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CLIMATE CHANGE IN A SUNBURNT COUNTRY

Exploring the Justification of Australian Climate Policy

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Men and nations behave wisely when they have exhausted all other resources.

—Abba Eban, Israeli diplomat (1967)

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List of Abbreviations

ALP	Australian Labor Party
APP	Asia-Pacific Partnership
BoM	Bureau of Meteorology
CDC	Climate discourse complex
CSIRO	Commonwealth Scientific and Industrial Research Organisation
CO_2	Carbon dioxide
COP	Conference of Parties
DAP	Direct Action Plan
ESD	Ecologically Sustainable Development
ETS	Emissions trading scheme
GDP	Gross domestic product
GFC	Global financial crisis
GHGs	Greenhouse gases
GLR	Governmental legitimation rhetoric
IPCC	Intergovernmental Panel on Climate Change
NCPR	National climate policy regime
NGRS	National Greenhouse Response Strategy
OECD	Organisation for Economic Cooperation and Development
PM	Prime Minister
RET	Renewable energy target
UN	United Nations
UNFCCC	United Nations Framework Convention on Climate Change
USA	United States of America

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I. INTRODUCTION

State responses to global warming and climate change have been far from uniform, both across geography and across time (S. Gupta et al. 2007). This thesis explores how states justify adopting or opposing certain climate change policies. The research focuses on Australia due to its remarkable lack of action taken to address climate change, despite its high ecological vulnerability, low cost of marginal abatement, and high carbon footprint. Australia is an energy exporting country and has some of the highest carbon emissions per capita on the planet, but it is highly sensitive to climate change, both in terms of the ecology and in terms of food and water security. Despite these sensitivities, Australia's response to climate change has been markedly schizophrenic, as exemplified by years of increasing emissions despite concerns of global warming, its late accession to the Kyoto Protocol and subsequent "carbon tax", which was followed by the current government's "blood oath" to repeal existing legislation and dismantle climate change institutions (Grattan 2011). These hyperbolic variations beggar curiosity, and therefore this thesis seeks to answer the question: how do states justify adopting or opposing certain climate change policies?

In order to examine the changes in the justifications for Australian climate change policies, this thesis traces the changes in the salience of government global warming and climate change discursive fields and discourses. By parsing sources from the late 1980s (when global warming first emerged as an international political issue) to beyond the election of the 'the most environmentally hostile administration' in Australian history in 2013 (K. Marks 2014), it is revealed that economic considerations have been the primary justifications of Australian climate policy, and that scientific and ethical considerations have been used to both justify and criticise a variety of policies. This sheds light on why Australia's climate policy has been so dissonant, and suggests new directions future policymakers might take in addressing climate change.

This thesis explores how the discourse of the Australian government has changed over time, and how certain stimuli have impacted on this rhetoric. This research contributes to the existing literature in several ways: it offers novel insights into how Australia has justified a variety of disparate policies; it provides a more comprehensive exploration of the history of the climate policies and discourse of Australia; and has the potential to act as a springboard for further research by exploring some of the relationships identified within.

The remainder of the thesis is structured as follows. The second section provides an introduction to climate change, briefly discussing the global imperative to prevent it, and Australia's particular vulnerabilities. The following part reviews the literature on climate governance and climate policies. Chapter IV discusses the theoretical framework underpinning the analysis. This is followed by an explanation of the methodology employed herein. Section VI provides the discourse analysis. Part VII summarises and concludes.

II. CLIMATE CHANGE

Before discussing climate change, it is first necessary to clarify what is meant by the term, the consequences of unabated warming, and to provide a brief background on the political responses so far.

A. *The Super Wicked Problem*

A "wicked problem" is a problem facing policymakers that 'defies resolution because of the enormous interdependencies, uncertainties, circularities, and conflicting stakeholders' (Lazarus 2010, 10750). A "super wicked problem" is more complex, in that in addition to the characteristics of a wicked problem, it also involves an impending and expiring deadline to act, an absence of a strong central authority to address the issue, the dilemma that those who are responsible for causing the problem must act to address it, and very high and irrational discount rates of future problems, promoting myopic behaviour (Levin et al. 2010, 5–7; Levin et al. 2012, 124). Climate change is a super wicked problem.

According to the United Nations Framework Convention on Climate Change (UNFCCC), "climate change" means 'a 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' (United Nations). While slightly tautological, this definition clearly demonstrates the focus of climate change: atmospheric composition. This definition has been criticised for focusing too heavily on anthropocentric greenhouse gas (GHG; notably carbon dioxide (CO_2)) contributions and thus energy policy (Pielke 2005), however due to its widespread acceptance it will be used herein. What does need greater explanation however, are the consequences of climate change, and the imperative of appropriate policy responses.

B. *"Of Droughts and Flooding Rains"*

When one thinks of global warming or climate change, the usual manifestations conjured are warmer temperatures, melting icecaps, and rising sea-levels. While these are indeed realities of climate change, they are but the tip of the iceberg. The full impact of a warmer world runs a much larger gamut, with many more consequences directly affecting humanity.

Due to the immensity, uncertainty, and variety of the impacts of climate change, only the very briefest of overviews can be included here. According to the Stern Review, climate change will impact on 'the basic elements of life for people around the world—access to water, food production, health, and the environment' (Stern 2006, vi). The Intergovernmental Panel on Climate Change (IPCC) has released catalogues of impacts, including 'hundreds of millions of people [becoming] exposed to increased water stress', significant global extinctions, increased wildfire risk, decreased food production, increased damage from floods and storms, changing distribution of disease vectors, an 'increasing burden from malnutrition, diarrhoeal, cardio-respiratory, and infectious diseases', and 'increased morbidity and mortality from heat waves, floods, and droughts' (Parry et al. 2007, 10). The World Bank has released concurring reports, stressing heat extremes, water stress, increasing food insecurity, sea-level rise, ocean acidification, and climate refugees (Schellnhuber et al. 2013, xvii–xviii). Australia in particular is 'highly vulnerable' to the effects of climate change (McKinnon 2012), and is likely to suffer because of water stress, increased salinisation, decreased food production, more intense storms and bushfires, and greater infrastructural damage from flooding and storm surges (Lyster 2004, 566–567). Although it is impossible to precisely determine what will happen, these are the likely consequences for inadequate action. Therefore, when considering the discourses presented below, it must be remembered that these threats are the impetus for action.

The IPCC warns that a warming of 2°C (from pre-industrial times) is the tipping point between what we see now, and those aforementioned catastrophes *plus* feedback loops that will increase the speed and severity of further warming (Stocker et al. 2013). Already Earth is 0.8°C warmer than pre-industrial times (Schellnhuber et al. 2013, xvii). What then, have the nations of the world done to stem this existential threat?

C. *Progress So Far*

This section provides a very rudimentary snapshot of the recent history of climate change policies. It does not look at the effectiveness of specific policies, as that is an area of great contention and disagreement.

Climate change emerged onto the international political scene in the late 1980s. Since that time there have been countless fora, conferences, negotiations, summits, reports and meetings discussing how it should be addressed. As it influences the global commons, has a trans-boundary nature, and spills over onto non-environmental issues, no consensual agreement has been reached (Young 1994, 20–26). Moreover, the time lags, scientific uncertainties, and the progress of technological development have further compounded the already significant difficulties (Nordhaus 1994, 4–5).

The most notable achievement arising from climate change negotiations is the 1997 Kyoto Protocol. Countries which signed and ratified the Protocol had to meet pre-determined emissions reductions targets by 2012. There is a second period of further reductions for the period of 2013–20. Australia signed the Kyoto Protocol in 1997, but did not ratify until 2007. Australia's target was an *increase* of eight per cent in emissions on 1990 levels by 2012. Australia achieved this target, largely due to concessions it was awarded during the negotiations phase enabling it to include emissions from land clearing, thereby artificially increasing its baseline (C. Hunt 2004, 156).

Australia has introduced several different greenhouse policies, with the most recent being the emissions trading scheme (ETS; also known as a "cap and trade" system), and its would-be replacement, the Direct Action Plan (DAP). The ETS was introduced in July 2012. An ETS sets a limit on the total amount of national emissions, divides this total into a specified number of emissions permits, and allocates these permits amongst industry. Industry must then either reduce its emissions to comply with their permit allocation, or purchase additional permits from third parties who do not require such a high threshold. The Coalition government of Australia which came to power in 2013 campaigned hard on a platform to repeal this "carbon tax",[1] and to replace it with DAP. Under DAP, businesses submit tenders for government funds to lower emissions. It functions as a reverse auction, with the lowest bidder winning. Businesses then ostensibly use the money to complete their proposal, however there are no ramifications for failing to do so.

[1] Although technically an ETS, the policy was referred to as a 'tax' because in the first stage of the ETS there was no emissions limit, permits could not be traded, and the permits had a fixed price. Therefore the ETS acted like a tax, despite technically being something else.

At the time of writing, DAP is not yet implemented, and the repeal of the ETS has failed to pass both houses of parliament.

III. Explaining Climate Change Action & Inaction

The literature on political responses to climate change falls into two broad categories: assessments of international climate negotiations and the hurdles of collective climate action; and analyses of positions, preferences and policies enacted at the domestic level.

Concerning the former, much of the literature takes state positions as given and focuses on how international negotiations have occurred (Ward, Grundig, and Zorick 2001). Drawing heavily on rational choice and game theoretic approaches, this literature often focuses on the institutional framework in which the negotiations take place, the incentives to free-ride (Ward 1996), two-level games involving states and lobbies (D. F. Sprinz and Wolinsky-Nahmias 2004), the outcomes sought (Tingley and Tomz 2014), the general feasibility of collective climate action (Finus 2002), and the limits of international climate regimes (Keohane and Victor 2011). The problem with these systemic game theoretic and rational choice models however is that they ascribe rationality, and require player positions to be predefined. These positions are often taken as purely representative of the financial costs of abatement, which while parsimonious for such models, fail to portray the many nuances of climate geopolitics.

In order to better appreciate the nature of state climate positions, authors have begun to unpack the state, and examine how political positions on climate change are formed. Interest-based approaches are the simplest method for explaining climate preferences, however they are also the least accurate (Rootes, Zito, and Barry 2012). They declare that states only take action on climate change when such action is aligned with national interests, whatever they might be. Moreover, the interest-based models are largely static, whereas in reality preferences are dynamic and malleable. Such approaches have looked at state vulnerability to climate change (D. Sprinz and Vaahtoranta 1994; Rowlands 1995), perceptions of risk (Bulkeley 2001a), fossil fuel industries in the national economy (Paterson and Grubb 1992), domestic political interests (Hochstetler and Viola 2012), international political developments (Kasa 2013; Takao 2012), the strategies employed by politicians (Bailey et al. 2012), and the influence of multi-national corporations (Rowlands 2001; Levy and Kolk 2002; Levy and Newell 2002).

However, while interest-based approaches provided a substantial foundation for examining state climate preferences, their inaccuracy has resulted in an expansion of possible explanations. Further research has focused on willpower of political leaders (McDonald 2013a; Eckersley 2013), the significance of "climate campaigners" (Christoff 2005), the interplay of climate norms with national cultures (Elliott 2011; Stevenson 2009; Crowley 2007), ethical ignorance (McDonald 2005), political partisanship (Tranter 2013; Fielding et al. 2012), the salience of post-materialist values (Inglehart 1995), and even the state's place within the geopolitical space-time continuum (Williams and Booth 2013).

It is clear that the international politics of climate change have received a great deal of scholarly attention, and the situation in Australia is no exception. In addition to some of the above explanations, authors have sought to explain climate policy in Australia by looking at the population's belief in climate change (Tranter 2013; Leviston et al. 2014; Stefanova 2013), technological and regulatory inertia (Mikler and Harrison 2013), Australia's membership in international organisations (Lawrence 2009), the beliefs of Australia's Prime Ministers (PMs) (Curran 2011; Fielding et al. 2012; Boswell, Niemeyer, and Hendriks 2013; Hawke 1989), and the potential for carbon sequestration (Buizer and Lawrence 2013).

Despite the relatively high amount of literature on this topic, several gaps exist. Firstly, most of the above analyses have only been employed over one incident in particular: Australia's 2007 ratification of the Kyoto Protocol and the implementation of the ETS. How climate policy justifications have changed since global warming first emerged as a political issue in the late 1980s has been relatively neglected, as has the current government's crusade against existing climate policies. Moreover, the existing literature does not examine how the justification discourse is affected by extraneous stimuli, such as natural disasters, national elections, and the health of the national economy.

So although much has been researched and written with regards to climate change, the fact that it remains an impending problem means that further study is warranted. Therefore, this thesis adds to the existing panoply of scholarship by examining previously unscrutinised stimuli, and analysing the relationship between climate change discourse, climate policy, and the aforementioned stimuli.

IV. Analysing the Legitimation of Climate Change Policy

In order to answer "how do states justify adopting or opposing certain climate change policies?" several concepts must be introduced. These include the "climate discourse complex" (CDC), the "governmental legitimation rhetoric" (GLR), and the "national climate policy regime" (NCPR).

A. *The Climate Discourse Complex*

A discourse is 'a collection of stories, narratives, scripts, myths, legends, and sagas accounting for events, usually developed chronologically and sequentially, to indicate a causal relationship between one event and another' (Butteriss, Wolfenden, and Goodridge 2001, 49). It is 'a shared way of apprehending the world' and they 'construct meanings and relationships, helping to define common sense and legitimate knowledge' (Dryzek 2005, 9). Consequently, Peter Christoff defines the CDC as 'a dominant… ensemble of… climate discourses arising from several fields…that frames and governs public and private practices' (Christoff 2013, 354). In essence, the CDC is the framework in which society as a whole discusses climate change. According to Christoff, the discursive fields of the CDC are the *scientific*, the *ethical*, the *economic*, the *technological*, the *political/legal*, and the "*lived reality*". The CDC is dynamic and provides the parameters within which the national climate policy regime lies.

