contingent on the existence of a counterpart Australian climate change programme. The New Zealand Government indicated that if major trading partners, like Australia, did not implement their own response, then the NZ ETS would likely need further moderation. The Minister for the Environment, Dr Nick Smith stated that:

New Zealand would be unlikely to proceed with the full obligations for energy, transport and industrial sectors and to add additional sectors to the emissions trading scheme in New Zealand if there was no progress in other countries, particularly trading partners like Australia, Japan and the United States. (Young, 2010)

In December 2010, the Government confirmed that the statutory mandated review of the NZ ETS would proceed in 2011. It would be conducted by an independent panel of emissions trading and finance experts, and designed to assess the future of the NZ ETS (Emissions Trading Scheme Review Panel, 2011a, p. 14; Smith, 2010b). The review was asked to consider the continuation of the NZ ETS transitional phase, particularly the entry dates of trade-exposed sectors. A majority of submitters to the review felt that further moderation of the NZ ETS was appropriate in light of the still precarious economic conditions following the GFC. Some submitters, however, were concerned that changes would increase the uncertainty around the policy, privilege industry and the agricultural sector while punishing forestry, and further harm Maori customary interests (Emissions Trading Review Panel, 2011b).

When the Emissions Trading Review was released in June 2011 it unequivocally endorsed the NZ ETS. It was the panel's belief that the Government needed to signal to stakeholders the NZ ETS's permanency. This would lead to greater regulatory certainty – deemed an essential quality for cost-effective public policy. Acknowledging the value of the transitional phase, the panel accepted that the adverse international economic conditions made implementation of a price on carbon problematic. Furthermore, as the impacts of the emissions trading scheme varied across the economy, an extended period of state assistance was justified. However, the review did make several recommendations regarding changes to the transitional assistance pathway. Proposed changes included a gradual phase out of the two for one surrender obligation by 2015 (except for agriculture, who warranted a two-year extension), an incremental rise in the NZU price cap by \$5 post 2013, and a prohibition on low-quality international carbon credits. It also argued for the retention of staged sectorial entry into the NZ ETS. Lastly, the review acknowledged the limitations of forestry sinks (and implicitly the net approach) within New Zealand's climate change response. Forestry could not be a "long-term panacea for meeting future international or domestic emission reduction targets" and that the fundamental objective of the NZ CCP must be gross emissions abatement (Emissions Trading Scheme Review Panel, 2011a, p. 7-8).

Although the Government publically welcomed the review and its findings (Smith, 2011a), it ignored many of the panel's key recommendations when, in November 2012, the *Climate Change Response (Emissions Trading and Other Matters) Amendment Act* was passed. The amendments included (Groser 2012a; MfE, 2012a, 2013b):

- The retention of the two for one surrender obligation;
- Maintaining the price cap at \$25 until at least 2015;
- The introduction of offsetting for pre-1990 forestry and a review forestry's compensation under the NZ ETS;
- The indefinite postponement of agricultural participation in the NZ ETS.

The amendments were argued to be necessary in ensuring flexibility within the NZ ETS price mechanism, and its overall consistency with the Government's economic growth priorities (MfE, 2013b, p. 14). Agriculture's entry into the Scheme was indefinitely delayed, with the Government repeating the stance that it would not impose a cost on agricultural emissions without the development of practical and cost-effective abatement options. Furthermore, proposed quantitative restrictions on trading international units were also abandoned (MfE, 2013b, p. 68; Smellie, 2012). However, in late 2011, the Government did move to ban low-quality industrial gas Certified Emissions Reduction units, in line with the 2011 review's recommendations (Smith, 2011b). Overall, the 2012 moderating amendments further engrained the least cost quality within the NZ CCP.

The Government's second round of moderating amendments drew support from business and industry, and widespread criticism from environmental groups. Business New Zealand (2012) viewed the amendments as "reasonable" and that the NZ ETS would still maintain a credible price on carbon. This sentiment was shared by Fonterra, which felt the amendments balanced economic and environmental priorities (Fonterra welcomes ETS changes, 2012). Naturally, Federated Farmers (2012a, 2012b) was pleased with agriculture's continued exemption, stating that:

[...] it's a pragmatic step to position agriculture out because we don't have the tools to mitigate emissions which are practical and scalable. That will take science to solve and science doesn't happen overnight.

The Government defended its moderating policy change, with the Minister for Climate Change Issues, Tim Groser (2012c), arguing that the legislation suitably balanced economic and environmental priorities. According to Groser:

Given the global economic climate, the Government needed to make tough decisions to not artificially inflate the short term cost of the ETS to households and businesses.

[The] amendments will assist New Zealand in meeting its current and future international climate change obligations, ensure this is achieved at least cost to the domestic economy and provide the flexibility necessary to accommodate developments between now and 2015.

For environmental interests, the amendments hollowed out the NZ ETS, demonstrating the Government's antipathy for meaningful climate change policy. The Parliamentary Commissioner for the Environment labelled the amended legislation a "farce" (Wright, 2012), while the World Wildlife Fund (2012) was dismayed at what they considered a short-sighted approach to climate change governance. Greenpeace (2012) New Zealand succinctly summarised the distain felt by environmental groups:

By gutting the Emissions Trading Scheme any progress to tackle climate change will be drowned out by the sound of chainsaws, as trees fall to be replaced by industrial dairy farms - and more emissions.

This is just another example of the Government writing laws to suit the country's biggest polluters, to the enormous cost of ordinary New Zealanders.

There was also political opposition to the amendments. The Green Party (2012a) described the legislation "ripping out the heart of the emissions trading scheme", while Labour (2012a, 2012b) similarly referred to the amendments "gutting" the NZ ETS policy.

### **The instrumental effects of the NZ ETS moderating amendments**

In this chapter, I have argued that the 2009 and 2012 moderating amendments consolidated and entrenched New Zealand's least cost and minimal interventionist approach to climate change governance. The fifth National Government reformulated aspects of the NZ ETS, strengthening its neoliberal and market environmentalist foundations. It is important now to dig deeper into

this policy change and consider its precise instrumental effect – how the modifications ensured limited state intervention and promoted a least cost response.

By all accounts, the moderating amendments further distorted the NZ ETS's market-based price mechanism, decreasing the carbon price signal, i.e. the price of NZUs. This act substantively shielded private capital from a price on carbon. The Government was entirely open with its intent to minimise the economic burden of the NZ CCP on its corporate allies. It is also instructive that National went well beyond the amendments recommended by the 2009 and 2011 reviews. Such an act would undermine the Government's claim that the amendments were solely planned as corrective measures for Labour's poorly designed emissions trading scheme. If National truly intended to fix the design flaws of the original NZ ETS, the amendments implemented by the Government would have directly corresponded with the quite specific recommendations of the 2009 and 2011 reviews. The reviews endorsed minor corrective changes to the NZ ETS (and in particular the transitional assistance package). The Government, however, largely ignored the advice – revealing its true intent to restructure the NZ ETS.

The distortionary effects of the moderating amendments warrant further discussion. These provisions included: 1) the price cap on NZUs, 2) the free allocation of NZUs to competitive-at-risk firms, 3) the delayed entry of sectors into the Scheme, 4) the continuation of unrestricted access to the international carbon market, and 5) maintaining the lack of a regulatory cap on emissions. The amendments either interfered with the NZU price signal or limited the exposure of NZ ETS participants to a price on carbon. For an economic instrument to incentivise a reduction in emissions, the imposed price on carbon must approximate the social cost of climate change (Intergovernmental Panel on Climate Change, 2007b). Estimates of the social cost of climate change vary, but the IPCC estimate that would limit global warming to 2°C ranges between \$60 and \$200 NZD per tonne of carbon by 2030 (MfE, 2015d, p. 13). To effect an authoritative and meaningful intervention in the productive sources of emissions, the NZ ETS price mechanism would need to generate a price on carbon equal or similar to the social cost of carbon. This carbon

price signal would also need to be equally applied across the economy. However, the distortionary, moderating amendments ensured a price on carbon that was well below the social cost of carbon. In fact, the free allocation of NZUs to business and the delayed entry for select NZ ETS participants effectively spared private capital from a price on carbon. Under the NZ ETS, carbon-intensive firms are provided with, at best, a weak incentive to alter their production and reduce emissions, and at worst, a perverse incentive to maintain polluting yet profitable productive practices. The following arguments will draw on the policy analysis of Bertram and Terry (2010), Hood (2010), Bullock (2012), Richter and Chambers (2014), Macey (2014), and Hadley (2015). This collective body of scholarship provides a comprehensive interpretation of the NZ ETS instrument.

It is important, however, to preface this discussion by acknowledging that economic and political factors, external to the NZ CCP, appreciably affect the domestic price on carbon. First, the NZ ETS and the domestic price signal are influenced by the fluctuations of the international carbon market. As a direct substitute for other Kyoto-compliant emissions units, the NZU value is inextricably linked to the Kyoto Protocol's flexible mechanism. This would mean that neither the NZ ETS design nor the conditions within New Zealand's carbon market, solely determine the price on carbon in New Zealand (Bertram & Terry, 2010, p. 51). Because of this, even the distortionary effects of the moderating amendments would be somewhat limited.

Furthermore, the NZU has gradually become redundant in light of the continued absence of quantitative restrictions on international units (Carbon News, 2013a). Because participants in the NZ ETS are able to purchase inexpensive and dubious<sup>32</sup> Kyoto units to satisfy their individual surrender obligations, the overall demand for NZUs collapsed between 2010 and 2012. Allowing

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<sup>32</sup> The lack of environmental integrity of CERs, ERUs, and RMUs has been well documented (Royal Society of New Zealand, 2016; Simmons & Young, 2016). Auditing has revealed that these units do not represent actual reductions in emissions anywhere in the world. Most of these units originate from Eastern Europe, where compliance and auditing practices lack integrity. Simmons and Young (2016, p. v) go so far as to suggest international units are, in fact, fraudulent – so much so that in 2013 these units were banned from use in the European Union's Emissions Trading Scheme.

rational self-interested NZ ETS participants to cover 100% of their emissions with international units all but guarantees that carbon-intensive firms will select cheap CERs, ERUs, and RMUs over relatively expensive NZUs (Macey, 2014, p. 52). Indeed, within the New Zealand Emissions Trading Scheme, CERs, ERUs, and RMUs have become the predominant units of trade (Environmental Protection Authority, 2013, p. 2; MfE, 2015a). By the end of 2013, international units accounted for 99.5% of all surrendered permits in New Zealand (Environmental Protection Authority, 2013, p. 2). The Royal Society of New Zealand (2016, p. 70), in its review of the NZ ETS, concluded that this provision greatly contributed to the collapse of the domestic carbon market, as well as the low carbon price signal. Obviously, the price of Kyoto units at the international carbon market is not affected by the design of New Zealand's Emissions Trading Scheme. As trading of NZUs has become minimal in New Zealand, those moderated design features of the NZ ETS (which could only affect the price of a domestic NZU) have become less relevant – and perhaps even inconsequential.