While Christoff's CDC and its discursive fields are a useful starting point, it needs to be updated. This thesis uses the six discursive fields as a point of origin, but expands upon them by identifying the prominent (including the hegemonic, dominant, and marginalised) discourses within each field. Consider the *scientific* discursive field as an example. Christoff defines it as 'framing discourses about the nature and material impacts of human and non-human contributions to climate change' (Christoff 2013, 356). After reviewing the literature the prominent discourses within each field are readily identifiable. Accordingly, the prominent discourses of the scientific field are *climate change scepticism* (i.e. doubt of its occurrence), *natural climate variability* (i.e. acceptance of its occurrence but doubt as to the role of humanity), and *anthropocentric climate change* (i.e. acceptance that humanity is causing or accelerating climate change) (Hoffman 2010; Lahsen 2013; Antilla 2005; Poortinga et al. 2011). By enumerating these discourses within the discursive field, a more accurate and illuminating picture can be provided by the discourse analysis. It must also be mentioned that the fields are not self-contained—they

interact and influence one another. Therefore, the following discourses and discursive fields are prominent in the Australian CDC:

Economic	Scientific	Energy & Technology	Ethical	Political/Legal	Social Impact
Traditional	Climate change scepticism	Fossil fuels	Fellowship	Emissions targets	Domestic impact
Sustainable	Natural climate variability	Nuclear	Leadership	Carbon markets	International impact
	Anthropocentric climate change	Renewables		Subsidies	
				International agreements	

Table 1: Discursive Fields and Prominent Discourses of the Climate Discourse Complex

Brief descriptions of each discourse and the sources of their identification are provided in Appendix A (below). Note that this list is not exhaustive, it merely contains the most prominent discourses. The role of the CDC in this thesis is that it acts as the foundation of the GLR.

B. *The Governmental Legitimation Rhetoric*

The GLR is a novel concept developed in this thesis in order to analyse the trends in how climate change policies are legitimated and justified. The GLR draws on the CDC, in that the GLR amplifies or silences specific discourses from within the CDC. While made of the same discursive fields, the main differences between the CDC and GLR is that the GLR is comprised only of government discourses (as opposed to society as a whole), and that the GLR is a conscious portrayal, and not an organic cluster of narratives. In essence, the GLR is the dynamic collection of discourses used to justify and legitimate, or oppose and criticise, climate change policies.

This thesis analyses how the GLR has changed over time, and also how it has responded to a variety of exogenous shocks.

C. *The National Climate Policy Regime*

Christoff adapts Krasner's definition of international regimes as 'implicit or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given area of international relations' (Krasner 1983, 2), to create

the concept of the NCPR. This concept provides a useful framework for describing a state's overall policy position. Therefore, the GLR exists to defend the NCPR.

This thesis charts the history and transformations of the NCPR and examines how the NCPR has been justified (or challenged) by the incumbent (or opposition) government using the GLR.

D. *Hypotheses*

1. *Hypothesis 1—Policies & Justifications*

This hypothesis considers the relationship between the GLR and the NCPR. As the GLR can be employed to legitimate and justify policies, or to criticise and oppose them, it would be logically inconsistent if the same discourses were employed to both justify *and* criticise similar NCPRs. This hypothesis rests on the assumption that governments are logical and actually mean what they say. One should therefore expect to see a certain coherence in the dominant discourses used to justify and legitimate policies under the NCPR. For example, it would be highly surprising if a government were to use discourses of anthropocentric climate change to oppose adopting climate change policies.

> H1a: The dominant discourses espoused via the GLR should be logically coherent with the types of policies promoted by the NCPR.

Moreover, due to the impartiality of the effects of climate change, it is expected that the primary justifications for climate change policies have stemmed from the *social impact* and *scientific* discursive fields:

> H1b: The primary justifications of the Australian climate policy regime have stemmed from the *social impact* and *scientific* discursive fields.

2. *Hypothesis 2—Economic Slowdowns*

The consequences of the health of the economy and the global financial crisis (GFC) are largely undiscussed in the existing literature on climate change, especially in the Australian context. Using changes in gross domestic product (GDP) as a parsimonious indicator of economic health, this thesis examines the effects of recessions and slowdowns on the GLR. It is probable that the recent historical health of the economy will trump vaporous future concerns about climate change (due to the primacy of the ideal of neoliberal economics present in the Australian political culture) and thus have a direct effect on the dominance of the economical discursive field:

> H2: In the wake of a recession or economic slowdown, the *economic* discursive field in the GLR will increase in dominance.

3. *Hypothesis 3—Natural Disasters*

Hypothesis 3 is also based on an omission in the literature, namely the effect of natural disasters on climate policy. One of the most observable implications of climate change is that natural disasters will increase in intensity (Schellnhuber et al. 2013). However, a significant impediment to taking action on climate change is that the magnitude of these intensified disasters are often extremely discounted, resulting in a cost-benefit analysis that advocates inaction (Finus 2002). Therefore, the occurrence of a natural disaster, especially a disaster beyond the magnitude of so-called "3-sigma" event,[2] could arguably act as a catalyst for a change in the dominant discursive discourse. Therefore:

> H3: In the wake of a natural disaster, the *social impact* field of the GLR will increase in dominance.

4. *Hypothesis 4—National Elections*

There is an emerging component of the literature which discusses the importance of political leaders on climate policy (J. Gupta and Grubb 2000; Eckersley 2013; Fielding et al. 2012). There is also literature which outlines the significance of the public's perception of climate change (Bättig and Bernauer 2009; Niemeyer 2013; Carson, Louviere, and Wei 2010; Corner et al. 2011). However, these discussions have of yet not assessed how such factors influence the GLR. By combining the democratic functioning of the Australian parliament, the high level of partisanship in the Australian electorate (Tranter 2013), and the weight of political leaders with respect to the direction of national climate policies, the following hypothesis emerges:

> H4: A national election is likely to increase the salience of marginalised discourses in the GLR.

5. *Hypothesis 5—International Climate Negotiations*

The final hypothesis adapts existing hypotheses surrounding international political pressure to the current discourse framework. One of the most often encountered reasons for explaining the lack of progress in addressing climate change is that governments have an incentive to free-ride and cannot rectify the "common but differentiated responsibilities" (Heitzig, Lessmann, and Zou 2011; Kaitala and Pohjola 1995; Rajamani 2000; Stone 2004; Harrison and Sundstrom 2010; Ward 1996; Finus 2002). It follows therefore that the occurrence of international climate negotiations will affect the GLR in Australia. Therefore:

[2] According to The World Bank, 3-sigma events occur once every 740 years; 5-sigma events once every several million years. The 2012 US heat wave and the 2010 Russian heat wave classify as 3-sigma events.

H5: The occurrence of international climate negotiations is likely to increase the salience of the *ethical* discursive field in the GLR.

The veracity of the above hypotheses will be assessed by an examination of Australian GLR on climate change policies over the past three decades.

V. A Discursive Analysis of Climate Policy

This thesis analyses the Australian government's discourse from the late 1980s through to 2014. Australia is chosen as the case study due to the significant transformations and subsequent reversal of its preferences for addressing climate change, the accessibility of sources, and the inherent interest to the author.

Discourse analysis is an appropriate technique to showcase the evolution of climate policy justification due to its ability to 'illuminate how policies are shaped by the interpretation of problems and their subsequent transformation into practice' (Tellmann 2012, 748). It rests on the assumption that 'language matters, that the way we construct, interpret, discuss, and analyze [sic] environmental problems has all kinds of consequences' (Dryzek 2005, 10).

Governmental discourse is readily available, and is relatively reliable in a strong democratic country such as Australia. Indeed, as discourse analysis is best suited to addressing how policies are legitimated (rather than why they are enacted), it is an appropriate research methodology in this case (Eckersley 2013, 383).

A variety of theoretical approaches have informed the hypotheses and concepts, in addition to the author's observations. These theories include realism (Waltz 1990), liberalism & two-level games (Moravcsik 1997; Putnam 1988), game theory & rational choice (Grundig 2009; Ward 1996), social constructivism & international political sociology (Bigo 2008; Bigo and Walker 2007; Tellmann 2012; Eckersley 2013; Pettenger 2013), and regime theory & multi-level governance (Bache and Flinders 2004; G. Marks and Hooghe 2004; Liesbet and Gary 2003; Krasner 1983; Keohane and Victor 2011). While the analytical framework draws on insights from multiple theoretical perspectives, as the methodology employs discourse analysis it proceeds largely from a constructivist perspective.

It is prudent to outline the theoretical underpinnings of discourse analysis and the manner of its employment here. When analysing discourses, it is imperative to pay attention not only to the choice of words, but also to the context in which they are employed. The specifics of discourse analysis have been enumerated by multiple authors, who suggest

that the analyst examine the formation and use of concepts, the placement of tropes and metaphors, choices in framing, the dominant stories and narratives, and the sources of validation (Gasper and Apthorpe 1996; Fairclough 1992; Butteriss, Wolfenden, and Goodridge 2001). However, as the discourses are analysed through the lens of the researcher, there is the risk of imputing or constructing meanings which do not exist (Snow 2004).

John Dryzek has espoused a widespread framework for discourse analysis on environmental problems, focusing on the basic entities recognised or constructed, the assumptions about natural relationships, the agents and their motives, and they key metaphors and rhetorical devices (Dryzek 2005, 19). Dryzek's method has been adapted from environmental problems in general to climate change in particular by Silje Tellmann (Tellmann 2012). Tellmann's refined model suggests looking at the following indicators to identify discourses: the problem definition; the contextual framing of the problem; the problem solution; legitimating arguments & key concepts; and the knowledge base. Consequently, this thesis employs this lens to analyse the discourse of the Australian government surrounding the justification of climate change policies. A point of contention however is that the analysis takes place within a predetermined structure (that is, the fields and discourses are previously identified). While this is in line with how Tellmann and Dryzek performed their analyses, it does run the risk of creating artificial boundaries or excluding some discourses (Butteriss, Wolfenden, and Goodridge 2001). However, this risk is minimised by the broad research undertaken to ensure the most accurate construction of the CDC possible.

The government discourse which is the focus of this paper includes discourses of both the incumbent government and the opposition, as well as any large minorities (such as the Greens party). The focus on the government is legitimised by the aim of this thesis, namely to see how the state's justification of certain policies has changed over time. An argument could be made that by focusing on only governmental discourse, the influence of other fields will be ignored (such as that of industry). However, it is posited that if such fields are influential their discourses will be absorbed by the government, and thus this poses no significant barrier. Moreover, the aim of this thesis is not to analyse the interrelationship between industrial or other discourses with that of the government, yet that could be an avenue for further research.

A wide range of sources were parsed to perform the discourse analysis. These sources include: the National Library of Australia's PANDORA web archive; Hansard federal parliamentary transcripts; election speeches and campaign materials from the Museum of Australian Democracy; political party media releases; reports and documents from

existing and defunct governmental departments and agencies (including the Departments of: Agriculture; Defence; Foreign Affairs and Trade; Industry; the Environment; the Attorney-General; Climate Change (defunct); and, Prime Minister and Cabinet); and a wide range of academic articles, books, and national & international periodicals.

VI. The Justification and Legitimation of Australian Climate Change Policy

A. *Australia's Governmental Legitimation Rhetoric and Climate Policy Regime, 1987–2014*

The schizophrenic nature of the Australian NCPR is perfectly captured by Talberg, Hui and Loynes:

> Australia's commitment to climate action over the past three decades could be seen as inconsistent and lacking in direction. At times Australia has been an early adopter, establishing the world's first government agency dedicated to reducing greenhouse gas emissions; signing on to global climate treaties the same day they are created; establishing the world's first emissions trading scheme…; and pioneering an innovative land-based carbon offset scheme. But at other times, and for many reasons, Australia has erratically altered course: disbanding the climate change government agency, creating a new one then disbanding that; refusing to ratify global treaties until the dying minute; and introducing legislation to repeal the national ETS (Talberg, Hui, and Loynes 2013).

This section examines how the GLR has employed discourses from the CDC to justify and legitimate the ever-changing NCPR. Although some 16 prominent discourses have been identified in the Australian CDC (such as "renewable energy" or "carbon markets") that belong to the six discursive fields outlined above, only a handful of these have been truly dominant in the GLR. What is more, conflict between incumbent and opposition discourses is a relatively recent phenomenon, and only really emerged in the mid-2000s.

Generally speaking, the NCPR can be grouped into four different periods. These are the "no regrets" policies of the late 1980s until the fall of the Keating administration, the nominal and voluntary posturing of Prime Minister Howard's reign, the "markets and targets" of Rudd-Gillard-Rudd administrations, and most recently the Coalition's "blood oath" to 'axe the tax' and establish Direct Action.

1. *"No Regrets": 1987–96*

Looking at the current situation of the Australian GLR, one might be forgiven for believing that climate change had always evoked partisan separation. However, beginning in the late 1980s both major Australian parties (the Australian Labor Party (ALP) and the Coalition/Liberal Party) espoused more or less similar discourses on global warming.[3] Indeed it was not until around 1997 that significant differences in party discourses emerged.

The "no regrets" era of 1987–96 was characterised by policies which sought to reduce GHGs as well as provide economic benefits, or at least no economic losses (Commonwealth of Australia 1992). The policies were very cautious and sought to maintain the status quo, as state and federal governments were not required to commit to any definitive reductions in any definitive timeframe (Taplin 1995, 18). The "no regrets" campaign consisted of approximately $1 billion allocated to provide incentives to reduce emissions and encourage investment in cleaner technology. These goals were to be achieved by a variety of programmes including: the Greenhouse Gas Abatement Programme (to encourage the development of carbon sinks); the Greenhouse Challenge (where businesses could publically report on their reduction progress); suggested improvements to Generator Efficiency Standards (for improved energy efficiency); and applying a mandatory Renewable Energy Target (RET; which forced power generators to supply a very small percentage of renewable energy) (Australian Government 2002). Due to their largely voluntary nature, and the absence of a "polluter pays" methodology, these policies have since been described 'arbitrary', 'administratively cumbersome', 'ineffectual', and burdensome for taxpayers (C. Hunt 2004, 162).

Nevertheless, during their time these policies were underscored by discourses from both the ALP and the Coalition promoting the *scientific* discursive field. For example, the Commonwealth Scientific and Industrial Research Organisation (CSIRO) held multiple conferences and released several papers in 1988, which stated that 'the climate is changing' and argued that 'mankind is strongly implicated in these changes' (Pearman 1988), and outlined the likely negative effects of climate change on bushfires (Beer, Gill, and Moore), and the water supply (Peck and Allison 1988), amongst others. Despite the acceptance of some of CSIRO's observations of a changing climate, politicians debated the science as to why the climate was changing: was humanity to blame?

[3] The ALP is a centre-left party. The misnomered Liberal Party is centre-right. When in power, the Liberal Party joins forces with the National Party, the Country Liberal Party, and the Liberal National Party, resulting in what is commonly referred to as the Coalition.

This early dominance of the *scientific* field is an expected observation, as the revelations of climate science were emerging onto the global stage, yet its relative novelty meant that disagreement as to the precise cause or nature of climate change could still be taken seriously. Supporting these scientific discourses were discussions surrounding "climate justice" and questions of responsibility for emissions abatement, as well as of notions of sustainable development. For example, Foreign Minister Gareth Evans (ALP) declared 'climate change and the protection of the atmosphere [to be] the biggest problem, the biggest challenge, faced by mankind in this or any other age' (Commonwealth Parliamentary Debates 1989, 814), and Prime Minister Bob Hawke (ALP) agreed that 'there is no greater global environmental concern than the greenhouse effect', and that 'the most cost-effective' measure was to reconsider energy policy (Commonwealth Parliamentary Debates 1991, 5124).

The combination of the *scientific*, *ethical* and *economic* fields led to talk of national emission reduction targets attaining dominance in the final years of the Hawke administration. It is interesting to note that both the incumbent and opposition parties put forward similar positions on global warming at this stage. This indicates that action on global warming was a bipartisan issue. These emission reduction policies were underpinned by discourses of sustainable development and ethical concerns stemming from the revelations of climate science, and the Australian NCPR circled around adoption of the Toronto Targets. Established in 1988, these targets called for a 20% reduction of global CO_2 emissions by 2005. On balance, there was bipartisan support for their adoption, yet with Paul Keating (ALP) assuming Prime Ministership in late 1991, no enabling legislation was ever passed (Bulkeley 2001b, 158). Consequently the Keating administration put environmental issues on the backburner, which began a change in discourse dominance that continued throughout the Howard years.

The displaced environmental issues were usurped by strong discourses promoting traditional economic concerns. This was preceded by the birth of the so-called "greenhouse mafia"—a powerful lobby of vested interests that represented carbon intensive businesses, notably the fossil fuel industry, which formed in 1990 (Pearse 2007). The precise influence of this lobby cannot be specified, but what is clear is that from Keating's ascension in 1991 to John Howard's (Liberal) fall in 2007, the dominant discourses of the government were focused on traditional economic calculations underscored by growth derived from fossil fuels. And while renewable energy technology discourses did feature intermittently during those 15 years, the primacy of fossil fuels in underpinning Australian economic growth went largely unchallenged.

Other than the significant favouring of fossil fuels and a reversion to traditional economic conceptions, the GLR during Keating's administration was not overly different from the GLR of Hawke's government. This is very interesting, because the same supporting discourses were enunciated during each period, yet the Keating administration was markedly less environmentally friendly than Hawke's and possessed a different NCPR. This echoes the concern outlined above, whereby the rhetoric uttered by an institution need not necessarily be a true and accurate representation of their underlying motivations. Alternatively, it could merely demonstrate the extensive influence of the "greenhouse mafia".

2. *Nominal and Voluntary Posturing: 1996–2007*

It is during the Howard years that the first challenges to the incumbent discourses appear. The severity of the change in discourse is succinctly summarised by an anonymous government official quoted in 1996:

> The Australian position [with respect to climate change] has changed from being a very wide one that recognised the science, the need to be putting new technologies into developing countries and giving them financial assistance, and that recognised the need for adaptation strategies but also included trade concerns. Now, instead of the holistic approach, we've zoomed in on the bottom line and trade is the only driving consideration (Gilchrist 1996).

The NCPR during PM Howard's era was characterised by token statements of Australia being a "good global citizen" and doing its fair share to address global warming, while at the same time questioning its underlying science and offering unyielding resistance to the Kyoto Protocol (Pincock 2007, 337). Prime Minister Howard argued that ratifying the protocol 'would cost us [Australia] jobs and damage our industry' (Roarty 2002), and supported the USA's criticism of the Kyoto Protocol ("EU Urges U.S. to Reconsider Global Warming Treaty" 2001). The resulting policies largely followed the "no regrets" line, yet from late 2006 talk of carbon markets gained prominence. In response to offers made by the opposition, the Coalition government promised (if re-elected) to take steps to set up an ETS, conduct an economic analysis of its effect on the Australian economy, and increase the proportion of electricity generated by low-emissions sources (Macintosh, Wilkinson, and Denniss 2010). However as these policy promises were made at the end of Howard's administration, their role in the NCPR was negligible.

From 1996 until 2007 discourses of traditional economics and fossil fuels were used heavily to legitimate and justify what few policies did exist. The prime objective of climate policy during the Howard years was ostensibly to deliver a 'strategic and dynamic response to climate change which is capable of protecting our economic interests' (Reuters

News 1996a). To appreciate the supremacy of fossil fuel discourses during this decade, one need only look at the Asia-Pacific Partnership (APP) on Clean Development and Climate. Before its disintegration in 2011, the APP was an international association of governments founded (largely by Australian and the United States of America (USA)) as an alternative means to address climate change (Lawrence 2009, 282). Instead of relying on mandated targets and deadlines, the APP members preferred to suggest voluntary measures and opt for industrial cooperation, with only nominal mentions of alternative technologies and renewable energy (Christoff and Eckersley 2007, 35). This is clearly stated in the AAP's communiqué to its members, specifying that all members had 'recognised that fossil fuels underpin[s] [their] economies, and will be an enduring reality for [their] lifetimes and beyond' (AAP 2006a). This is reflected in statements made by the Coalition administration defending the coal industry and claiming that if they were made to reduce emissions it 'would do great damage to the economy of [Australia]' (AAP 2006b).

Additionally, notions of international fellowship and Australia "doing its fair share" were also used as justification, which stand at quite the contrast to Howard's disdain for and rejection of the Kyoto Protocol in 1997 (see E. International Climate Negotiations, page 39, below). Although the government espoused support for international agreements, it vehemently opposed binding targets, due largely to a perception of unfairness. The Labor opposition under Kim Beazley and Simon Crean projected strong alternative discourses in support of the Kyoto Protocol and the adoption of binding national targets. They claimed that Australia's emissions 'would be slashed in half' if they came to power, by way of an ETS, increased renewable energy generation and the ratification of the Kyoto Protocol (Peatling 2006). These discourses never gained traction however and faded from the public realm until a brief reappearance in 2002. The Kyoto Protocol again was the impetus for these alternative discourses, emerging as they did when PM Howard stated that ratifying the Protocol was against Australia's interests. The ALP opposition promoted not 'just a strong economy, [but] a sustainable economy as well' and supported Kyoto as it is the 'best international framework to achieve [a] solution' (Crean 2002). Such discourses peaked when the incumbent Coalition performed a turnaround on their new 'four-pronged policy response' (Minister for the Environment and Heritage Dr David Kemp and Minister for Foreign Affairs Alexander Downer 2002), (comprised of international unity, a strong but clean fossil fuel powered economy, government-business linkages, and domestic and international adaptation programmes) and declared it to be economically unviable. However these alternative discourses could not topple the dominance of traditional economic thought and fossil fuels. Curiously, PM Howard used

an admission of the anachronistic nature of these dominant discourses to rule out ratifying Kyoto, stating that there is

> one thing I am frozen in time about and that is a determination to protect the industries of this country that give us a natural competitive advantage. I am frozen in time on that because I believe in the coal industry and I believe in preserving the competitive advantage we now have that is why… we didn't sign Kyoto, because Kyoto could well have put us at a competitive disadvantage (Pearse 2007, 131).

Nevertheless, the discourses which had been entrenched as offering legitimacy for the past decade were significantly challenged when Labor won the election under the leadership of Kevin Rudd in 2007.

3. *Markets and Targets: 2007–2013*

Rudd's first official act of government was to ratify the Kyoto Protocol. Subsequently an ETS was developed and there was significant research and development into renewable energy. This is clearly mirrored by a change in the dominant discourses in the GLR, most evidently with changes in the *economic* discursive field, and the *ethical* and *political & legal* fields achieving dominance.

Although the economic field remained hegemonic, the focus shifted from a traditional economic perspective to a new, sustainable perspective supported by an ETS. This was accompanied by a decrease in the salience of fossil fuels as underwriting the Australian economy, and the emergence of renewable energy and innovation powering future Australian prosperity. Moreover, Rudd's ratification of the Kyoto Protocol was accompanied by a strong *political & legal* discursive field, as discussions about carbon markets, emissions reductions targets and international agreements made the headlines. The *ethical* field underwent a strong resurgence, as noted by Rudd calling climate change the 'great[est] moral, environmental and economic challenge of our age' (Rudd 2009).

Despite the leadership change resulting from Julia Gillard's (ALP) Prime Ministerial coup in 2010, the GLR did not change radically, nor did the NCPR. Her government adopted a watered-down version of the ETS, perhaps largely due to the fact that her minority government required the support of the Greens.(Quiggan 2013). Talk of markets being the best method for managing emissions remained dominant in the incumbent government, with Gillard declaring that she was 'determined to price carbon' (AAP 2011b), and Federal Treasurer Wayne Swan (ALP) agreeing that pricing carbon was an 'entirely responsible decision' (Hutchens 2013). Conversely, the Liberal opposition under Nelson, Turnbull and then Abbott offered alternative discourses, namely traditional economic thought, but also climate change scepticism, concerns about the ethical responsibility Australia was

ostensibly undertaking, and the importance of coal and other fossil fuels. Examples of these alternative discourses can be found below.

Rudd became PM again in the middle of 2013 for a mere three months, and there was little change in the GLR associated with that change of leadership

4. *'Axe the Tax': 2014*

It would not be difficult to argue that the NCPR of Tony Abbot's Coalition government is the antithesis of Rudd's ALP administration. Indeed, since being elected in 2013, the main pillar of the Coalition's climate policy has been to reverse the policies of Rudd and Gillard. The ETS is set for repeal in July 2014, the RET is to be decreased, and a policy known as "Direct Action" is to be introduced (Australian Government Department of the Environment 2014). If enacted, this policy would establish an Emissions Reduction Fund, call for high polluters to submit tenders for projects to lower their emissions, and the winner would receive money from the fund to ostensibly complete that project (Miller 2014). This policy has been heavily criticised due to the fact that there are no sanctions for failing to complete the project, it is unlikely to meet Australia's emissions reduction target of five per cent under 2000 levels by 2020, the marginal cost of abatement is much higher than under a tax or ETS, and that it requires the public to pay instead of the polluters (Denniss and Grudnoff 2011). Indeed, it has been described as akin to 'giving money to an illegal drug dealer to stop dealing drugs, then having no penalty if he keeps selling them' (White 2014).

Prime Minister Abbott and the Coalition have espoused a variety of discourses justifying their NCPR, and criticising the policies of the former administration. This makes it difficult to isolate those that are dominant. For example, Abbott has 'always thought that climate change was real' (Abbott 2011a), but at the same time he is 'hugely unconvinced by the so-called settled science on climate change' (Australian Government Department of the Environment 2011). He has announced that the Coalition has 'a policy to reduce emissions, not just to make them more expensive' (Abbott 2011b), but at the same time has categorically said that 'big reductions in emissions are impossible without a big increase in people's cost of living' (Taylor and Coorey 2011). However these contradictions are more revealing than they appear when one considers the historical utterances of the parties which comprise the Coalition. During their turn in the opposition, the Coalition politicians were very vocal in their scepticism of climate change. Abbott himself has been quoted as saying that 'the argument [behind climate change] is absolute crap' (Rintoul 2009), and a significant number of other Coalition members have espoused similar views. Former Senator Nick Minchin (Liberal) says that concern over global warming is 'scaremongering', disputes the fact that climate scientists are in

agreement as to the nature of climate change, and claims that Earth has not warmed since 1998 (Minchin 2012). Minister for Employment Senator Eric Abetz (Liberal) has declared that worrying over climate change is the same as listening to the 'apocalyptic Chicken Little' (Abetz 2012). and that there 'is no doubt that weeds pose… a challenge much clearer, more present and possibly more serious than… climate change' (Carlton 2007). Self-avowed sceptic 'of the connection between emissions and climate change' (Pearse 2011) and Minister for Industry Ian Macfarlane (Liberal) dismissed the content of Al Gore's *An Inconvenient Truth* as 'just entertainment' ("Gore Says He Hasn't Ruled out Running for President" 2006). Current Minister for Trade and Investment Andrew Robb (Liberal), who was responsible for developing a new emissions-trading portfolio, proudly 'dismissed climate change as a cause *célèbre* seized on by lefties with nothing to do since the collapse of communism' (Pearse 2009, 51). And Minister for Agriculture Barnaby Joyce (Coalition) has accused 'environmental goose-steppers' and 'doomsayers' of silencing the voices of climate change deniers and has equated climate change with Y2K ("Climate Action Rises Above Hot Air" 2009).

The point of outlining in such detail the sceptical discourses uttered by Abbott's party while they were in the opposition is to juxtapose it with their current stance and their current policies. Such clear disbelief has been ostensibly replaced by tacit acceptance of anthropocentric climate change. By enumerating discourses as varied as climate scepticism to natural climate variability, the future of renewable energy but the importance of coal in the national economy, and by proclaiming the virtues of market forces yet criticising market-based emissions control in favour of direct intervention, it shows that the Coalition government has no clear vision for addressing climate change. Yet the fact that climate change is still being paid lip service and was a major election issues says something about the importance of climate change to the Australian populace.

When one views the history of the Coalition's discourse, it becomes clear why a government would seek to repeal an ETS but still try to court environmentally minded voters with the DAP: it allows the party to seem to be taking action on climate change yet allows it to adhere to its historically demonstrated preferences. In essence, the NCPR of the Coalition has been accompanied by a dramatic change in dominant discourses, notably a return to traditional economic perspectives and what appears to be cognitive dissonance regarding the strong alternative discourses uttered by the Liberal opposition during the Rudd-Gillard-Rudd administrations.

5. *Overview*

This above overview shows how the Australian government has characterised and framed the problems of global warming and climate change in tandem with the NCPR. A

visual overview of the dominant and alternative discourses inherent in the GLR can be found in Appendix B.

Although dominance has shifted across discursive fields and between discourses, several observations can be made. First is the hegemony of the *economic* discursive field. In almost every year since global warming was acknowledged as a potential problem, the *economic* field has been dominant in the GLR. This has been true regardless of the types of policies present in the NCPR. In general, it does appear as though there is a correlation between sustainable economic discourses being used to justify more aggressive NCPRs, and traditional economic discourses seem to be used to criticise such policies. Despite this dichotomy, for every permutation of the NCPR, either the main justification or the main criticism has stemmed from the *economic* discursive field. This dominance may represent the strength of neoliberal economic ideals in Australia's capitalist society, or perhaps it is indicative of the power of the aforementioned "greenhouse mafia". But what it does represent is how significant the almighty dollar is, and highlights the lens through which policymakers view climate change.