However, the atypical design of the policy and the moderating amendments are still instructive in demonstrating the capitalist bias of the NZ ETS. Let us begin with the NZU price cap, which represented the Government's most blatant attempt to manipulate the domestic price of carbon. The 2009 amendments provided NZ ETS participants with the option to purchase NZUs directly from the government at a fixed price of \$25, as an alternative to either the international or domestic carbon markets. It was reasoned that if the market-driven price on carbon became too high, NZ ETS participants would be able to acquire NZUs from the state, at a set \$25 value. While the intent of the NZ ETS was to allow market forces to determine an appropriate price on carbon, the price cap amendment undermined this by imposing a de facto NZU price ceiling. Added to this, the \$25 price cap was substantially lower than any recognised estimate of the social cost of carbon. In effect, this ceiling constrains the NZ ETS market-based, price mechanism, preventing the determination of an efficient or meaningful carbon price signal. Even if the New Zealand carbon market arrived at a higher carbon price, one approaching the social cost of climate change, participants would be able to obtain units at the Government's low \$25 offer. Firms seeking to reduce the financial burden of the NZ ETS would, every time, accept the Government's

generous offer. Considering that the amendments package included a two for one NZU surrender obligation, the real price ceiling for emitting one tonne of CO<sub>2</sub>-e was only \$12.50. The price cap immediately creates a disparity between New Zealand's imposed price on carbon and the true social cost of carbon.

In a similar manner, the gifting of NZUs to so-called competitive-at-risk firms undermines the NZ ETS's intervention in the productive sources of emissions. This provision subsidises carbon-intensive firms in their efforts to reduce emissions, protecting private capital from the true price of carbon. Labour's 2008 formulation of the transitional assistance package supplied agriculture and industry with 90% of the NZUs required to cover their emissions liability. This free allocation was to be gradually phased out in order to make participating firms fully responsible for their emissions. The 2009 and 2012 moderating amendments reduced the phase out rate of this transitional assistance – drawing out the allocation of NZUs (under the 2009 amendment some 80 years' worth of subsidisation, costing New Zealand \$61 billion (Bertram and Terry, 2010, p. 104-108)). As this provision awarded select participants with a large portion of their required NZUs, the exposure of these sectors to a meaningful price on carbon was significantly curtailed. Instead, firms were only obligated to account for a fraction of their total emissions, reducing the number of NZUs (and other international units) needed to comply with the policy. Bullock (2012, p. 668) argues that the 2009 change in the Government's method of unit allocation, from "grandparenting" to intensity or production-based, also increased the state's subsidisation of heavy emitters:

Free allocation of units amounts to a subsidy to emitters. When these units are grandparented, participants who receive a free allocation are essentially 'compensated' for the scheme's impact on technologically locked in emissions, meaning the scheme will have less retrospective effect on such participants. However, intensity-based allocation goes further; participants are 'compensated' or subsidised for increasing emissions. Even firms that have entered the market after the scheme has come into

force are entitled to an allocation of units, even though the scheme has had no retrospective effect on them.

This provision is purposefully distortionary. The very act of gifting NZUs unequally distributes the cost of abatement across the economy, as it releases certain, favoured actors from the obligation to reduce emissions. As the state elite ultimately determines which firms and economic sectors are entitled to free NZUs, participants with greater political influence are invariably the beneficiaries of the subsidy. It should be unsurprising then that agriculture is comprehensively spared from a price on carbon, considering their position within New Zealand's capitalist system and its substantial institutional privilege.

The problem with the state subsidising carbon-intensive firms through the gifting of NZUs, is that the financial burden of emissions mitigation is transferred from business and industry (who are the primary source of domestic greenhouse gases) to the public. Remember, under the Kyoto Protocol, New Zealand must account for all of its domestic emissions during CP1. The provision of free NZUs shifts that burden from polluters to the Government and, in turn, taxpayers. Bertram and Terry (2010, p. 111-2) suggest that as much as 84% of New Zealand's Kyoto liability will fall on New Zealand taxpayers, representing a massive transference of the Kyoto debt to future generations. Moreover, the design of the NZ ETS unevenly distributes the cost of abatement across the economy. While the NZ ETS was meant to cover 100% of the economy, in reality the measure only exposes 54% to a price on carbon (Macey, 2014, p. 53). For Macey:

New Zealand's ETS settings have created winners and losers: winners in the livestock sector, the most emissions-intensive of agriculture; and losers in forestry, other less greenhouse gas-intensive land sector uses, and also to some extent the rest of the economy, which has to bear the costs of the 46% of emissions that are outside the ETS but within New Zealand's international target.

When the gifting provision is coupled with the staged entry into the NZ ETS, private capital's shielding from a price on carbon becomes almost absolute.

The cumulative effect of these provisions – the NZU price cap, the absence of any limits on international units, the uncapped design of the NZ ETS, and the gifting of NZUs to carbon-intensive firms – has been the breakdown of the NZ ETS policy instrument. In 2013, the price of an NZU dropped from around \$20 in 2011 to less than \$2 (Green Party of Aotearoa New Zealand, 2012; Richter and Chambers, 2014, p. 60). While the NZU price has slowly risen since 2013, the 2015 price fluctuated between \$5.70 and \$6.50 – well below the established price cap of \$25 (\$12.50 if you include the two for one surrender provision) (Carbon Forests Services, 2015; Horizon Research, 2013; Stock, 2013). As firms can acquire an unlimited number of Kyoto-compliant units to account for their emissions – all of which are valued well below the NZU anyway – the price signal established by the NZ ETS has progressively weakened. Between 2011 and 2015, the value of ERUs, CERs, and RMUs crashed. In 2012, the ERU fell to 15 Euro cents, while the CER dropped to below 5 Euros (Complete Disaster in the Making, 2012; Harvey, 2012; Horizon Research, 2013).

In sum, the peculiar design and settings of the NZ ETS has meant that carbon-intensive actors are not at all exposed to a meaningful price on carbon. The economic incentive imposed by the NZ ETS is woefully insufficient to precipitate the decarbonisation of production in New Zealand. As a form of state interventionism, the NZ ETS cannot be considered either significant or authoritative. Those emitting actors subject to the negligible monetary burden of the NZ ETS can easily absorb this cost and continue practising forms of carbon-intensive production. As business as usual practices are profitable, firms will always delay implementing changes without some form of external compulsion. There is even evidence that the low price of NZUs has encouraged forestry owners to leave the NZ ETS, as it no longer profitable (Carbon News, 2013b). It is arguable then that the current design and settings of the NZ ETS – which shield business and industry from an imposed price carbon – conform to the immediate, profit maximising interests of private capital. However, an emasculated NZ ETS ultimately spells big trouble for the long-term interests of private capital, if climate change continues to occur unabated.

## **The uncertain future of New Zealand's Kyoto obligation**

Since 1997, New Zealand's commitment to the Kyoto Protocol underpinned the NZ CCP. This all ended in November 2012, with the Government's decision that New Zealand would not participate in the Kyoto Protocol's second commitment period (CP2). From 2013, New Zealand would pursue a parallel, non-binding emissions reduction framework under the UNFCCC, rather than the Kyoto Protocol. Although this was not a total withdrawal from Kyoto (as the Protocol's framework of rules would still be applied in New Zealand), the move did end the binding obligation for New Zealand to reduce greenhouse gas emissions to specific, internationally agreed upon targets (Groser, 2012b; Groser & Bridges, 2012; MfE, 2013, p. 61). The withdrawal would also effectively terminate New Zealand's access to the international carbon market after 2015, significantly affecting the liquidity of the domestic market (Environmental Protection Authority, 2012; Groser, 2012d). The Government argued that an alternative commitment under the UNFCCC would better align the NZ CCP with other major economies, collectively responsible for 85% of the world's emissions (Groser, 2012b). Both Labour (2012) and the Greens (2012d) rejected this logic, claiming that the withdrawal would harm New Zealand's international reputation and undermine the Global Climate Change Regime. Prominent New Zealand climate scientist James Renwick and policy expert Ralph Chapman also criticised the Government's decision (Climate scientists criticise Govt's Kyoto decision, 2012). There was an overwhelming sense of incredulity in response to the Government's course of action.

What are the implications of New Zealand's withdrawal from the Kyoto Protocol? The NZ CCP was founded on a belief that the global nature of climate change demanded a collective international response. The mitigation of climate change requires the equitable participation of all nations within the GCCR. New Zealand's very participation in the global governance regime helped shape and legitimise international efforts to reduce greenhouse gas emissions. I would argue, by withdrawing from Kyoto, the Government repudiated two decades of policy activity. Now, the Government could argue that New Zealand was still engaged with international climate

change efforts through the UNFCCC, its continued participation in multilateral climate change meetings, and its presence and contribution to the Global Research Alliance on Agricultural Greenhouse Gases (Global Research Alliance on Agricultural Greenhouse Gases, 2016; MfE, 2013b). However, in discontinuing the binding obligation for New Zealand to reduce greenhouse gas emissions, the Government signalled a radical break from the norms of international climate change governance. Not only did the decision begin the process of extricating New Zealand from the international governance regime, it also represented a rejection of common but differentiated responsibility. The notion that developed nations must accept the majority cost in mitigating climate change had long been the basis of international and domestic climate change efforts (Stone, 2004; United Nations, 1992, 2016b). The principle was implicit in National's Comprehensive Strategy on Climate Change, and Labour's proposed carbon tax and the NZ ETS. The fifth National Government was adamant, however, that the Kyoto framework was fatally insufficient and inequitable in allowing large developing economies to emit without constraint. Withdrawing New Zealand from the regime represented a qualitative shift in climate change governance, where, for the first time, domestic self-interest and national sovereignty trumped collective international responsibility and action.

At the conclusion of the Kyoto Protocol's first commitment period, New Zealand's predominant mode of climate change governance appeared increasingly at odds with a meaningful climate change response. The Government's articulation of the Business Growth Agenda (Ministry of Business, Innovation and Employment, 2012) – with its focus on developing New Zealand's primary industries and petroleum reserves – contradicted efforts to decarbonise the economy. Indeed, the Government intended to double the value of New Zealand's agricultural exports and greatly expand the exploration and production of fossil fuels (Boston, 2015, p. 490). Considering that agriculture and petroleum represent massive sources of anthropogenic greenhouse gases, any macroeconomic strategy that emphasises and expands these sectors must be antithetical to the goal of reducing emissions. Such an agenda speaks volumes about National's priorities and neoliberal beliefs. It also begins to demonstrate (alongside the Kyoto Protocol withdrawal) the uncertainty surrounding the future of the NZ CCP.

## **Attributing policy success or failure with respect to the NZ CCP**

At this point in the thesis, an assessment of the NZ CCP and its efficacy would seem useful. Has the NZ CCP succeeded as an ameliorative response to climate change? The analysis, thus far, would strongly suggest that major facets of the NZ CCP have succumbed to policy breakdown. It is therefore arguable that New Zealand's response to climate change has been largely unsuccessful. However, before policy success or failure can be determined, an appropriate measure must be defined. For McConnell (2010, p. 351), a policy or programme can be considered successful if it:

[...] achieves the goals that proponents set out to achieve and attracts no criticism of any significance and/or support is virtually universal.

Policy failure is the mirror image of success. A policy fails when it does not achieve its objectives and generates significant opposition.

Three critical issues need to be acknowledged before the success of the NZ CCP can be judged. First, the longevity of the NZ CCP complicates a general statement of either success or failure, as arguably there have been instances of both success and failure. Success could easily be attributed to the 2002 ratification of the Kyoto Protocol, the state's commitment to fund climate change research<sup>33</sup>, or the continued financial support for developing nations in responding to climate change<sup>34</sup>. The implementation of the NZ ETS was arguably a success, considering its comprehensive nature and exceptionality in comparison to other national climate change policies. Undoubtedly though, the history of the NZ CCP has been replete with instances of breakdown, including the failure to implement the 1990s low-level carbon charge, the 2005

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<sup>33</sup> In 2011/2012, public expenditure on climate change research totalled \$55.7 million, with an additional \$20 million for climate and weather observation. Much of this funding has gone to developing forms of cost-effective agricultural emissions abatement (MfE, 2013b, p. 176). However, this figure represents only a modest increase from 2007/2008, when government funding of climate change research totalled \$55 million (MfE, 2009a, p. 130).