The *scientific*, the *ethical*, and the *energy & technology* fields also feature relatively prominently throughout the time period analysed. Discourses promoting the use of fossil fuels were significantly employed to justify a refusal to ratify the Kyoto Protocol, and have helped reinforce more dominant discourses of traditional economic growth. In terms of the *scientific* discursive field, the most frequently encountered discourses are those of climate change scepticism. Indeed, apart from the relatively brief period in the late 1980s when the *scientific* field was used to promote policies, scientific concerns have more often than not been used to criticise policies and legitimate inaction. This is quite a curious and unintuitive observation. This indicates the extent to which climate change has moved from a scientific issue to a political issue, and reinforces the notion that policy need not have any scientific basis. Lastly, ethics have been used both to legitimate and criticise policies. Curiously, notions of fellowship have been employed to suggest Australia should do more to reduce emissions, while in another era they meant that Australia should do less.

Perhaps most curious is what has been marginalised, namely the *impact* discursive field. While there has been the occasional mention of the likely impacts of climate change, these discourses are clearly the most severely marginalised. This omission leads to interesting questions, most obviously counter-factual scenarios of how Australian climate policy would have progressed if the impacts of climate change were more acutely stressed. It might also help explain why Australia remains the developed country with the highest GHG emissions per capita: by neglecting the *social impact* discursive field in the GLR,

climate change has remained something of a vaporous, temporally distant concern, which might make people a bit uncomfortable. It is possible that if *social impact* discourses featured more prominently, this might be reflected by a change in per capita GHG emissions, as individuals seek to minimise the exposure to climate risk. However, as mentioned above that is a counter-factual scenario and remains conjecture.

On balance, there has been some support for H1a. A correlation between sustainable economic discourses and "aggressive" NCPRs is visible, as is a correlation between traditional economic and fossil fuel discourses and "business as usual" policies. However, this is about as much support as H1a receives. Discourses of ethical fellowship have been used to promote greater action and have been used as a justification for refusal to ratify the Kyoto Protocol. Anthropocentric climate change discourses were prevalent in 1987 and 2007, yet the NCPR in each decade was markedly different. And narratives of different policy responses have been used to criticise, justify, defend and belittle many manifestations of NCPR. Despite the incoherence in the use of the GLR, one thread of consistency has emerged: the hegemony of the *economic* discursive field. This casts significant doubt on the accuracy of H1b, as narratives from the *social impact* field have rarely been employed, and scientific justifications have been of marginal importance at best.

In the interests of brevity, only tiny excerpts of the discursive trends could be included above, however in the subsequent sections the GLR will be explored in greater depth and detail. What follows is an examination of how the GLR has responded in the wake of various stimuli, namely the economic downturns, natural disasters, national elections, and international climate negotiations.

B. *Recessions and Slowdowns*

This section examines how decreases in the Australian economy have influenced the Australian GLR. Two potential stimuli will be examined: recessions and economic slowdowns. Both of these concepts lack official definitions, however for the sake of parsimony the conventions endorsed by the International Monetary Fund will be employed. A recession will be identified by a contraction of real GDP lasting for two or more consecutive quarters (Claessens and Ayhan Kose 2009, 52). A slowdown will employ the same timeframe of two consecutive quarters, but will use the less stringent criterion of a decreased growth rate when compared to the previous quarter.

Using data sourced from the Organisation for Economic Cooperation and Development (OECD), one can see that there have been several economic slowdowns since 1987, but

only one full-blown recession which was in the early 1990s (see Figure 1). It is interesting to note that despite the global recession in 2007, the Australian economy only experienced a slump and continued to grow during that time. The grey shaded areas indicate economic slowdowns, and the orange shaded area highlights the recession of 1991.

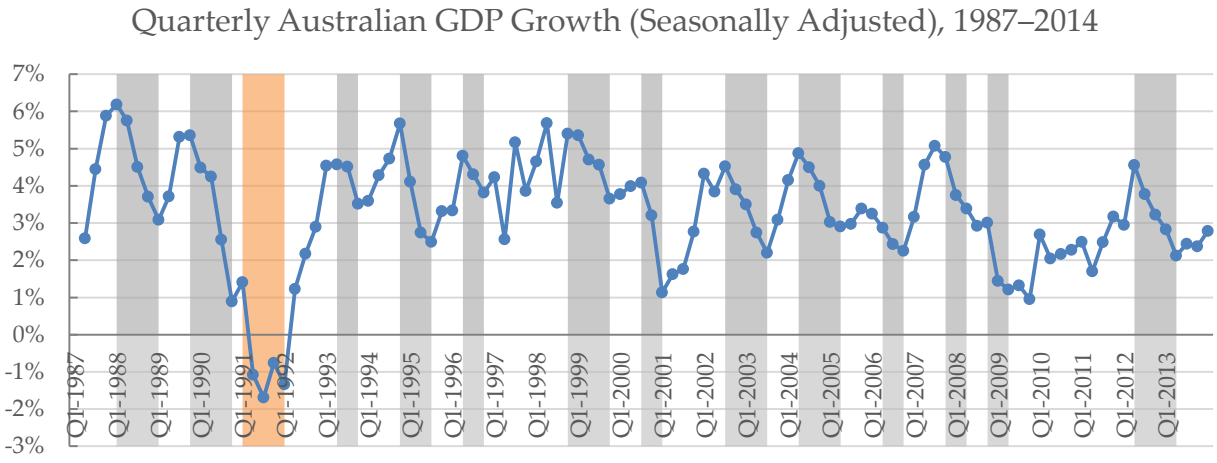

Figure 1: Quarterly Australian GDP Growth (Seasonally Adjusted), 1987–2014 (Organisation for Economic Co-operation and Development 2014).

Comparing this data with the GLR trends outlined in Part A above (or the visual shorthand in Appendix B), one connection is immediately noticeable: Australia's only recession in the past three decades is paired with a reversal of the dominant economic discourse, namely from a sustainable to a traditional perspective. The other noticeable observation is the lack of a correlation between the incidence of economic slowdowns and changes in the GLR. While undoubtedly a slowing economy was mentioned in context with action on climate change, these utterances were not prolific enough to substantiate a change in the dominant GLR discourses. Consequently it would be tenuous to claim that economic slowdowns have had a tangible effect on the GLR. Therefore, greater attention is justifiably paid to the effect of the 1990s recession.

It is difficult to find direct evidence of the impact of the recession on the GLR. Only the social science equivalent of hearsay is readily available, which makes ascertaining causal relationships difficult. However it still provides a useful starting point. Looking at data from the national newspaper the *Australian Financial Review* (Figure 2), one can see the marked shift in the dominant narrative of articles containing the phrases "climate change" or "global warming" in the early 1990s, correlating with the event of the recession. While it may be premature to assign anything other than a spurious relationship, it is interesting to note how the portrayal of climate change in the public news media changed from an issue of science to an issue of economics. While this is not definitive evidence of anything, it is at the very least an interesting coincidence, especially considering that during 1990–

92 the Australian Government was exploring possible policy options regarding the implementation of the Toronto Targets.

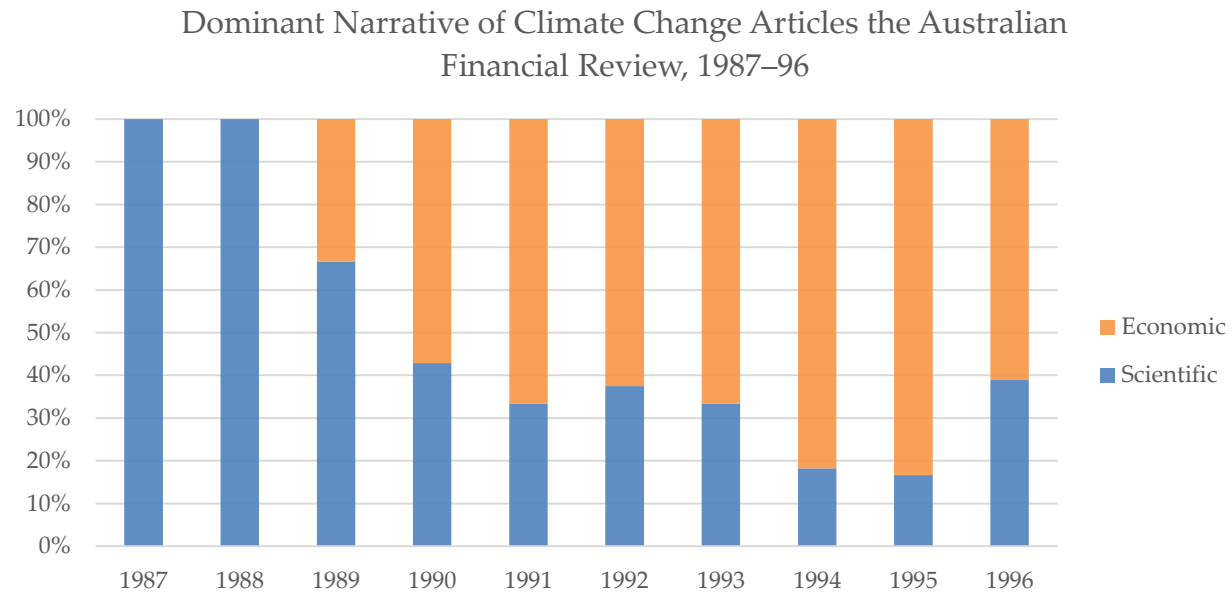

Figure 2: Dominant Narrative of Climate Change Articles in the Australian Financial Review, 1987–96 ("The Australian Financial Review" 2014).

As a consequence the Federal Government set up two major consultation processes: the Ecologically Sustainable Development (ESD) process and the Industry Commission (Bulkeley 2001b, 159). While overt mentions of 'recession' are interminably scarce in the reports and minutes of these processes, the language contained therein certainly emphasises the paramount importance of maintaining economic growth. For example, the goal of ESD should be 'achieved without threat to continued economic growth' (Downes 1996, 186), and the 'primacy given to market liberalism and the need to incorporate environmental values into the framework of market economics' was palpable (Ian 1992, 201). Nevertheless, the ESD working groups did determine that there were some options available to the government which would reduce emissions and save money (notably energy efficiency measures) (Hamilton 2001, 33). If the ESD could be said to straddle the border between traditional and sustainable environmental discourses, the Industry Commission was by contrast decidedly traditional. They relied on neo-classical economic thought and some rather generous assumptions about the perfection of the energy market (Bulkeley 2000, 43). It heavily emphasised the conflict between environmental and economic goals, and proselytised the importance of the latter (Industry Commission 1991). Consequently, it determined that if Australia were to take unilateral action to reduce GHG emissions, the costs would be economically deleterious and fiscally devastating. As a result, the business press 'mounted a scare campaign against a carbon tax, one of the policy instruments mooted in the Industry Commission's report'

(Hamilton 2001, 33). Reinforced by the carbon lobby, the political willpower for carbon markets evaporated and that topic became political leprosy for the next decade.

The ESD process and Industry Commission report were amalgamated into two policy documents: the National Strategy for Ecologically Sustainable Development and the National Greenhouse Response Strategy (NGRS). The NGRS outlined a range of 'voluntary low- and no-cost emissions reduction measures for achieving a non-binding goal of stabilizing national CO_2 emissions at 1988 levels by the year 2000 and reducing them by 20 per cent by 2005' (Christoff 2005, 31). The voluntary measures were underpinned by the notion that the costs of inaction could not be economically estimated with a significant degree of certainty (due to the difficulty in assessing the monetary value of environmental factors for the economic models), and thus it was justifiable to delay prescribed action. Consequently, the NGRS was accepted by the Council of Australian Governments in 1992, and set the foundation for Australian climate policy for the years to come. Although it is difficult to ascribe the precise influence of the recession to the construction of the NGRS, its heavy focus on economic issues and the anathema of harming GDP growth suggests that the recession likely influenced the thinking of its creators.

It is prudent to also mention the influence of the carbon lobby during this stage of policy formation. The 1990s recession may have acted as a force multiplier, exacerbating the carbon lobby's response to the environmentally-minded Hawke government. The greenhouse lobby exerted significant influence to persuade the government 'that emission-intensive industries made a much greater economic and employment contribution than was the case; that greenhouse constraints would wreck the entire Australian economy' (Pearse 2009, 31–32). While this paper cannot recount the entire scope of the carbon lobby's influence, it is plausible that the government was more receptive to their message than would have otherwise been the case, due to the poor health of the Australian economy at the time. Perhaps if the "greenhouse mafia" had not experienced the trauma of the recession, they may have been less militant about exerting their influence. However this is a counterfactual assumption, and cannot be asserted with a high degree of confidence.

Nevertheless, as demonstrated above the Australian recession of the early 1990s is associated with a reversal of the dominant discourse within the *economic* discursive field, namely from a sustainable to a traditional narrative. Curiously, the subsequent reversal from traditional to sustainable occurs at the same time as the GFC. Perhaps there is cause to investigate the role of a *global* recession, as opposed to a *local* recession, on the GLR. However as the Australian economy continued to grow during the GFC it is beyond the

scope of this paper to examine this potential linkage. Perhaps this can be explained by people being "fed-up" with the existing economic situation and politicians capitalising on their desire for change. However, while this is a plausible connection, it may be a spurious relationship: with a sample size of only two, it would be premature to ascribe permanence to this correlation.

Circumstantial evidence also indicates the marginalisation of the *scientific* discursive field, presumably as short-term concerns of recovery trumped fanciful notions of future climate calamities. The recession had little effect on the *energy & technology*, *ethical*, *legal & political* or *social impact* fields, arguably as these fields were only of marginal importance to the GLR before the economic downturn.

In summary, the evidence supports H2. The synthesised sources show how economic concerns were used to justify voluntary policies and the preservation of GDP above all else. These changes came at the expense of discussions regarding the science of climate change, and seem to have remained dominant ever since.

C. *Natural Disasters*

According to the logic of rational choice and game theoretic models of climate change negotiations, one of the reasons why states consider free riding on taking climate action is that the negative effects lie in the future and are thus significantly discounted. However, recent reports from the IPCC and the USA National Climate Assessment stress that climate change is already magnifying the effects of natural disasters (Stocker et al. 2013; Melillo, Richmond, and Yohe 2014). Therefore, it is reasonable to expect that in the wake of a natural disaster the GLR would shift, stimulating a change in the way climate policies are defended or criticised. This section of the thesis examines this assertion by looking at the major natural disasters to happen in Australia over the last 30 years, and how they have influenced the GLR.