<sup>34</sup> Between 2010 and 2012, New Zealand provided approximately \$90 million in climate related aid, through various bilateral, regional, and multilateral contributions (MfE, 2013, p. 156).

collapse of Labour's proposed carbon tax, and the moderating effect of National's 2009 and 2011 amendments. Of course, from the perspective of certain stakeholders (private capital in particular), these failures would undoubtedly represent instances of success. The attribution of success or failure can be subjective and certainly contested.

Second, the objectives of the NZ CCP have not remained constant. Considering the significant policy change since 1988, changing policy objectives should be unsurprising. However, inconsistency in the markers of policy success complicates its attribution. There are two types of policy objectives with respect to the NZ CCP: the quantitative emissions reduction targets established by the government and the Kyoto Protocol, and the broader qualitative objectives that speak to policy design and desired policy outcomes. Over the years, the NZ CCP's quantitative emissions targets have been deflated:

- 1991: a 20% CO<sub>2</sub> reduction of 1990 levels by 2000 regardless of GDP growth;
- 1994-1997: a return to net 1990 CO<sub>2</sub> levels by 2000 and maintain thereafter;
- 2001-2008: meet Kyoto targets, which entailed limiting emissions to their 1990 levels during CP1 (2008-2012);
- 2009-2012: 10-20% reduction below 1990 levels by 2020, and a long-term goal of 50% reduction of 1990 levels by 2050;
- 2013: an unconditional 5% reduction below 1990 levels by 2020.

The above objectives were variously described as responsible and representative of New Zealand doing its "fair share" (Key, 2012; Parker, 2008f; Smith, 2010a). If policy success or failure is to be assigned, which of these targets should be the basis? By the initial 1991 standard, the NZ CCP has absolutely failed – New Zealand emissions were not 20% below 1990 levels in 2000. However, there is still time for the 2013 objective to be achieved. Moreover, it could be argued that the 2013 objective is far less meaningful than the 1991 objective, as it corresponds with a smaller reduction in New Zealand's anthropogenic greenhouse gases. Considering then, that the 2013 objective represents, arguably, an insignificant reduction in emissions, actually achieving the target may not necessarily constitute a policy success.

Intuitively, the determination of success based on quantitative targets should be straightforward. Either targets are met or they are not. However, the NZ CCP's use of the net measure (over gross) constitutes a disingenuous standard to calculate emissions reductions. As discussed in chapter five, the net measure is contentious as it includes uncertain variables within its calculation of emissions. This uncertainty particularly concerns forestry sinks. First, there is still debate regarding the sequestering capacities of New Zealand's sinks i.e. the actual extent to which forests remove greenhouse gases from the atmosphere. Second, the permanency of forestry sinks is not included in the net calculation. The offsetting effect of forestry is indefinite because commercial forests are eventually felled. The Ministry for the Environment (2013b, p. 100) has actually acknowledged the impermanence of New Zealand's commercial forests, and that by 2030 these forests will be a source of carbon and not a sink.

The NZ CCP's qualitative objectives have also changed over time. At various points, the NZ CCP's high-level objectives have referred to New Zealand (Richter & Chambers, 2014):

- Meeting UNFCCC and Kyoto Protocol obligations;
- Demonstrating leadership on climate change issues;
- Promoting sustainable development and economic resilience;
- Contributing to the climate change research project;
- Promoting an equitable policy response with New Zealand doing its fair share internationally;
- Enhancing New Zealand's adaptive capacity to climate change;
- Encouraging economic growth and opportunities through mitigation and adaptation;
- Effecting least cost greenhouse gas reductions.

This last goal of a least cost reduction in emissions appears to be the only constant qualitative objective. This might indicate that a least cost response is the fundamental qualitative policy objective of the NZ CCP. Should it then follow that the realisation of a least cost response is the

only reliable marker of policy success for the NZ CCCP and its policies? Are the other policy objectives superfluous?

Third, policy objectives are open to interpretation. Because policy objectives can be subjectively interpreted, the attribution of success or failure can often differ amongst actors. Take, for instance, the qualitative objective of a least cost response to climate change. In environmental economics a “least cost response” refers to any measure that achieves an environmental objective at the lowest overall financial cost to society. Certainly, the least cost option implicitly connects economic sustainability with emissions reductions – but what this represents in terms of actual instrumental changes or policy design remains unclear. If the formulation of a least cost objective was inherently ideological, and prioritised economic efficiency over environmental integrity, then the very legitimacy of this objective would come into question.

### **The NZ CCP and the state of policy breakdown**

Bearing these issues in mind, I would suggest that any reasonable critical analysis of the NZ CCP would ultimately find the response to be unsuccessful – and therefore in a state of policy breakdown. Firstly, the NZ CCP has failed to achieve either its quantitative emissions targets or the universal qualitative policy objective of least cost mitigation. Between 1990 and 2013, New Zealand’s gross emissions increased by 21%. In 1990, New Zealand’s gross annual emissions were 66,720.16 kt CO<sub>2</sub>-e. By 2013, this figure had risen to 80,961.64 kt CO<sub>2</sub>-e, constituting an annual growth rate of 0.9%. Net emissions figures fared even worse, with a 42% increase occurring between 1990 and 2013 (1990: 38,065.71 kt CO<sub>2</sub>-e and 2013: 54,200.53 kt CO<sub>2</sub>-e) (MfE, 2015e, p. 9). Between 2013 and 2014, New Zealand experienced a 1% rise in gross greenhouse gas emissions (which were now 23% above their 1990 levels) (MfE, 2016b, p. viii). New Zealand’s three most significant greenhouse gases – CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O – all increased between 1990 and 2013, by 36.3%, 7.0%, and 24.1% respectively. The energy, industrial processes, and agricultural

sectors all experienced emissions growth, with waste experiencing a slight decline (MfE, 2015b, p. iv-xiv). New Zealand's contribution to atmospheric greenhouse gases has actually increased while the NZ CCP has been in place.

In 2008, agriculture constituted the largest source of domestic emissions – producing 34,826 Gg CO<sub>2</sub>-e, or 46.6% of New Zealand's total emissions. Energy, industrial processes, and waste represented the remaining major contributors, with the sectors producing 33,839 Gg CO<sub>2</sub>-e (45.3%), 4,292 Gg CO<sub>2</sub>-e (5.7%), and 1,671 Gg CO<sub>2</sub>-e (2.2%) respectively (MfE, 2010, p. vi-viii). Figures for 2013 revealed that agriculture, industrial processes, and waste all experienced increases in emissions. Agricultural emissions increased to 39,200 Gg CO<sub>2</sub>-e (48%), while industrial processes and waste both increased to 5,100 Gg CO<sub>2</sub>-e (6%). Only energy experienced a reduction in emissions – 31,700 Gg CO<sub>2</sub>-e (39%) (MfE, 2015b, p. 1).

The overall growth of emissions has continued, even while the New Zealand Emissions Trading Scheme has been operational. Between 2010 and 2011, gross emissions grew by 1.4% (MfE, 2013a, p. v), while between 2011 and 2012, emissions grew by 2.2% (MfE, 2014, p. vi). The 2012-2013 period did see a 1.4% decrease in emissions. However, this drop has been attributed to a higher contribution of renewable energy sources reducing the demand for fossil fuel based energy; an overall reduction in ruminants during this period, leading to a decrease in agricultural emissions; and improved landfill management practices, decreasing waste emissions (MfE: 2015b, p. 32). The ineffectiveness of the NZ ETS was recognised by the 2011 review, which found that “the ETS has not had a significant impact to date, given the transitional measures that were specifically introduced to moderate its impact in the short term” (Emissions Trading Scheme Review Panel, 2011a, p. 18). In 2016, the Ministry for the Environment (2016c, p. 5) concluded that the NZ ETS had yet to influence domestic emissions mitigation.

The increase in New Zealand's greenhouse gas emissions between 1990 and 2012 demonstrates the ineffectiveness of the NZ CCP. So far, New Zealand has failed to achieve any of the quantitative emissions targets, despite the Programme's deflationary tendency and use of the net emissions measure. The Ministry for the Environment (2013b, p. 99-123) modelled the impact of the NZ CCP on domestic emissions – the results were not encouraging. Accounting for the effect of the NZ CCP (with measures), New Zealand's 2020 gross emissions were projected to be 29% above 1990 levels. However, without the NZ CCP and its associated policies, New Zealand's 2020 gross emissions were expected to be approximately 30% above 1990 level – only 1% (or 437.1 Gg CO<sub>2</sub>-e) higher than the 2020 “with measures” projection. This small difference between the “with” and the “without” projections demonstrates the expected minimal mitigation effect of the NZ CCP.

This growth in domestic anthropogenic emissions has also meant that the fundamental qualitative objective of least cost mitigation has not been achieved. Without measurable emissions reductions, the least cost component of the objective is meaningless. What does it matter if the NZ ETS represents an ideal least cost design for an economic instrument, if emissions reductions cannot be attributed to the policy? In the end, reducing greenhouse gas emissions is the purpose of the NZ CCP – not designing and implementing a theoretically sound least cost policy response to climate change.

The NZ CCP has also largely failed to encourage afforestation. According to the consultancy Convec (2011, p. 23-24), recently observed (2008-present) increases in domestic levels of afforestation, insignificantly correlate with the introduction of the NZ ETS. In any event, levels of afforestation remain historically low – indicating that the substantial growth in forestry predicted in response to the NZ ETS has not eventuated. Richter and Chambers (2014, p. 60-61) also considered the inability of the NZ ETS to drive afforestation. They specifically point to the 2009 and 2011 amendments, which lowered the domestic price on carbon, making forestry less

profitable. Krupp (2012) suggests that the low price on carbon has encouraged the large-scale conversion of forested land to more profitable uses, particularly dairy farming.

While the NZ CCP has its proponents, the overwhelming perception of the response appears to be negative. This opposition has ranged from vested stakeholders to the more objective critics found within academia and journalism. If widespread support for a policy symbolises success, then the pervasive disapproval of the NZ CCP – criticism coming from numerous and reputable sources – is certainly indicative of its failure. Much of this criticism, spanning private capital and environmental interests, has already been delineated in this thesis. However, the sheer ubiquity of independent, scholarly opposition to the NZ CCP is quite remarkable. Early on, Al Gillespie (1997, p. 46) described the development of New Zealand’s climate change response as “[moving] between the sublime and the ridiculous”, while Parr (1999) similarly criticised the NZ CCP as being intrinsically inequitable. The NZ ETS has been particularly subject to criticism. For Hosking et al (2009) the emissions trading scheme was a wasted opportunity, with the 2009 round of amendments profoundly undermining the emissions reduction capacity of the Scheme. This sentiment was shared by Hood (2010), Bullock (2012), Taylor (2013), and Richter & Chambers (2014) - with each documenting the flawed policy design and the likelihood of ensuing poor outcomes. The implications of the poor design of the NZ ETS were authoritatively captured by Bertram and Terry (2010, p. 186). In their view:

The New Zealand ETS has now become so degraded relative to the simple originating theory of cap-and-trade that it is probably beyond rescue as a sustainable framework for this country’s climate change policy. Elements of the total ETS package may well be adaptable, but major structural changes to the intellectual architecture are a matter of ‘when’ rather than ‘if’.