Based on the dichotomy established by Roberts and Parks, the focus herein is on 'climate related disasters'. Created as an alternative scale to measure the human costs of climate change, they define such catastrophes as all disasters excluding 'technological disasters, geophysical disasters, epidemics, forest and scrub fires, and famines' (Roberts and Parks 2007, 70). For the purposes of this thesis, no convincing argument can be made as to why epidemics, famines and especially fires should be excluded from the analysis. Consequently all catastrophic events which have occurred in Australia since 1987 have been synthesised, excluding technological (such as bridge collapses) and geophysical (such as earthquakes) disasters. Despite these restrictions, a 'natural disaster' remains a

relatively vague concept. Therefore for the sake of parsimony and continuity, data has been sourced from the Australian Attorney-General's Department (Australian Government Attorney-General's Department 2014a; Australian Government Attorney-General's Department 2014b; Commonwealth of Australia 2014), which is responsible for disaster management, with supplementary data sourced from the Australian Bureau of Meteorology (BoM) (Australian Government Bureau of Meteorology 2014a). This results in a total of 27 natural disasters afflicting Australia between 1987 and May 2014, including floods, cyclones, heatwaves, severe storms and bushfires. As climate change affects the intensity, not the frequency, of disasters, it is therefore prudent to focus the analysis on the most devastating and severe catastrophes. Examining the disasters on the bases of infrastructure damage and casualties (deaths, injuries and other "affected") and selecting cases higher than two standard deviations from the means (that is, excluding 98% of all disasters, or a 2-sigma or greater event), leaves five significant disasters: the 1999 Sydney hailstorm, the 2009 South Australia & Victoria heatwave, the 2009 Victorian bushfires, the 2011 Queensland floods, and Cyclone Yasi which hit Queensland in 2011.

The first thing to notice from this list of disasters, which includes several extreme-weather record breakers, is that they are heavily clustered towards one end of the three decades analysed. Now while there is danger in blaming any one specific event on climate change (Arup 2011), it is arguable that the clustering of four of five high intensity natural disasters in a two year period might signify an alarming trend indicative of climate change manifestations. Nevertheless, as the text below indicates, the government discourse on climate change has remained largely unaffected by the incidence of catastrophic natural events.

1. *1999 Sydney Hailstorm*

Discourse surrounding the 1999 Sydney hailstorm was largely devoid of climate change references. While the government was quick to acknowledge the severe intensity of the storm, the incredible size of the hailstones, and the unusual time of year for its occurrence (Yeo, Leigh, and Kuhne 1999), no politicians or government bodies mentioned the storm in context with either global warming or climate change. While not technically part of the governmental discourse, newspaper articles debunked claims qualifying the storm as a 'one-in-100-year-event' or as 'the mother of all storms' (Keys 1999), instead categorising it as a 'one-in-20 to -25 year event' (Hogarth 1999). Perhaps the silence of the government amounts to an acquiescence of the media's perspective, which might then be construed as increasing the salience of the climate scepticism discursive field. However this is a tenuous and disprovable claim, and should be considered accordingly.

That being said, 11 years after the event one (state) government document did mention the hailstorm in the context of climate change (Department of Environment, Climate Change and Water NSW 2010). This report covers multiple weather events and stresses that they 'were not unprecedented' (Department of Environment, Climate Change and Water NSW 2010, 5), and comes to the conclusion that more research is needed before any connections between increasing storm intensity and climate change can be drawn. This might indeed indicate the government's acquiescence to increasing the salience of climate change sceptic discourses, although such a conclusion still seems slightly outlandish.

On balance therefore, it appears as though the 1999 Sydney hailstorm—known as the costliest natural disaster in Australia's history—passed by with nary a ripple on the GLR.

2. *2009 South Australian & Victorian Heatwave*

Ten years after the Sydney hailstorm, south-eastern Australia was hit by the longest and hottest heatwave in recorded history. In January and February 2009, temperatures consistently stayed above the 40°C mark, with Adelaide and Melbourne setting records for the most consecutive days above 43°C, and much of South Australia and Victoria had maximum temperatures '12–15°C above normal' (National Climate Centre 2009, 4). The heat buckled railway lines, caused power blackouts to over 10 000 homes, and forced the Australian Open tennis tournament to suspend matches due to hallucinating athletes (Perry 2009).

Despite the new records, this heatwave also had little effect on the GLR. Although the Minister for Climate Change Penny Wong (ALP) stated that the heatwave was 'consistent with climate change… and consistent with what scientists [said] would happen' ("Heatwave a Sign of Climate Change: Wong" 2009), and the acting head of the National Climate Centre issued his agreement (Hunter 2009), these discourses were not widely mentioned in national media, nor was this incident discussed in parliament. Moreover, Wong qualified her remarks regarding the link between climate change and the heatwave, stating that 'you have to look on a much longer time frame than week to week' (Barbeler 2009) before drawing any conclusions.

Having examined what little evidence there is, it appears as though the heatwave also had little effect on the GLR.

3. *2009 Victorian Bushfires*

The month following the heatwave, the same region was engulfed by flames, marking 'the worst bushfires in [Australia's] history' (ABC 2009). Although PM Gillard and Opposition Leader Turnbull delivered eloquent speeches to parliament conveying

sympathy, praising the resolve, tenacity and strength of will of those affected and ending on notes of positivity emphasising how "we will rebuild", neither politician mentioned climate change explicitly or implicitly in the context of preparing for repeat occurrences (Gillard and Turnbull 2009). However, Representative Kelvin Thomson (ALP) declared that 'the bushfires in Victoria… [and] the floods and storms in North Queensland… are all part of the same phenomenon—global warming, climate change' (Commonwealth Parliamentary Debates 2009a, 826). Moreover, Representative Tony Zappia (ALP) stated that one 'need only look at the economic costs of the Australian drought, the Victorian bushfires and the Queensland floods… to understand that… climate change cannot simply be dismissed' (Commonwealth Parliamentary Debates 2009b, 1549). Despite these statements promoting discourses of domestic impacts, their relatively low volume meant that they did not have a significant impact on the GLR.

Several months after the inferno, more discourses concerning the bushfires and climate change were uttered. The Royal Commission released by the Victorian government mentioned the phrase "climate change" twice, both in the context of increasing domestic risks.(Teague, McLeod, and Pascoe 2010). Discussions in parliament also explored the connection, with Minister for the Environment, Heritage and the Arts Peter Garrett (ALP) declaring that 'fire regimes in southern Australia… have been changing', and those changes are 'consistent with climate change impacts' (Commonwealth Parliamentary Debates 2009d, 10873). Federal Attorney-General Robert McClelland (ALP) outlined how emergency services will:

> take full advantage of the lessons learned from the tragedy of the Victorian bushfires to maintain an efficient and responsive disaster response and recovery framework for the future, which, unfortunately, all indications will become more in demand as a result of the impacts of climate change (Commonwealth Parliamentary Debates 2009c, 8675).

Again however, these whispers promoting the *social impact* discursive field were not absorbed into the GLR. Notably however, several months after the heatwave dissipated and the smouldering subsided, then-Opposition Leader Tony Abbot questioned the link between the high temperatures and climate change by stating that 'the world's warming has stopped' (AAP 2010a). This statement stands in stark contrast to the others mentioned, yet is consistent with the Coalition and their preferred discourse of climate change science scepticism. Nevertheless, this statement also had a negligible effect on the GLR.

4. *2011 Queensland Floods*

In Queensland in early 2011 an area the size of France and Germany combined was declared a disaster zone because of flooding from torrential rains (which came on the back of a decade long drought affecting large parts of the state) (Queensland Government

2011). Although the global scientific community suggested links between these floods and climate change, government discourse was mixed with respect to accepting this connection (Birsel 2011; Readfearn 2011). In Parliament, Representative John Murphy (ALP) sardonically thanked climate change deniers for the lingering 'public confusion [that] still surrounds the origins of what has become a destructive national and international crisis of catastrophic floods, storms, heatwaves, fires and cyclones' (Commonwealth Parliamentary Debates 2011c, 850). He went on to qualify his grievances:

> I want to make it clear tonight that climatologists and other scientists are not saying that global warming is directly driving events, in particular Cyclone Yasi or the floods in South-East Queensland and north-west Victoria, nor the recent disastrous Victorian and Western Australian bushfires or the other climate calamities in other parts of the world. Rather climatologists and other scientists are warning that the probability of these sorts of events is increased by rising air and sea temperatures and that these increasing temperatures are being driven by the trapping of heat by rising atmospheric carbon dioxide levels (Commonwealth Parliamentary Debates 2011c, 850).

These strong discourses emphasising the *scientific* and *social impact* discursive fields were echoed by Parliamentary Secretary for Agriculture, Fisheries and Forestry Dr Mike Kelly (ALP), and Representatives Adam Bandt (Greens) and Steve Gibbons (ALP). Dr Kelly brought home the notion that 'we [Australia] may experience not only further events… but also events of greater intensity, with the probable effects of climate change' (Commonwealth Parliamentary Debates 2011b, 173). Bandt hypothesised that 'we have been given a glimpse into the future we face if we do not act to cut pollution and prevent further climate change', and attempted to marginalise climate change sceptic discourses by denigrating the 'loud and partisan voices [that] in recent weeks have tried to shout down any discussion about climate change and the floods' (Commonwealth Parliamentary Debates 2011a, 65). Gibbons also emphasised the domestic impact of climate change, but espoused a degree of scepticism by stating that 'bushfires, cyclones, storms, drought[s] and flood[s]… are expected to increase in frequency and intensity due to climate change, whatever the cause of that change may be' (Commonwealth Parliamentary Debates 2011a, 46).

By contrast however, Representative Michael McCormack (Coalition) categorically declared that 'the events of recent times show again the ageless cycle of nature, floods following droughts. This is not climate change' (Commonwealth Parliamentary Debates 2011b, 183). Moreover, when asked if she thought climate change had anything to do with the floods, PM Gillard offered her support for the cautious perspective, stating that 'I don't think you can look at one weather event, one disaster. I mean this has been a huge, unprecedented disaster but I don't think you can look at… a bit of the weather and say

that equals climate change. I don't think it's as simple as that' (Kirk 2011). This strong discourse of natural climate variability appears to have been taken up by the Queensland Government in their Commission of Inquiry into the inundation. Indeed, of the 650 pages of the Royal Commission investigating the floods, the phrase "climate change" can be found only 19 times. Seven utterances are in one seven-line paragraph, which arrives at the conclusion that the 'analysis should be completed first without taking into account climate change' (Queensland Government 2012, 45). The remaining 12 mentions are in the context of statutory immunity for the liability of local councils (Queensland Government 2012, 128–136).

This flood of biblical proportions did not have a clear impact on the dominant climate discourses. Although there are several examples of statements promoting the *social impact* discursive field, there are also statements dismissing these as hyperbolae. And the decision to omit climate change from the official Commission of Inquiry also acts to counterbalance discourses advocating domestic repercussions.

5. *2011 Cyclone Yasi*

The most recent major disaster analysed is Cyclone Yasi: the 600km-wide, category 5 cyclone with 295km per hour winds and 9m high waves, whose path coincided with homes of some 400 000 people, that made landfall in north Queensland in February 2011 (Australian Government Bureau of Meteorology 2014b). Here one finds the strongest associations linking climate change and the catastrophe. The deputy leader of the Greens party Christine Milne said outright that Yasi's devastation was 'a tragedy of climate change' ("TC Yasi Caused by Climate Change: Greens" 2011). However, as is common in Australian politics, the voices of the Greens party remained largely marginalised, thus their bold assertion did not significantly influence the CDC.

The position of the Greens was challenged by the BoM, with its High Impact Weather Research team stating that 'events like Yasi are just an extreme part of normal weather patterns… [We cannot] link Cyclone Yasi to climate change' (Gary 2011), and noting that 'it is difficult to make a strong case that we are seeing a change in tropical cyclones [due to climate change]'.(Lloyd and Fraser 2011). CSIRO agreed, reiterating that 'no individual event could be linked to climate change', but that climate change would increase the probability of extreme events (Smith 2011). This position was echoed by the Federal Government's climate change advisor Ross Garnaut, who agreed that Yasi could not be entirely ascribed to climate change, but warned that climate change 'can intensify extreme events, and… we're [Australia] feeling some of that today' (AAP 2011a), and told the people of Australia that they 'ain't [sic] seen nothing yet' (Morton 2011).

The statement by Representative Murphy (quoted above in relation to the Queensland floods) was also spurred by Yasi, which pressed home discourses of the domestic impact of climate change. Representative Melissa Park (ALP) also took the opportunity Yasi presented to promote *social impact* discourses:

> In Australia [the] imperative [to respond to climate change and its consequences] is made stronger by the fact that we are in many ways particularly susceptible to the negative effects of climate change. The evidence and the expert analysis do suggest that climate change will produce extreme weather events of greater intensity. While no-one can say that the clearing and burning of a particular forest in South America in the year 1987 has directly contributed to Cyclone Yasi or the floods in Queensland or the fires last year in Victoria, it is absolutely correct to say that all of the human contributions to climate change are, taken together, a factor in bringing about an altered climate system that will result in higher temperatures, higher sea levels and more intense extreme weather events (Commonwealth Parliamentary Debates 2011b, 358).

Finally, Senator Douglas Cameron (ALP) criticised climate change sceptic discourses, declaring climate change deniers to be 'the great pretenders on climate change' and that they 'try to pretend… that there were no disasters in Australia—no floods, no Cyclone Yasi' (Commonwealth Parliamentary Debates 2011d, 2319). While it is doubtful that any individual could deny the existence of a storm the size of the continental USA, the exasperation and frustration inherent in Senator Cameron's remark was not an isolated discourse. In the wake of Yasi, prominent academics criticised the unwillingness of 'most of our [Australia's] politicians and most of our major media outlets' to make a connection between climate change and the hostile environment, calling it a 'toxic blend of denial, media management and sheer lack of leadership' (Fogarty 2011), and implored 'the spoilers to stop playing culture war games and focus on the most-cost effective ways of reducing carbon dioxide emissions' (Quiggan 2011).

Again, it is difficult to isolate a specific impact on the GLR due to the disaster. Although there were attempts to increase the dominance of domestic impact discourses, there were equally loud attempts to promote climate change scepticism. When one considers the relative weight of each utterance, and the medium in which they were transmitted, it appears as though the strongest message portrayed would have been one of caution and reluctance to associate Yasi with climate change.

6. *Overview*

In summary, despite some private sources claiming that Australian disasters have spurred discussion of climate change (Marriott 2013), the government discourse does not reflect this trend. And if it has spurred discussion, the influence of the Murdoch media

empire on both news periodicals (Manne 2011) and broadcast television (Chubb and Nash 2012) has increased the influence of alternative discourses such as climate science scepticism. In the interests of creating a 'balanced discussion' (Simons 2011; S. Keane 2012) Australian media outlets give equal weight to anthropocentric and dissenting viewpoints. Although this thesis lacks the purview to investigate the nature of climate change reporting, this phenomenon might offer some explanation as to why natural disasters have had negligible effects on the GLR.