The Royal Society (2016, p. 7) found that the NZ ETS has not been effective in reducing New Zealand’s emissions, while the Morgan Foundation (Simmons & Young, 2016) argued that the NZ ETS deals in fraudulent carbon credits – meaning “New Zealand has been a willing participant in a wholesale climate fraud”.

Opposition has also been prevalent from the media. In editorials, the New Zealand Herald (2009) and the Dominion Post (2009) criticised the moderated emissions trading scheme, while commentators Rod Oram (2009) and Brian Fallow (2009) addressed the policy's general ineffectiveness. International media, including the Guardian (Pearce, 2009), the Sydney Morning Herald (Kiwis beat Aussies to climate scheme, 2009), and the Economist (It's not easy seeming green, 2010) supported this view of a largely ineffectual NZ CCP.

## **Conclusion**

In light of the policy change that took place between late 2008 and 2012, it is difficult not to be pessimistic about the state of the NZ CCP. The fifth National Government, in an attempt to consolidate and entrench minimal interventionism and a least cost approach to climate change policy, twice reviewed and amended the NZ ETS. This policy change reflected National's unflappable commitment to green growth and its blue green vision (in reality, heightened forms of neoliberal market environmentalism) for domestic climate change governance. The 2009 and 2011 amendments, however, greatly weakened the NZ ETS by expanding the policy's concessions to private capital. By moderating the NZ ETS, the Government further undermined the execution of its climate change maintenance function. Despite near universal opposition to the changes from environmental interests, the Government forged ahead with the implementation of these contentious provisions. This culminated with New Zealand's withdrawal from the Kyoto Protocol. The weakening of the NZ ETS indicated an endemic pattern of policy change, one that facilitated the breakdown of New Zealand's policy response to climate change. The final discussion chapter will pull together the threads of the thesis argument, expounding on the state of the NZ CCP and the contradictions of modern climate change governance.

## **Chapter Nine**

### **Discussion**

At the beginning of this thesis an intentionally broad aim was stated: that was to describe and explain the organisation and practice of climate change governance in New Zealand. The preceding chapters have attempted to satisfy this aim, describing first the New Zealand Climate Change Programme and its historical policy change, and then applying Marxian systems-analysis to explicate the observed trends. The long history of New Zealand's social response to climate change reveals numerous instances of dysfunctional governance and policy breakdown. In documenting this breakdown, the research has attempted to demonstrate how socio-structural constraints on the state's policy-making activities shape and ultimately undermine climate change governance. This final discussion chapter will pull together the various threads of the thesis argument and, in turn, support the conclusion that the progression of the NZ CCP is subject to the contradictory policy-making dynamics of New Zealand's capitalist state. This discussion chapter will conclude by placing this thesis within a wider scholarly context and addressing some of the limitations of the research.

#### **Policy change and the NZ CCP**

In 1988, the NZ CCP was initiated in response to the articulation of climate change as a policy problem by the Global Climate Change Regime. As New Zealand policy-makers became cognizant of the social and economic threat posed by climate change, the state's general maintenance function was triggered – precipitating an incipient policy response. Although the early response failed to implement any remedial measures that could reduce domestic greenhouse gas emissions, the fourth Labour Government did formulate a progressive framework for future

policy action. Interestingly though, economic instruments – including emissions trading schemes and carbon taxes – already appeared to be preferred by the state.

The incoming fourth National Government disregarded Labour's response strategy. While National, like Labour, were similarly motivated to respond to the existential threat of climate change, its more conservative attitude towards environmental issues, coupled with an intent to expand and entrench New Zealand's neoliberal, macroeconomic reforms, resulted in a more reluctant and halting perpetuation of the NZ CCP. The passage of the 1993/1994 Comprehensive Strategy on Climate Change introduced several, ineffectual measures – reflecting National's ideological commitment to a minimal interventionist and a least cost NZ CCP. Indeed, throughout the late 1990s the National Government failed to implement appropriate interventionist policies that could effect meaningful climate change mitigation. Furthermore, during this period the state's capitalist rationality created a binary agenda, whereby emissions trading and carbon taxation became the only conceivable remedial policies available for implementation. Command and control regulation – likely the only measure capable of authoritatively intervening in the productive sources of emissions and effecting mitigation – was removed from the policy agenda, as this form of regulation demonstrably conflicted with the systemic boundaries of New Zealand's capitalist state (represented by the exclusionary imperative and the dependency constraint). Ultimately, National delivered a climate change response consistent with the short-term, profit-maximising interests of private capital. Consequently, there was little opposition to National's NZ CCP from business and industrial interests.

Although the fifth Labour Government was more committed to addressing climate change than its predecessors, invariably Labour's iteration of the NZ CCP perpetuated National's minimal interventionist and least cost policy response. The passage of the *Climate Change Response Act* (2002) ratified the Kyoto Protocol, while Labour proposed a carbon tax to fulfil New Zealand's UNFCCC and Kyoto obligations. However, this modest policy change prompted concerted and vehement opposition from private capital. The power elite's exertion of ideological, political, and

economic pressure compelled the Government to abandon its proposed carbon tax option. In addition, the state's capitalist rationality, coupled with the third way ideological disposition of the Labour Government, contributed to the rejection of carbon taxation in favour of emissions trading – a market-based, policy instrument, which would devolve mitigation control to private capital (limited interventionist) and minimise the costs to business and industry in accounting for their greenhouse gas emissions.

The rise of emissions trading within New Zealand's climate change policy debate led to the implementation of the NZ ETS in late 2008. Because emissions trading was generally perceived as being less interventionist than carbon taxes, as well as essentially conducive to private capital accumulation, the NZ ETS appeared to be a more amenable policy option for both the Government and private capital. This quality facilitated the passage of the NZ ETS through Parliament and into law. The formulation of the NZ ETS was simultaneously informed by the state's capitalist rationality and New Zealand's hegemonic corporate lobby. The resultant policy change (the generous transitional assistance package and the uncapped design of the NZ ETS) accorded with the demands of private capital, socialising the costs of mitigation, and shielding New Zealand's most carbon-intensive actors from a price on carbon. While the Labour Government and private capital were largely satisfied with the highly idiosyncratic NZ ETS, an array of interested stakeholders decried the weak and highly partial policy. Critics rightly pointed to the distortion of the NZ ETS price mechanism and the weakening of the imposed price on carbon. The design and settings of the NZ ETS undermined the economic incentive for the decarbonisation of production. The NZ ETS, as the culminating policy of the NZ CCP, contradicted the state's general maintenance function as it, by design, precluded an authoritative intervention in New Zealand's productive sources of emissions.

The fecklessness of the NZ CCP reached its apex under the fifth National Government. After winning the 2008 election, National immediately reviewed and amended the NZ ETS, consolidating New Zealand's minimal interventionist and least cost approach to climate change

governance. This policy change provided additional and almost absolute shielding for select NZ ETS participants from a price on carbon. Consequently, the already facile intervention offered by the NZ ETS was greatly diminished. By the time National pulled New Zealand out of the Kyoto Protocol in late 2012, the NZ CCP constituted a largely ineffectual and incoherent climate policy response – totally in contradiction with the general maintenance function. The effect of this policy breakdown is evident, considering the steady rise of New Zealand’s greenhouse gas emissions. Between 1990 and 2014 New Zealand’s gross emissions increased by 23%. Moreover, there has been little evidence to suggest increases in either afforestation or meaningful climate change adaptation.

### **The capitalist rationality and New Zealand’s climate change response**

At the outset of this research, two hypothesises were articulated regarding the organisation and practice of climate change governance in New Zealand. Firstly, it is likely that the political economy of New Zealand’s capitalist state affects the organisation and practice of domestic climate change governance, and therefore the constitution and design of the NZ CCP and attendant policies. Secondly, the dysfunction that has characterised the NZ CCP is partly attributable to the contradictory political-economic arrangements of New Zealand’s capitalist state. The critical policy analysis conducted in this thesis would largely support these statements.

The New Zealand state’s capitalist rationality has, and continues to inform the development of the NZ CCP, functioning as a causal logic for the observed minimal interventionism and least cost trend in policy change. This capitalist rationality imposes positive and negative constraints on policy-making, impelling from the New Zealand state specific forms of policy change. The recognition of climate change as an existential threat to the capitalist system in the late 1980s triggered the state’s general maintenance function and, in turn, precipitated an ameliorative policy response. In the execution of the general maintenance function, successive New Zealand

governments developed forms of interventionist climate change policy, which were intended to transform the productive sources of greenhouse gas emission and decarbonise the economy.

Although climate change policy, introduced to fulfil the state's general maintenance function, often conflicts with the power elite's short-term economic interests (particularly the private accumulation of capital, as the regulation of carbon-intensive productive practices incurs significant costs on production and commerce), policy intervention of this type is still undertaken in a more essential effort to sustain the wider capitalist system. In climate change governance, the state's relative autonomy from the capitalist class is a crucial structural dynamic. It provides governments with a necessary capacity to eschew the immediate demands of business and industry. This independence allows the state to pursue stabilising public policy, designed to ensure capital's long-term political and economic domination – even if it is opposed by powerful business and industrial interests in the short-term. Ultimately, the very maintenance of the capitalist system corresponds with the general or long-term interests of private capital. Consider the evident function of remedial policies (such as a carbon tax or emissions trading scheme), namely the resolution of climate change and the abatement of its deleterious material and social impacts. State intervention that meaningfully addresses climate change, would ultimately preserve capitalism and benefit capitalists. Without relative autonomy, the New Zealand state would be little more than an instrument of the ruling capitalist class. If this were the case, business and industry would likely veto policy change that conflicted with short-term capital accumulation – effectively eliminating the prospect of remedial climate change policy (meaningful or otherwise).

However, negative constraints, such as the exclusionary imperative and dependency constraint, concurrently limit the policy-making capacities of the state. Both the manner and extent of government intervention in the productive sources of emission is significantly restrained. Essentially, negative constraints (such as the exclusionary imperative and dependency constraint) embed within the state's policy activity a structural preference for minimal interventionism and

a least cost response. To start with, the exclusionary imperative blocks the state from implementing policy that could authoritatively command emissions abatement. Command and control regulation, for instance, was entirely removed from New Zealand's policy agenda as it flagrantly violated the exclusionary imperative – the inviolable structural separation of the economic and political systems in capitalist society. Carbon taxes and emissions trading schemes became the only major acceptable policy options, generally consistent with minimal interventionism and a least cost response, i.e. the binary policy agenda.

The exclusionary imperative and the dependency constraint also altered the perception and support for carbon taxes and emissions trading schemes. Carbon taxes were still seen as being highly interventionist, economically inefficient, and costly. Emissions trading became the preferable policy option as it was regarded by state managers to be less interventionist and essentially congruent with a least cost response. This helped emissions trading in becoming the preferred economic instrument of the NZ CCP. However, questions regarding the environmental integrity (an instruments effectiveness at mitigating climate change) and the equity (how the costs and benefits of climate change mitigation are distributed throughout society) of carbon taxation versus emissions trading, were left largely unasked and certainly unanswered.

Even the design of the NZ ETS was influenced by structural constraints. The dependency constraint facilitated the development of a highly idiosyncratic emissions trading scheme. Dependency forced the fifth Labour Government to accede to the wishes of carbon-intensive policy actors and formulate a benign and pro-business NZ ETS. Obviously, by emasculating the instrument's price mechanism, those key design features of the NZ ETS policy benefited the immediate, profit-maximising interests of private capital. However, in artificially diminishing the policy's imposed price on carbon, the economic incentive to reduce emissions was irreparably weakened.

## **The New Zealand climate change policy community**

Policy actors, with competing policy beliefs, ideologies, and interests, have shaped the NZ CCP's historical pattern of policy change. A policy community was formed in response to climate change becoming an established policy problem in the late 1980s. Although initially technocratic, New Zealand's climate change policy community gradually expanded, as climate change became an issue of economic, political, and social import. The coalition of actors representing the short-term, profit-maximising interests of business and industry became singularly dominant within the contemporary policy community. Precisely defining the nature of this disparity can be difficult, as a confluence of variables (including wealth, legitimacy, and social capital, etc.) would likely account for the differentiation in power/influence. This research, however, has identified structural forms of privilege – institutional privilege – as being key in determining the distribution of power within the policy community. The corporatisation of New Zealand's policy process saw business and industrial interests gradually integrated into the state's formal policy-making apparatus. The three importance instances of structural privilege included: the Voluntary Agreement (VA) and Negotiated Greenhouse Agreements (NGA), the Memorandum of Understanding agreed between the fifth Labour Government and agriculture, and the technical expert groups that operated during the formulation of the NZ ETS. Institutional privilege created a core group of policy actors, who were granted special access and influence over state managers. Actors on the periphery of the policy community (say for instance environmental groups), did not possess the same insider status, and were therefore unable to significantly affect policy change.

This hegemony enjoyed by private capital functioned as an important secondary constraint on domestic climate change governance. In terms of instrumental policy change, it ensured the formulation of a minimal interventionist and a least cost response throughout each period of the NZ CCP. Let us consider the policy objectives and beliefs of the private capital class. This research has already extensively documented the advocacy of groups like Federated Farmers and Business New Zealand with respect to the NZ CCP (see chapters six, seven, and eight). From this, the

beliefs and objectives of private capital can be inferred. In general, private capital will oppose climate change governance that either interferes with its sole authority to direct production, or that imposes additional costs on its operation. These two negative impacts conceivably threaten business and industry in its accumulation of capital. If the state must pursue an ameliorative response to climate change, private capital will always advocate for the forms of policy change that embody minimal interventionism and a least cost response.

Now, New Zealand's power elite were not sufficiently influential to halt the NZ CCP – arguably the coalition's ultimate policy objective. Relative autonomy precludes private capital from directly ordering specific forms of state activity. However, they were sufficiently powerful to coerce meaningful concessions from the state. Certainly, the abandonment of Labour's carbon tax and later the idiosyncratic design of the NZ ETS, represent key moments of policy change, where the supreme influence of private capital secured minimal interventionist and least cost governance. Furthermore, there is a real incentive for state acquiescence, if the short-term interests of private capital align with the systemic needs of capital. Remember, private capital will (begrudgingly) support climate change governance, provided it exemplifies the qualities of a least cost and minimal interventionist response – precisely those attributes prescribed by the exclusionary imperative and the dependency constraint. It should be expected then that the state would effect policy change that corresponds with both the systemic requirements of capital, and the interests of the hegemonic private capital bloc. Indeed, private capital's exertion of political, economic, and ideological pressure renders the state's incentive to acquiesce almost irresistible.

### **The role and impact of ideology on the NZ CCP**

The state's ideological disposition functioned as another significant auxiliary constraint on the NZ CCP. Successive New Zealand governments accepted and adopted neoliberal, market environmentalism in the formulation of their respective policy responses. Now, that is not to say

National and Labour Governments equally observed the core precepts of market environmentalism – the corporatization, privatisation, and deregulation of environmental governance. Indeed, both political parties meaningfully differed with respect to the purity in which they interpreted and applied the ideology. The fourth National Government’s Comprehensive Strategy on Climate Change, for example, represented a pure interpretation of market environmentalism – and a radical departure from the progressive framework established by the fourth Labour Government. Similarly, the fifth National Government, in its commitment to green growth and Bluegreen environmental policy, moderated the NZ ETS, further entrenching neoliberal precepts within the NZ CCP. The fifth Labour Government, for its part, did pursue policy change consistent with market environmentalism – although without the same zeal as the National-led governments. Nonetheless, the sheer pervasiveness of market environmentalism contributed to a relatively continuous pattern of minimal interventionist and least cost policy change – despite the very real differences in policy beliefs and political and economic priorities held by National and Labour Governments.

In addition to the state’s ideological disposition, New Zealand’s capitalist power elite developed its own resonant ideological discourse. Functioning as a vehicle for the corporate lobby and its subjective policy beliefs, the discourse argued for least cost and minimal interventionist climate change governance. In a broad sense, business and industry contended that domestic climate change policy should finely balance economic and environmental objectives. The discourse recognised climate change as a real environmental and social problem, requiring remediation. However, the formulation of a policy response had to remain circumspect, eliminating any potential burdensome or punitive impacts on private capital. Furthermore, as New Zealand insignificantly contributed to global greenhouse emissions, comprehensive or overly ambitious mitigation policy was unwarranted and ultimately harmful. Domestic action should be undertaken, but only at a similar pace to competing nations. Such an approach would eliminate the threat of competitive disadvantages or carbon leakage. New Zealand’s response should primarily be focussed on developing cost-effective mitigation technology, and not the radical transformation of the economy. Crucially, the financial burden of New Zealand’s climate change

response should be borne by society and not by private capital alone. Failure to do so would undermine New Zealand's economic performance and lower standards of living.

This representation of climate change governance – described first in terms neoclassical economics, and then conceptualised within the logic of neoliberalism – was essentially ideological, and a fundamental source of hegemony. Market environmentalism was not only presented as being in the general interests of New Zealand society, but as an entirely rational, moral, efficacious, and necessary approach to climate change governance. Alternative response strategies – those policies that conflicted with the neoliberal paradigm – were represented as being irrational and radical. In portraying market environmentalism as the unquestioned, common sense, and natural means in which climate change governance ought to be practised, both the state and private capital reified their neoliberal policy prescriptions and class-based interests. Critical theorists recognise reification as a form of domination. Accordingly, by reifying neoliberalism within the domestic policy debate, political consciousness – the manner in which stakeholders and the wider public perceived appropriate climate change governance, as well as the state of the NZ CCP – was expertly manipulated. Neoliberal, market environmentalism obscures: 1) the capitalistic nature of the NZ CCP, 2) the degree to which select, class-based interests significantly shape domestic climate change policy, 3) the degree to which these same interests benefit from neoliberal climate change governance, and 4) the inexorable connection between NZ CCP's capitalistic nature and its breakdown and dysfunction. By concealing the realities of “neoliberalised” climate change governance, market environmentalism assisted the state and private capital in effecting minimal interventionist and least cost policy change.

### **State form and the breakdown of climate change governance**

This thesis illustrates how a confluence of primary and secondary structural constraints, acting upon the policy-making capacities of New Zealand's capitalist state, contributed to successive

governments in their practice of minimal interventionist and least cost climate change governance. Consequently, the NZ CCP and its historical pattern of policy change has tended to embody these neoliberal and capitalist precepts in spades.

But does the capitalist form of the New Zealand state explain the breakdown of the NZ CCP? According to Marxian systems-analysis, contradictions occur between incongruous systemic imperatives/constraints that structure the state's policy activity. The maintenance function, for instance, compels the New Zealand state to pursue meaningful climate change policy. However, the exclusionary imperative and dependency constraint – in ensuring the formulation of minimal interventionist and least cost policy – prevents the state's successful performance of its climate change maintenance function. Those authoritative policy measures capable of meaningfully intervening in the productive sources of emissions are stymied because of the state's adherence to the exclusionary imperative and dependency constraint. This was evidenced within the NZ CCP by the wholesale rejection of command and control regulation. However, policies consistent with the exclusionary imperative and dependency constraint, and thus permissible options, do not possess the requisite authority or force to compel private capital to reduce emissions. Economic instruments that employ a price incentive (a price on carbon) to effect emissions abatement, offer a comparatively ineffectual intervention in the productive sources of emissions, and are insufficient to precipitate the decarbonisation of New Zealand's economy. These acceptable capitalist policies contradict the general maintenance function, as they cannot authoritatively intervene in production and correct the economic and productive arrangements that cause climate change.

### **The NZ CCP and the crisis of legitimacy**

Besides the breakdown that defined New Zealand's response to climate change, a burgeoning crisis of legitimacy appears imminent. Legitimation crises occur when the state can no longer

conceal the disjuncture between its capitalist functions and democratic artifice. Social policy gains legitimacy from the public expectation that it will contribute to the common good and individual welfare. If this popular expectation is not met, the legitimacy of the state and its policies suffer.

Thus far, the NZ CCP has not been subject to a total crisis of legitimacy. Direct criticism of the policy response has been limited to academic sources and environmental groups. Arguably, the New Zealand public remains disengaged with the politics of climate change (see Box 8) – indicating that questions of popular legitimacy remain unasked. I would suggest that the ideological nature of New Zealand’s policy debate, which has been perpetuated by the state and private capital via neoliberal, market environmentalism, promotes false consciousness regarding domestic climate change governance. The dimensions of this false consciousness were identified early in this chapter. They include: 1) the capitalistic nature of the NZ CCP, 2) the degree to which select, class-based interests significantly shape domestic climate change policy, 3) the degree to which these same interests benefit from neoliberal governance, and 4) the connection between NZ CCP’s capitalistic nature and its breakdown and dysfunction. The immediate consequence of this popular false consciousness has been the failure of the New Zealand public to engage with the urgency of the climate change crisis, as well as recognition of the shortcomings of the NZ CCP.

**Box 8. Popular engagement in climate change politics**

The extent of popular engagement with the issue of climate change remains ambiguous. “Engagement” represents a largely subjective measure of political participation, which can be variously interpreted. Available data suggests that a majority of New Zealanders believe in anthropogenic climate change, recognise it as serious threat, and desire appropriate remedial action. According to Sibley and Kurz (2013, p. 259), roughly half of New Zealanders believe that climate change is real and caused by humans. This is supported by Milfont, Milojev, Greaves, and Sibley (2015, p. 20), who found that 53% of New Zealanders “hold uniformly high beliefs that climate change is both real and caused by humans”. Climate change also ranks highly in terms of perceived problems facing New Zealand and the world. 24.7% of respondents to a Motu Economic and Public Policy Research and the

Sustainable Business Council poll (Horizon Research, 2014, p. 1-6) rated climate change as the most significant problem facing the world. Climate change was ranked above other threats, including war, poverty, over-population, terrorism etc. Interestingly though, climate change was not considered the most significant issue facing New Zealand. Poverty (14%), employment (7.6%), and wages (7%) were all rated above climate change, which only 6.9% of respondents considered New Zealand's greatest threat. Support for climate change policy is also less clear. A 2009 poll (Chapman, 2015, p. 64) found that a majority of New Zealanders supported the NZ ETS, provided the imposed costs were not high. However, a 2012 Horizon poll found that only 28.2% of people backed an imposed price on carbon (28.7% opposed a price on carbon) (Horizon Poll, 2012).