Consequently, there is a little evidence to support Hypothesis 3. The occurrence of natural disasters has not had a clear effect on the GLR, let alone the *impact* discursive field. Although the Greens party made claims that climate change will result in 'significant increase[s] in natural disasters' (The Greens 2014), these claims did not achieve dominance in the governmental discourse, and they are not accepted by the scientific community (as climate change increases the intensity, not frequency, of disasters). Perhaps the most significant effect on the GLR of these severe disasters was to increase the salience of climate change sceptic discourses. Even though the basis for Environment Minister Greg Hunt's (Liberal) rejection of the links between bushfires and climate change was because he 'looked up what Wikipedia says' (Davidson 2013), his dismissal reinforced the Coalition's alternative discourse of climate scepticism. One would hope that a minister for the environment who is savvy enough to use Wikipedia would also be aware of the 2007 IPCC report declaring that:

> Climate change is known to alter the likelihood of increased wildfire sizes and frequencies… while also inducing stress on trees that indirectly exacerbate [such] disturbances… This suggests an increasing likelihood of more prevalent fire disturbances, as has recently been observed… (Parry et al. 2007, 229).

Alternatively, the lack of impact on the GLR could potentially be explained by the fact that floods, cyclones, droughts, bushfires and storms are all relatively normal in Australia. As mentioned above, ascribing any one event to climate change is fraught with risk, and identifying changing trends in a country where a drought can last for over a decade only to be replaced by torrential rains is difficult. Perhaps if unusual weather events begin to occur, such as tornados or snow storms, the GLR might respond. However as it stands now, natural disasters have had a very weak effect on the legitimation of Australian climate change policies.

D. *Election Campaigns*

Despite a brief period of bipartisanship, climate change and global warming have been partisan issues in Australian politics since the early 1990s (Staples 2009). This section

examines how the GLR is shaped by the occurrence of federal elections. Election campaigns provide political parties near-perfect platforms from which to frame their perspectives and differentiate themselves from other contenders. Therefore what is expected is that the salience of marginalised discourses increases around the event of an election. The table below outlines the dates of elections for the lower house of the Australian parliament (the House of Representatives) for the relevant period of analysis. The subsequent Prime Ministers have been emboldened.

Election Date	Labor Leader	Coalition Leader
11 Jul 1987	**Bob Hawke**	John Howard
24 Mar 1990	**Bob Hawke**	Andrew Peacock
13 Mar 1993	**Paul Keating**	Robert Hewson
2 Mar 1996	Paul Keating	**John Howard**
3 Oct 1998	Kim Beazley	**John Howard**
10 Nov 2001	Kim Beazley	**John Howard**
9 Oct 2004	Mark Latham	**John Howard**
24 Nov 2007	**Kevin Rudd**	John Howard
21 Aug 2010	**Julia Gillard**	Tony Abbott
7 Sep 2013	Kevin Rudd	**Tony Abbott**

Table 2: House of Representatives Elections (The University of Western Australia 2013).

1. *Before 2001*

After reviewing campaign platforms, policy statements and election speeches surrounding these ten elections, the first conclusion to be drawn is that before 2001, global warming or climate change policy barely warranted a mention in the main parties' election campaigns. This observation is reinforced by data from the Australian Election Study outlining the most important non-economic issues for sampled voters in most recent elections (see Figure 3). One can see that "global warming" was only worthy of inclusion as an option from 2007, and that "environment" has routinely been dramatically trumped by concerns over healthcare. Perhaps it is not surprising then that the election campaigns in these earlier elections dwell heavily on health reform and fail to mention carbon or GHGs at all. This observation does little to provide general support for Hypothesis 4, however the situation is slightly different after the turn of the century.

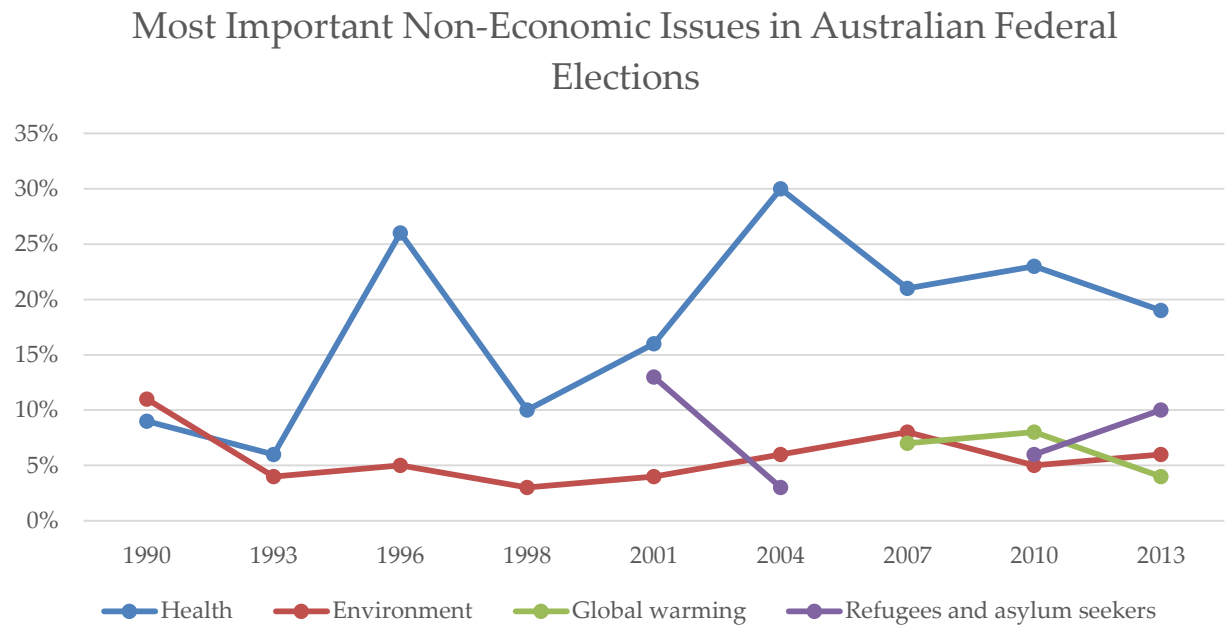

Figure 3: Most Important Non-Economic Issues in Australian Federal Elections.(McAllister and Cameron 2014, 21)

2. *2001 & 2004*

John Howard's administration did not campaign on climate change policy. This is evidenced by the continuous and consistent supremacy of the traditional economic discourse and the fossil fuel discourse. This denigration of climate policy was (unsuccessfully) capitalised upon by Howard's Labor opponents in the 2001 and 2004 elections, Mark Latham and Kim Beazley respectively. The election speeches made by each leader act as microcosms of their discourses. While Howard's speeches before the 2001 and 2004 elections do not mention climate change, global warming, renewable energy or greenhouse gases, both Latham's and Beazley's do. In 2001 Latham equated addressing climate change to 'saving our planet' and emphasised the role Australia must play on the global stage (Latham 2004). He brought the issue home by outlining the effects on the Australian environment. He promised to ratify the Kyoto Protocol and to join the 'lucrative international trade in carbon emissions' (Latham 2004). And Latham saw the future developing along a sustainable path with a greater contribution stemming from renewable energy. Consequently, this platform is mirrored by changes in *economic*, *ethical*, *political & legal* and *social impact* discursive fields. In a similar vein, Beazley saw 'enormous opportunities' for Australia in the environmental sustainability industry, and intended to ratify the Kyoto Protocol (Beazley 2001). This corresponds with changes in the GLR regarding discourses on sustainable economic thought and international agreements.

While these two election campaigns do correspond with changes to the GLR, these changes were only temporary. Although it is difficult to pinpoint the exact nature for the

brevity of these changes, it seems plausible that as climate change was only an auxiliary component of these parties' election platforms, and the main election battles were fought over economic and medical concerns, and changes to the GLR never had enough time to gather traction. However, this changed in the lead up to the 2007 election, as former PM John Howard declared: 'in 2006 my Government hit a "perfect storm" on the issue [of climate change]… To put it bluntly "doing something" about global warming gathered strong political momentum in Australia' (Howard 2013, 5). Consequently, the elections of 2007, 2010 and 2013 have all seen more lasting changes in the GLR.

3. *2007*

For the first time in 11 years in power, Howard's election speech mentioned climate change, emphasising that action needs to be taken 'in a way that does not destroy jobs,' that 'does not weaken the great coal industry,' and 'ensures importantly that all nations of the world pull their weight and play their part' (Howard 2007). It is clear that this reflects the previous years' dominant discourses of traditional economic thought, fossil fuels and international fellowship.

By contrast, the election platform of the ALP and Kevin Rudd brought about changes in the GLR due to their heavy campaigning on climate change and the strong alternative discourses associated with it. Campaigning on commitments to: ratify the Kyoto Protocol; voluntarily reduce emissions by 60%; establish a national ETS; increase the RET; implement climate change adaptation policies; and, make Australia 'a leader in the global negotiations on climate change' (Rudd 2007a), all the while criticising the Howard administration's denial of climate change, Rudd and the ALP upset the status quo and increased the dominance of many erstwhile marginalised discourses. Rudd managed to paint the ALP as 'the party of climate reform, the party that was willing to take climate change seriously and make bold decisions' (Macintosh, Wilkinson, and Denniss 2010).

Rudd's determination to 'forge a national consensus on climate change' and broad policy ambitions resonated throughout several discursive fields (Kelly 2007). In addition to the specific policies themselves increasing the *political/legal* field, and the moral undertones increasing the salience of the *ethical* field, sustainable economic discourses were at the forefront of the ALP's campaign. Viewing the challenge as one of 'economic restructuring' and the application of a 'market-based strategy' (Kelly 2007), the *economic* discursive field remained at the forefront, however with a narrative of sustainability instead of traditional extraction and consumption.

4. *2010*

This situation repeated itself in 2010, however this election marked the rising significance of the Greens party. Whereas in earlier elections the Greens had never secured more than a nominal share of the electorate, in the 2010 election their vote jumped from 3.6% to 11.4% (Hepburn 2010). This diversion away from the two main parties is indicative of the lack of media attention given to the main parties' climate change policies in this election, and the lack of differentiation between their climate policies. Gillard's election speech was notably vague about climate change, only aspiring to 'work together and tackle the challenge of climate change' (Gillard 2010b). This was likely an attempt at misdirection, stemming from the ALP's dissonant climate change platform. The ALP did not run on a coherent climate action platform, first trying to distance itself from Rudd's attempted introduction of a fixed-price ETS by paradoxically declaring 'there will be no carbon tax under a government I lead, but let me be clear: I will be putting a price on carbon and I will move to an emissions trading scheme' (Walsh 2013), and then later introducing the negatively-received "citizens' assembly" policy which would have seen '150 randomly-selected Australians' (AAP 2010b) gathered 'to examine over 12 months the evidence on climate change, the case for action and the possible consequences of introducing a market-based approach to limiting and reducing carbon emissions' (Gillard 2010a). Despite these changes in policy direction, the ALP did not deviate radically from the underlying discourses espoused during the Rudd administration.

The election platform of the Coalition under Tony Abbott capitalised on the discourses marginalised by the ALP. Apart from the expected heavy criticising of the ALP's policies, the Coalition campaigned to never 'damage our economy with futile gestures' such as a carbon market that would 'raise prices, damage industries and cost jobs', but instead to 'buy abatements, particularly through soil improvements and tree planting' (Abbott 2010). These statements typify the traditional economic discourse that was prevalent in the Liberal Party's campaign, which stood in stark contrast to the sustainable economic discourse presented by the ALP. Curiously, this was diametrically opposed to the Coalition's preferred discourse from only one year earlier, where Tony Abbott declared his scepticism by stating that 'we can't conclusively say whether man-made carbon dioxide emissions are contributing to climate change', and even declared support for carbon markets by enunciating that 'if Australia is greatly to reduce its carbon emissions, the price of carbon intensive products should rise… [A carbon] tax would be the intelligent skeptic's [sic] way to deal with minimising emissions' (B. Keane 2011). In the interests of uniformity however, official party copies of these speeches have been erased from history by the Liberal Party with all of Abbott's speeches and media statements made before July 2010 having disappeared, and 'at least two recent transcripts have also

been expunged from the public record' (Hall 2013). While copies do exist on the National Library of Australia's PANDORA archive, the deleterious move by the Coalition appears to be a clear example of discourse management. It seems very clear that statements and policies which were inconsistent with the party's currently preferred discourses have been removed. This makes it difficult in retrospect to identify the dominant discourses at the time. What is clear however, is that attempts have been made to promote the traditional economic discourse, and marginalise the previously espoused discourses of carbon markets and science scepticism.

5. *2013*

The Coalition's endeavour to distance itself from its erstwhile support of a carbon market continued in the 2013 election. Their climate catchphrase became "axe the tax", and the repeal of the carbon pricing legislation became one of their central election platforms (Readfearn 2013). So fundamental was the marginalisation of the carbon market discourse to the Liberal Party campaign that in the week before the 2013 election Abbott equated the vote to a 'referendum on the carbon tax' (Hull 2013). Furthermore, their official climate policy media release also sought to marginalise the carbon market discourse by stating that a 'vote for Labor or the Greens will mean ever increasing financial pain for no environmental gain,' but did little to promote alternatives other than stating that 'the environment will have an important place on the agenda' (G. Hunt 2013). Traditional economic discourses remained the cornerstone of Abbott's campaign, insinuating that 'we'll build a stronger economy [by] scrapping the carbon tax' (Abbott 2013), and end 'unnecessary' climate change-related administrative bodies (S. Clarke and Greene 2013).

Labor took a much broader approach, and sought to increase the salience of the *ethical* and *social impact* fields by reminding the populace that 'the serious reality of climate change and its impacts on our environment is one [sic] of the key challenges facing Australia' and that 'we [Australians] have a responsibility to reduce our pollution output' and should 'join countries like Germany, France, the UK [United Kingdom]… China, South Korea and parts of the United States' in an international ETS (Butler 2013). Rudd promoted 'a clean energy future' and promoted sustainable economic perceptions, renewable energy discourses and emissions reductions targets (Rudd 2013).

What is evident is the omission of scientific discourses from both major parties. Only the Greens incorporated science into their platform, as exemplified by their official policy release which reiterated the warnings of The Climate Commission regarding emissions levels and global tipping points, as well as supporting a carbon market and renewable energy investment (Milne 2013). This marginalisation of the *scientific* field sheds interesting light on just how politicised the issue of climate change has become. It

reinforces the primacy of the *economic* field, as it becomes clear that the major parties advocated policies based on economic costs and benefits, as opposed to scientific consensus or the imperatives of taking swift action.