Public concern regarding climate change does not necessarily translate into popular political activity. Indeed, there is a strong case that the New Zealand public has not mobilised (in any meaningful way) in response to climate change. Firstly, there were relatively few public submissions (submissions from individual members of the public) to the select committees concerned with the 2008 formulation of the NZ ETS, the 2009 special review of the NZ ETS, and the 2009 and 2011 amendments to the NZ ETS (see New Zealand Parliament, 2016). Although submissions from individuals always totalled in the hundreds (and often represented the single largest category of submitters), this would still represent an insignificant fraction of the electorate – suggesting, perhaps, that the public are not substantially involved in the formal policy process. This corresponds with a climate change policy community dominated by organised interest groups and concerned stakeholders.

Secondly, climate change does not appear to be a significant issue in New Zealand's popular political discourse. The national conversation on climate change is persistently insubstantial and muted. Nowhere was this subdued quality more evident than New Zealand's 2014 General Election, where climate change hardly warranted discussion. In a pre-election survey of important issues facing New Zealand, only 1% of respondents identified climate change (Chapman, 2015, p. 63). A One News/Colmar Brunton (2014) poll identified (in this order) education, health, jobs, child poverty, wages, crime, asset sales, income tax, house prices, inequality, and changing the New Zealand flag, as the most important election issues according to New Zealanders. Climate change, or even the environment, did not make the list. TVNZ's Vote Compass (Vote Compass first results: economy the top issue, 2014) identified the economy, inequality, and the cost of living, as the three big issues of the 2014 election. Once again, the environment (including climate change) was conspicuous in its

absence. Climate change may not even be the most pressing environmental problem according to New Zealanders. A 2013 poll, identified water pollution as the gravest environmental problem facing New Zealand – climate change was only ranked sixth (Chapman, 2015, p. 60-70).

However, there are recent indications of greater popular engagement with the climate change problem. In the last few years, two new climate change interest groups – Generation Zero and 350 Aotearoa – have become established in New Zealand politics. Both organisations have worked to encourage greater public interest in climate change. Perhaps, the most successful occurrence of public mobilisation was the November 2015 climate change protests. In response to the 2015 United Nations Climate Change Conference in Paris, an estimated 20,000 New Zealanders took part in the protests, urging the New Zealand Government to adopt meaningful emissions targets (Climate activists march in nationwide protests, 2015; NZ hosts day of climate protests, 2015).

Legitimacy will only become a significant problem if New Zealanders become cognizant of the fecklessness of the NZ CCP and its capitalist biases. If emissions continue to rise and the hazardous impacts of climate change become apparent and undeniable (which by all accounts will occur), public attitudes surrounding the response's weakness will change. In response to catastrophic climate change, the public will demand from the state an effective ameliorative response. However, as the NZ CCP and its policies are inherently flawed, New Zealand's climate change response will never be in a position to meet the public's demands – hence a crisis of legitimacy.

The certain failure of the NZ CCP to respond to the threat of climate change will reveal, over the course of time, its capitalist functions. The extent to which policies like the emissions trading scheme overtly prioritise economics over meaningful emissions reductions, and which render the NZ CCP patently ineffective, will become self-evident. Moreover, people will become aware that the NZ CCP overtly minimises private capital's exposure to a price on carbon, while socialising the costs of mitigation. Not only does the NZ CCP fail as a remedial response to climate change, its

very design and constitution enriches the private capitalist class. Environmental interests will emphasise these flaws in the NZ CCP, revealing the response's demonstrable partiality. The pure inequity of New Zealand's climate change response – the near total inversion of the polluters' pays principle – will be undeniable, compromising the legitimacy of the NZ CCP.

As it becomes increasingly clear that the capitalist bias of the NZ CCP is responsible for the breakdown of New Zealand's climate change response – at a time when effective remedial action will be urgently required and hence demanded – a legitimisation crisis will occur. How might the New Zealand state counter an impending legitimisation crisis? It is likely that the state will rely largely on ideology to reinforce the legitimacy of the NZ CCP. This could include claims that climate changes policies are in fact working, and its identification of tenuous or disingenuous markers of policy success. It is also likely that the state will reemphasise the “merits” of market environmentalism to justify economic instruments. By accentuating the market environmentalism canard that capitalist economics are a necessary precondition to effect positive environmental outcomes, such as the long-term decarbonisation of the economy, the state may be able to buttress the underlying neoliberal foundation of the NZ CCP. It is also possible that the state will attempt to minimise or obfuscate climate change as an important issue. Other significant problems (such as terrorism or economic crises) will be pointed to as demanding greater attention and resources than climate change. Moreover, efforts to reassert the urgency of responding to climate change or to expose the deficiencies of the NZ CCP undertaken by either the environmental lobby, academia, or the media will almost certainly be delegitimised. Lastly, the state may rely on its powerful political allies from within the power elite to support the NZ CCP. Presently, it is unknowable how effective these or any other ideological steps taken by the state will be. However, if the climate change hazards are great enough, the disparity between the ideology and the obvious breakdown of the NZCCP will become too great for the state to overcome – leading inexorably back to a crisis of legitimisation.

## **The state of climate change governance in New Zealand**

It is difficult to argue against the deficiencies of New Zealand's policy response to climate change. The modern form of the capitalist state, with its innate contradictions, cannot practice an effective politics of climate change. Climate change governance has been enfeebled to such an extent that national responses, like the NZ CCP, are unable to reduce domestic emissions and meet international mitigation obligations. According to Turner (2010: 11), a successful social response to climate change must lead to fundamental systemic change i.e. a radical transformation of the globalised, capitalist political economy responsible for anthropogenic climate change. Following this logic, it is incumbent on modern nation states to stimulate an almost revolutionary change in the use of natural resources and energy, as well as popular patterns of production and consumption. These changes will be painful and unpopular – and will certainly be resisted. It should also be understood that systemic change will not occur without considerable impetus from some external locus of power. The nation state, working in concert with other cooperating states, is the only feasible institutional structure sufficiently organised and resourced that could effect widespread systemic changes.

However, according to Marxian systems-analysis, the capitalist state cannot truly function as a mechanism of social change. Because the state is inexorably tied to the capitalist system, it must always work to maintain capitalist arrangements and ensure the accumulation process. The state is a “capitalist state” that is unwilling and unable to bring about systemic change. Even though the state, through its general maintenance function, is compelled to act in response to systemic crises, it is forced to do so in a constrained manner that protects and reproduces capitalism. Moreover, the state's contradictory dynamics cause wide scale dysfunction in policy-making. This structurally induced feebleness undermines the possibility of even modest political and economic change. Accordingly, the likelihood of a coherent and strategic social response to climate change is regrettably remote.

It is interesting to note that even some of the most critical governance scholarship still articulates the possibility of effective remedial climate change policy (Bachram, 2004; Bertram & Terry, 2010; Turner, 2010). If the state, however, is unable to practice an effective politics of climate change, this possibility of meaningful climate change governance would be extremely low – if not non-existent. As the capitalist state cannot alter capitalist systemic arrangements, it follows that climate change, as an expected outcome of global capitalism, also cannot be ameliorated through state activity. When one considers additional problematizing factors (those variables previously identified in governance literature), the possibility of a meaningful politics of climate change appears to be very unlikely. This thesis has addressed sociological barriers to efficacious climate change governance. There are also essential psychological factors that reinforce these social barriers (Dietz, Dan & Shwom, 2007; Gardiner, 2009; Gifford, 2011; Gilbert, 2006; Harman, 2014; Paramaguru, 2013). The threat of climate change can be difficult to perceive, and resistant to conventional forms of cognitive risk assessment. There are layers of socio-structural and psychological factors that lead to dysfunctional governance and the breakdown of climate change policy.

Where does this leave the NZ CCP, the collective international response, and humanity's chances of solving and, indeed, surviving climate change? The logical conclusion of this analysis is that anthropogenic climate change is unstoppable and, no matter what, an effective social response is an impossibility. Although the material and social impacts of climate change remain uncertain, the scientific consensus indicates that these consequences will be severe. These impacts will also be differentiated, with greater harm and damage being felt in developing countries and borne by the most vulnerable. If climate change is as catastrophic as some predict, then its cumulative impacts may very well become an existential threat to capitalist system. Climate change as a contradiction of capitalism, where both the degradation of the material base of production and greater class struggle increasingly manifest, will produce considerable systemic strain. Because climate change undermines capital accumulation and the successful reproduction of capitalist relations, it is likely to induce a profound systemic crisis, which would either debilitate or entirely collapse global capitalism. This should not necessarily be considered an extreme or alarmist

interpretation of the climate change threat. The notion that climate change will produce such degraded environmental conditions where capitalism, as an economic system dependent on an ever-increasing expropriation of the material world, is no longer physically possible remains an entirely rational conclusion. It is also a conclusion supported by the scientific consensus regarding the physical and social impacts of climate change. Although human societies can alter the natural environment, it cannot reproduce, replace, or survive without nature (Glover, 2006). In New Zealand, farmers will be unable to raise livestock or crop, in light of the intensification of drought conditions (and other extreme weather events for that matter), and the increased presence of pests and agricultural disease. Other important primary sectors (such as forestry and seafood) and the energy sector – those businesses and industries dependent on a stable environment to produce goods – will also become increasingly untenable.

This conclusion leaves us with a rather troubling irony. If the impacts of catastrophic climate change crash global capitalism – an undeniably flawed political and economic system that burdens society with gross exploitation and inequality – would this ultimately be a good or bad form of social change? No one should ever doubt the appalling cost that would follow climate change, and in particular its inescapable humanitarian impacts. However, climate change is unlikely to be so destructive as to end civilisation. The human species will survive. Damage to the biosphere will be significant, but probably not irreversible. One could argue that the destruction wrought by climate change has the potential to create a post-capitalism society. When capitalism becomes materially impossible, new economic and social arrangements will emerge in replacement. Now armed with an indelible awareness of the inherent environmental contradictions of the capitalist system, humanity will be equipped to create a sustainable mode of production. It may also very well be that the cataclysmic material impacts of climate change are the only possible means to effect meaningful systemic change – particularly when the endurance of capitalism (despite its replete contradictions) is considered. Capitalism can apparently endure class struggle, the decline in the rate of profits, and even inequality. Surely, capitalism is unlikely to survive climate change though, as it creates the very hostile material conditions where capitalist production is actually an impossibility.

Does this then mean climate change is potentially a positive occurrence and that this post-capitalist outcome is desirable? Moreover, does this mean that there is no need to try and ameliorate climate change – that we would want climate change to undermine capitalism, and that any policy response would be ineffective anyway (and thus a waste of time, energies, and resources)? Suppose that the climate change induced collapse of capitalism could be controlled. That the damage of climate change could be somehow minimised in terms of both its humanitarian impacts, as well as the social impacts resulting from the decline of capitalism. Would this not constitute an effective, if not *extremely* radical solution to the problem of precipitating necessary systemic change in light of intractable and seemingly immutable global capitalism? Of course, this would be foolish. The fall of capitalism could never be ordered or controlled. Nor is it certain that a post-capitalist world would be any more equitable or ecologically sustainable than the current capitalist one. The risks of allowing climate change to occur unabated are intolerable. The potential of a post-capitalist society cannot be seen as an excuse for inaction. There must be some kind of social response to climate change. Perhaps there is still some limited potential for progressive social change that could address the capitalist arrangements that produce climate change – other than the destructive material impacts of climate change itself.