6. *Overview*

Overall, there seems to be substantial support for H4, namely the increasing salience of marginalised discourses surrounding the event of an election. Stronger evidence is seen in the elections over the past decade, as before then climate change had not been a highly salient voter issue. Without a doubt, the *economic* discursive field has received the most attention during the elections, with the general trend being that the ALP try to promote discourses of sustainable economies, whereas the Coalition praises traditional economic models. Silenced discourses in the *scientific* and *social impact* fields also increased in salience around elections, however not as frequently or dramatically as the *economic*. The focus on economic narratives and the relative marginalisation of science suggests, perhaps unsurprisingly, that political parties campaign on the basis of what will get them elected, and not what is arguably necessary for the collective good.

The examples clearly show that national elections have a significant effect on the GLR and consequently on how climate change policies are justified, or perhaps more importantly, criticised. The logic underpinning H4 is that opposition political parties will capitalise on marginalised discourses in order to differentiate themselves from the incumbents. Perhaps in a society where climate change policy was not as dichotomised as in Australia, there would be less support for H4. However, due to the partisanship in Australian climate politics, action on climate change has become yet another *political* issue, like the age of retirement, the corporate tax rate, or the treatment of illegal immigrants.

E. *International Climate Negotiations*

The final driver of the GLR to be examined is the role of international climate negotiations. Due to the global nature and high publicity of these conferences, it is hypothesised that their occurrence will drive increases in the significance of the *ethical* discursive field. In particular, this section examines the influence of the sessions of the UNFCCC Conference of Parties (COP), due to their regularity, wide attendance, and varied success rate.

Year	COP Meeting	Location	Australian Prime Minister
1995	1	Berlin, Germany	Paul Keating
1996	2	Geneva, Switzerland	John Howard
1997	3	Kyoto, Japan	John Howard
1998	4	Buenos Aires, Argentina	John Howard

1999	5	Bonn, Germany	John Howard
2000	6	The Hague, Netherlands	John Howard
2001	6 *bis*	Bonn, Germany	John Howard
2001	7	Marrakech, Morocco	John Howard
2002	8	New Delhi, India	John Howard
2003	9	Milan, Italy	John Howard
2004	10	Buenos Aires, Argentina	John Howard
2005	11	Montreal, Canada	John Howard
2006	12	Nairobi, Kenya	John Howard
2007	13	Bali, Indonesia	Kevin Rudd
2008	14	Poznań, Poland	Kevin Rudd
2009	15	Copenhagen, Denmark	Kevin Rudd
2010	16	Cancún, Mexico	Julia Gillard
2011	17	Durban South Africa	Julia Gillard
2012	18	Doha, Qatar	Julia Gillard
2013	19	Warsaw, Poland	Tony Abbott

Table 3: Sessions of the UNFCCC-COP (UNFCCC 2014).

1. *Before Kyoto (COP-1–3)*

The Australian position at the early COPs was characterised by strong discourses against unilateral action by developed countries, against uniform international targets, and trumpeting the importance of traditional economic thought (Grubb, Vrolijk, and Brack 1999, 50; Paterson 1996, 70). As mentioned above, Australia's position was closely wed to the continued use of fossil fuels, which in turn translated to opposition to binding reduction targets. A joint statement issued by the Coalition's Minister for Foreign Affairs, Minister for the Environment and the Minister for Resources and Energy is emblematic of the official discourse from this period:

> Australia will insist that the outcome of current international negotiations on climate change safeguards Australia's particular economic and trade interests... The Government will be actively campaigning to ensure that all countries bear their fair share of the global burden of addressing climate change (Callick 1996).

This joint statement is reinforced by announcements made by then-Environment Minister Robert Hill (Liberal) about Australia's greenhouse policy. Hill promoted the fact that Australia will 'look for measures whereby we can meet our international responsibility whilst at the same time maintaining our capacity to grow as an economy' (AAP 1996), and that climate science did 'not provide sufficient certainty about climate change, nor about the assessment of impacts' (McCathie and Callick 1996). In the lead up to the Kyoto Protocol, Prime Minister Howard criticised other countries which supported tough GHG reduction targets, announcing that he was 'disappointed' with those countries who were

only 'looking after their own national interests' (Reuters News 1996b), and that their behaviour 'hurts Australia' (Benson 1996).

These discursive trends dovetailed during the Kyoto COP, where Australia emphasised "fairness" in reduction targets and the necessity of fossil fuels. Prime Minister Howard campaigned for an outcome that was 'balanced and fair' (Howard 1997), but which translated as special treatment for Australia. Supported by a report from the Australian Bureau of Agricultural and Resource Economics and Sciences (which was sponsored by the fossil fuel industry) (Hamilton 2001, 58), the Foreign Minister claimed that common reduction targets 'would make Australia's economy suffer more than any other OECD country' and that 'tens of thousands of jobs would be lost' (Hamilton 2001, 61), and the PM repeated that such targets would 'do very serious damage to the Australian economy' (Kelly 1997a). Although the actual report stated that halving Australia's emissions by 2050 would result in GDP growing 247% instead of 281%, the narrative repeated by the PM and cabinet was that reducing emissions would 'lead to a 10 per cent fall in GDP' (Pearse 2009, 23). Furthermore these strong traditional economic discourses were echoed in Murdoch's media. The Australian people were told that 'the Kyoto meeting is not just about the environment. It is about imposition of restrictions across economies, most notably Australia's' (Kelly 1997a).

The outcome of the Kyoto COP was the Kyoto Protocol, which Senator Hill claimed as a 'victory for Australian diplomacy and… John Howard', and PM Howard declared as a 'splendid result, particularly gratifying for Australia' (Taylor 1997), which would 'protect local jobs while improving the world environment' (Lunn and Garran 1997a). Even the populist media announced it as 'win-win', praised the 'tenacity', 'guts and persistence' of the Australian delegation, and managed to belittle the European 'grandstanding' for stricter targets (Kelly 1997b). The reason for the incumbent Coalition's celebration was that under the Kyoto Protocol, Australia was one of only three developed countries (including Norway and Iceland) which were allowed to *increase* its emissions. Moreover, the special "Australia clause" enabled Australia to include emissions released due to land clearing in its baseline calculations. This meant that Australia could stop clearing land (which it had done since 1990) and essentially meet its Kyoto targets. Senator Hill played a game of brinkmanship, and refused to concur with the agreement until such a clause had been inserted (Lunn and Garran 1997b). This move was criticised by the European Union and environmental non-governmental organisations, and made Australia a climate pariah (Skelton 1997). Nevertheless, it clearly demonstrates the dogmatism to which the Howard administration clung to the discourses of traditional economics and how talk of international good faith in addressing climate change was little more that political lip service (Hamilton 1997).

2. *Post-Kyoto (COP-4–12)*

Although the formation of the Kyoto Protocol makes a convenient sub-heading, it did little to mark a change in discourse dominance. Over the following years Australia reiterated its traditional economic narrative and reluctance to act without commitments from developing countries. In 2000, after emphasising the 'constructive role' of Australia, and how it would contribute 'its fair share' at the COP (Hill 2000a), Senator Hill left the conference when negotiations were turning in a direction that was not 'fair to our [Australia's] economy' (Hill 2000b). Hill's intransigence led to the first and only postponement of a COP decision, the six-month delayed outcome being another concession for Australian industry. Unsurprisingly, Hill's constituents lauded the result as a 'very good outcome' for Australia and its economy, and championed the traditional economic discourses (Salleh 2001).

Narratives outlining international "fairness" persisted too, especially in the context of ratification. Senator Hill stated that ratification would depend on 'whether the big emitters in the developing world, the Chinas [sic] and the Indias [sic], come on board' (AAP 1998). Hill's eventual replacement, Senator Ian Campbell (Liberal), repeated that an 'effective response to climate change requires action from all major greenhouse gas emitting countries' (Campbell 2005), that there must be a 'new global agreement that involves all major emitters… that fits the… economic aspirations of all countries' (Campbell 2006), and that we need 'to find international responses that are environmentally effective, economically efficient and involve all major emitters, [and that] [a]bove all… safeguards world economic growth and development' (Campbell 2004). Underwriting this facade of fairness was the discourse of a traditional, fossil fuel powered economy, and fears of losing a competitive advantage because of emissions targets. These messages demanding fairness, but praising Australia's special treatment, seeking emissions reductions, but relying on carbon fuels, were often contradictory. Eventually, the traditional economic discourse emerged supreme, with PM Howard qualifying the Kyoto Protocol as 'next to useless and indeed harmful' for Australia until 'such time as the major polluters of the world, including the United States and China, are made part of the Kyoto regime' (AAP 2005). A curious declaration when juxtaposed with the salubrious victory speeches surrounding the 'splendid result' of the Kyoto Protocol's formation.

3. *Post-Howard (COP-13–19)*

COP-13 in Bali was the first conference after the change from Howard's to Rudd's government. A noticeable change in discourse was evident within the first few days of the new administration, as Rudd's first act of government was to ratify the Kyoto Protocol and name climate change as 'one of the greatest moral, economic and environmental

challenges of our age' (Rudd 2007b). Ratification was associated with strong discourses emphasising the impact of climate change, noting that Australia's 'rivers are dying', its 'bushfires are becoming more ferocious' and its natural wonder is 'now at risk' (Rudd 2007b). A change in the *ethical* field is also notable, with Australia's role shifting from "doing its fair share" to 'working hard to build bridges between nations' (Rudd 2007b). Furthermore, climate science scepticism was dismissed, with the PM declaring anthropocentric climate change to be 'indisputable' (AAP 2009b), and the perception of national interest was reversed—whereas several years earlier an ETS would ravage the Australian economy, now, according Environmental Minister Greg Combet (ALP), such a policy was 'firmly in our national interest' (Millar 2010).

Interestingly, alternative discourses began to increase in salience following COP-16. Although there were some mentions of disagreement and criticism from the opposition through the 1990s and early 2000s, discourses challenging the main narrative began in earnest in 2009. Following the Copenhagen conference, characterised as a 'grand bargain' by PM Rudd (AAP 2009b), and thus promoting a discourse of international agreements, opposition leader Tony Abbott equated the conference to an 'environmental Munich agreement' ("Abbott Compares Copenhagen to Munich Agreement" 2009), or 'a PR [public relations] stunt at best' (AAP 2009a). What is more, the discourse of leadership was challenged by the opposition, declaring it to be 'a great conceit to think that Australia could save the world on its own' (AAP 2009c). Furthermore, a traditional economic perspective re-emerged in response to discussions of emissions reductions—Abbott announced that a 15 or 25 per cent reduction in emissions would result in a '$300 or $400 billion tax' on the people of Australia, and that the 'Australian people ought to be very concerned' about international agreements (AAP 2009a). These strong and emotionally charged alternative discourses resonated well with the dominant discourses of the 1990s, and acted as an effective competitor to the discourses uttered by the incumbent government.

By the time of the 2013 Warsaw COP, Australia had had three PMs in one year, the then-current being Tony Abbott. Just as the change in government in 2007 was accompanied by an act to distance the new government from the old (i.e. the ratification of the Kyoto Protocol), so too did the Coalition government seek to distance itself from the track record of the ALP. To achieve this, the government announced that for the first time since 1997 Australia would not send a minister to the COP (McDonald 2013b). The Department of the Environment explained the absence of the Minister for the Environment Greg Hunt by saying that Hunt would be 'fully engaged in repealing the carbon tax' and thus unable to attend the climate conference (Packham 2013). Moreover, the PM espoused discourses silencing the possibility of future emissions reductions targets, by noting that Australia is

'in no way looking to make further binding commitments' (Taylor 2013). These actions clearly exemplify the marginalisation of discourses pertaining to carbon markets, international agreements and national targets. The only discourse which pushed for dominance was traditional economic thought, as demonstrated by Australia's submission to the COP noting that Australia would only take action that was 'fiscally and economically' viable (UNAA 2013).

4. *Overview*

It is evident that there have been some very dramatic swings in the dominance of the discourses espoused at the COPs over the past several decades. The data support H5, as one of the most prescient dichotomies was the turmoil within the *ethical* discursive field: the battle for dominance between Australia doing only what is fair and thus acting in fellowship, or Australia assuming a position of leadership and acting as a climate change exemplar. Narratives representing both these positions were used to justify Australia's role in the COPs, and thus its NCPR. Discourses from the *economic* field featured heavily, and occasionally scientific discourses were used in support, however there was, yet again, a noted absence of the *social impact* discursive field.

Despite the variety in dominant and marginalised discourses witnessed at the international climate negotiations, and the support for H5, it is premature to ascribe the variations witnessed as stemming purely from the occurrence of the negotiations themselves. That is, it is unclear whether the relationship is one of correlation or causation. That being said, the contrast between the prominence of ethical discourses at the COPs against their relative absence from general politicking suggests that the international negotiations do influence the discourses presented.

F. *Summary*

Although the above analyses identifies how the GLR is influenced by a variety of events, the list is by no means exhaustive. As mentioned in Section III, scholars have looked at a multitude of stimuli which impact on the policies of climate change. That being said, this thesis has unveiled several characteristics about the GLR, some intuitive and some unintuitive.

The data has provided mixed support for the hypotheses outlined at the beginning of the paper. The observed influence of international climate negotiations, economic recessions and federal elections on the GLR was consistent with the hypotheses. As intuited, the 1990s recession increased the significance of economic discourses in justifying and criticising the NCPR, the outcome of which has remained to this day. Federal elections (at

least after 2001) were used as opportunities to promote previously marginalised discourses to criticise the existing NCPR, or to justify policy promises. And international climate negotiations elicited a major increase in the salience of ethical narratives. Indeed, the legitimation rhetoric presented at the COPs were some of the only examples where economics did not always trump all other concerns (yet it still played a significant role).

However, no clear relationship between natural disasters and the legitimation of climate change policies is visible from the data, especially with respect to the dominance of the *social impact* discursive field. Although there were mentions of the impact of climate change, these voices were largely in dissent, and failed to meaningfully influence the GLR. Curiously, natural disasters seemed to evoke responses of caution and scientific trepidation. By the same token, H1b found little support, revealing that narratives of the impact of climate change have rarely been used to justify or criticise the NCPR. Hypothesis 1b also intuited a significant role of the *scientific* discursive field in the GLR. This part of the hypothesis can be said to have received qualified support, as narratives of science have played frequent, but marginal, roles in the GLR. One might be forgiven for lamenting the fact that the most frequently employed discourses from the *scientific* field have been ones of climate change scepticism. This is an unexpected and potentially troubling observation, and has implications for policymakers (see Section VII).

Perhaps most interestingly, no clear outcome regarding H1a was found. Providing support for this hypothesis were the observations that narratives of fossil fuels and traditional economics were used in correlation with NCPRs advocating typically voluntary measures, and that sustainable economic discourses were used to justify mandatory and more stringent policies. Conversely, narratives from the *ethical*, *scientific*, and *political & legal* discursive fields have been used to legitimate and criticise similar NCPRs. This realisation suggests a complex, non-linear correlation between the GLR and the NCPR. It also suggests that climate change policies may often be justified on bases that have nothing to with climate change itself. These observations cast doubt on the assumptions underpinning H1a, namely that governments are logical, mean what they say, and present coherent policy platforms.

VII. Conclusion

This thesis has looked at how Australian climate change policy has been justified and legitimated over the past three decades, and how these justifications have been influenced by certain events. This was achieved by examining the government legitimation rhetoric, specifically its relationship with the national climate policy regime and how it changed

over time. A large variety of sources were analysed according to a predetermined structure designed to identify the dominant and marginalised discursive fields and discourses. It was found that there is a complex, non-linear relationship between the GLR and the NCPR, and that the *economic* discursive field is overwhelmingly hegemonic within the GLR. This suggests that economic concerns are the primary justifications behind Australia's climate policy. This finding is reinforced by the marginalisation of other discursive fields during times of economic stress, such as the 1990s recession. Ethical discourses were also found to be relatively dominant, yet curiously they were used both to justify NCPRs that resisted reducing emissions *and* NCPRs that advocated mandatory reduction targets and carbon markets. Scientific narratives have played a similar role to ethical discussions, being used both to support and criticise NCPRs. Shamefully for Australia however, is that discourses of climate change scepticism are still dominant and resonate well within the public. This realisation goes a long way in explaining the dissonant nature of Australia's NCPRs since 1987. Nevertheless, it was observed that elections are associated with increases in the salience of alternative discourses. This is indicative of the nature of politics, in that politicians campaign on platforms designed to win votes, and not necessarily with the best interests of the general populace in mind. Interestingly, natural disasters had little effect on the GLR. It was hypothesised that disasters might be viewed as a manifestation of climate change, and thus prompt changes in the GLR increasing the dominance of the *social impact* discourses. However this was not the case, possibly due to climate change scepticism, or the creeping normality of severe weather events.

This thesis has cast a broad net, and assessed many different stimuli and their effects on the GLR. While some interesting observations have been made, there is arguably room for greater and deeper exploration of these relationships. Further research could be done on how the health of the *global* economy, as opposed to the *domestic*, affects the GLR. This thesis found prima facie evidence of the GFC being associated with a change in dominant discourse, despite the Australian economy being relatively strong. Moreover, while this thesis found scarce evidence connecting the passing of a natural disaster with changes in the justification of climate policy, perhaps a study involving a large sample size might uncover some interesting relationships regarding several high intensity disasters leading to a tipping point, or perhaps the occurrences of dramatically atypical weather (such as a blizzard in Brisbane, for argument's sake) might reveal a relationship. Additionally it would be interesting to conduct cross-case comparisons, to see if countries that, for example, justify their NCPR with scientific discourses have been more successful at reducing emissions than countries with dominant economic discourses.

This thesis is not without its limitations. First and foremost, it focuses on only one case study—Australia since 1987. In terms of climate change, Australia might be something of an unusual case, as it has the unique combination of a large fossil fuel industry, a strong economy, and high susceptibility to the effects of climate change. Therefore, this may limit the generalisability of the findings of this paper. Moreover, climate change is a highly partisan issue in Australian politics. This being so, the methods employed in this thesis may not yield interesting insights if applied to other cases where climate change is less politically divided, such as in some European countries.

This research also has implications for climate change policymakers. Firstly, as it shows that economic narratives are the primary justification of climate change policies, this thesis strikes home the necessity of robust economic modelling when determining climate change policy. One of the main rifts separating the traditional and sustainable justifications is the valuation of costs: traditional narratives heavily discount the future uncertainties associated with climate change; whereas sustainable perspectives consider that failing to act would be economically foolhardy. It is unlikely that a bridge between these camps can be formed until questions about climate change—specifically 'how much, how fast and how costly' it will be—can be answered by science (assuming governments are receptive to that science) (Nordhaus 2007, 701). Secondly, as discourses involving the science and social impact of climate change have been marginalised in Australia, policymakers might do well to incorporate these discourses in order to familiarise the people with its underlying causes, feedback loops, thresholds, and expected consequences. Perhaps then the nation would be less willing to accommodate such a highly divided and partisan portrayal of a possibly existential threat.

In conclusion, this thesis has shown that Australia is still a long way from having a robust, coherent and effective climate change policy. Over the past three decades Australian climate change discourse has orbited around economic concerns, while neglecting issues of social impacts, climate justice, and scientific revelations. While economic feasibility and maintaining a low cost of living are legitimate concerns for politicians, so too should be ensuring a high standard of living for future generations. Imagine what they could have accomplished since 1987 if instead of offering competing climate change discourses, Australian politicians promoted a united narrative accepting the science behind climate change and advocating swift and effective action?

In sum, climate change is not a conspiracy cooked up by an international cabal of meteorologists sponsored by the UN in order to attract more funding. Climate change is not just about melting snow or warming air. It is a security issue, and should be treated sincerely and not as political detritus. We do not exist in a vacuum: humanity is part of

the ecological environment and the economy relies on that environment. It is time that Australian politicians realised this, implemented appropriate policies, and stopped signing their own death warrant out of a fear of 'clobber[ing] the economy' (Glenday and Griffiths 2014).

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APPENDIX A: DISCURSIVE FIELDS AND PROMINENT DISCOURSES

(a) Economic

The economic discursive field clusters all discourses regarding the economic effects of climate change, including effects on employment, trade, welfare and development. The prominent narratives are therefore *traditional economic discourses* and *sustainable economic discourses* (Böhringer and Vogt 2003; Grubb 2003; Harris and Roach 2009; Layton and Brown 2000; Neumayer 2000; Stern 2006; Garnaut 2011). Traditional narratives largely mirror neoliberal conceptualisations of market supremacy, the primacy of economic growth, increased consumption and extraction of resources, immediate costs, high future discounting, and the disregard of 'ecological' losses (such as biodiversity losses and decreased glacial density). Sustainable narratives are harder to define, yet include greater valuations of future costs, the valuation of 'ecological' losses, and conceptualisations of future competitiveness based on early adopters of renewable or sustainable technologies.

(b) Scientific

The scientific field essentially captures the discussion about the whether or not climate change (or global warming) is happening, and if so, why it is. Therefore, the prominent discourses of the scientific field are *climate change scepticism* (i.e. doubt of its occurrence), *natural climate variability* (i.e. acceptance of its occurrence but doubt as to the role of humanity), and *anthropocentric climate change* (i.e. acceptance that humanity is causing or accelerating climate change) (Hoffman 2010; Lahsen 2013; Antilla 2005; Poortinga et al. 2011). Within the scientific community, the discourse of anthropocentric climate change is now hegemonic, however due to choices in governmental framing this hegemony is lost in policy discussions.

(c) Energy & Technology

The energy and technology field embraces discourses on existing technologies, possible technological developments and sources of energy (Turner 2012; Corner et al. 2011; Carson, Louviere, and Wei 2010; L. Clarke et al. 2009; Nordhaus, Houthakker, and Solow 1973; Barrett 2008; Blackstock and Long 2010; Hulme 2012). Therefore, the main discourses are *fossil fuels*, *nuclear* and *renewables*. These are all largely self-explanatory, however two points are worth mentioning. The first is that despite its purported cleanliness, natural gas is included in the fossil fuel discourse. The second is that the

renewables discourse also captures discussions of new technologies to capture and sequester carbon.

(d) Ethical

Ethical discourses capture concepts of climate justice and common but differentiated responsibilities. It involves considerations of the rights of non-human species. In the Australian context, two main discourses emerge: *fellowship* and *leadership* (Arce M 2001; J. Gupta and Grubb 2000; Heitzig, Lessmann, and Zou 2011; McDonald 2005; Ward, Grundig, and Zorick 2001; Stone 2004; Rajamani 2000; Elliott 2011; Roberts and Parks 2007; Sell 1996; Hurrell and Sengupta 2012). *Leadership* discourses are characterised by their emphasis on, unsurprisingly, leading the way in taking unilateral action against climate change. These discourses break free of the collective action problems and advocate individual action. The discourses of *fellowship* on the other hand advocate united, collective and conditional action.

(e) Political & Legal

This is perhaps the most interconnected field, as all its discourses are reliant on the discourses of other fields. This field captures debates on appropriate policies, such as carbon markets or support for the Kyoto Protocol (Aldy and Stavins 2007; Kellow 2006; Victor 2004; Bailey et al. 2012; Buizer and Lawrence 2013). Without identifying specific policies, the prominent discourses in this field are *national emissions targets* (either self-imposed or those of Kyoto), *carbon markets* (such as carbon taxes or cap and trade systems), *subsidising carbon-intensive industries* to adopt cleaner practices (most noticeably the Direct Action policy), and support for *binding international agreements* (namely the Kyoto Protocol and its successor).

(f) Social Impact

Finally, the social impact field is adapted from Christoff's "lived reality" field. Christoff does not develop this field very much, which is a significant shortcoming. Consequently, this field is morphed to capture the social impacts of climate change, specifically *domestic impacts* and *international impacts* (Carson, Louviere, and Wei 2010; Inglehart 1995; Lachapelle, Borick, and Rabe 2012; Lazarus 2010; Whitmarsh, Seyfang, and O'Neill 2011). Domestic impact discourses bring the nature of climate change home to ordinary citizens by explaining how they are likely to be affected. In contrast, international impact discourses distance societies from climate change by suggesting that it will be a greater problem elsewhere.

APPENDIX B: OVERVIEW OF THE AUSTRALIAN GOVERNMENTAL LEGITIMATION RHETORIC, 1987–2014

The figure in this appendix provides a visual representation of the changes and trends in the Australian GLR form 1987 to 2014. It is not the result of a quantitative analysis, instead it is a qualitative interpretation of the main themes, discourses and narratives identified in the parsed sources. While this undoubtedly affects the reproducibility of the figure, it must be stressed that its purpose is as a visual shorthand to the observations outlined in *VI.A: Australia's Governmental Legitimation Rhetoric and Climate Policy Regime, 1987–2014.* Moreover it can be used as a comprehension aid or as a mnemonic device when considering the remainder of the analysis in this thesis.

Due to the size of the figure it appears on the next page.

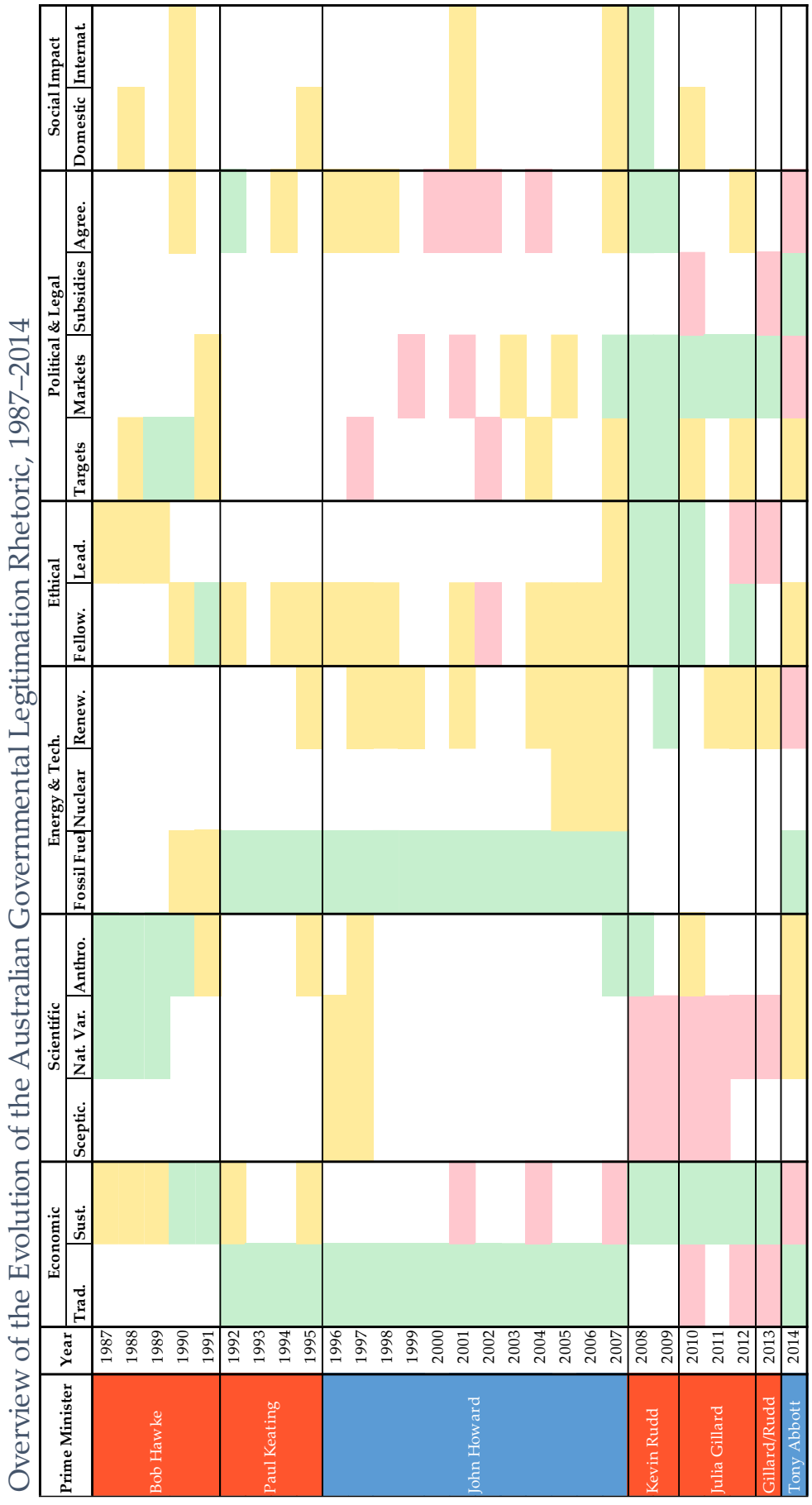

Figure 4: Overview of the Evolution of the Australian Governmental Legitimation Rhetoric, 1987–2014.