Ultimately, this conclusion that the modern capitalist state cannot practice a meaningful politics of climate change leaves little room to imagine alternative forms of governance capable of social transformation. Such a conclusion defies the intrinsic normative priority of critical policy analysis. It is not enough to describe the contradictions and forms of domination within the NZ CCP. Alternative social arrangements must be proposed that can contribute to the equitable amelioration of climate change. In this sense, the critical policy analysis conducted in this thesis fails to derive alternative political and economic arrangements or forms of climate change governance that could adequately respond to the crisis. Perhaps society will have to settle with those remedial policy options that are already available, as a radical, progressive transformation

of the global economy appears almost inconceivable. It is arguable that the predominant minimal interventionist and least cost mode of climate change governance may be able to effect marginal emissions abatement, at least under the right conditions. If we assume that actors will respond to a sufficiently high economic incentive – a price on carbon that approximates the social cost of climate change – then an outside possibility of responding to climate change exists.

To this end, very recent policy change to the NZ CCP demonstrates the possibility of marginal emissions abatement. In late 2013, the fifth National Government adjusted the settings of the NZ ETS, banning the use of inexpensive and low-quality Kyoto units (ERUs, CERs, and RMUs). From the 1<sup>st</sup> of June 2015, only NZUs would be eligible to meet NZ ETS obligations. While this decision was necessitated by New Zealand being locked out of the Kyoto Protocol flexible mechanism, it was also made in recognition of the significant price disparity between NZUs and international units (MfE, 2016c, p. 10). Following this decision, the NZU price slowly increased. The NZU spot price in late 2013 was approximately \$3. By late 2014 and 2015, the spot price had risen to approximately \$6 and \$8 respectively (MfE, 2016, p. 27). While this is still far from a meaningful price on carbon (one approximating the social cost of carbon), the increased NZU spot price still offers a greater incentive for decarbonisation than any Kyoto unit (with virtually no monetary value) does. Moreover, the policy change demonstrates that by scaling back the transitional assistance pathway, the NZ ETS could impose a price on carbon sufficiently high to effect marginal emissions abatement. In late 2015, a third review of the NZ ETS was undertaken (MfE, 2016c). Both the NZU price cap and the two for one surrender obligation were re-examined. However, the continued exclusion of agriculture was not reviewed (Royal Society of New Zealand, 2016, p. 70). In May of 2016, plans to phase out the “two for one surrender obligation” were announced. By 2019, all NZ ETS participants would be fully responsible for their emissions (MfE, 2016d). The Minister for Climate Change Issues, Paula Bennet (2016) asserted:

It is time businesses move towards paying the market price of their emissions. Gradually removing the one-for-two measure is a pragmatic and practical way for them to manage the costs.

It is likely that this policy change would further increase the price of NZUs. However, a number of key distortionary provisions remain in place, including agriculture's exemption from the NZ ETS and the NZU price cap. Consequently, the domestic price on carbon will invariably remain low. Adjusting the settings of the NZ ETS will not address its inconsequential intervention in New Zealand's productive sources of emissions.

### **Generalising the thesis argument**

Can the conclusions found in this thesis be applied to comparable capitalist states in explicating their practice of climate change governance (or other forms of environmental governance)? I would suggest that the research findings are generalizable – at least to a certain extent. If we consider the Marxian framework employed in this research, it offers a broad conceptual base from which the policy activity of the capitalist state can be interpreted. This framework should apply to different capitalist states, provided that the analysis accounts for historical and national variability. The same social arrangements and structural dynamics that have shaped the NZ CCP – the state's capitalist rationality, the ideological disposition of the state, and the supreme influence of private capital – should also govern the policy responses of other, similar nation states. The conclusions found in this research should be broadly generalizable, as they are informed by a totalising conceptual framework, one that attempts to systematise the inner workings of capitalist societies and states.

Such a framework, applied to similar advanced capitalist societies, should reveal a common pattern of policy change. If we look at the responses pursued by those nations similar to New Zealand – Australia, the United States, and the European Union (obviously not a nation state, but a politico-economic union of capitalist states) – phenomenal regularities in climate change governance begin to appear. The key similarities between these particular societies include: 1) an advanced capitalist political economy, 2) liberal democracy and attendant state apparatus, 3)

pervasive neoliberalism, and 4) a public largely disengaged with the climate change issue. The policy change demonstrated by these three jurisdictions mirrors, in many respects, New Zealand's experience of policy breakdown and dysfunctional climate change governance.

Climate change governance in both Australia and the U.S. has been marked by policy breakdown. Let us begin with Australia. Although in 2011, Australia (under the centre-left Gillard Government) introduced a national carbon tax (Packham & Massola, 2012), the measure was later repealed in 2014 by the climate change denying Abbot Government (Taylor & Hoyle, 2014). Prior to this, Australia delayed its ratification of the Kyoto Protocol (which it only managed in 2007) and failed to introduce the Carbon Pollution Reduction Scheme (Aust 'must adapt' to global warming, 2007; Bartholomeusz, 2007).

As bad as things were in Australia, the state of U.S. climate change governance was even worse. Although a signatory of the Kyoto Protocol, the U.S. Federal Government (under the Clinton Administration) failed to ratify the treaty. This failure occurred after significant bipartisan Congressional opposition. The incoming Bush Administration was just as implacable in its opposition to meaningful climate change policy. Not only did it refuse to commit to the Kyoto Protocol, the Administration actively participated in efforts to delegitimise the climate change scientific discourse. Indeed, an abundance of anecdotal evidence exists pointing to concerted political interference within American scientific institutions (including NASA and the Centre for Disease Control) by the Bush Administration and its congressional allies (Bowen, 2008; McCright & Dunlap, 2010a). The Obama Administration has had some success in responding to climate change, including becoming a signatory to the 2015 Paris Agreement to reduce greenhouse gases, the 2012 passage of Federal regulations designed to curb emissions from power plants, and the rejection of the Keystone XL pipeline (Alman & Marans, 2015; Koronowski, 2015; Labott & Berman, 2015). However, Republican opposition to climate change policy has continued to prevent the implementation of a national response. Some individual states have developed their

own climate change policies – most notably California, which in 2006 introduced components of an emissions trading scheme (Lazo, 2014).

Unlike Australia or the U.S., the E.U implemented an analogous policy instrument to the NZ ETS in the European Union Emissions Trading Scheme (EU ETS). Representing the world's first and biggest emissions trading scheme, the EU ETS encompasses 31 countries (all 28 EU member states plus Iceland, Norway, and Liechtenstein) and covers approximately 40% of Europe's greenhouse gas emissions (European Commission, 2016). Operating under the UNFCCC and the Kyoto Protocol, the EU ETS functions very much like New Zealand's emissions trading scheme. Carbon credits are auctioned or freely allocated to participating firms, which can be subsequently traded. This market-based activity imposes a price on European emissions, incentivising mitigation. Unlike the NZ ETS though, Europe's emissions trading scheme includes a hard quantitative cap on emissions. It also does not allow carbon sinks to offset emissions, i.e. the net approach (Giddens, 2009). Arguably, these provisions make the EU ETS a more comprehensive policy instrument than the NZ ETS.

However, even the EU ETS has been criticised for rewarding major industrial emitters and failing as an authoritative climate change response (Lohman, 2008). According to Böhm, Misoczky and Moog (2012, p. 1622), extraordinary concessions were granted to private capital in the design of the EU ETS (very much like the NZ ETS). This included a generous initial allocation of free units to EU ETS participants. The effect of these concessions has been depreciation in the value of carbon credits within the EU ETS. Like the NZ ETS, components of the EU ETS distort the market-based price mechanism, reducing the exposure of private capital to a price on carbon. The economic incentive for emissions abatement is also relatively weak within the EU ETS.

In this brief summation of policy change, a familiar pattern of minimal interventionism and least cost climate change governance becomes apparent. All three jurisdictions intermittently enacted

climate change policy, albeit measures that failed to authoritatively command the decarbonisation of the productive sources of emissions. Economic instruments – carbon taxes and emissions trading schemes – were obviously preferred amongst these capitalist states. Furthermore, significant interventionist climate change policies were blocked or repealed entirely. This common pattern of policy change – reminiscent of New Zealand’s own policy response – might indicate the constraining effect of the state’s capitalist rationality. It might also suggest the impact of pervasive neoliberalism and private capital exerting influence within the respective policy debates. Undertaking a critical policy analysis of climate change governance in these countries, employing the same Marxian systems-analysis framework, would likely support the findings of this research.

However, Marxian systems-analysis can only really indicate the probable form of the capitalist state and specify the broad limits on its policy-making capacities. As Jessop (1977, p. 353) correctly recognises, important historical differences between countries will often inform the function, form, and disposition of individual capitalist states. Yes, climate change governance is invariably subject to a common capitalist rationality. However, this capitalist rationality is itself sensitive to specific historical and national variables – particularly the balance of class forces and the predominant ideologies within different countries. Following this logic, we should expect to see qualitatively distinct forms of climate change governance, even between nations with a similar capitalist political economy. The observed regularities in policy change between New Zealand, Australia, the U.S., and the E.U., are very broad. There are obviously profound differences between, say, New Zealand’s moderately dysfunctional response, and America’s deeply dysfunctional response. It can therefore be said that each jurisdiction approaches climate change with a degree of distinction and variability.

As earlier stated, the findings of the thesis are broadly generalizable. They illustrate an underlying political and economic process occurring within capitalist states, which guides and structures policy-making and governance. However, this approach would be meaningless without an

appreciation of historic and national variability, uniquely affecting climate change policy. New Zealand, for example, is uniquely susceptible to the demands of its primary industries, as agriculture, fisheries, and forestry represent hugely significant parts of the domestic economy. It should be unsurprising that the policies of the NZ CCP aligned with the interests of these sectors – at least to a far greater extent than in other countries.

### **Contextualising the political and economic history of climate change governance in New Zealand**

I would argue that the analysis of domestic climate change governance undertaken in this research provides a novel contribution to the sociology of climate change. It specifically advances scholarship concerned with the political economy of climate change governance. This thesis contributes to critical governance literature, in reiterating 1) the causative link between capitalism and climate change, 2) the extent to which the capitalist political economy informs climate change politics, 3) the inability to reconcile capitalism and an effective and equitable social response to climate change, and 4) the role of class-based actors within the politics of climate change.

Arguably, the wider body of political economy literature, while predominantly focussed on the economic dimensions of climate change, has undertheorized the essential political dimension of climate change governance. Because the politics of climate change are primarily constituted at the level of the state, a central focus of any critical analysis should be the capitalist state itself. What is missing from the political economy literature is recognition that climate change governance is often directly informed by systemic constraints on the state's policy-making capacities. The biases observed in regards to national climate change policies are an outcome of the state's capitalist rationality. This thesis adds to the body of governance literature, by

providing a unique conception of the climate change political economy, one that is purposefully refocused on the compromised capitalist state.

As a corollary to this, political economy governance literature should not be afraid to embrace its critical conceptual heritage. While much of this research certainly is inspired by Marxist theory (as well as other critical social theories), it often fails to explicitly draw from the rich and invaluable conceptual repertoires. This is a mistake. This thesis has attempted to demonstrate the continued relevancy of political Marxism within the context of the sociology of climate change governance and, more broadly, environmental sociology. Marxian systems-analysis, and its explicit focus on policy breakdown, provides an ideal critical framework to reinterpret the organisation and practice of climate change governance. Combining diverse strands of Marxist state theory, systems-analysis interrogates the pervasive dysfunction characteristic of modern climate change politics – something that traditional governance literature has failed to attempt.

Lastly, the research offers a novel interpretation of class-based actors in climate change politics and the organised resistance to climate change policy. It is true that governance literature acknowledges the significant influence of business and industrial actors (and their political allies) within climate change politics. However, it has also refrained from directly addressing the class disposition of these actors. These actors must be seen as agents of private capital, who are able to exploit the state's capitalist nature and effect policy change in accordance with their subjective, class-based interests. Corporate and industrial actors are the beneficiaries of the corporatized structure of the state, as well as the various forms of structural privilege that pervade the state's policy process. Such a heterodox, neo-pluralistic conception provides an account of the unrivalled influence of private capital in the formulation of climate change policy, and its ability to stifle meaningful climate change governance.

## **Limitations of the study and further research**

While this thesis contributes to the sociology of climate change governance, one could argue that it is still limited in two crucial respects: its overly broad analytical scope, and the contentious nature of its Marxian conceptual foundation. The first of these limitations – the extensive scope of the analysis, which covers twenty-four years of policy activity – was an intentional choice of the research design. Considering that a meaningful pattern of policy change can only really be observed over an extended period, the thesis's broad scope was seen as a justifiable aspect of the analytical design. Moreover, the identification of specific causal mechanisms responsible for patterns of policy change must also be undertaken over a longer timeframe. For Sabatier (1988), processes of policy change can only be observed over a protracted period – usually a decade or more. This allows time for a full policy cycle to be completed and for the determination of policy success or failure. Furthermore, a short-term focus may underestimate the effect of socio-structural variables on policy change, while over-estimating the influence of micro-variables. Ultimately, the decision to pursue a broad analytical scope, which focusses on long-term trends in policy change, would seem a legitimate approach to the analysis of climate change governance.

However, in conducting the analysis of New Zealand climate change politics over an extended timeframe (twenty-four years) it was unavoidable that an array of potentially important micro variables would be overlooked for the sake of argument coherency and succinctness. Significant micro detail – particularly the interactions, motivations, and policy beliefs/preferences of individual state managers and private policy actors – was deliberately set aside, in favour of demonstrating how macro, systemic variables effect policy change. An inevitable drawback of such an approach was that the actual myriad detail constituting domestic climate change governance could not be thoroughly analysed. Heclo (1974), in his seminal work on policy analysis, argued that policy change is a product of both macro and micro phenomena. It could be said that by not sufficiently including micro factors, this research presents an incomplete or perhaps reductive conception of policy change. Indeed, a longer timeframe appears to privilege

macro/meso-level phenomena over micro-level phenomena in policy analysis. A purely macro approach to policy analysis cannot consider those individual decisions made by key policy-makers, which could potentially be the defining causal factor for an observed pattern of policy change. This limitation was also reflected in the analytical approach of the thesis, which predominantly used government discourse to identify and consider policy change in the NZ CCP. This public discourse (government reports, press releases, etc.) can only really reflect macro-causal variables. There is virtually no way to discern important, behind the scenes micro-factors from this discourse alone. I would suggest that qualitative interviews with important policy-makers would be necessary to provide insight to the micro-level of climate change governance.

Nonetheless, there is certainly a wisdom in the analytical approach of the thesis. As previously stated, the thesis's broad scope is justifiable when the aim of the research – to describe and explain long-term patterns of climate change governance in New Zealand – is considered. Simply put, the analysis had to cover the long history of the NZ CCP in order to identify the minimal interventionist and least cost pattern of policy change. Systemic variables incrementally shaped the NZ CCP – uniquely effecting policy change in the response's different periods. Furthermore, the analysis has attempted to incorporate micro phenomena considered crucial to the development of the NZ CCP, and that, if left out, would have blatantly misrepresented the pattern of policy change. The research has included the individual policy beliefs and actions of key policy-makers, such as Geoffrey Palmer, Simon Upton, and Pete Hodgson – all of whom have meaningfully influenced climate change governance in New Zealand.

Further research, with a significantly reduced scope, could focus on one of the distinct periods of policy change identified in the thesis, or a specific instance of policy change – like the collapse of the carbon tax or the passage of the NZ ETS. Such an approach would offer a richer analysis, illuminating the influence of micro variables on policy change. Additionally, in considering the causal effect of micro variables in domestic governance, a more accurate assessment of macro, systemic factors could be subsequently achieved. A reduced scope would allow for the respective

weights of micro and macro variables to be measured. Studying the potentially different causal influence of micro and macro phenomena would seem necessary in determining the influence of the state's capitalist rationality. Marxian systems-analysis asserts the primacy of macro, systemic variables in shaping the policy-making capacities of the state. However, if micro variables turned out to be influential, and non-systemic factors meaningfully inform climate change governance, this might call into question the explanatory value of said framework. Although the research's basic reading of Marxian systems-analysis attempts to soften its structuralist disposition, it would still be difficult to reconcile the theory's systemic focus with non-structural variables.

There is also an argument for widening the scope of the thesis – particularly with respect to the forms of domination that have been analysed. Arguably, the critical policy analysis undertaken in this research is one-dimensional, as it solely focuses on domination as it relates to New Zealand's capitalist political economy. A broader analysis could address other fundamental forms of domination, including race (the effects of colonisation of domestic politics) or patriarchy. Jessop (1977) has suggested that an ideal analysis of the state should reflect on non-economic variables and their influence on the form and function of the state.

The second limitation of the thesis rests with its Marxist conceptual framework. All forms of Marxist theory – including systems-analysis – are somewhat controversial and divisive. In systems-analysis, contentious functionalist assumptions are made about the arrangement and operation of the state, which are subsequently used to frame the analysis of state governance and policy-making. The notion of a fundamental capitalist rationality, defined by systemic imperatives and informing state activity is treated axiomatically – even though the existence of such systemic imperatives is contestable. It is certainly arguable that Marxian systems-analysis provides an entirely totalising and economic deterministic interpretation of the state, one that is premised on flawed or biased theoretical assumptions. Because these core assumptions are not falsifiable, large parts of systems-analysis are potentially untestable and difficult to prove. If we then consider the analytical approach of the thesis, these debatable system-analysis assumptions

have been readily accepted, and deeply integrated into the fabric of the study. Because of this, those systemic causal factors identified as responsible for the minimal interventionist and least cost pattern of policy change are also contestable. For those who find Marxism, as a critique of capitalism or as an interpretation of state activity, substantively flawed, they will likely be unconvinced with the analysis conducted in the thesis.

An example of the problematic epistemology of Marxian systems-analysis is its ambiguous theorisation of the relationship between state managers and structural constraints. Consider the exclusionary imperative and its effect on the NZ CCP. Systems-analysis does not provide an adequate explanation for why state managers inevitably respond to the exclusionary imperative and observe the structural separation of the state and economy. Why do state managers comply with this systemic imperative and remove offending, non-capitalist measures from the policy agenda? Does it work as a naturalised principle, ingraining within the consciousness of policy-makers that the state cannot command economic performance? Wetherley (2005) talks about “common-sense assumptions” that shape the political consciousness of state managers in pro-capitalist terms. Is the exclusionary imperative such an assumption? As there is no explicit or convincing explanation for this relationship between structural constraints and individual policy-makers, one has to assume that the systems-analysis theory deploys a stock-standard structuralist interpretation – that policy-makers are simply executants of systemic imperatives, they undertake set roles within the state apparatus, and are devoid of agency. This kind of axiomatic, anti-humanism is one of the most damning limitations of Marxian systems-analysis. One could argue that the analysis of New Zealand climate change governance conducted in this thesis, in its extensive use of the Marxian systems-analysis framework, inherits this structural functionalist deficiency. Nor does this thesis adequately attempt to resolve this epistemological problem. Yes, the analysis does not entirely reduce policy change to a function of structural constraints. But it does substantively adopt the structuralist assumption that state managers are subject to mechanisms of economic determinism, and therefore have little agency.

On top of this, the highly deductive research design runs the risk of data being interpreted to fit the theory. At times, the research's explanation of political activity to systemic constraints required a selective interpretation of the historical data. Instances of policy change that have been recognised as evidence of the state's constrained policy-making capacities could easily be interpreted in an alternate light. Lastly, there exists the distinct possibility that the thesis's essentialist reading of Marxian systems-analysis misrepresents the complexity and contradiction of the framework. The scholarship of Offe and Habermas are rich and multifaceted. A basic reading of these authors cannot reflect this richness.

### **Conclusion: a critical interpretation of climate change governance**

At the very beginning of this thesis, it was asserted that a fundamental incongruity undergirds the politics of climate change. The practice and organisation of modern climate change governance is unambiguously dysfunctional. Social responses to the climate crisis appear ever subject to policy breakdown. This dysfunction reliably occurs despite an overwhelming acceptance of climate change as an existential threat, demanding immediate and significant ameliorative action. Surely, the palpable risk of catastrophic climate change must offer sufficient impetus for societies to overcome any political, economic, or cultural obstacle to a meaningful politics of climate change.

Most scholarship concerned with the governance of climate change has attempted, in one form or another, to explain this irrationality – the inability to square the high stakes of climate change with society's general inaction. This thesis, and its study of the historical progression of the NZ CCP, offers a novel interpretation of the climate change governance incongruity, one that is grounded in critical social theory. It suggests that the ultimate barrier for meaningful climate change governance is the contradictory structure of the state itself. In Marxian political economy, the state's functional position within capitalist society greatly informs the kinds of policy activity

it can practice. This ensures policy change that is, for lack of a better word, innately “capitalistic”. This thesis would argue that, in short, a successful politics of climate change cannot be reconciled with inherently capitalist policy design or objectives.

The constraining effect of the state’s capitalist rationality shapes climate change governance – particularly the formulation and implementation of social responses to the climate change phenomenon. As climate change governance is rooted to the logic of capital, climate change policy is simultaneously impelled to fulfil the various maintenance requirements of the capitalist system, while also adhering to the imperatives or rules of that same capitalist system. This becomes problematic, however, as the needs of capital and the rules of capital (of which state policy-making must abide by) are in contradiction. The systemic requirements of capital are incompatible with the forms of policy intervention consistent with the systemic boundaries of capitalism. What capitalism needs (to substantially reduce emission and adequately respond to the hazard of climate change) are radical interventionist policies, capable of transforming the productive sources of emissions and decarbonising the economy. What capitalism allows, via its constraining effect on state activity, are policies that are severely limited in their intervention, and which substantively shield the capitalist class from the costs of abatement. Policy breakdown is a predictable outcome of climate change policy that attempts to satisfy opposing structural imperatives.

The state’s contradictory disposition represents a barrier to a meaningful politics of climate change that can never be surmounted. The contradiction is ubiquitous. And as the practice and organisation of climate change governance is irrevocably subject to contradictions of the capitalist state, dysfunction occurs irrespective of overwhelming popular recognition of climate change and the demands for consequential remedial action. Popular demand for action does (in part) precipitate climate change policy. But it can have no real effect on the broken institutional mechanism (the state) that, in the end, unwittingly generates ineffectual climate change policy. The breakdown of climate change policy – the breakdown of the New Zealand Climate Change

Programme – is inexorably structural in nature. The dysfunction of climate change governance is not an irrationality per se. Rather, it is the logical and predictable outcome of an irrational political and economic system. One could argue that appropriately addressing climate change may not actually be about addressing climate change. To realistically address climate change, first the socio-structural conditions that undermine climate change governance need to be allayed.

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